



# IGC

## Structural transformation via services or manufacturing? Evidence from Ethiopia

Mulu Gebreeyesus and Getachew Ahmed Abegaz

- Ethiopia's economy grew rapidly between 2000 and 2022, averaging 8.9% annually, but its structural transformation has been uneven and incomplete.
- Labour moved out of agriculture, but it was absorbed mainly by low-productivity informal services, while manufacturing's employment share declined despite sustained policy support.
- Productivity gains were substantial but came mostly from within-sector improvements. Labour reallocation contributed little and often undermined overall efficiency.
- High-skill services (finance, real estate, public administration) and construction show strong productivity performance but remain small and capital-intensive. Low-skill services dominate employment absorption.
- Ethiopia's experience reveals a disconnect between output growth and structural inclusion, reflecting weak alignment between skills, employment, and tradability.
- A hybrid strategy is needed: one that expands labour-intensive manufacturing, upgrades informal services, aligns education with market demand, and develops tradeable sectors beyond agriculture and air transport.

POLICY BRIEF ETH-24287

JUNE 2025

This project was  
funded by the IGC

[theigc.org](http://theigc.org)

DIRECTED BY



FUNDED BY



## Policy motivation

---

For decades, manufacturing has been viewed as the cornerstone of structural transformation, driving productivity growth, employment creation, and export diversification. However, this traditional model is increasingly being challenged. Technological advances and rising global standards have raised the barriers to entry, making it harder for late-industrialising countries to compete. Empirical evidence shows that many developing economies are experiencing premature deindustrialisation, with manufacturing peaking at lower income levels than in today's advanced economies. As Nayyar et al. (2021) note, the decline of agriculture in low- and middle-income countries has been offset more by growth in services than in industry, raising critical questions about the viability of manufacturing-led development in the 21st century.

Ethiopia offers a compelling case in the global debate on structural transformation. Beginning in the early 2000s, the country pursued an ambitious industrial development strategy, investing heavily in infrastructure and offering targeted incentives to build a competitive manufacturing base. Yet despite sustained policy attention, manufacturing has underperformed and its share in GDP, employment, and exports continues to be minimal. In contrast, services have expanded rapidly. They now account for over 40% of GDP, about 30% of employment, and the bulk of export earnings, particularly in air transport and tourism-related services.

This divergence between policy ambition and sectoral outcomes presents a critical dilemma. Should Ethiopia persist with its manufacturing-centered strategy, recalibrate toward service-led growth, or pursue a more integrated path? This study examines these questions by evaluating Ethiopia's transformation trajectory across employment, productivity, skill intensity, and tradability. It provides insights for rethinking the sectoral priorities of development strategy in light of both domestic realities and shifting global conditions.

## Overview of research

---

This study evaluates the quality and direction of Ethiopia's structural transformation from 2000 to 2022, structured around four inter-related themes.

- First, it examines sectoral skill intensity, exploring whether manufacturing has become more skill-intensive and how service subsectors vary in their capacity to absorb low-skilled labour.
- Second, it analyses employment dynamics, focusing on the relative contributions of manufacturing and services to job creation and the extent of labour reallocation into informal segments.

- Third, it investigates productivity trends, distinguishing between within-sector improvements and gains from labour shifts.
- Finally, it assesses tradability, examining the export potential and global integration of manufacturing and service sectors.

To address these questions, the study employs a mixed-methods approach that combines descriptive and comparative trend analysis with several quantitative techniques. A shift-share decomposition is applied to both employment and productivity to disentangle the contributions of structural change versus within-sector dynamics. Employment elasticity is estimated to assess how different sectors respond to output growth. The evolution of skill intensity is examined using data from national labour force surveys, allowing for disaggregated sub-sectoral analysis of high-, medium-, and low-skill segments. The absorptive capacity of sectors for low-skilled labour is assessed by linking education levels with employment patterns. To analyse tradability, sectoral export-to-output ratios and comparative value-added export performance are used.

The study draws on a range of national datasets, such as labour force surveys, education statistics, manufacturing censuses, and export data, alongside international sources including ILOSTAT, World Development Indicators, the Economic Transformation Database, and Africa's Supply and Use Tables. Comparative benchmarks with African and Asian economies are used to situate Ethiopia's experience in a broader global context. The approach allows for a detailed and disaggregated assessment of sectoral dynamics, helping to illuminate the quality, depth, and direction of Ethiopia's transformation.

## Key findings

---

### High growth, limited structural realignment

Ethiopia recorded an impressive 8.9% average annual growth rate between 2000 and 2022. Yet this growth did not deliver a manufacturing-led transformation. Instead, the country followed a trajectory of “structural transformation without industrialisation,” with labour moving from agriculture into services and construction rather than into competitive industry. Manufacturing's share in GDP and employment remained weak, and the shift away from agriculture did not translate into productivity-enhancing or employment-rich outcomes.

### Employment reallocation: horizontal shifts with limited structural impact

Agriculture's share of total employment declined by 13 percentage points over two decades, from 76.6% in 2000 to 63.1% in 2022. However, nearly all of this labour appears to have been absorbed by informal service sectors with low

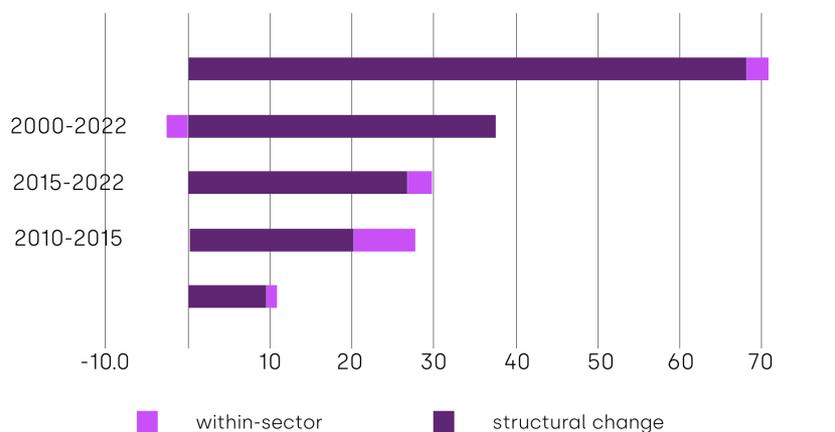
productivity, particularly in segments like informal trade and personal services. Manufacturing's employment share fell from 5.2% to 3.1%, despite sustained public investment. Shift-share analysis confirms that all employment growth was driven by within-sector expansion, with no positive contribution from structural reallocation, which is an indication of weak and non-transformative change. Ethiopia's low employment elasticity (0.3) further signals job-weak growth, particularly in manufacturing where elasticity was zero or negative.

### Productivity growth: strong but uneven and structurally shallow

Aggregate labour productivity in Ethiopia nearly tripled between 2000 and 2022, with the vast majority of these gains driven by improvements within sectors. As shown in Figure 1, over 96% of total productivity growth over the period came from within-sector effects. However, the contribution from structural change, labour reallocation across sectors, was modest overall and turned negative in the most recent period (2015 to 2022).

This suggests that while some labour shifted out of agriculture, it was not consistently absorbed into high-productivity sectors. Instead, labour often moved into low-productivity or stagnant subsectors, limiting the potential for structural change to amplify productivity gains. This pattern points to a transformation that remains structurally shallow, with progress driven largely by internal sector improvements rather than productive reallocation of labour.

Figure 1. Shift-share analysis source of productivity growth

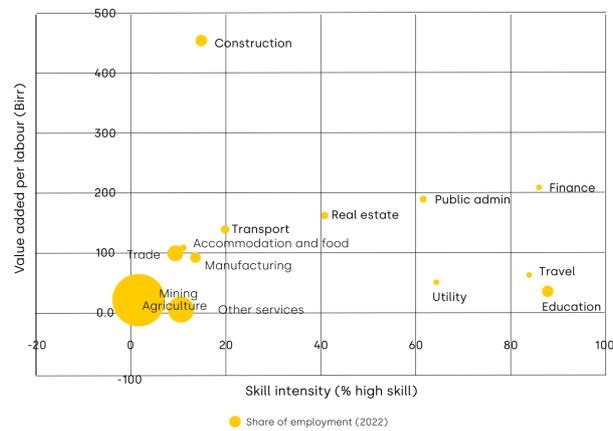


### Skill intensity: growing mismatch between education and employment

Despite gains in educational attainment and rising skill intensity in sectors such as finance, utility, public administration, and health, these high-skill service subsectors remain small and capital-intensive. Most workers are still concentrated in low- and medium-skill sectors, including informal services, light

manufacturing, and agriculture. As shown in Figure 2, sectors with high skill intensity and productivity, such as finance and public administration, employ only a small share of the labour force, while those absorbing most workers remain low-skill and low-productivity.

**Figure 2. Skill intensity, labour productivity and employment share**



### Tradability: narrow base in both services and manufacturing

Contrary to the traditional assumption that services are inherently non-tradable, Ethiopia’s experience reveals that specific service subsectors, notably air transport and travel, have become significant export earners. Between 2001 and 2022, service exports consistently outperformed manufacturing in both value and share of total exports, challenging the classical view that industrial exports are the primary path to global integration.

However, this success is narrowly concentrated in transport, particularly around Ethiopian Airlines, while other potentially tradable service sectors such as ICT and finance remain marginal. At the same time, manufacturing exports remain weak, accounting for less than 5% of total exports. Agricultural commodities – particularly coffee, oilseeds, and pulses – continue to dominate Ethiopia’s export structure, leaving the economy vulnerable to price shocks and climatic risks. Value-added export measures show that Ethiopia’s manufacturing sector contributes little to embedded domestic value, with just 0.4% of GDP derived from manufacturing-related exports.

### Comparing sectoral merits: a dual economy with few convergences

The comparison between services and manufacturing reveals a stark dualism. Services have absorbed most labour but are concentrated in informal and low-productivity segments. Manufacturing demonstrates higher productivity growth but remains limited in scale and job creation. High-productivity service sectors are largely domestically oriented and capital-intensive, while tradable sectors,

both in goods and services, lack diversity and depth. Ethiopia's transformation thus falls short of the inclusive, export-driven models seen in East and Southeast Asia.

## Suggested policies

---

To translate structural transformation into inclusive and sustained development, Ethiopia requires a coherent set of policies that address sector-specific challenges while strengthening cross-cutting enablers. The following suggestions draw on the empirical findings of this study and highlight priority areas for intervention to enhance productivity, employment quality, and economic diversification.

- **Invest in digital infrastructure as a cross-sector enabler:** prioritise national investment in broadband, digital literacy, and data systems to unlock productivity and tradability across sectors, from manufacturing and retail to tourism and logistics.
- **Reinvigorate labour-intensive manufacturing and agro-industrial linkages:** focus on targeted reforms to unlock the potential of labour-intensive subsectors, such as garments, leather, and agro-processing. Address persistent bottlenecks in backward linkages to agriculture, local supplier development, trade logistics, finance, skills, and regulatory certainty. Integrate SMEs and cooperatives more effectively into industrial ecosystems.
- **Leverage services with strong backward linkages:** Expand high-potential services such as tourism, air transport, logistics, and agro-industries that connect rural production to global markets. Invest in transport corridors, cold chain systems, skills development, and regulatory modernisation to strengthen rural-urban-export linkages and create employment for low- and semi-skilled workers.
- Support upgrading and entrepreneurship in informal services: shift from blanket formalisation to differentiated support. Tailor business development services, finance, and urban infrastructure to promote inclusive entrepreneurship, especially for women and youth. Embed digital skills and platforms to boost productivity in sectors like retail, domestic services, and tourism.
- **Align skills development with sectoral demand:** design national skills strategies around both high- skill sectors (for example, ICT, logistics) and middle-skill segments with large employment potential (for example, agribusiness, tourism). Strengthen vocational systems,

employer partnerships, and address soft skills and work experience gaps.

- **Diversify tradable services and boost export competitiveness:** promote emerging services such as digital platforms, business outsourcing, and potentially energy-related exports. On the manufacturing side, reduce trade costs, improve quality and certification standards, and support firm-level innovation. Avoid blanket support for uncompetitive firms in priority sectors.

7

## Implications for the global debate

---

Ethiopia's experience offers a cautionary but constructive contribution to global discussions on structural transformation:

- **Manufacturing's promise is not automatic.** Productivity gains alone are insufficient. Without institutional support, infrastructure, and market linkages, manufacturing may fail to absorb labour or drive transformation, even with sectoral output growth.
- **Services can transform, but only under the right conditions.** For services to drive structural change, they must be tradable, skill-intensive, and linked to dynamic sectors. Ethiopia's expansion in informal services contrasts with the export-oriented ICT growth seen in India or business service growth in Kenya and South Africa.
- **Transformation must be inclusive.** Productivity growth without employment reallocation leads to exclusion. Ethiopia's negative interaction effects illustrate the risks of disconnected growth rising averages masking widespread stagnation and informalisation.

The Ethiopian case underscores the need for hybrid strategies that combine targeted manufacturing promotion, modernisation of tradable services, and institutional reforms to better align skills with employment demand. Structural transformation is possible but only when productivity, employment, and tradability move in tandem.