

The Takeaway

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Manufacturing Productivity Growth and Job Creation in Sub-Saharan Africa

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Over the last couple of decades, sub-Saharan African (SSA) countries have registered strong economic growth. In these countries, agriculture has experienced a decline in its contribution to value addition and employment while services have grown considerably. Manufacturing, however, has played a minor role despite its expanding workforce.¹

In the global market, most SSA countries leverage primary good exports (such as coffee, cotton, crude oil, and minerals) to participate in global value chains (GVCs). GVC participation, mainly through backward integration, is positively associated with manufacturing job and productivity growth.²

Progress in some development indicators (e.g., job creation, industrialization, poverty reduction, health and education access, and digitalization) have been encouraging. However, SSA countries have yet to achieve sustained and inclusive economic growth and build modern, resilient economies.



WHAT'S THE TAKEAWAY?

Job creation is a top development priority in sub-Saharan African countries.

The small number of medium and large manufacturing establishments implies limited large-scale job creation.

Productivity growth is critical to job creation.

Policy should address resource misallocation, strengthen rural-urban integration and value chain linkages, and reduce informality.

A fundamental development challenge for these countries is, therefore, the creation of gainful employment opportunities at a large scale, a challenge highlighted by the current high underemployment and informal employment.³

Two regional and global trends motivate the need for job creation and productivity growth. First, the SSA population is young. In 2020, the region hosted about 1.2 billion people, with 70% of its population below the age of 30. Projections show the population rising to 2.2 billion in 2050, and the dependency ratio—ratio of dependents (ages below 5 or above 64) to the working-age population (ages 15-64)—declining to 60.5% in 2050 from 83.7% in 2020.⁴ These demographic transitions underscore the need for large-scale job creation and investment in human capital in order for the demographic trends to accelerate economic growth and yield better development outcomes.

Second, the fourth industrial revolution—characterized by increasingly widespread application of advanced production technologies—has begun restructuring the international network of global production, including reshoring to developed countries. SSA countries are at a disadvantage because these technologies are skill-biased, labor-saving, and have limited complementarity with low-skill labor. As a result, SSA countries may face serious difficulties in attracting and retaining GVC-related jobs, or, even worse, engage in a race-to-the-bottom at the expense of local workers (e.g., declining wages and poorer working conditions). Furthermore, the ongoing trade disputes and the COVID-19 pandemic have accentuated the push for reconsideration of existing trade policies and priorities, especially with respect to manu-

facturing due to recent supply chain disruptions and national security concerns.

WHY FOCUS ON MANUFACTURING?

Manufacturing possesses certain key features that make it a focal point of policymaking in developing countries. Unlike other sectors, labor productivity in manufacturing grows significantly more rapidly in poorer countries, irrespective of other country-specific characteristics.⁵ In addition, manufacturing usually involves substantial economies of scale because manufacturing goods are usually internationally tradable. Besides being less exposed to international price volatility (compared with primary goods), tradable manufactured goods facilitate technology transfers and spillovers. Manufacturing also creates better employment opportunities for agricultural workers.

WHAT CHARACTERIZES MANUFACTURING?

Understanding the salient features of manufacturing establishments in SSA countries is an important first step toward designing policies to promote job creation and productivity growth.

*Size Distribution*⁶

SSA manufacturing production is characterized by a large mass of establishments at the lower end of the size distribution. Larger establishments are rare, and medium-sized establishments employ a smaller share of the manufacturing workforce in SSA countries than in advanced economies. Moreover, employment in the new cohort of establishments is concentrated in the smallest-sized class and distributed more evenly across the remaining size classes.

Evidence also reveals a high prevalence of informal establishments (having no registration with an administrative body), especially at the lower end of the size distribution. A small portion of the manufacturing activity is formal—at most one-third of the manufacturing establishments and about 50% of the manufacturing workforce. Interestingly, the employment distribution in formal manufacturing resembles the pattern observed in the developed economies, except that developed countries have more large establishments.

Resource Misallocation

In the absence of market distortions (e.g., size-dependent tax policy and labor regulations), there would be an efficient allocation of resources. However, economies face market distortions and experience resource misallocations. These market distortions lower productivity and undermine productivity growth.⁷

Evidence from cross-country enterprise surveys shows that size-dependent tax-enforcement (inspection probability and compliance rate) is common and increases with establishment size in low-income as opposed to high-income countries, causing a decline in productivity.⁸ Evidence also shows substantial resource misallocations in SSA countries (e.g., politically connected businesses getting access to subsidized credit), implying a large potential for productivity gains by reducing these misallocations even in the absence of technological change.⁹

Productivity and Job Creation

Microdata from a sample of SSA countries uncovers that job growth in manufacturing is primarily driven by the formation of new and growth of younger establishments.¹⁰ Some evidence also suggests that large formal manufac-

turing establishments are becoming more capital-intensive, reducing job creation despite having higher productivity levels and growth.¹¹ By contrast, the smaller establishments host most of the workforce but experience slow productivity growth. Relatedly, most of the labor force released from agriculture ends up mainly in low-productivity services activities.

Overall, the lack of medium and large manufacturing establishments, lack of growth among smaller ones, and inability of larger ones to absorb more workers result from underlying factors such as limited entrepreneurial capabilities, severe market distortions, and unfavorable business environments. These characteristics of manufacturing in SSA have undermined the massive job creation needed to absorb the region's large and expanding labor force.

WHAT SHOULD BE THE POLICY FOCUS?

Besides increasing the number of establishments, a sustained large-scale job creation critically relies on productivity growth. SSA countries should address the challenges of productivity growth.

Boosting productivity growth requires a broad-based approach. First, policy interventions should create an enabling business environment. The size distributions reflect the unfavorable market and policy environments where establishments remain small and informal to evade regulation, losing out on benefits such as access to credit and the legal system that could help their survival and growth, or where they need to grow to generate sufficiently higher profits that outweigh the costs of regulation. Hence, lowering the cost burden of formality and enforcing regulations are equally necessary.

Another area of policy intervention is the integration of the rural and urban economies (e.g., better road infrastructure). Linking these segments of the economies serve as a powerful source of demand and is capable of driving job creation and productivity growth.¹² Similarly, promoting regional and global value chain integration (e.g., lower import duties on intermediate inputs) is beneficial due to the possibility of access to large markets, more and/or better varieties of inputs, and technology transfer. Finally, there should be more effort toward addressing the infrastructure deficit, harnessing special economic zones, and promoting regional economic initiatives (e.g., African Continental Free Trade Area) to bolster the domestic, regional, and global market integration, and promote productivity growth.¹³

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Notes:

- ¹ Abreha, K., Kassa, W., Lartey, E., Mengistae, T., Owusu, S. & Zeufack, A. (2021). Industrialization in Sub-Saharan Africa: Seizing Opportunities in Global Value Chains. *Africa Development Forum*. Washington, DC: World Bank.
- ² Abreha et al. (2021).
- ³ ILO defines informality as activities of economic units and workers beyond the reach or application of the law due to difficulty to enforce compliance.
- ⁴ Source: World Bank's Population Estimates and Projections database.
- ⁵ Rodrik, D. (2013). Unconditional Convergence in Manufacturing. *Quarterly Journal of Economics*, 128(1), 165-204.
- ⁶ Abreha, K., Cirera, X., Davies, E., Fattal-Jaef, R. & Maemir, H. (2022). Deconstructing the Missing Middle: Informality and Growth of Firms in Sub-Saharan Africa. Policy Research Working Paper #10233, Washington, D.C.: World Bank.
- ⁷ Hsieh, C.T. & Klenow, P. (2009). Misallocation and Manufacturing TFP in China and India. *Quarterly Journal of Economics*, 124(4), 1403-48.
- ⁸ Bachas, P., Fattal-Jaef, R. & Jense, A. (2019). Size-dependent Tax Enforcement and Compliance: Global Evidence and Aggregate implications. *Journal of Development Economics*, 140, 203-22.
- ⁹ Cirera, X., Fattal-Jaef, R. & Maemir, H. (2019). Taxing the Good? Distortions, Misallocation, and Productivity in Sub-Saharan Africa. *World Bank Economic Review*, 34(1), 75-100.
- ¹⁰ Abreha et al. (2021).
- ¹¹ Diao, X., Ellis, M., McMillan, M. & Rodrik, D. (2021). Africa's Manufacturing Puzzle: Evidence from Tanzanian and Ethiopian Firms. NBER Working Paper #28344.
- ¹² Intra-national trade costs are estimated to be 4 to 5 times larger in Ethiopia and Nigeria than in the United States. See Atkin, D. & Donaldson, D. (2015). Who's Getting Globalized? The Size and Implications of Intra-national Trade Costs. NBER Working Paper #21439.
- ¹³ Better integration with the domestic and regional value chains can be a steppingstone to join larger and more complex markets and GVCs. See Boys, J. & Andreoni, A. (2020). Value Chain Directionality, Upgrading, and Industrial Policy in the Tanzanian Textile and Apparel sectors. WIDER Working Paper 2020/93.

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