



Manufacturing

Employment in Africa's manufacturing sector

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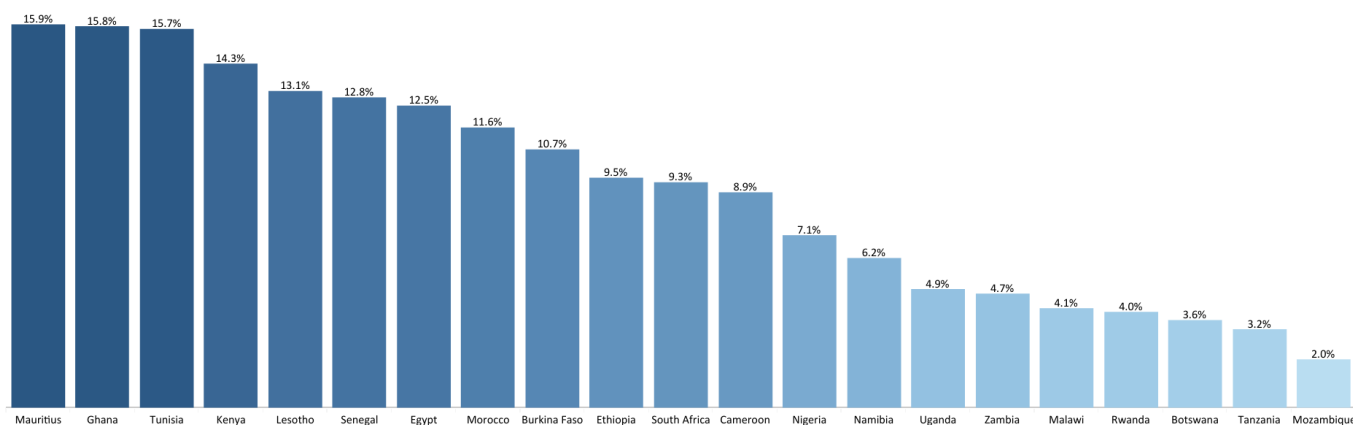
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Traditionally, manufacturing has been viewed as a labour-absorbing sector during the process of economic development. As manufacturing industries with higher productivity emerge, labour moves from farming to manufacturing jobs (and associated services) in urban areas. There is no better example of this than China, where formal-sector manufacturing employed around 50 million workers in 2014.[1] With 50 million jobs, a country like Nigeria could employ more than 80% of its current labour force, estimated at about 60 million.

However, in Africa's manufacturing sector, jobs are not being created at the pace required to match rapid population growth, even though Chinese-owned manufacturing firms have employed several million Africans.[2] The latest available data shows that the number of workers employed in manufacturing in Africa is low (see Chart 7). In many African countries, the share of manufacturing employment in total employment has even declined. In South Africa, for instance, manufacturing accounted, on average, for about 13% of total employment over the period 2001 to 2010 compared to 10% for the period 2011 to 2018.[3]

Chart 7: Manufacturing share (%) in total employment in selected African countries, 2018



Source: UNU-WIDER Economic Transformation Database

According to Diao and colleagues,[4] the low employment performance of the formal African manufacturing sector might be explained by the nature of technologies available to African firms. Using the case of Tanzania and Ethiopia, they show that the relatively large manufacturing firms that are supposed to employ more workers are significantly more capital-intensive than what would be expected on the basis of the countries' income levels or relative factor endowments (abundant labour). In other words, adopting capital-intensive modes of production is one of the important reasons behind poor employment performance.

Why would manufacturing firms in Africa adopt capital-intensive modes of production while labour is abundant on the continent? According to Diao and colleagues, two things have happened in recent decades that push firms in that direction:[5]

First, manufacturing has experienced significant technological change in advanced economies. Naturally, innovation has taken a direction that responds to relative factor prices in the settings where it has taken place. So, it has been markedly labour-saving. Secondly, globalization and the spread of global value chains have had a homogenizing effect on technology adoption around the world. This means that the range of substitution between capital and low-skill labour has likely shrunk. The imperative of competing with production in much richer countries at similar quality levels makes it difficult to undertake large shifts in technique. Unlike earlier waves of developing nations, many African countries joined the world economy at a point where these two trends were already well established. Meanwhile, they are still poor and have very low relative capital endowments. This creates a conundrum: competing with established producers on world markets is

only possible by adopting technologies that make it virtually impossible to generate significant amounts of employment to be generated.

If these trends continue (capital-biased manufacturing), it will get harder for African firms to create jobs in the same numbers that Asian ones did from the 1970s onwards. In other words, it will be challenging for Africa to use manufacturing or industrialisation to absorb its expanding labour force productively and to reduce poverty.

This is not to say that Africa should not adopt the industrialisation path for its development. Manufacturing offers African countries a chance to increase resilience to economic shocks. Also, productivity growth in manufacturing firms could create jobs indirectly. For example, if the agro-processing industry is capital intensive, it may increase employment in smallholder farming which is labour-intensive.

The growth of low-end services in informal urban areas and subsistence farming in rural areas does not notably improve productive structure. Without concomitant revolutions in industrialisation and agriculture, much of sub-Saharan Africa's economic future will be shaped by a large subsistence agriculture sector in rural areas and low-end, informal services in urban areas that generally consist of wholesale and retail trade.[6]

Endnotes

1. N Lardy, *Manufacturing employment in China*, *China Economic Watch*, Peterson Institute for International Economics (PIIE), 21 December 2015.
2. K Jayaram, O Kassiri and IY Sun, *The closest look yet at Chinese economic engagement in Africa*, New York: McKinsey & Company, 2017.
3. UNU-WIDER, *ETD-Economic Transformation Database*.
4. X Diao, M Elis, MS McMillan and D Rodrik, *Africa's manufacturing puzzle: Evidence from Tanzania and Ethiopian firms*, Working Paper No. 28344, National Bureau of Economic Research, 1 March 2021.
5. X Diao, M Elis, MS McMillan and D Rodrik, *Africa's manufacturing puzzle: Evidence from Tanzania and Ethiopian firms*, Working Paper No. 28344, National Bureau of Economic Research, 1 March 2021.
6. H Bhorat, R Kanbur, C Rooney and F Steenkamp, *Sub-Saharan Africa's Manufacturing Sector: Building Complexity*, Working Paper No. 256, Abidjan: African Development Bank Group, 2017; L Fox, AH Thomas and C Haines, *Structural transformation in employment and productivity: What can Africa hope for?*, Washington, DC: International Monetary Fund, 2017.

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Dr Kouassi Yeboua is a senior researcher in African Futures and Innovation programme in Pretoria. He recently served as lead author on ISS studies on the long-term development prospects of the DR Congo, the Horn of Africa, Nigeria and Malawi. Kouassi has published on various issues relating to foreign direct investment in Africa and is interested in development economics, macroeconomics, international economics, and economic modelling. He has a PhD in Economics.

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