# RETHINKING AFRICA'S STRUCTURAL TRANSFORMATION:

The rise of new industries



## **CHAPTER 4**

# The road not taken: Structural change in Africa reconsidered

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Economists have long regarded structural change—the movement of workers from lower to higher productivity employment—as essential to growth in lowincome countries. Yet, until recently, Africa's economic structure had changed very little, worrying both policymakers and analysts. The African Union, the African Development Bank, and the United Nations Economic Commission for Africa have all voiced concern with Africa's slow pace of structural change. Earlier this year, *The Economist* noted, "Africa's development model puzzles economists."

Historically, manufacturing drove economic transformation. Today, new technologies have spawned a growing number of services and agro-industries—including horticulture—that share many characteristics with manufacturing. They are tradable, have high value added per worker, and can absorb large numbers of moderately skilled workers. Like manufacturing, they benefit from technological change, productivity growth, scale, and agglomeration economies. These are "industries without smokestacks," and in 2015, the Africa Growth Initiative and UNU-WIDER set out to study their role in Africa. The results are forthcoming in *Industries Without Smokestacks: Industrialization in Africa Reconsidered* (Oxford University Press, 2018).

We have found a new pattern of structural change emerging in Africa, one different from the manufacturing-led transformation of East Asia. ICT-based services, tourism, and transport are outpacing the growth of manufacturing in many African countries. Between 1998 and 2015, services exports grew more than six times faster than merchandise exports. Kenya, Rwanda, Senegal, and South Africa have vibrant ICT-based services sectors. Tourism is Rwanda's largest single export activity, accounting for about 30 percent of total exports. In 2014, 9.5 million tourists visited South Africa, contributing 3 percent to its GDP. Ethiopia, Ghana, Kenya, and Senegal all actively participate in global horticultural value chains. Ethiopia has achieved extraordinary success in flower exports, so much so that the country is now a global player in the sector.

We also found that, because tradable services, agro-industry, and horticulture share many firm characteristics with manufacturing, it is possible to develop a strategy for structural transformation based on three factors that have largely shaped the global distribution of manufacturing. The first is the "investment climate" (the environment within which firms operate). The second is the capacity to export, and the third is agglomeration. The three are inter-related, and to boost the pace of structural change African governments need to address them concurrently.

Today, new technologies have spawned a growing number of services and agro-industries—including horticulture—that share many characteristics with manufacturing.

# The global dividends of Africa's industrialization

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Many experts are lamenting the fate of advanced economies, still at risk of secular stagnation-a prolonged period of insufficient growth that can only be addressed by unconventional monetary policy and unsustainable financial conditions. In fact, the main problem that has plagued the global economy for much of the past decade is inadequate aggregate demand due to deflated balance sheets of households; constrained fiscal options in high-income countries where there seems to be a fiscal stimulus "fatigue" and an obsessive focus on public debt; and exhaustion of the uses of monetary policy, especially when the financial sector lacks the incentives and effective tools to fund medium- and long-term profitable investment. These suboptimal macroeconomic conditions are compounded by the perpetuation of inequality within nations-especially with respect to access to the job market, to education, and to capital. All these obstacles are fueling anger, resurgent populism, despair, and helplessness in many social groups.

Fortunately, the resilience of some emerging economies has kept global growth afloat. Last year they accounted for nearly 75 percent of global growth (China's annual growth average of 9.6 percent for the past 38 years is something that will be studied in economic history books for centuries to come). But as they approach the technology frontier, they too are facing the risk of lower potential output due to population aging and lower total factor productivity growth. African economies have substantially improved their general macroeconomic conditions and performance but are still trapped in the trade of unprocessed commodities whose prices declined sharply in 2014. Despite a remarkable performance (last year, 13 African countries grew above 5 percent and 17 grew between 3 and 5 percent), the continent is not creating enough wealth and jobs to help reduce poverty and mitigate the risks of conflicts and disorderly migrations.

Under such circumstances, a straightforward solution to the problem of global growth would be for rich economies to

devote a small fraction of their poorly used financial resources to finance infrastructure in developing countries where profitable investment opportunities and business ventures abound. African industrialization is indeed the most reliable driver for global prosperity and peace for decades to come. It would spur economic development on the continent, provide the much needed boost to aggregate demand, and lift global growth while generating new employment opportunities in advanced and developing economies.

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African industrialization should not be financed through old forms of foreign aid with miserabilist connotation but through a series of new global pacts combining substantial amounts of public and private money in search of good returns (including pension funds and sovereign wealth funds). This would require accommodative monetary policy and fiscal stimuli that are wasted in rich countries be channeled into profitable infrastructure projects that abound in developing countries. Instead of trying to fill large infrastructure deficits indiscriminately around the world, multilateral development banks could help build a series of welltargeted industrial parks and quality infrastructure in developing countries, and provide advice and training on products quality standards to make nontariff measures ineffective. Everybody would win. And the world would be a much safer, happier place.

#### Infrastructure, skills, and competition are key elements of the investment climate. African firms pay a high productivity penalty because of poor infrastructure.

Governments can support agglomerations by concentrating investments in high-quality institutions and infrastructure in a special economic zone.

Here, China could play a leading role by shifting its preferential trading agreements from bilateral deals to a single, wellpublicized Africa-wide initiative. Infrastructure, skills, and competition are key elements of the investment climate. African firms pay a high productivity penalty because of poor infrastructure. High-speed data transmission is critical to exporting a wide range of services and especially to IT-intensive exports. A necessary condition for developing tourism is adequate tourist-related infrastructure. Investments in trade logistics are essential to agro-processing and horticulture exports. Skills matter as well. Attempts to expand the IT-enabled services industry have encountered manpower constraints. The skills needed to interact with tourists and provide back office services are critical to high-quality tourism. Lack of competition in transportation markets represents a significant barrier to competitiveness.

Exporting offers opportunities to acquire capabilities and enhance productivity, but individual firms face significant barriers to export. To address this, governments need to develop a package of trade and exchange rate policies, public investments, regulatory reforms, and institutional changes designed to increase the share of non-traditional exports in GDP. To date, few countries have succeeded in implementing such an "export push" strategy.

Agro-processing, horticulture, and ICT-based services—like manufacturing—benefit from agglomeration economies. Geography also plays an obvious role in tourism; tourist facilities tend to cluster close to the tourism resource. Governments can support agglomerations by concentrating investments in high-quality institutions and infrastructure in a special economic zone (SEZ). Ethiopia is successfully pursuing such an approach in both manufacturing and services, but the majority of Africa's SEZs have failed to attract a critical mass of firms.

Globally, trade policy has an important role to play. Escalating tariffs in Asia for higher-stage processing of commodities discourages the development of Africa's agro-industrial value chains. Here, China could play a leading role by shifting its preferential trading agreements from bilateral deals to a single, well-publicized Africa-wide initiative. Another priority is to implement the World Trade Organization Trade Facilitation Agreement (TFA) fully. In recent years, as concessional finance has become constrained, governments have turned to private borrowing. Because sovereign borrowing often involves high costs and short maturities, a better alternative would be to allow creditworthy countries to borrow from the non-concessional windows of the World Bank and other multilateral development banks.

Structural change in Africa is a "road less travelled by." While some countries perhaps those in coastal locations—will transform their economies through manufacturing, others will be able to turn to high value-added agriculture, agroindustry, and tradable services. From the perspective of public policy, it is, happily, not an either/or choice. Better national and global policies can support structural change with or without smokestacks.

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# Sector forecasts: Agribusiness and tourism

#### VALUE OF FOOD MARKETS IN SUB-SAHARAN AFRICA IS ON THE RISE

According to World Bank projections, the value of sub-Saharan Africa's food and beverage markets is expected to reach \$1 trillion by 2030—up from \$313 billion in 2010—driven in large part by rising incomes, urbanization, and growing food consumption in cities. This situation presents enormous opportunities for the agribusiness industry and suggests that targeted investment in processing, logistics, market infrastructure, and retail networks could help support the development and expansion of commercial value chains throughout the region.



Source: Authors' calculations, Growing Africa: Unlocking the Potential of Agribusiness, World Bank, March 2013. Available at: http://documents.worldbank.org/curated/ en/327811467990084951/Main-report.

## TOURISM WILL CONTINUE TO GENERATE EMPLOYMENT OPPORTUNITIES IN SUB-SAHARAN AFRICA

Over the next decade, the travel and tourism industry will continue to be an important source of jobs for the region. Taking into account the total contribution of the tourism industry to employment, including broader effects from linkages and induced income impacts, it supported 16,289,000 jobs (6.0 percent of total employment) in 2017 and is projected to employ 22,361,000 people (6.1 percent of total employment) in 2027.



Note: Induced contribution includes the broader contribution to employment of spending by those who are directly or indirectly employed by travel and tourism. Source: World Travel and Tourism Council, Travel and Tourism Economic Impact 2017: Sub-Saharan Africa, March 2017. Available at: https://www.wttc.org/-/media/files/ reports/economic-impact-research/regions-2017/subsaharanafrica2017.pdf.

# Is automation undermining Africa's industrialization prospects?

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The adoption of labor-saving technologies associated with Industry 4.0—the Internet of Things, advanced robotics, and 3D printing—in high-income economies is reducing the importance of low wages in determining costs of production. China, too, is automating at a rapid rate and is projected to be the largest user of industrial robots by 2018. This trend potentially narrows the path for less-developed countries in Africa to industrialize—the expected en masse migration of labor-intensive manufacturing activities to poorer economies with lower labor costs, such as those in Africa, may not occur.

#### Given current automation trends, there will likely be fewer entry points in global value chains for African countries, and industrialization could become increasingly challenging.

But manufacturing is not monolithic in terms of the extent of automation. The adoption of robots, for example, varies considerably across sub-sectors (Figure 4.2). Some manufacturing industries are relatively unaffected and will therefore remain feasible entry points for less-industrialized countries. This includes a range of commodity-based manufactures such as basic metals, non-metallic mineral products, wood products, paper products, and food processing, which are also less traded and therefore subject to less international competition. Despite being highly traded internationally, there will also be opportunities for African countries to be competitive in the production of labor-intensive tradables such as textiles, apparel, and leather products, which is the least automated subsector—thus far.

Further, there will likely still be room for lower-quality, lower-price goods produced and consumed domestically. This possibility follows from the experience of large developing countries like China and India where highly traded manufacturing sectors have been characterized by segmented markets. The scope for productivity gains might be greater for those lower-guality, lowerprice goods that are regionally traded, where countries can exploit opportunities beyond the domestic market. This opportunity holds considerable promise in Africa where almost all manufacturing industries have seen large increases in their intra-Africa trade shares over the last decade and a half (Figure 4.3). Given current automation trends, there will likely be fewer entry points in global value chains for African countries, and industrialization could become increasingly challenging. While there may be opportunities to "leapfrog" to new technologies, developing the relevant worker skills, firm capabilities, and infrastructure is likely to be a more gradual process. Yet, there is still scope for countries using Industry 2.0 technologies to compete if other ecosystem requirements are met. If countries in Africa can integrate their growing labor force with substantial improvements in their business environments, logistics and other backbone services, regulatory requirements, and so on, this approach might slow down the adoption of Industry 4.0 technologies in the higher-income countries.

## FIGURE 4.2. THE GLOBAL OPERATIONAL STOCK OF INDUSTRIAL ROBOTS VARIES BY MANUFACTURING SUBSECTOR

The adoption of robots in manufacturing varies significantly across subsectors, meaning that some industries are relatively unaffected by the uptake of labor-saving technologies and continue to be strong entry points for less industrialized countries in Africa.



## FIGURE 4.3. THE SHARE OF INTRA-AFRICA TRADE IN AFRICA'S TOTAL EXPORTS HAS INCREASED ACROSS MOST MANUFACTURING INDUSTRIES

Between 2000 and 2013, intra-African trade has seen a large increase in manufactured items in almost every subsector. Particular gains have been made in food, beverages, and tobacco; rubber and plastics; electronics; and non-metallic mineral products. It seems that Africa might have the potential for large productivity gains in regionally traded goods.



Note: All values are in units of 2010 constant USD using USA CPI. The sector classification is a variation of isic rev.3 2-digits.

Source: Hallward-Driemeier and Nayyar, 2017, Trouble in the Making? The Future of Manufacturing-Led Development (www.worldbank.org/futureofmanufacturing).

# **Manufacturing complexity in Africa**

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One of the key challenges sub-Saharan African countries must address is the need to undergo structural transformation in the face of young and growing labor forces. As such, there are the twin imperatives of many economies: First, the need to grow, while, second, the need to provide employment opportunities for their growing populations.

#### Building complexity, and thus producing a diverse range of increasingly complex manufacturing products, is a path-dependent process.

Although there is evidence of growth-inducing structural transformation in sub-Saharan Africa since the 2000s, this has not been manufacturing led as it was in the "East Asian model." Using the empirical technique employed by McMillan, Rodrik, and Verduzco-Gallo (2014), Figure 4.4 depicts sub-Saharan Africa's pattern of structural transformation in the post-2000 period. There is a shift of labor resources away from low productivity agriculture activities (in the bottom left quadrant). However, instead of substantial labor resources shifting toward high productivity manufacturing activities, much of the shift has been directed toward services-based activities, such

as government services and retail services. In contrast, the "East Asian model," depicted in Figure 4.5, shows manufacturing-led structural transformation with a substantial shift of labor resources toward a relatively large manufacturing sector (in the top right quadrant). Broadly speaking, this manufacturing-led growth has not occurred in sub-Saharan Africa. A key question, is why?

We posit that sub-Saharan African countries have low levels of economic complexity, which negates their ability to structurally transform (Bhorat, Rooney, and Steenkamp, 2016). Figure 4.6 shows the relationship between economic development and economic complexity, and it is evident that higher levels of economic complexity are associated with higher levels of economic development. Economic complexity measures the productive knowhow or capabilities inherent in an economy, and in order for a country to diversify into more complex productive activities-particularly those in manufacturing-it needs to accumulate productive capabilities. More complex countries are able to produce a diversity of more complex products, such as x-ray machines, while less complex countries are typically restricted to a concentrated portfolio of resource-based products, such as iron ore. It is clear from the clustering of sub-Saharan African countries in the lower-left segment of Figure 4.6 that these countries are characterized by low levels of economic complexity or limited productive capabilities, which constrains their ability to structurally transform.

## FIGURE 4.4. SECTORAL PRODUCTIVITY AND EMPLOYMENT CHANGES IN SUB-SAHARAN AFRICA, 2000-2010

From 2000 to 2010, sub-Saharan Africa has experienced a shift in labor from the low-productivity agriculture sector to the services sector—a different pattern of structural transformation than the manufacturing-led "East Asian Model."



Note: African countries include: Botswana, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Nigeria, Senegal, South Africa, Tanzania, and Zambia. Source: Authors' calculations using Groningen Growth and Development Centre 10-sector database (see Timmer de Vries & de Vries, 2014).

#### FIGURE 4.5. SECTORAL PRODUCTIVITY AND EMPLOYMENT CHANGES IN ASIA, 1975-2010





Source: Authors' calculations using Groningen Growth and Development Centre 10-sector database (see Timmer de Vries, & de Vries, 2014).

## FIGURE 4.6. COMPLEXITY (ECI) AND THE LOG OF GDP PER CAPITA BY INCOME AND REGIONAL GROUPING, 2013

Higher levels of economic complexity correspond with higher levels of economic development, suggesting that structural transformation is associated with building productive capabilities to manufacture a diverse array of increasingly complex products.



Note: The sample of countries is reduced to those for which we estimate complexity measures. Source: Authors' calculations using trade data from BACI data (HS 6-digit revision 1992) and GDP per capita data from the World Development Indicators.

## How can a country build economic complexity?

Building complexity, and thus producing a diverse range of increasingly complex manufacturing products, is a pathdependent process. This is best illustrated and explained using the Product Space analytical framework developed by Hidalgo, Klinger, Barabási, and Hausmann (2007). Countries shift more easily to products characterized by capabilities that are similar to those embedded in a country's current productive structure. For example, it is easier to shift production from iron ore to steel than it is to shift from iron ore to pharmaceuticals. Thus, if a country produces relatively lowcomplexity natural resource-based products, as many African countries do, the capabilities inherent in these products are relatively dissimilar to those needed to produce complex manufacturing products, meaning the ability to diversify, and hence structurally transform, is curtailed. The link between building complexity and employment creation is not a simple direct relationship; rather, it is nuanced. Increasingly complex products tend to be more capital- and technology-intensive, and thus the employment multipliers get lower for the most complex products (Bhorat, Kanbur, Rooney, and Steenkamp, 2017). However, in industrial terms, many African countries are starting from low bases, and thus the manufacturing products closest in terms of required capabilities are relatively less capital-intensive. Thus, African countries can build complexity by developing more diverse productive structures, characterized by a greater number of manufacturing activities, and thereby generate employment opportunities.

However, a key constraint to this process of building complexity in African countries is their current set of productive capabilities. These are distant from those needed in order to shift to more complex productive activities. For example, the shift to higher value-added agriculture, such as horticulture, may be constrained by the lack of scientific know-how needed to produce products that meet food standards in developed country markets. Shifting to manufacturing activities may be constrained by skills shortages or lack of access to financial, logistics, and input networks.

With the notion that building complexity is a pathdependent process shaped by the capabilities embedded in a country's productive structure, policymakers could do the following: First, using the Product Space and Economic Complexity analytical framework, identify products with capabilities similar to those inherent in a country's current productive structure. For example, if a country is producing motor vehicles, then the next product space would be vehicle parts. Second, test whether these products align with economic reality. This is done by speaking to industry associations, firms, and other public and private sector stakeholders in order to test whether the outcomes of the analytical framework align with what is happening in the economy. Third, identify appropriate target markets. For example, determine whether exports are to be directed toward high- or low-income markets, or international or regional markets.

The employment creation potential of building complexity is dependent upon the production function specific to each new industry. However, this process of diversifying toward a wide range of increasingly complex productive activities, by its very nature, will generate employment opportunities for sub-Saharan African countries.

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# African economies and global value chains

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Global value chains (GVCs), in which production crosses at least one border and usually more than one, now make up about two-thirds of global trade. GVCs are a key reason China has been able to increase its role in trade so quickly and pull a large number of workers out of agriculture into labor-intensive manufacturing. But now labor-intensive GVCs are starting to leave China because of China's rising wages and move up the value chain. Much of the movement is to nearby Vietnam or Bangladesh. But some Chinese manufacturers are shifting production to Africa as well, especially to Ethiopia and other East African economies.

At the moment, no countries with high trade costs play a significant role in GVCs, hence the importance of trade facilitation, customs reform, and infrastructure development.

The first Global Value Chain Development Report<sup>1</sup> had many findings relevant for developing countries that would like to increase their role in GVCs. African economies have lowered tariffs on manufacturing products, including parts and components, by 25 percent over the past decade. In Africa today, non-tariff trade costs generally are much higher than any remaining tariffs. These costs include delays with customs clearance,

corruption, and infrastructure deficiencies. Importantly, in GVCs, trade costs cascade because products move across borders multiple times. At the moment, no countries with high trade costs play a significant role in GVCs, hence the importance of trade facilitation, customs reform, and infrastructure development. Of these areas, only South Africa compares favorably with East Asian economies, though some East African states are improving rapidly. In Ethiopia, a number of special zones have been set up to concentrate reform and infrastructure investment in a fixed number of locations. Special zones can be a good start but to have a large impact on the economy the benefits need to be spread to the whole country as soon as possible.

A second relevant matter concerns services. Mostly countries trade manufactured products. But when breaking down the value added in trade, services are playing a greater role and now account for about onehalf of world trade. This trend reflects the importance of software in many "smart" products as well as the growing role of services in managing supply chains—services such as finance, telecom, and logistics. Many African economies are dualistic in that they have opened up to foreign trade and investment in manufacturing, but remain relatively closed in services. This is a losing strategy, as services are needed to participate in modern manufacturing. All of the services mentioned require careful regulation, but if done right, opening up to foreign investment in services can be an effective support to industrialization through GVC integration.

<sup>1.</sup> World Bank. 2017. Global Value Chain Development Report 2017: Measuring and analyzing the impact of GVCs on economic development. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/440081499424129960/Measuring-and-analyzing-the-impact-of-GVCs-on-economic development.

#### FIGURE 4.7

## Africa's role in global value chains

Last year, the World Bank Group's World Integrated Trade Solutions database created and published a tool to analyze country participation in three global value chains: apparel and footwear, electronics, and automotive goods. The role of sub-Saharan Africa in these global value chains has followed an interesting evolution in the last 10 years. Today, the export of apparel and footwear makes up 2.52 percent of total trade in sub-Saharan Africa, followed by the export of final and intermediate vehicles. In terms of destination, Europe and North America are the largest recipients of African apparel; apparel exports make up 47 and 35 percent of all African exports to those regions. The large export value of apparel is notably led by Africa's manufacturing pioneers such as Mauritius, where apparel made up 35 percent of it exports in 2016. The large export share of vehicles and car parts is a reflection of South Africa's large export value in that industry.



Africa's exports by category and partners, percent of total exports						
	Apparel & footwear		Electronics		Vehicles	
	Intermediate	Final	Intermediate	Final	Intermediate	Final
East Asia	0.89	1.25	0.17	1.2	0.4	3.97
Europe	4.36	47.44	1.2	6.91	7.62	28.05
Latin America	0.04	0.4	0.01	0.24	0.42	0.47
Middle East	0.24	0.3	0.17	8.13	0.17	1.51
North America	0.26	35	0.14	0.5	0.72	2.37
South Asia	0.3	0.08	0.03	0.2	0.15	0.66

Note: Percent of total trade.

Source: World Integrated Trade Solutions database, WITS, 2017.

# Female entrepreneurship in Africa and globally

Women in Africa (15 percent) and Latin America and the Caribbean (17 percent) are more likely to start a new business than women in Asia and Oceania (9 percent), Europe (6 percent), and North America (12 percent). They are also more likely than their counterparts in other regions to cite necessity instead of opportunity as the motivating factor behind establishing their business. Still, two-thirds of female entrepreneurs in Africa state that opportunity is the primary motivation for starting their business. Meanwhile, men in Africa are more likely to start a business (20 percent) than women, and male entrepreneurs cite opportunity (69 percent) slightly more frequently than women do (66 percent) as the motivation for starting their business.

#### 14.9 17 Early-stage entrepreneurial activity rates 8.7 (% of adult female population) 6.1 11.9 65.9 67 Motivation for entrepreneurship: 73.3 Opportunity (% of TEA females) 72.9 84.2 30.1 30.7 Motivation for entrepreneurship: 23.9 Necessity (% of TEA females) 23.8 13.1 0 10 20 30 40 50 60 70 80 90 Africa Latin America and the Caribbean Asia and Oceania Europe North America

FEMALE ENTREPRENEURS AROUND THE WORLD

Note: The Total Early-stage Entrepreneurial Activity (TEA) rate measures the percentage of the adult population (18 to 64 years) that are in the process of starting or who have just started a business. It measures individuals who are either nascent entrepreneurs (those who have committed resources to starting a business, but have not paid salaries or wages for more than three months), and new business owners (those who have moved beyond the nascent stage and have paid salaries and wages for more than three months). TEA Opportunity rates measure the percentage of entrepreneurs who reported choosing to pursue an opportunity as a basis for their entrepreneurial motivations, while TEA Necessity rates measure the percentage of entrepreneurs who reported starting a business out of necessity. Source: Global Entrepreneurship Monitor: Global Report 2016/2017. Available at: http://gemconsortium.org/report.

#### MOTIVATION FOR MALE AND FEMALE AFRICAN ENTREPRENEURS



Female Male

## **Commitment to women's entrepreneurship and economic empowerment: Why 2018 will be a defining year**

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The year 2017 has seen a commitment to furthering Africa's demographic dividend through inclusive access to productive resources and opportunities for all to achieve sustainable development.<sup>1</sup> As leaders grapple with striking the balance between modernizing economies, meeting skills needs, and achieving the demographic dividend, even more attention should be given to closing gender gaps in education, skills, and productive jobs.

We enter into 2018 with a renewed international commitment to the advancement of female entrepreneurship with the launching of the Women Entrepreneurs Finance Initiative (We-Fi) by the World Bank, which aims to leverage more than \$1 billion in commercial and international financial institution financing for women-owned small and medium enterprises.<sup>2</sup>

As we continue to support efforts like this, two outstanding questions need to be answered to guide investments to successfully advance women entrepreneurship and economic empowerment. 1) What exactly are we promoting (overall economic productivity, entrepreneurship, inclusion, or all)? And 2) what is the planning horizon (long term vs short term)? The answer to these should guide the skills investment strategy.

A persistent concern for policymakers, researchers, and development partners has been that female entrepreneurs are primarily engaged in low-productivity services and industrial sectors, running mostly small- and mediumsize enterprises (SMEs).<sup>3</sup> So far, assisting SMEs through improving their access to loans, business trainings, and networking are the most common form of interventions to promote women's entrepreneurship and economic empowerment. However, results have been mixed.

## Micro-interventions have proven ineffective.

Research has shown that micro-interventions to provide access to credit and business trainings for the poor have limited effectiveness in bringing major changes in women's economic empowerment.<sup>4</sup> This calls for more integrated approaches to address women's simultaneous constraints, macro-level interventions, advocacy and collective action, and to promote government accountability to the gender equity cause in and of itself.

<sup>1.</sup> The African Union for instance has chosen the theme of 2017 to be "Harnessing the demographic dividend and investment in Africa's youth," with a special focus on employment and entrepreneurship, skills development as well as the rights and empowerment of women and youth.

<sup>2.</sup> Fourteen donor countries already committed over \$340 million to the initiative as of its launch in October 2017.

<sup>3.</sup> See the AfDB, OECD, and UNDP (2017) report African Economic Outlook 2017: Entrepreneurship and Industrialization, available at: http://www.africaneconomicoutlook.org/en/theme/ Entrepreneurship-and-industrialisation.

<sup>4.</sup> The World Bank's October 2017 African Development Bank, Organization for Economic Co-operation and Development, United Nations Development Program "African Economic Outlook 2016: Sustainable Cities and Structural Transformation" report, for instance, shows how universal access to foundational skills/primary education coupled with improved maternal and child nutrition could contribute to overall productivity of countries and close the skills gap of Africa's workforce. Read the full report here: https://openknowledge.worldbank.org/ handle/10986/28483.

# Better cooperation between the stakeholder-led and bottom-up initiatives is vital.

Recent initiatives to improve women's access to markets and finance include government procurement for womenowned SMEs, gender budgeting, gender mainstreaming (audit) and quotas, and third-party guarantees by regional development banks.

Top-down approaches may run the risk of taking the sense of agency and ownership of women's empowerment from its ultimate owners-the very women these programs are trying to promote.

Government and stakeholder-led interventions can be important tools in promoting accountability to achieve gender-oriented goals by encouraging evidence-based interventions and instilling competition among various stakeholders in generating, seeking, and promoting innovative solutions. These programs' success hinges, however, on the validity of the assumption that decisionmaking bodies know what works best in promoting gender equality. Moreover, top-down approaches may run the risk of taking the sense of agency and ownership of women's empowerment from its ultimate owners—the very women these programs are trying to promote.<sup>5</sup>

## Women as change agents and part of the collective action

One remedy would be embracing a more pluralistic approach, including promoting and creating a generation of successful women entrepreneurs who are also social entrepreneurs (i.e., making women play leadership, by example, roles in promoting women's economic empowerment) and paying closer attention to the delivery methods of gender programming.

Increasing awareness about the importance of women's empowerment and promoting female entrepreneurship is a welcome trend in the debate about inclusion and economic development more broadly. It is important to maintain this momentum and to monitor the implementation of women's empowerment and entrepreneurship programs for early lessons on successes as well as on areas for improvement.

Psychology, aspiration, and behavioral economics literature for instance points towards the key role ownership and sense of control play in success. For instance, see Andrea Cornwall (2016), "Women's Empowerment: What Works?" *Journal of International Development* 28, 342–359, and Stefan Dercon et al. (2014), "The Future in Mind: Aspirations and Forward-Looking Behavior in Rural Ethiopia," CSAE Working Paper Series 2014-16. Oxford, U.K.: Centre for the Study of African Economies, University of Oxford.