HARNESSING AFRICA'S YOUTH DIVIDEND:

A new approach for large-scale job creation

How industries without smokestacks can address Africa's youth unemployment crisis

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By some estimates, Africa's working-age population will grow by approximately 450 million people—about 3 percent per annum—between 2015 and 2035. By 2050, Africa will have 362 million young people between the ages of 15 and 24 years old.[1] Where will the region find the jobs for such a rapidly growing young population? In the past, the answer has been industry. Historically, industry has led to structural change—the movement of workers from lower to higher productivity employment. In East Asia, large numbers of workers leaving agriculture moved into manufacturing, driving growth, job creation, and poverty reduction.

In contrast, Africa has deindustrialized. Today, its share of global manufacturing is smaller than in 1980 and the share of manufacturing in GDP is less than half of the average for all developing countries. As a result, structural change in Africa looks very different from East Asia. In Africa, three-quarters of new entrants to the labor market will work in self-employment or in microenterprises. Some 20 percent will work for wages in the service sector, and only about 4 to 5 percent will find a wage-paying job in industry. If these trends continue, only about 100 million of the 450 million Africans expected to reach working age over the next two decades can hope to find decent work. The growing population of more educated and urbanized youth encountering few jobs is a crisis in the making.

Why has Africa failed to industrialize? First, the success of East Asia as a manufacturing center means that—unlike when that region broke into global markets—African industry faces a highly productive, relatively low wage competitor. Second, industry has declined as a share of output and employment at all levels of development over the past four decades, suggesting that Africa may not be able to rely on industry to lead structural change to the extent that it did in East Asia. Third, the growth of

1 Brooks, Karen Mcconnell, P. Deon Filmer, M. Louise Fox, Aparajita Goyal, A. Taye Mengistae, Patrick Premand, Dena Ringold, Siddharth Sharma, and Sergiy Zorya. 2014. *Youth employment in Sub-Saharan Africa (Vol. 2): Full report (English).* Africa development forum. Washington D.C.: World Bank Group.

global value chains (GVCs) brings both opportunities and challenges. GVCs offer the opportunity to specialize in a limited set of tasks suited to a country's capabilities, but they place a strong premium on trade logistics, an area in which Africa's economies have not excelled. Finally, the share of natural capital in Africa's aggregate wealth is the second-highest in the world, and resource-abundant economies face strong headwinds in industrializing.

The same forces that limit Africa's opportunities in industry, however, are also creating a growing number of tradable services—such as tourism and remote office services—and agri-businesses—including horticulture—that share many characteristics with manufacturing, especially the capacity to create better jobs. Like manufacturing, they benefit from productivity growth, scale, and agglomeration economies. These "industries without smokestacks" are among Africa's most dynamic sectors of economies. Information and communications technology (ICT) based services, tourism, and transport are outpacing the growth of manufacturing in many African countries. Between 1998 and 2015, Africa's services exports grew more than six times faster than merchandise exports. Tourism alone accounts for at least 3 percent of sub-Saharan Africa's GDP.

Between 2002 and 2015 exports of tradable services and agri-business increased as a share of non-mineral exports by an average of 58 percent. High-value agricultural exports account for an increasing share of Africa's overall exports, and Ethiopia, Ghana, Senegal, and South Africa have succeeded in breaking into GVCs in horticulture. Horticultural exports from Senegal to Europe have grown rapidly, averaging 20 percent per year. Kenya, Rwanda, Senegal, and South Africa have growing ICT-based services sectors, while transit trade is Tanzania's second-largest foreign exchange earner.

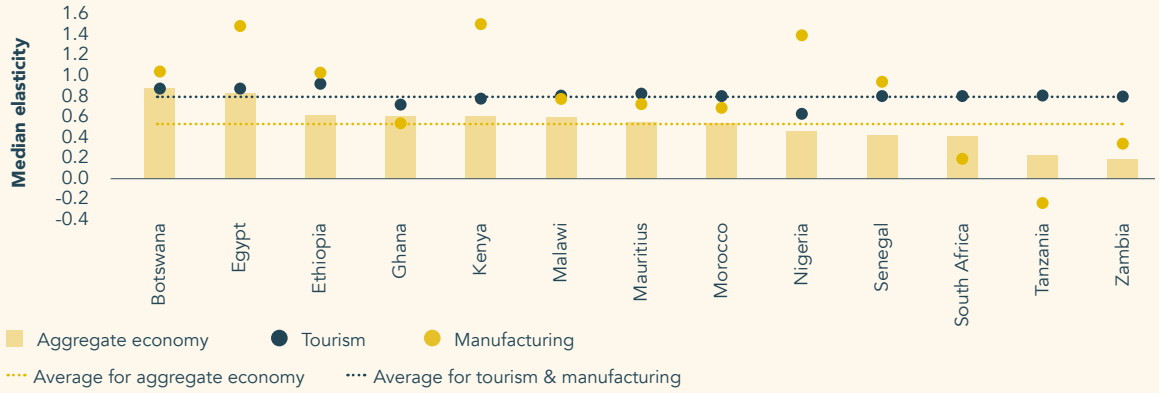
Changing prospects for manufacturing and the growing relevance of industries without smokestacks may make us rethink the sources of structural change in Africa.

Research by Brookings and the United Nations University World Institute for Development Economics Research gives some, but not full, insight into the role industries without smokestacks can play in generating better jobs for Africans. That is largely because our statistics are not well adapted to the task. For example, the tourism sector is made up of several different industries including but not limited to accommodation, food and beverage, transportation, and culture, sports, and recreational services. Thus, while it is possible to track tourist arrivals, estimates of their direct and indirect effect on output and employment are necessarily imprecise. Similar considerations apply to agri-business, horticulture, and tradable services. Better statistics on these industries without smokestacks are a must.

Nevertheless, country-level data suggest that the employment impact of industries without smokestacks can be considerable. In South Africa, tourism creates 680,000 jobs, including 36 percent of jobs in the food and beverage industry. In Tanzania, tourism accounts for approximately 14

Figure 3.1 Employment potential of tourism

Growth in tourism is outpacing manufacturing in many African countries. Like manufacturing, it benefits from productivity growth, scale, and agglomeration economies. It has the potential to create some of the millions of formal sector jobs Africa needs each year to employ youth entering the labor force. As the figure shows, tourism has the same average employment elasticity as manufacturing and much higher than that for the aggregate economy, highlighting its job creation potential.



Note: Each countries' elasticity measure is the median value of annual elasticities between 2005 & most recently available data. Aggregate Economy Elasticity is the percent change in total employment divided by the percent change in total value added to the economy. Tourism is percent change in tourism employment divided by percent change in direct tourism value added. Manufacturing is percent change in manufacturing employment divided by percent change in manufacturing value added.

Source: Brookings calculations using World Tourism and Travel Council Data and Groningen Growth and Development Centre 10-Sector Database.

percent of GDP, and about 3.2 percent of total employment, and in Ethiopia, the travel and tourism sector contributes about 11.3 percent of GDP and 9.8 percent of employment. Horticulture generates jobs for rural laborers and unskilled or semi-skilled processing factory workers. Kenya's cut flower industry employs between 40,000 and 70,000 workers, while in Ethiopia flower exports generate more than 180,000 jobs. In South Africa fruit packing alone employs about 300,000 workers.

Changing prospects for manufacturing and the growing relevance of industries without smokestacks may make us rethink the sources of structural change in Africa. The region's resource endowments suggest that many of the region's internationally competitive industries are likely to be industries without smokestacks. The good news is that because tradable services, agro-industry, and horticulture share many firm characteristics with manufacturing, policies designed to promote the growth of manufacturing—such as improving trade logistics, investing in infrastructure and skills, and promoting exports—apply equally to tradable services and agri-business. The key to solving the employment problem is to develop an

2 Newfarmer, Richard S, John Page, and Finn Tarp, eds. 2018. Industries Without Smokestacks: Industrialization in Africa Reconsidered. Oxford University Press. https://www.wider.unu.edu/publication/industries-without-smokestacks-2.

effective strategy for structural change that spans industries with and without smokestacks. We set out some elements of that strategy in a new book, *Industries Without Smokestacks: Industrialization in Africa Reconsidered* (OUP, 2018), available on open access.[2] While much of the discussion has focused on the supply side of the labor market in Africa, less emphasis has been given to the demand side. Promoting industries without smokestacks offers a complementary demand-side approach to address the continent's jobs crisis.

VIEWPOINT

The urgency of securing employment for youth in Africa

Lindsay Wallace
Director, Strategy and Learning, Mastercard Foundation

01.

At the Mastercard Foundation, we believe youth employment in Africa is the issue of our time. For every four young people entering the labor market, only one formal sector job is being created, leaving a large fraction, over 3 million, scrambling to find employment opportunities.[1] Our research[2] has shown what a challenge this can be for young people. The lack of a steady income makes it extremely difficult to move out of poverty.

Our new strategy, Young Africa Works,[3] has set an ambitious goal: to enable 30 million young people, especially young women, to secure work they see as dignified and fulfilling by 2030. Our strategy is based on our decade of work in financial inclusion, education, and skills development, and we believe that we can move the needle on youth employment in Africa.

1 African Development Bank, *Jobs for Youth in Africa*, https://www.afdb.org/fileadmin/uploads/afdb/Images/high_5s/Job_youth_Africa_Job_youth_Africa.pdf.

2 Williams, Tricia and Claudia Pompa, *Invisible Lives: Understanding Youth Livelihoods in Ghana and Uganda*, The Mastercard Foundation: Toronto, February 2017. https://mastercardfdn.org/wp-content/uploads/2018/05/Report_YouthLivelihoods_Feb2017v2-Accessible-3-1-accessible.pdf.

3 *Young Africa Works Strategy: Finding solutions to youth unemployment in Africa.* The Mastercard Foundation. https://mastercardfdn.org/our-strategy/young-africa-works/.

The scale and complexity of this challenge means that no one organization can solve it alone. Young people need to drive the change, and we need everyone to work together to solve this problem, including governments, the private sector, and civil society.

Here's what we believe needs to be done across all sectors.

Support the growing and innovative youth entrepreneurs with leadership development opportunities, finance, and links to wider markets.

Include leadership, soft skills, and digital skills in training and education systems to increase the success of young job seekers. A number of our case studies[4] highlight the importance of this work.

Encourage greater links between the private sector and education and training institutions. Young people must have access to education and training that equips them with the skills employers need. Employers need to find ways to inform curriculums and support early employment opportunities as the first job often sets the path for a young person's career.

Make financing small businesses and entrepreneurs easier by eliminating risk through digitization, alternative forms of finance, guarantees, and changing perceptions. Youth entrepreneurs in some of our programs perform just as well if not better than adult entrepreneurs—but they find it much harder to find financing.

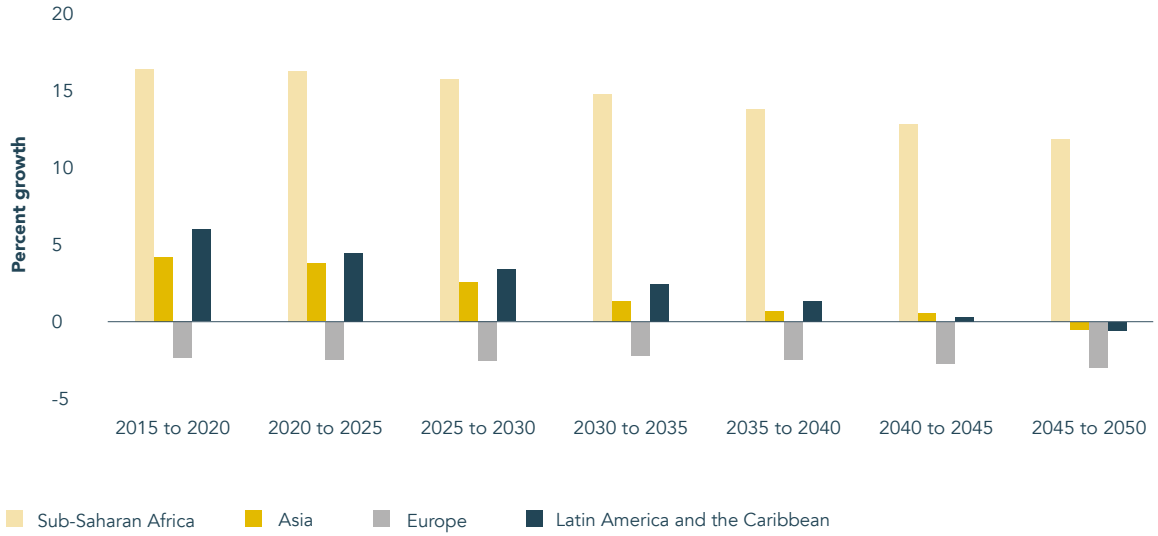
Leverage technology to drive impact and scale. We have found that education, training, employment job matching, and financing can be done effectively and affordably by leveraging technology as a delivery channel.

Over the next decade, we will partner with young people and dynamic organizations to change systems. How will you contribute to this change?

4 Novy Marx, Milena and African Institute for Development Policy, *Skills at Scale*: *Transferable Skills in Secondary and Vocational Education in Africa*. Mastercard Foundation: Toronto, March, 2017 https://mastercardfdn.org/research/skills-at-scale/.

Figure 3.2 Global workforce growth projections

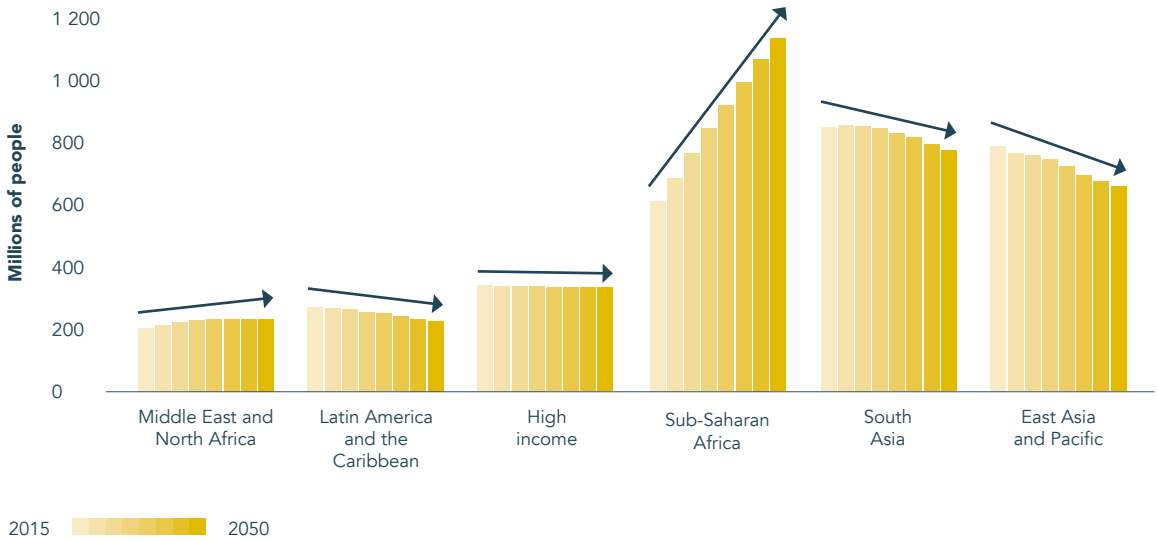
Over the next three decades, sub-Saharan Africa's working age population will grow by about 14 percent every five years.



Note: Country groups follow World Bank classifications. Working age population defined as population 15 - 64 years old.
Source: U.N. World Population Prospects 2017 Revision, Medium Variant Projections.

Figure 3.3 Global youth population projections

Over the next three decades, sub-Saharan Africa's youth population will grow faster than any other region. By 2050, sub-Saharan Africa will make up 33 percent of the world youth population, up from 19 percent in 2015. During this period, sub-Saharan Africa's youth population will increase by 522 million while the rest of the world's youth population declines by 220 million.



Note: Country groups follow World Bank classifications. Youth defined as population age 0 - 24 years old.
Source: U.N. World Population Prospects 2017 Revision, Medium Variant Projections.

VIEWPOINT

Migration of Chinese manufacturing jobs to Africa: Myth or reality?

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02.

Since the 1970s, China has emerged as the main hub of global manufacturing. Production from early-industrialized countries—like European countries and the United States—has increasingly been relocated to China to take advantage of the enormous size of China's low-wage labor force as well as economies of scale in production and transport. China's manufacturing boom is still unbroken—growing almost six fold between 2004 and 2017 (from $625 billion to $3,591 billion[1]) and reaching one-quarter of the world's manufacturing value-added.[2]

Yet, China's manufacturing industry is changing. As real wages increased by around 10 percent annually[3] between 2005 and 2014, the skills base improved and internal demand became a major driver of industrial development. China is now moving from light manufacturing for exports toward diversification and higher technology.

For many years, China was so competitive in light manufacturing—garments, shoes, toys, and electronics assembly, for example—that very few other countries managed to compete in such labor-intensive industries. However, this competitive advantage is now eroding, as industrial labor costs are skyrocketing. In fact, Chinese garment and footwear firms see rising labor costs as their main challenge. This could offer great opportunities for other developing regions, notably Africa, which has labor costs that are lower than China's. Justin Lin, the World Bank's former chief economist, calculated that if only 1 percent of China's production of apparel was shifted to Africa

1 *China: manufacturing value added.* The Global Economy: 2017. https://www.theglobaleconomy.com/China/manufacturing_value_added/.

2 UNIDO database.

3 Lin J. (2011). From flying geese to leading dragons. New opportunities and strategies for structural transformation in developing countries (Policy Research Working Paper 5702). Washington DC: World Bank.

"it would boost African production and exports of apparel by 47 percent. A 5 percent shift of Chinese export-related investments in the industry could translate into $5.4 billion in additional exports—a 233 percent increase."[4]

To take advantage of this shift, Ethiopia started an ambitious industrial parks development program to provide the infrastructure and incentives for investors in light manufacturing industries. Four parks are already operational, with many others in the pipeline. By 2020, Ethiopia intends to have built 30 industrial parks. So far, parks have successfully attracted foreign investment. Official sources say about 28,000 jobs have been created so far.

Whether this is the beginning of a large wave of industry relocation from China to Africa, however, is far from clear. There are three reasons for skepticism:

First, labor costs in most African countries are not low (Ethiopia being one of the exceptions), especially when looking at unit labor costs. Various Asian countries undercut African unit labor costs.

Second, African countries rank low on a number of other factors that influence investment, such as the overall cost of doing business affected by the quality of roads and ports, the reliability of electricity infrastructure, the degree of political stability, and the level of excessive bureaucracy and corruption. For example, in Ethiopia, high labor turnover and public protests are already challenging the success of the new export industries.

Third, most light manufacturing jobs are likely to be substituted by machines in the near future. Robots are nowadays able to produce garments and other products that could not be fully automated a few years ago. Not everything that is technically feasible, however, is also cost-competitive; but with technological progress and scale economies in deployment, costs of robots are decreasing rapidly. In a decade or so, unit costs from fully automated factories will probably fall below those from traditional labor-intensive manufacturing. Two recent surveys suggest that the vast majority of Chinese garment and other light industry firms[5] prefer to invest in technology upgrades at home or to close down rather than to relocate abroad.

Yet, about 10 percent of firms do see relocation abroad as an option. Even if most of them prefer Asian countries, following Lin's argument, the remaining small share of Chinese firms can make a big difference to Africa. African policymakers are, therefore, well advised to closely observe the Ethiopian experiment as well as the ongoing trends in factory automation and, above all, undertake steadfast reforms to reduce the cost of doing business.

4 Xu, J., Gelb, S., Li, J., & Zhao, Z. (2017). Adjusting to rising costs in Chinese light manufacturing. What opportunities for developing countries?. SET (Supporting Economic Transformation) Programme. ODI: London.

5 Xu et al (2017) as well as a survey by China Center for International Knowledge on Development and the German Development Institute (forthcoming).

VIEWPOINT

A gig economy solution to boost employment in Africa

Adam Grunewald
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03.

Africa's rapidly growing employment gap has become an emotionally charged issue for economists and policymakers. The issue is exacerbated by a quickly rising youth population, for whom the lack of formal sector jobs means that most turn to informal sector jobs such as domestic work, casual labor, or smallholder farming. As a technology platform for informal sector workers in Kenya, Lynk has harnessed the growth potential of this trend to create one of the largest gig-work platforms (an online resource to match people's skills with needed work) on the continent. Innovative efforts like ours are just the tip of the iceberg. In Africa, gig platforms have the potential to provide a source of consistent work and, with centralized governance and support, a pathway to reduce informality and boost productivity by leapfrogging informal economies.

As the name suggests, the informal economy is marred by uncertainty, a lack of social protections, and massive inefficiencies around productivity and income growth. In Kenya, for example, where hundreds of thousands of people work in carpentry and joinery, most workers only have access to and training in manual hand tools. Rather than investing to make the sector competitive, the government's most notable interventions in the past year have been to cripple the sector with a ban on logging and a substantial tax on alternative materials. In spite of their growing importance as an engine of employment, most informal activities are still seen as an adversary by national governments.

Meanwhile, in other parts of the world, technology platforms that operate as non-traditional "employers" are rapidly growing. In the United States, where a proliferation of platforms like Uber, Lyft, and Airbnb has led to the rise of the gig economy, a

growing population of U.S. workers are choosing flexible gig work instead of formal contracted employment. In China, Alibaba boasts millions of participating small and medium businesses—for many of which Alibaba represents their only sales channel. Beyond simply linking them to consumer demand, the platform also provides loans, access to logistics and warehousing, and even business formalization and tax filing support. The potential for gig platforms to provide a source of consistent work and centralized governance and support is even more exciting in Africa where platforms can leapfrog informal economies.

The potential for gig platforms to provide a source of consistent work and centralized governance and support is even more exciting in Africa where platforms can leapfrog informal economies.

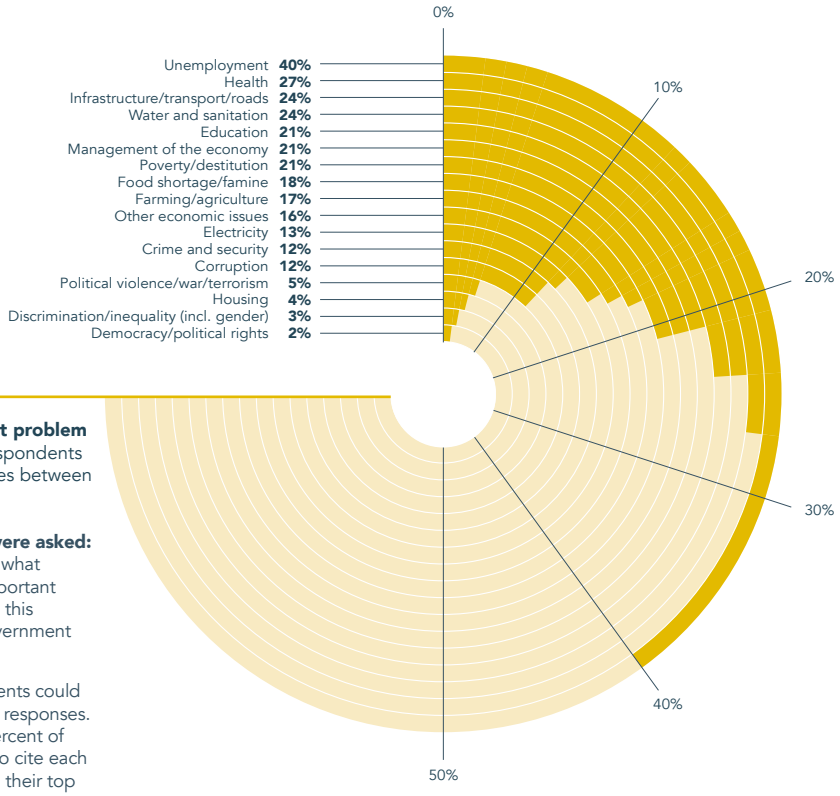
Lynk is a platform that matches thousands of jobs each month in categories ranging from plumbing and electrical works to yoga lessons and hair care. While the technology is similar to platforms like Uber or TaskRabbit, Lynk takes a more hands-on approach to worker vetting and quality management. Unlike in developed countries, where gig workers often have college degrees or formal sector experience, most informal sector workers in Africa lack this educational foundation and soft skills. Lynk addresses this gap by investing in onboarding and upskilling. So far, the investment is paying off, with most participating workers seeing a two- to three-fold increase in monthly income. Lynk also provides services that are often unavailable like logistics and warehousing support, material wholesaling, and ongoing skill training.

For many workers on Lynk, the platform is building their first actionable digital identity. By accruing data on jobs completed, income earned, and other efficiency metrics, platforms like Lynk are poised to offer advanced services such as loans or skill accreditation, areas where traditional institutions have struggled to engage. As job platforms grow, they become an increasingly valuable source of data and service delivery for enormous populations of hard-to-reach and historically underutilized workers. As we see in the case of Lynk, indigenous platforms that are customized to the needs of a local ecosystem can serve as both a compelling source of jobs and income, as well as an effective channel for formalization, inclusion, and economic development.

Platforms like Lynk are poised to offer advanced services such as loans or skill accreditation, areas where traditional institutions have struggled to engage.

Figure 3.4 Voices of Africa: Priorities for the region

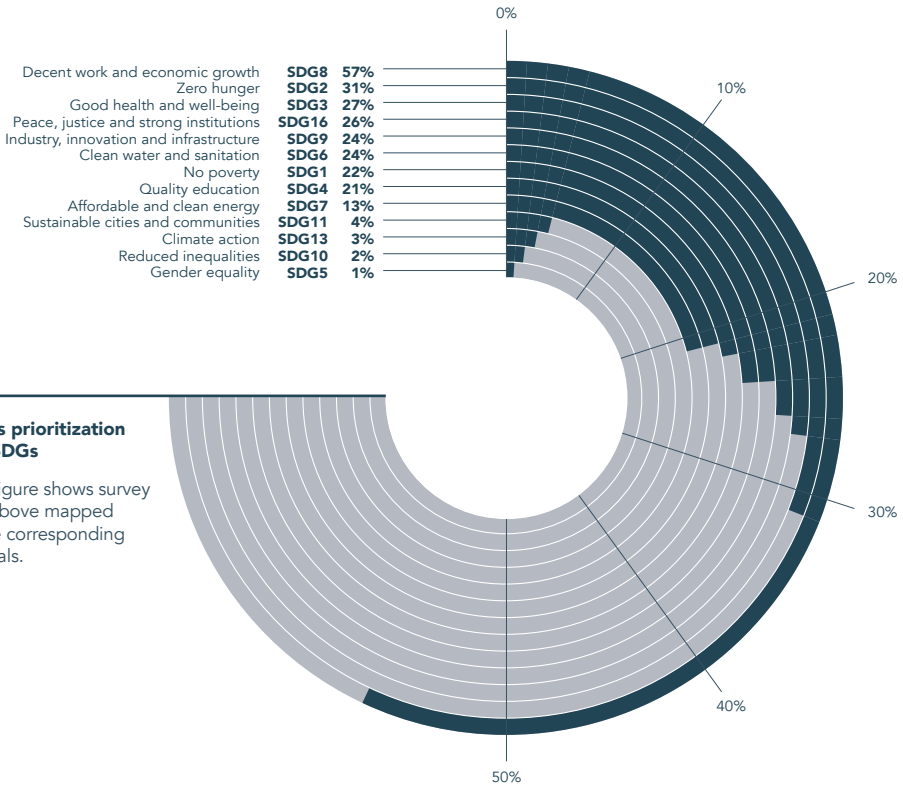
Be it in job availability, quality, or growth, survey data from a diverse group of countries all over Africa shows that people are chiefly concerned about the future of work.



Most important problem according to respondents from 34 countries between 2016 and 2018.

Respondents were asked: in your opinion, what are the most important problems facing this country that government should address?

Note: Respondents could give up to three responses. Figure shows percent of respondents who cite each problem among their top three.



Citizen's prioritization of the SDGs

Note: Figure shows survey results above mapped onto the corresponding SDG goals.

Note: Both are surveys according to respondents from 34 countries between 2016 and 2018.

Source: Coulibaly, Silwé, and Logan. "Taking stock: Citizen priorities and assessments three years into the SDGs." Afrobarometer Policy Paper No. 51. 2018.

VIEWPOINT

3 myths about youth employment in Africa and strategies to realize the demographic dividend

Louise Fox
Chief Economist, United States Agency for International Development

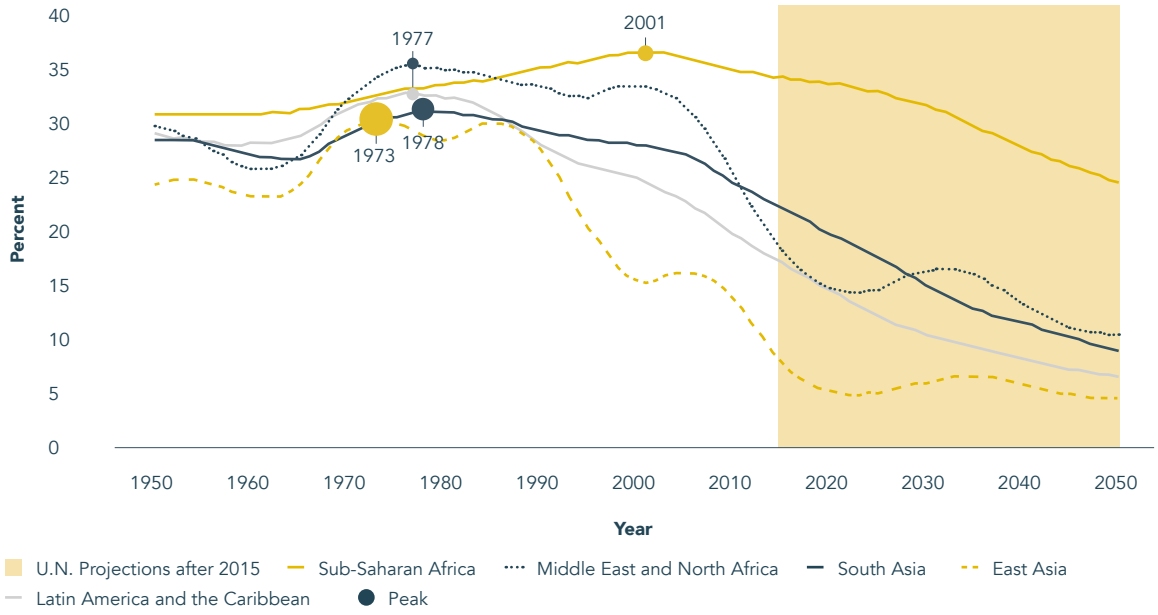
04.

Myth 1: Sub-Saharan Africa faces a unique demographic challenge

Most commentators on employment in Africa believe it faces an unprecedented youth employment challenge. Facts to back this up include that Africa is demographically the world's youngest continent, and that by 2050, the estimated number of young people entering the labor force there will exceed that of the rest of the world combined.

Historical data tell a different story. It is true that Africa's demographic and economic transformations are well behind the rest of the world—in part because most African countries started these processes later, with less developed economic, social, and political institutions. But African's youth as a share of their working age population, at its maximum, was about half the size of the peak youth populations of East Asia, and 20 percent less than the South Asia peak (Figure 3.5). Actually, Africa's youth bulge in the labor force peaked at the turn of this century, at 38 percent (only 4 percentage points higher than the Asian peaks), and is now on the decline. All other regions made it through this period of peak youth share of the labor force without facing a crisis. Africa should be able to as well. Opportunities for higher per capita growth should be on the horizon. Why are they not?

Figure 3.5 Youth (ages 15-24) share of working age population



Note: Size of bubble indicates the subregion or region's share of the world working age population at its peak. Youth is the estimated population at ages 15-24 years old. Working age population is estimated population ages 15-64 years old. After 2015, all data represent U.N. projections. Produced by USAID Data Services.

Source: U.N. Population Prospects.

Myth 2: Africa's youth bulge will create a demographic dividend

What is unique about Africa is how slowly the youth share of the working age population is expected to decline. While some are promising that this high youth share in the labor force will generate a demographic dividend for Africa that will help boost economic growth,[1] again the historical data tell a different story. Crucially, the size of the dividend depends on the rate of demographic transition,[2] and Africa's transition is proceeding very slowly. The world's 10 highest fertility countries are now in Africa, and these countries, which have not even started the transition, will keep the regional fertility averages and youth shares up at least until mid-century.[3] This will be a drag on economic growth.

In Kenya and Ghana, for example, fertility has been declining steadily as life expectancy increases (the essence of the demographic transition), and now the total expected births per woman has just moved below four. Even in these countries, though, the transition will not make the fast progress we saw in other regions owing in part to the stubbornly high share of young women having children before the age of 18 (8 percent in Kenya and 7 percent in Ghana, compared with only 4 percent in South Asia and 2

1 Paulo Drummond, Vimal Thakoor, and Shu Yu (2014). "Africa Rising: Harnessing the Demographic Dividend," IMF Working Paper. https://www.imf.org/external/pubs/ft/wp/2014/wp14143.pd.

2 Andrew Mason, Ronald Lee, Michael Abrigo and Sang-Hyop Lee (2017). "Support Ratios and Demographic Dividends: Estimates for the World," technical paper. http://www.un.org/en/development/desa/population/publications/pdf/technical/TP2017-1.pdf.

3 Population Reference Bureau. 2018. "2018 World Population Data Sheet With Focus on Changing Age Structures." https://www.prb.org/2018-world-population-data-sheet-with-focus-on-changing-age-structures/.

percent in East Asia). The regional average is an abominable 10 percent. When women marry and have children early, they tend to be less educated and have more children. Unmet demand for contraception among women who are married or in a union is also stubbornly high—30 percent in Ghana and 17 percent in Kenya, compared to just 4 percent in East Asia. To reduce fertility rates and realize any demographic dividend, Africa will have to aggressively expand contraceptive access, and support young women's health and development through adulthood.

Myth 3: Skills training is the solution to Africa's youth unemployment situation

Youth is widely recognized as an important skills-building period, with education being a crucial part. Africa's education systems could do a lot better at building the foundational skills for the future labor force. However, educational and skill-building institutions do not create jobs. Firms and people do. Wage employment is created when new firms are created and existing firms expand production, finding new markets. This takes time, probably decades before most employment will be in modern firms in the case of African countries. Indeed, it could be argued that owing to better education policy than economic policy, young Africans are over-skilled for their economies, which is one reason why unemployment is highest among the most educated youth. Lacking opportunities to use their skills, they are frustrated and vocal.

The majority of African youth, of all skills levels, will have to seize opportunities and create their own living through self-employment, often with family members, on farms or in nonfarm sectors. A few people, typically 2-5 percent of the labor force, will be able to create a growth-oriented business and employ five or more people. This challenges the massive push toward youth entrepreneurship as the solution to the region's unemployment challenge. Sadly, youth businesses—operating in an unfriendly economic environment, with limited capital, networks, and knowhow—tend to remain small, livelihood-sustaining ones, serving local markets.[4] More training does not solve this problem, unfortunately.

The focus on Africa's youth as an instrument of development, and the subsequent explosion of youth training and development programs, is misplaced. Education is needed for more than earning money—it enables all aspects of youth transition from dependence to independence. But education is not enough, as youth need jobs and an opportunity at decent work; so do their parents, and so will their children.

All the attention on the perceived deficiencies of youth, and the interventions targeting them, do not create jobs or increase opportunities in self-employment. Put simply, there is no silver bullet. Imagine instead if all the money being spent now on tiny youth projects with tiny results were spent instead on improved infrastructure, connectivity of information flows, trade facilitation, and better management in the public and private sector to facilitate formal sector job creation? Hard to do, but it is what youth really need.

4 OECD Development Centre. 2018. "Better Policies for Better Youth Livelihoods: A Guidance Note for Development Practitioners." EU-OECD Youth Inclusion Project: Paris.