

THE BROOKINGS INSTITUTION

SAUL ROOM

OPPORTUNITIES FOR LARGE-SCALE JOB CREATION AND STRUCTURAL TRANSFORMATION
IN AFRICA: LEVERAGING INDUSTRIES WITHOUT SMOKESTACKS

Washington, D.C.

Tuesday, May 27, 2025

This is an automated transcript that has been minimally reviewed. Please check against the recording for accuracy. If you find any significant errors of substance, please let us know at events@brookings.edu

WELCOMING REMARKS:

BRAHIMA SANGAFOWA COULIBALY

Vice President and Director, Global Economy and Development, The Brookings Institution

PRESENTATION:

RICHARD S. NEWFARMER

Country Director for Rwanda, Uganda, and South Sudan, International Growth Centre

PANEL DISCUSSION:

MODERATOR: PIERRE NGUIMKEU

Senior Fellow and Director, Africa Growth Initiative, The Brookings Institution

BELINDA ARCHIBONG

Fellow, Africa Growth Initiative, The Brookings Institution

MARY HALLWARD-DRIEMEIER

Professor of the Practice of International Economics, Walsh School of Foreign Service,
Georgetown University

VICTORIA KWAKWA

Former Regional Vice President for Eastern and Southern Africa, The World Bank

* * * * *

COULIBALY: If you can find your seats and we'll get started really soon. So good morning, everyone. It's really my great pleasure to welcome you to today's event hosted by the Africa Growth Initiative here at Brookings. And thank you for joining us, both those in the room, but also those who are tuning in virtually from across Africa and around the world. Today's gathering marks the culmination of several years of rigorous research and collaboration. And what we hope will be a broader and deeper conversation on the challenges that is really central to Africa's future, namely how to create productive employment opportunities at scale for the continent's growing young population.

This is a really defining issue of our time. I think in the coming decades Africa's population will surge and by some estimates by 2050 one in four people on the planet will be Africans. So, this demographic trends presents both a tremendous opportunity, but also a significant risk. And much of it will depend on how African economies are able to harness this demographic dividend, which depends critically on the ability to enact inclusive policies, meaningful investments, and an openness to rethink the traditional pathways to development. So, historically, industrialization, particularly manufacturing, has been the escalator to higher incomes and mass employment. But we now face a reality where many countries are industrializing at lower levels of income and are reaching their manufacturing employment peaks earlier in their development journey due to a combination of globalization, but also increasing reliance for production on machinery, think automation, think robotics. For production at the expense of labor. So, this phenomenon, known as premature deindustrialization, has cast doubt on whether the traditional economic development model remains viable for Africa, but frankly, beyond Africa, it applies to all other regions with similarly burgeoning youth population.

If the traditional development model is no longer or may no longer be as viable. So how can countries develop nowadays? That's really the big question. So, in many respects, the book and the research agenda is about more than job creation. It is also about even rethinking the entire development model. Our Africa program in partnership with a network of African research institutions: KIPPRA in Kenya, DPRU in South Africa, LAPD in Senegal, EPRC in Uganda, the University of Ghana, and IGC in Rwanda and Zambia, and Policy Studies Institute in Ethiopia, launch a major research effort to explore whether there are industries within Africa's comparative advantage that can be leveraged

either alone or alongside manufacturing to accelerate job creation. And therefore, structural transformation. In other words, is there an alternative development model?

So, my co-editor, Richard, who is here, will present high level summary of the results shortly. So, I don't want to steal too much of his thunder, but the answer is happily a resounding yes. We find that industries such as tourism, horticulture, agro-processing, and certain ICT-based services offer employment. Offers opportunity for job creation and structural transformation. And for lack of a better term, it's what we call industries without smokestacks. Let me note that this is the second edition of this research agenda. In 2018, Brookings partners with UNU wider on an earlier edition focused on industrialization that resulted in the production of the first book entitled, Industry Without Smokestacks, Industrialization in Africa Reconsidered. It was edited by Richard Newfarmer, John Page, and Finn Tarp. So today I'm pleased to introduce the results of the latest efforts of this research agenda in a new book called, New Pathways to Job Creation and Development in Africa, The Promise of Industries Without Smokestacks. I don't have my copy of the book, but if anybody does, if you don't mind me borrowing this. Here it is. Yeah, thank you.

It is edited by me, Haroon Borat, one of our nonresident senior fellows and director of GPRU at the University of Cape Town in South Africa. He was gonna be with us online, but he's also an advisor to the South African president, has been pulled into meeting and it's quite hard to compete with the South African president when he needs you. Richard Newfarmer here, is country director for IGC. And our former colleague John Page, who unfortunately could not be with us here today. But the book presents compelling evidence and case studies showing that these sectors, when supported by the right policies, can indeed be powerful generators of productive jobs, inclusive growth, and economic transformation. Our goal today is not only to share the research findings, but also to spark a wider dialog among policymakers, researchers, development partners on how best to support these emerging sectors, scale up successful models, and ensure that Africa's next generation can find productive employment opportunities.

We are really fortunate to have with us several of the book's co-editors, esteemed scholars, and practitioners from across Africa and beyond who will share their perspective and insight, and I'm

grateful for their contribution and for the partnership in advancing innovative thinking on African development. So, let me close by thanking our partners, the panelists, and all of those of you here and online for being a part of this important conversation. So, we look forward to a rich and very engaging discussion. So, I will now turn it over to my co-editor, Richard Newfarmer, who will make a short presentation and then we would follow up with a panel discussion moderated by my colleague and director of our Africa program, Pierre Nguimkeu. So, Richard, the floor is yours.

NEWFARMER: Thank you very much.

NEWFARMER: Well, thank you, Coul. Coul's given a brilliant summary, perhaps more succinct than what I'm going to present with you right now. But as a friend of mine once said, if it's worth saying once, it's worse saying twice. So, let me also say how happy I am to kind of represent the team of editors here. Haroon cannot make it, as Coul mentioned. And Coul was really very important in this. The inspiration also goes to John Page, who unfortunately for health reasons can't be with us. But he was sort of the inspiration to this whole line of thinking. And I want to give a special shout out to John. So new pathways to job creation and development in Africa, the promise of industries without smokestacks. So, what's the challenge here? The challenge is, first of all, Africa has to create jobs. We estimate that something like 360 million young Africans will come into the labor force over the next 10 years, maybe that turns out to be about 15 million jobs annually that has to be created. It's a big number. But the challenge is not only to create jobs because we know that no matter what people's levels of incomes are they will have, generally have some form of employment. The issue is underemployment. So how can we create on the other side productive jobs, jobs that will drive growth.

This particular discussion, as Coul alluded to, was launched in part by some really important work that Danny Rodrik did more than a decade ago, along with Maggie McMillan and others, where they talked about premature deindustrialization. That manufacturing, Danny highlighted, was really not going to drive growth. And so, the debate became, well, how about services? What can services do? And On the other hand, maybe services were either not going to create enough productive jobs or maybe they were going to drive inequality. We saw some work of Arvind Subramanian, for example. So that led us

to come together under Coul's leadership to bring together researchers from Africa to look for new pathways to create jobs. Well, one of the premises was that it seemed unlikely that Africa could use manufacturing to replicate the experience of other developing countries, particularly those in East Asia, because the world had changed. So, let me highlight four or five of those really important changes to the global economy.

First of all, the world has shifted its nature of consumption away from products that have been manufactured into services primarily. I love this graph because this is, this shows per capita income, countries arrayed on the horizontal axis, together with manufacturing value added as a share of GDP. And what we can see in the 1980s, manufacturing was important for all countries, irrespective of income. These lines are averages for all countries during that period. We can see from the 1980's to 1990's all the way to the change in 2010. Though that line has progressively shifted downwards. What this means is that other parts of the economy have become more important than manufacturing, irrespective of per capita income. The second issue has to do with manufacturing itself. We know that technological advances have increased productivity dramatically. This graph happens to be for the United States, but and shows. Jobs, the number of jobs actually created in the United States in manufacturing as well as real manufacturing value added. So, this is output and what you can see is that even though the number jobs is declining, the productivity of that labor is increasing so the value added in manufacturing is increasing.

This graph could be replicated, in fact they've done so, in several other industrial countries. It would take a little different form in developing countries, but... It underscores the importance of productivity in manufacturing. It also echoes what's happened, of course, in agriculture. At the same time, the third reason why I think manufacturing is going to be tough is because of the transformation in the global economy and the nature of trade. This graph shows the share of global manufacturing value added in the world. And what we can see on the far right over here is high income countries and we can see that from 1994 almost every five years to 2015 we have seen a decline in the rich country share of global manufacturing value added. At the same time, we see that China and East Asia have also grown rather dramatically corresponding to that. So, we are getting a huge shift in the global economy

and in manufacturing base. And this is meant that east Asia is now very competitive in manufacturing. It's going to make it tough for Africa to come into this.

The final point I'll mention is one that comes out of recent work by Joe Stiglitz and Danny Rodrik. And they point out that manufacturing is also tough because of new rules that are likely to become adopted by the countries around the world dealing with climate change. So, think about the carbon border adjustment mechanism in or Europe's effort to curb deforestation through the deforestation regulation, those regulations may impede African exports in the world. So, all of this meant that maybe Africa had to begin thinking about looking for a new development strategy that was much more diverse than what we have seen in the past. So that was the challenge before us. We wanted to look at particular sectors. And for this, we wanted to look at those sectors which maybe shared some of the same attributes as manufacturing, but were involved in other things. The ones we looked at, for example, included tradability because exports and engagement with production chains were really very important, so tradability was important. Secondly, activities that could use technology to drive growth and productivity. That, too, is a criteria for selecting activities.

And then finally, as Coul mentioned earlier, activities that could employ a large number of people were equally central. So, what do we do? We took the normal categories, and we broke them up industrial statistics and we broke up somewhat differently than what we see in normal accounting. Here you see employment across all of a country divided into manufacturing, what we're calling industries without smokestacks, and then other non-lowa sectors as well. I think two or three things were novel about what we tried to do. The first was think about agriculture in more than just subsistence farming or as a category. Rather, we wanted to differentiate commercial agriculture from subsistency and traditional agriculture. The second thing we wanted do is think about informal trade and formal trade. And so, what we try to do is kind of take those apart using some different methodologies. And we put those together and we called these industries without smokestack, and then began to look at how this played through the eight country case studies. Three low income countries: Ethiopia, Rwanda, and Uganda. Four middle income countries: Ghana, Kenya, Senegal, and Zambia, and South Africa. And what you see is a picture that looks like this.

So, I'm hitting it with a lot of statistics and let me just highlight a couple real quickly. First of all, if you compare. Manufacturing with industries without smoke stacks, as we have defined them, you see that industries without smokestacks are actually pretty important here already, even for the low-income countries. More importantly, or equally importantly, is they become more important as income levels increase here. So, what we see is that manufacturing is maybe one-third or one-fourth the level of industries without smokestacks. At the same time, we know that traditional agriculture is declining during this period. That's evident in all of the case studies. But more importantly, or equally importantly, we see that services are particularly important here and financial services and tourism are a highlight here because they together, those two sectors alone, equal in general more employment than what we see in manufacturing. So, these are really important sectors where there is high productivity growth. These are tradable sectors where exports can be configured prominently. And so that's the reason why we highlighted these. And we trace them through the various country studies. But let me just show one graph from Rwanda, which I kind of think illustrates the point in the discussion of structural transformation.

In the early days, in the early literature, the focus was on sectoral movement and increasing jobs in outside of traditional agriculture. This graph shows the various sectors of the economy arrayed across the horizontal axis. And beginning with agriculture, let me note that productivity is very low in agriculture. This is Rwanda labor productivity. We know that early literature focused on moving workers out of agriculture into these other sectors. And so that was the structural transformation initial argument I think that Danny Rodrik and Maggie McMillan put on the table. At the same time, we know that productivity within sectors is really important. You see that in this graph comparing the dark lines, the dark bars with the less shaded bars. There, productivity gains within sectors become really important, in fact if you look Africa in somewhat detail. Perhaps 80% of the productivity gains have occurred not through these early definitions of early literature on structural transformation, but rather by the increase in productivity within particular sectors. So that's the good news. It opens up a lot of areas for discussion that we'll have a little bit later on. I'll show another graph here looking at all eight countries together, showing that labor productivity is moving out of agriculture into higher productivity, IWSS jobs. This graph shows the normalized change in employment shares during the period 2000 to 2018, varying depending on the country.

We had to do some fancy econometrics to put this together, and productivity. And what we see is, on the far left in the dark circles, we see subsistence agriculture. And if you look at the green bubbles, we call these bubbles, I guess so, the green circles. Those are the industries without smokestacks. And what we tend to see is that industries without smokestacks have pretty high productivity and pretty fast growth. And if you look at it in comparison with manufacturing, you see also that manufacturing is very important. The circle, I should emphasize, illustrates the size of employment during this period. The key takeaway here is that industries without smoke sacks is moving pretty rapidly to help absorb employment and create jobs. That said, how do we make this happen? How can we accelerate this? So, I think the case studies go into some detail about policies to drive industries without smoke sacks and manufacturing.

The name of the game is moving from subsistence agriculture into the industries without smokestacks sectors. How do we do this? Veronica Mitsubo, whoops let's just see if I can go back here now I have Uh... Veronica Mitsubo actually submitted a question you know what are the what are the policies that we could adopt to drive industries without smoke stacks? Well, I think the first way of thinking about this is to think about uh... Commercial agriculture uh... And services as being sources of productivity growth and sources of employment. How do you make that happen? Well, in all sectors you have to have good macro, you have to have infrastructure, you to have adequate regulation. That's kind of the baseline for everything. Macro can really mess up an economy, as we have had experienced in Zimbabwe, for example. It can also cover up a lot of sins at the micro level, or even at the governance level. So, macro is really important. Infrastructure is terribly important. And electricity. Is fundamental, we know that that's a major obstacle to both manufacturing and services in Africa. And likewise, tailored sectoral policies turn out to be very important. Industrial policies, as it were. These tend to be quite different and fine-tuned for each country, and we can talk about those perhaps in some detail later on.

The second point is the importance of driving exports, exports as a driver of growth. I say this because, if you think about it, the average size of an internal market, a national market in Africa is about \$40 billion. That's about the size of the GDP of Edinburgh or Stockton, California. So, if you're going to achieve economies of scale and have large firms, you've got to drive exports. I think this is

just really fundamental and deserves. A lot of consideration. The good news here is that services along with manufacturers are becoming important. This graph shows simply that services and manufacturers are about the same amount. In fact, in 2023 data it seems that services are exporting a little bit more than manufacturers. That is the good news maybe about this graph. Now, the bad news is growth rate has not been very high. This, if you can see, these are absolute numbers. To drive the eight or 10% growth that Africa would really aspire to, it needs to drive much more exports. So, beginning to think about that and thinking about using commercial agriculture and services, as well as manufacturing, to do that becomes central. That's the point here, that they're insufficient to drive growth.

And finally, in a world of Trump tariffs and a changing international order, I think this becomes really important. And maybe it underscores the importance of the African continental free trade area. We can talk about that a little bit, but also exports to other developing countries and integration of the global South, I think offers opportunities at a time when neo-isolationist policies seem to be emerging in the North. The final point I'll make here that comes out of all the case studies, these are general points, is the importance of investing in education and upgrading labor skills. We know that African skill levels are low. This graph shows various dimensions of education as captured in what's called the Network Readiness Index. And we pulled out the educational parts of it to show this graph. And what you see is that Africa pretty much has a fairly low skill level relative to other countries and other regions. This is terribly important because it's important to raise productivity within all sectors. You know, if you're going to have commercial agriculture, you're gonna have a network of agents that can help teach farmers what crops to plant, when to plant and when to farm. If you're to build a modern service industry, you are gonna have to have people that can firms and manage accounts, and do that sort of thing. AI, I think, is bringing this in spades.

The importance of digital trade as part of this is really central. I'll describe this also because of the importance of services. Mary Hallward, who will be with us today, has been the co-author of one of the definitive works on services in the developing world. I'm sure she'll have something to add to this, but the importance of services as a source of demand, a source of growth, a resource of export cannot be underestimated. And at the same time, the demand that that implies for skill level increases

is really important. And then finally, it's important for education and upgrading skills, it is important to make sure that the growth pattern that occurs is inclusive and that income distribution does not become more unequal. There's a natural tendency that as an economies grow, there's a wage widening effect that drives income inequality. There's a skill bias often in the growth pattern. And so, to overcome that, you have to increase the supply of skilled workers. That's just what it amounts to. And, so, up-skilling becomes very important. In any case, key takeaways from the book. One is that manufacturing is unlikely to provide sufficient productive employment for most African countries. And the governments need to think about. A multifaceted development strategy that can harness labor, but harness labor productively. That's the key element here. We think that industries without smokestacks have the potential to accelerate growth and rising incomes. And happily, it's not a choice between industries without smokestacks or manufacturing. Both require a really solid investment requirement. Both require an investment in infrastructure. Both requires an improvement in skill levels.

And then finally, but I think what we take away from this is a kind of a little more optimistic message than what transpired in the early literature on structural transformation. Instead of thinking about, well, manufacturing is growing slowly, so Africa is going to grow slowly, think about it as the promise of a multi-dimensional development strategy with solid industrial policies, vigorous export promotion, and investment labor skills. Because these can create productive jobs that will lead to rising incomes in Africa. So that's the takeaway from the book. It's available at every computer near you, online at Brookings. So, go to your nearest computer. I see somebody doing that back there. And while you're looking at the nice words that Ngozi, and Danny, and Njuguna, and Paul Collier wrote on the back of the book, I'm I'm going to give two shout outs if I can. One is to Wafa Abedin, where are you Wafa? Way back in the back of the room who has been a driving force in getting this into publication so we really appreciate your effort. The other is Chris. The other person is Chris Heitzig, who worked here at Brookings under Coul's leadership for several years and was really very instrumental in kind of keeping us all on track and helping us as co-author of the opening and closing chapters. So, he's somewhere in Europe floating around, but tuned in, so Chris, thank you as well. So, with that, let me say, Coul, back to you.

NGUIMKEU: Thank you very much, Richard, for that excellent presentation. My name is Pierre Nguimkeu. I'm the director of the Africa Growth Initiative here at Brookings, and I'm joined in this panel with four distinguished scholars. Richard Newfarmer is a country director for Rwanda, Uganda, and South Sudan at the International Growth Center. Belinda Archibong, she is a fellow here at Brookings's Africa Growth Initiative. Mary Hallward-Driemeier, is a professor of the practice of international economics at the World School of Foreign Services at Georgetown University. And Victoria Kwakwa, she's a former regional vice president for Eastern and Southern Africa at the World Bank. I would like to thank all of you for taking the time out of your busy schedule to come and share your thought on this very important topic. I would also like to thank the audience here at Brookings and also those joining online who are watching through our live stream process.

I will begin with some questions to the panelists before we open the floor to the guests, both in the room and online. Those online can submit their questions either through events or by Brookings.edu. Or you can also submit your questions online through X/Twitter, hashtag industry without smokestacks. Without you, I'd like to start with you, Richard. Your excellent presentation summarizes some of the key ideas of this research about the prospect of large-scale job creation through the development of industries without smokestacks. And we can better understand their implication for harnessing. The demographic dividend in Africa and also for achieving structural transformation, especially as we saw evidence of high productivity and fast growth compared to other traditional sectors. But you mentioned the use of industrial policies to promote industry without smokestacks. My question is, is there not a risk of falling into the traditional trap of losers and winners? And how can industrial policy be made more effective in this context?

NEWFARMER: Tough question. I think, in fact, I think about industrial policy as having sort of three key components. The first is incentives. We need to make sure that there are incentives out there for these sectors to grow. Perhaps one of the most important incentives is the exchange rate. You want to make that the exchange rate is competitive. When we know that it's very easy to kill the growth of any sector by having an overvalued exchange for any period of time. And beyond that, of course, the macro dimension, which we can talk about. Second part, I think, of industrial policy is infrastructure. It's often not discussed as industrial policy. But the fact is, we know that in the case of Rwanda, for

example, the tourism industry has taken off and has become very important because of public investments in the convention center, in connectivity within the economy.

When I first went to Rwanda. I was amazed driving through the countryside when I saw ditches being dug by women. I wasn't quite sure what these were doing. They were laying fiber optic cable. This was in 2010s. Fiber optic cable to integrate the internet throughout the country. That's an example of infrastructure. Ultimately, infrastructure and public investment was really very important. In connectivity, we have also mentioned, of course, electricity, which I think is fundamental. So, infrastructure is the second point. Is targeting. And here, targeting has to be done pretty carefully. And I would highlight two things. One is to build on existing firm level capacities and push it forward. This is something that comes out in the final chapter of the book. Build on what you've got and take it to the next level, especially those areas where there's technology involved and technology spillovers I think can be really important. At the same time... A key criteria for me on good industrial policy is whether or not it's competition-enhancing or competition-restricting.

What we know is that competition- restricting, let's say high tariffs, this is the Donald Trump policy, will we see industry resurging in the United States or will we in this case probably see slow growth emerge. But we know also that high tariffs in Argentina and other countries have just simply built little monopolies. Behind high-tech. That's competition restricting industrial policy. Competition enhancing industrial policies are ones that encourage entry. Investment promotion, bringing in foreign direct investment. We have a little project on export promotion in Rwanda, which is giving temporary credit subsidies for small firms to export. Likewise, exports generally tend to be, tend to drive productivity gains and intend to be competition enhancing. So, those are the three elements that I would point to, you know, incentives, infrastructure, and adequate targeting.

NGUIMKEU: Thank you very much Richard. So incentive, public investment, infrastructure, which seems to be the same type of ingredient we need for the traditional industrial sector. This question is for you Mary. How does the focus on industry with our small start mitigate some of the challenges in developing the industrial sector in Africa? What was the research missing in terms of the overall prospect by not specifically considering this type of economic activity?

HALLWARD-DRIEMEIER: Great, well first of all I want to say thank you very much for including me in part of this discussion. I think the big shift is from what countries are doing as to why. And the reason the focus traditionally was always on the manufacturing was understandable because up until more recently all the high-income countries became high income through industrialization. So, the sense was that is what countries had to do. And I think if instead you take this shift in perspective as to why, right, so the key factors about manufacturing was that it was tradable, you could have the scale, you could invest in machinery and equipment and capital that would complement labor, raise its productivity, and that's where a lot of innovation was. And the sense was services didn't have any of those characteristics. And so, if you shift to think about those characteristics, services increasingly do have those. Many of those are because they can be sold, traded digitally.

I think a lot of the areas where there is some of this scope for expansion is tied into the digital agenda. I think one of the things that is really interesting, you quoted Danny Rodrik and Macmillan with their quote premature deindustrialization, so 10, 15 years ago, this was seen as a huge worry, that countries had a lower share of their economies in industry and it started to decline at lower levels of income and that this was going to doom Africa's growth prospects. And even they are publishing now about the importance of services and taking this wider lens. So, I think much of the research in fact is sort of shifting into more of this why and less obsession on the what. So, I see that as all very good. The one other. Dimension I would add to your list is looking at spillovers. And this is one of the real advantages of services, is that they can be more productive themselves, they can provide employment, and many of these services have spillover benefits into other sectors, right? So that's clear in ICT or in finance or in business development sectors.

But so even some of these sectors, therefore, that may take and provide more jobs for higher skilled, people, they support sectors and industries and firms across the spectrum. So, I think if we look as well at where is that scope for these spillovers, it reinforces how and why this agenda is really important. And I want to just sort of say one other thing. So, I, yes, I'm a professor now at Georgetown. Prior to that, I was at the World Bank for many years and headed up one of the special themes for IDA. So, this is the sort fundraising for low-income countries. Much of which goes to sub-

Saharan Africa, and I was in charge of what had started as jobs, and then it changed in part at the request of officials, particularly in West Africa, that they didn't, yes, they wanted jobs, but they didn't want jobs created sort of from the government or sort of public works. They wanted the dynamism. They wanted to scale. They wanted it to be sustainable, and so it switched from being jobs to being jobs and economic transformation, which has the lovely acronym of JET. Which sounds much more exciting and much more potential. And I used to say that one of the key words there was and. And so, I like that you have and in your title of your book too because we do care about jobs and there is a huge number of young people gonna be coming into the market. But if you're not paying attention to the development and the growth dynamics and the private sector growth, you're never gonna provide those jobs. So, to me that and is really critical and I do think much of the research really is recognizing the urgency and trying to look at it in these broader terms.

NGUIMKEU: Thank you very much, Mary. So, I like that acronym of JET. We are ready to fly and create more jobs in Africa. Victoria, you also had a very rich and rewarding career at the World Bank, and we've seen job creation highlighted as one of the key themes of the recent World Bank IMF spring meetings. What tools are available for multilateral organizations like the World Bank and the IMF in promoting employment opportunities in Africa, and how does it operate concretely on the ground?

KWAKWA: Sure, thanks for that question and let me also thank the organizers for inviting me to be part of this panel and also congratulate the authors of this book. I think it really brings a lot to the table on this very important issue at a critical time for countries in Africa so I really hope it gets all the airtime that it deserves and really feeds into policy and in countries in Africa. And beyond. Let me just start by saying, as you indicated, I've retired from the World Bank, so I'm not speaking on behalf of the World Bank. I'm a recent retiree, so, you know, I will speak from what I know. The World Bank does, you know, so yeah, and I think it's still fairly current.

NGUIMKEU: Congratulations!

KWAKWA: Okay, thank you. Thank you so much. So, on jobs and the focus that the attention that the World Bank is giving to it, you know, the World Bank's mission of helping to end poverty, boost shared

prosperity on a livable planet, clearly can't be achieved without jobs and good jobs because it's evident that good jobs are super important for moving people out of poverty in a sustainable way. So, jobs, I believe, are the center of our work, or the World Bank's work, or the world bank's mandate. And it's always been clear, but I think we've, in the past, assumed that, okay, let's do all the things that we need to do to promote growth, to help economies develop, and the jobs will come. And I think with all the numbers that we're seeing in Africa, what we're seen going on in other parts of the world.

It's obvious that a more deliberate effort to look at this issue is needed and to give it more impetus and to support clients more. So, this renewed focus, I think it's a World Bank, but I think it's also African Development Bank and other institutions as well. So, Mary, you've mentioned, I think Richard also alluded to the private sector. The private sector is super important, you know, the jobs aren't going to come from the public sector. You need vibrant, dynamic private sectors that can generate a growth with jobs and good jobs at that. So fundamentally, the effort should be to create that over time and to lay the foundations for private sector that is really dynamic in all of these countries. So, you can say this is long term, and yes, it is, but it's also, you can't forget the short term because short term, politically, countries and governments have masses of unemployed youth. So, you have to combine what you're doing in the long term with specific actions that can address some of the issues in a more short-term space and give more jobs that are more visible and people see something is being done about it, so you have to work both angles and, in a way, that one doesn't go against the other. What you're doing in the short term doesn't go against your ability to do some of the longer-term things that are needed.

But in terms of what the bank and other international institutions, the tools that they have, for the World Bank, I guess of course the analytic work, like work as we're seeing today, really to understand better what are the sources of growth, where the jobs will come from, what are their issues, where are their gaps, and more recently we've had what is called a jobs and growth report that is new and it's being rolled out and allowing us to look more deeply at these issues. The IFC has what is call the country private sector diagnostics. That looks at specific sectors in particular, to look at the sectoral issues, to look the possibilities of job creation, and to look where the policy gaps are. So that's one too, research, analysis, knowledge. The other too, is just really policy advice and support to clients to

help them put policies together, think through the policies that they need to bring into being to support this. And then, of course, there's financing for initiatives, financing through policies, financing of policy reforms. About a decade ago, there was a very successful effort in Bangladesh to support the government with policies that were really important in creating jobs, particularly in the textile industry. And everybody refers to it, but this was a particular financing instrument which is provided to facilitate policy reforms and that is being looked at more to see if we can use that instrument of the bank and use that instrument in other countries.

Of course, there's just normal project financing where you're financing certain projects that will contribute to jobs. And we have examples across the world Bank work. In Kenya, we have specific jobs for at-risk youths to teach them new skills, to give them a means to start self-employment and so on. We're helping young people again who's going to work in agro-processing in countries like Malawi and so on, there's work in SME financing that is helping women hold on to their firms, you know, create more jobs and so on. So, there's a range of projects that are being financed that create jobs. And then more recently with this renewed focus we're trying to make sure that we're also looking at guarantees and how they come in to support the private sector to invest to create jobs. And also using guarantees to de-risk context for private sector so that the private sector could really come up with activities and grow and support job creation. Now, I think that these are some of the things that's happening on the ground. The individual projects are having impact. I think the real issue is getting scale, the scale that you need and making sure that, you know, what's being done in agriculture is connected with what's being done in SME financing, what's been done in social protection projects, and that it's more integrated.

So, this new effort to be more deliberate in looking at the jobs issue is to make sure that there's integration across the World Bank activities, you know, and individual projects aren't siloed. You'd come with a holistic approach, and then also integration across the World bank group. So, if you're doing work on jobs in Kenya... In the World Bank side, you're also talking to the IFC side. You're talking to MIGA so that the private sector part of it is all coming together more seamlessly to deliver so that whole is bigger than the sum of the parts. I think the other effort that's being made is to be more systematic in doing this and also to find ways of measuring better the job's impact. Some of the

impacts are indirect. I don't think the bank is looking for every job, every project to be called a jobs project, but to do everything we can to measure impact and to measure it accurately. So, a lot of thinking and work is ongoing to think through how do you measure jobs impacts of various initiatives. But I think in all of this, the foundations of infrastructure, of human capital, of policy and regulatory environment are also things that are really being looked at carefully. So, let me stop you. It's exciting. But I think this work that's been done really can provide a lot of input into this new effort by the bank and other multilateral development agencies. Thank you.

NGUIMKEU: Thank you very much Victoria. So, channeling, dynamizing the private sectors, stimulating public investment, providing policy advice and also financing key projects that are oriented toward these industries. Belinda, we've been talking a lot about technology and I think Mary also talked about the need for a digital agenda in terms of research avenue where a scholar need to pay particular attention. Where do you see the role of technology in boosting firms' productivity and employment in these industries and in creating jobs that allow for not only class mobility but also reduce inequality?

ARCHIBONG: So, thank you very much, Pierre. Thank you, Coul. Thank you everyone for this panel and for the book. I've got my signed copy. It's very excited. Thank you. So, thanks for asking this question. So, this is actually a big research agenda of mine. I have been working for a number of years trying to understand how we can leverage these online hiring platforms in Africa. So, think of LinkedIn indeed, but in Africa, right? And one of the things that we've been doing is trying to understand the extent of thinking about skills mismatch. So, I really like, Richard, that you mentioned thinking about incentives and infrastructure, and you also mentioned the issue of the supply of jobs. So, I completely agree that the supply jobs is a key constraint, right? We need to increase the supply job. We in this room probably know that most of the firms, the median firm in Africa is an SME with less than 100 employees. 80% of firms are that in our data set. And so, one of the things to think about when boosting firm productivity, I think, is even just to go a little bit further back in the first stage and think about mismatch, skills mismatch.

And so why do I mention this and how does this relate to the online labor market stuff that we've been doing? So, I am Nigerian, if you can't hear it, slash, can't see it in the last name. But one of things that you see if you go to Lagos, for example, is that, I don't know if people have seen this, you go and you see on the walls that people will have these ads. For cleaner wanted or whatever, hospitality person wanted, and then they will put the number you should call. And this is essentially a job ad that somebody has spray painted on the wall. People seen this, I don't know if anyone has ever been to Lagos, or okay, I see some people nodding, excellent. So, to me, I always put this as a picture when I'm trying to present on why I think skills mismatch is actually a bigger issue than we are focusing on in the African context, because I'm saying like, look. If people are, if employers are kind of desperate enough to go spray painting walls to find potential employees, then I think that the mismatch issue is probably a bigger one than we consider when we're thinking about how do we increase employment in Africa, right?

And I think even before we get to the, you know, getting firms larger and large enough to employ more people, trying to figure out how do you match skilled employees. To employers that need them in a more efficient, in a low-cost way is kind of a first-order question. And so, this is where the online labor market, the tech comes in, and this is why I say this is fantastic. We have, we've been working with, I've mentioned, people in the room know this, Jobberman is like the biggest online platform, online job platform in West Africa. They have presence in Nigeria, Ghana. There's Brighter Monday in Kenya. There are these big, big platforms that are able to match, when I say match, get employers that are looking for employees to skilled candidates that are looking for jobs together, they're able to really match this in a very cheap way. All you need to do is go on the platform, just like an Indeed or a LinkedIn, you set up your portal, your profile, and you apply to as many jobs as you want. The employers, it's a very low cost, they advertise on the platforms, and they're then able to match or find the kind of skilled candidates that they need in these industries without smokestacks, right?

And the key industries that we're seeing on the platform, we've been working with this data for a few years, is things like ICT, is things like financial services and banking, consulting, education, you know, and things that in Richard's presentation we saw have the potential to actually boost labor productivity, right? And so, this is very exciting. I think this is something where when we talk to these

firms, these online portals, they say, look, we are expanding, we're expanding throughout the countries, we serve millions and millions of applicants and job candidates. Skilled ones, by the way, so the people we're looking at in our sample, and this is in the Nigeria one, but I think it's true across West Africa. Eighty percent of them have bachelor's degrees. Ninety percent of them have completed some tertiary education. They're older, 30 years old, have up to four to five years of experience on average. So, these are very, very skilled candidates. So, the question is, how do we match this in a low-cost way? I think the online portals are a very promising avenue to do this.

But also, then, how do we get on the regulatory? I'm glad, Victoria, you mentioned the regulatory environment. How do we the regulatory environment to the point where when I'm talking to the online portals, and I'm saying, why don't you partner with the government to have these portals have career centers, for example, in the public secondary schools and the public universities in Nigeria, and make the match even more efficient? They're like, look, the barriers to working with are high, the regulatory costs are high. Government is not the most efficient partner. How do we change the regulatory environment so that these private companies that are excellent at matching, right, low-cost matching, are able to then say, oh, actually, okay, we can partner with government to boost productivity of firms and also to boost labor productivity, right? By increasing the match, and also maybe then thinking about ways to do some skills training and all of these things that they also do, these firms also do to kind of boost employment more generally. So, I'm gonna stop there, but you know, thinking about online portals, they're great, they are promising, and also thinking about how do we lower regulatory barriers so that these private companies can work with government to even further boost employment and firm productivity in Africa.

NGUIMKEU: Thank you, Belinda. So, lowering the barrier, reducing the mismatch between job seekers and employers, especially minimizing the search frictions and also reducing the asymmetry of information between these two groups of people. Excellent. Thank you so much. So, I'm going to come back to you, Richard about this question on how do we centrally incorporate industries without a smokestack activity, without risking? Don't you see this as risking to aggravating income inequality? And if so, what policies can mitigate this potentially adverse effect?

NEWFARMER: Tough question. I think this is a problem that many African countries are experiencing. I would say a big focus ought to be up-skilling, solving the mismatches in the labor markets, and making sure that the supply of skilled workers increases proportionate to the demand for skilled workers. And that's going to be tough, because industries without smokestacks, manufacturing, and even government jobs, or even in mining, these require skilled jobs. They're high-paying jobs. What that means is the demand is there. If you can create more mining engineers, if you can create more advertising agents, if you can create, God help us, more lawyers and accountants, that will tend to narrow the skills gap that naturally comes out in skills-biased growth. So, what do I think is really important? First of all, foundational skills, I think, are really important. And here, we're talking about things like, let's even go back one step, maternal health. I'm quite concerned about the fact that USAID has cut rather abruptly financing to PEPFAR and other things. This is going to mean that infant mortality will likely increase and that people, infants born with HIV are likely to become less productive workers. That's going to widen the distribution that you talk about. So, I think about rethinking that becomes really terribly important.

Secondly, school quality is really important, and educational quality is real important. We need more research on how to align teacher incentives to make sure they're delivering outcomes in the schools. Andy Zeitlin at Georgetown University, a colleague of Mary's, has done some really phenomenal work on this. But we know. That in the case of Uganda several years ago, 27% of primary school teachers didn't even show up for the job. They were getting paid, but they didn't show up. That's going to undermine the educational enterprise. And so that has to be rectified. And I think increasingly, we have to focus on digital skills as part of this story. It may require rethinking of tertiary education a little bit. You mentioned the mismatch. I'm worried that there's a lot of college graduates in Africa that are going without jobs for a while, right? Why is that? Well, maybe the skills they're getting in the universities are not commensurate with the labor market demand, and that ought to be looked at. For example, we know with the advent of artificial intelligence programs that a lot of rather high-paying jobs are going to disappear, and the skill mix is going to change. But McKinsey, in a recent report, estimates that Africa could do very well capturing the benefits of artificial intelligence. Up to \$60 to \$100 billion of economic value added could increase GDP within Africa, as well as employment.

The final point I'll make has to do with importing skills. You know, we. We often, I think, the ministries of labor, for those of you that know Africa well, are very interested in creating local employment and so it's very difficult for foreign firms to bring in foreign labor because their optic is, well, that job is being taken away from an African citizen. This, in my view, is the wrong way to think about it. I think we need to think about it as importing skills because every time there's a foreigner that comes into your economy with greater skills, they're teaching ten other local people about how that's to be done. I think there's a lesson, by the way, as the Trump administration looks at universities here. You know, we need foreign expertise coming into the U.S. Economy much as Africa needs it coming in abroad. So, the effect of the diaspora, the effect on bringing in foreign direct investment to bring in skills, and of course education abroad I think is really important as a way of importing skills. So, these are some of the measures that I would take to help try to mitigate the problem of perhaps widening wage distribution associated with IWSS and manufacturing as well.

NGUIMKEU: Thanks Richard, tough problems, tough issues. Belinda, you've done a substantial amount of work on youth and women in Africa. How does the context around this employment in this industry differ for this two group of people and how can we invest in this sector to improve job opportunities for this specific group of the people?

ARCHIBONG: Okay, so one of the, I'll give you evidence from our research, which is mostly in Nigeria, but let me speak to both sides of the market. So, on the supply side first and then on the demand side as well. So, on the supplies side, one of things that I've been mentioning for a while is thinking about, I'm going to add to Richard's incentives and infrastructure institutions, right, going back to the regulatory framework, right. So, we know youth unemployment is rather high in African countries. We also know that gender gaps in employment are quite persistent. And so, one of the things that we've been advocating for, based again on our research, is to say, one, there needs to be anti-discrimination laws in the labor market that are strictly enforced, right? That say, if you have discrimination against women, against young people in the labor market, this is going to be penalized by the government, right. So that's like a first order thing, you know, think of the EEOC in the U.S., but make sure that every African country has this, right.

The second thing that I'm gonna mention is, I've mentioned this, this is in ours. Law Jobs Framework paper in Foresight Africa. I recommend everybody read this, a great essay that I wrote. Not because I wrote it, but it's great. Anyway, the other thing that I will mention is thinking about the housing market, right, which I mentioned in that paper. So why do I mention the housing market and legislation or regulation? So, if you are noticing the trends in terms of population and what's happening with population density in African countries, you'll notice that the trend is towards urbanization, right? More and more people, especially young people, moving to cities. Now what happens when you move to a city? Your first order condition, your first order need is housing, right? You need to find a place to live. If you notice that if you go to many African countries, Nigeria included, Ghana included, Cameroon included, you'll notice that for one thing, landlords will ask you to have like up to a year rent in advance, right, to pay for housing in a place like Lagos, which is incredibly expensive, or a place, like Accra, et cetera, right. So, I think as a first stage, this should go away. Have housing regulation and laws that remove this requirement for young people who are just starting out life and their careers, and also are then income constrained, right?

And for women as well who tend to have, there is the gender wage gap, we know this from Claudia Goldin's Nobel Prize winner's work is persistent across the world, have lower income, remove that constraint that they should be paying up to a year in advance for rent. Also, thinking about the housing discrimination as well. If you go to places like, again, in Nigeria or in Ghana, you will notice how landlords will, for example, say that they will not rent housings to women, right? Especially to young women or unpartnered women. So again, this is a key constraint if you are trying to boost labor productivity and increase employment by getting a key productive arm of your labor force, women, to enter the labor force in a rapidly urbanizing country, right. So, I'm gonna mention those two, and I'm going to mention one more thing on the labor demand side. Which is thinking about entrepreneurs and female entrepreneurs. I don't know if people know this, but I believe Africa is the continent and sub-Saharan Africa is the region that has the highest share of female enterprises in the world.

African women are actually disproportionately more likely than men to be entrepreneurs. They are running these small micro-enterprises, oftentimes in the non-agricultural sector, the industries without smokestacks, and yet they are not receiving the support when it comes to access to financing that

they need to increase the productivity of these very, very small firms. So, I think there was a World Bank article that came out recently that said if you increase access to finance and remove discrimination in the labor market, you know, gender-based discrimination in the labor-market, you could boost global GDP by about 20 percent, right, which is a sizable number, sizable figure, right? Thank you to the World Bank colleagues for the analytics. So, again, I'm going to summarize there. One, laws, anti-discrimination laws, in both the labor market and the housing market, right, that prevent young people and women from getting access to labor market employment and housing, and two, ensuring that on the labor demand side, for the firm side, you have access to financing guaranteed to the population that is disproportionately more likely to be entrepreneurs in the continent, women.

NGUIMKEU: Thank you very much, Belinda. So, we have the largest, highest rate of women entrepreneurs in Africa. That's excellent. And you should be thinking about ways to regulate to make sure that they have their fair share in the job opportunities. So, Mary, this question is for you. Is there a trade-off between strategies that focus on traditional manufacturing and those that encourage the growth of industry without smokestacks for African countries?

HALLWARD-DRIEMEIER: So, is there a tradeoff? I'm going to say yes, I'm an economist. So yes, and on the other hand, no. But I think both parts of that are actually important. So, I'm gonna start with a no, not a tradeoff, in the sense that there's an awful lot of synergies between the two. So, back on this sort of premature deindustrialization. So, it is true that three quarters of countries are seeing industries declining as a share of their economy. But in terms of absolute decline, it's a dozen countries, almost all of which it's because of war, right? So overwhelmingly, countries' manufacturing sectors are growing, but they're declining as a share because services are growing faster. So, it doesn't have to be not to pay attention to manufacturing, and I think the book is very good at saying there are synergies across, just don't forget about the service sector. And if you look to see where is a lot of the productivity growth happening in manufacturing is actually in the service of occasion of manufacturing it's in the design and the R&D going in, it is in the financing, the marketing and the maintenance arrange of services or on your iPhone, think of all the apps.

There's a lot a services that come and are getting built into manufacturing goods so I don't think there has to be in that sense uh... Some sense of of trade-off. On the other hand, ... There's limited financing and there's little limited political will and where you're going to put your reform efforts and some of the kinds of reforms and investments you need are a little bit different. So, we've talked a lot about trade. A lot of the traditional trade agenda is trading goods and how to get the tariffs on goods down and aside from the last few months there's been incredible progress on that over decades. Services has been much harder and so there still needs to be more work reducing some of that tariffs on services. What's interesting is the latest sort of Trump tariffs are all on goods and not on services. So, there may be some sort of benefits of that being overly focused yet. But that is actually an agenda that needs more attention and including on trade in data.

And there was a question about CBAM and how this might hurt some of the manufacturing. You know, Europe has GDPR in terms of data and respecting some of the privacy issues. These are things that are being debated within African countries already. I think that debate is really important. If you look at some of the kinds of issues on services with the Continental Free Trade Agreement, the countries have given themselves an awfully long time to comply. So, the direction is good. I would say more urgency is needed. Technology is changing really fast and being behind is going to be costly. You know, we've talked about digital skills. I would say, so I'm gonna just build a little bit on some of what you've said in terms of other elements in which this digital matters. So, one is the matching of employment, but there's also matching in terms of selling other kinds of services, selling goods. You think of all the other kind of platform opportunities and in general, the research from many countries shows that this is inclusive, right? Individuals can, SMEs can, micro firms can. More informal firms can. The challenge is partly making the match, but part of it also is the payment and a trust on the quality of goods or services being exchanged.

So even in Nigeria, you've got a lot of e-commerce, but it's cash on delivery. Even in East Africa where there's more mobile money, a lot times there's not the trust. And certainly, you can't leave a package at a front door and expect it to be there when you get home hours later. So, there's sort of more fundamental issues. So, there is a lot that's happened in terms of mobile money. Really being able to use that and have trust in that I think is something that's critical for a wide variety of different

activities. Some more trust in dispute resolution on exchange of e-commerce and employment I think, is another piece on all of that. And I think the other piece, sort of building a little bit what you had said about industrial policy. So, if you're going to concentrate in certain sectors, there's an inherent trade-off, because you're choosing. But you really care about those incentives. And you care about it being competition enhancing. So, in addition to the anti-discrimination laws, and this has been improving in part because of a spotlight that the World Bank and others have been shining, is on the books the differences between men and women on their right to open a business in their own name, to open a bank account in their own name. To have contracts and enforce them in their own name. So, it's hard to extend the access to finance if you're not even seen as equal before the law in terms of gender and some of the key economic rights.

So, I'm just gonna broaden the gender law issue because I think for women entrepreneurs to really succeed that broader gender equality is really gonna matter. And I think the other sort of piece just coming back to this pro-competition is, and again, this matters for all the sectors, is that the playing field is level. And so, the risk with some of the industrial policy is it favors certain firms, often connected firms, larger firms, sometimes state-owned enterprises. And the intention may well have been good, and the intention is to have that catalyze and start something, but far too often it may start with some those connected firms and you never get that dynamics. So, paying attention that it really is enhancing. And some of the nature of competition in digital space is a little bit different. And so, updating some of competition authorities to really take that on, I think is gonna be critical to have these widespread benefits.

NGUIMKEU: Thank you very much Mary. So yes and no but mostly no trade-off between these two sectors which is great because we don't want the development of this industry to come across as a zero-sum game or at the expense of the traditional sector. Victoria, what do you think, what you see as a short-term and long-term challenges facing labor markets in African countries in this modern era of AI and emerging technologies?

KWAKWA: Thank you. Look, I think every time you talk about AI and emerging technologies and labor markets, people tend to think, okay, job losses, you know, and low-skilled jobs are going to go

and people are going to be left high and dry. And I don't think there's enough attention to the other side of it, that it will also produce jobs. And so, there's a lot of worry and not enough attention given to what are the things that stand in the way of countries, particularly in Africa, robustly and at scale adopting these technologies in a way that ensures that the other beneficial effects of job creation could come. You know, and I think that we should look at that a little bit more. So, if you look at, there are a few things, you know, it's come in the conversations quite a bit. First, the skills. The skills just aren't there to take on some of the new demand for jobs that might come. The skills aren't that to work with these technologies and to use them effectively. So that's one thing that I think really needs to be looked at.

I think the other thing is some of complementary infrastructure, infrastructure, energy for example, it's really critical for adoption of AI and these technologies. So, if you have, as we know in Africa, about 50% or so of the population that doesn't have access to energy and a lot of who have access is not reliable, how are you going to work in this context where you really need electricity? It's an issue of high costs of the technologies and so on for several of the African countries. I think these challenges need, should not be overlooked. And I would focus attention on getting these issues addressed. Some can be done in the short term, some longer term. Because if we do, and there's more adoption of these technologies and AI at scale, I think the net effect on the jobs issue is probably going to be positive. You know, some of the literature points to that and so on. I think government's focusing on these gaps and these challenges that limit or impede more adoption of skill is what they need to do.

And so, I would go back to the skilling and skilling taking advantage of the youth dynamic that we have in Africa and really skilling these youth to work in technologically sort of a friendly context. And be part of the revolution, make sure that it's really taking hold. And it is taking hold, but not fast enough and not at the scale enough that's needed to have all the beneficial effects. So, I would say that and certainly, certain other sector and of course, other sectors like some of what has been mentioned in the industries without smoke stacks. I would even in agriculture, Richard, what you showed in your presentation is that within agriculture itself, the productivity was quite high, 80% of the productivity, if I got the number right. And so that in itself, technology can be part of it and technology brought into sectors like agriculture can support resilience to climate in agriculture as farmers use AI

and newer technologies to understand better weather patterns to respond and to be prepared for that. And then the other sectors that we've also mentioned can be good sectors to look at. And then policy is going to be important. I think part of really mitigating some of the downside challenges to labor markets and labor dynamics is what sort of policies governments put in place. And you can put good policies that support labor and support workers to adjust. Of course, we're talking about the skilling, but we're also talking about policies that make sure, that support labor to benefit from these changes that are going on. So, I think social policy or policies as regards labor market can be very important tool and that's also something that governments can look at. Yeah, thank you.

NGUIMKEU: Thank you very much, Victoria. I think you have maybe time for one or two questions from the audience. If you have a question, please raise your hand. State your name and organization. Be brief and precise. And more importantly, make sure that you end with a question mark.

AUDIENCE MEMBER: Good afternoon. No, it's not afternoon yet. Good morning. Thank you all for being here. I've enjoyed your presentation. I'm Dr. Angela Pashayan from American University and I specialize in development in Kenya. So, I would like your perspectives and I don't know who wants to answer this, but I'll be brief, I promise. We're talking about addressing issues, challenges, long-term, short-term. We are talking a little bit about AI and I'm noticing that we're mentioning skills gap. And I'm thinking about access gap. I study people in Kenya, you know, in development. And what I see is that you have to pay to get a job, that it's not about the skills that many people who live in informal settlements have master's degrees, but they don't have the money to pay, to get the jobs. And so, when I think about World Bank and I think about AI, I think about perhaps... What are your thoughts of using something like I don't know, blockchain, something where you can track where money goes to stop corruption so that people can actually access jobs when they do have skills without having to pay to get the jobs.

NGUIMKEU: The gentleman over there.

AUDIENCE MEMBER: Thank you. I'm Julien Piquet with the Africa report, Jean-Afrique, here in D.C. You've all touched a bit on the AFC-FTA. I was wondering if you could develop a little bit about that.

Critics would say that it's kind of putting the cart before the horse, pre-major industrialization on the continent. I think the bylaws of the AFC-FTA itself, the free trade area, talk about using it as a tool for industrialization on the continent, creating supply chains, et cetera. Could you talk a little bit about your message to the AFC-FTA Secretariat? Do they have it wrong? Should they rethink their whole approach here? Love to get your thoughts on that. Thank you.

ARCHIBONG: I'm not sure about the pay to get a job in terms of the access. I do know that Kenya has Brighter Monday. They have, I think they also have Jobberman. They have these big online portals where, as I mentioned, the direct cost of application is zero. Now, where I thought you were going with the paying to get access is thinking about the ICT costs, right? It costs money to have data to be able to access these jobs, this is true. Thinking about the infrastructure costs also, especially if you have to travel from a more rural area to the city. Where a lot of the jobs tend to be concentrated. At least when I say the jobs, I'm talking about like the white collar in the industries that we've been talking about, like the ICT, the financial services, et cetera. These are the industries that I'm taking about, right? And they tend to very concentrated in the urban areas. So, when it comes to transportation costs, when it come to ICT costs, I think this is definitely a role for public sector, right?

So, we have another paper on thinking about how you can subsidize, for example, access to the internet, on your mobile phone, access to ICT. And governments can partner with private sector telecom companies to do this in a pretty efficient way. We can talk offline if you're interested in this. If you're talking about direct corruption, I have not found much evidence on this, at least in the kind of job markets that we are talking about, where people are literally paying for access to a job. What I have found, again, I think this is where the online hiring companies have been very, very good in places like Kenya. Which also has a fantastic mobile money market, so I think quite connected when it comes to the telecom industry. They've been very good in terms of trying to match or matching, I should say, these qualified applicants with the master's degree with these jobs in ICT consulting finance. The key issues, the key constraints are the ICT costs, are the transport costs. Then we can talk more about thinking about skills training. I just mentioned, I know we're running out of time. People have been talking about digital skills, people have been taking about all the tech skills.

When I talk to companies, and we ask them to rank what is the most important skill, they say soft skills. They say, I need somebody who can communicate properly, who knows how to do teamwork, and who comes on time. They say look, especially with AI, I can teach you digital skills. In fact, coding, I'm an economist, I'm an economics professor. My students, I tell them, you know, we're gonna use ChatGPT to learn how to code. It's great. They're like, I can't teach you that. What I need is people who have soft skills, and then we need more investment, maybe in places like the World Bank, in soft skills training. To help lower those barriers, so we can connect that master's degree person in Kenya to the great jobs in the city.

NGUIMKEU: Thank you, Belinda. Second question.

NEWFARMER: Just a couple thoughts on the Africa free trade area. I think the administration in Washington has kind of given a wake-up call to developing countries, that all of a sudden, they are going to see the costs of closed markets. And I think that I'm optimistic that that's going to give impetus to regional integration in the global South. What we see, actually, we saw that pattern actually over the last 10 years. We see the North kind of retreating from regional integration with Brexit and all kinds of incipient protectionist measures. But now we're seeing it in spades. At the same time, in the Global South, we saw efforts at integration. We saw, of course, the EAC. We saw the tripartite arrangement in the South, and now the Africa Free Trade Agreement. 54 or 55 countries, I think, have signed the protocols. The deal is, they've got to accelerate it. Because I think it's really important at this stage, if you want to have large firms, you need large markets. And we know that one problem that Africa has is that companies are just too small. And if your market is just the neighbor next door, you're not going to be able to grow very big. So, I think the potential is really there. And I would hope that there would be an acceleration.

One of the issues, well, we know rules of origin are still being negotiated. We know that services, something Mary emphasized a little bit earlier, are terribly important. Restrictions are still abound. If you look at the Services Trade Restrictive Index, you see that it's pretty high in Africa still. That's got to be brought down. The good news, I think, is that trade within Africa is Last year, it grew by about 8%, that is 22%, 23%. That's good news. A lot of the content and composition is somewhat different

than North-South trade. Instead of commodity trade, it's also regional manufacturers. It's differentiated products. This is a terribly important set of changes for the region. So regional integration is really important. I would just like to see it happen a bit faster.

NGUIMKEU: Thank you Richard. Mary?

HALLWARD-DRIEMEIER: So, I'm gonna pick up again on the access. So, I really think that's an important point, access, but I'm going to interpret it a little bit differently. So, the paying to get a job, I hear more often about public sector jobs that people pay because there's then incredible job security, often higher wages, and some can use those government public positions to gain private benefits from their power in their position, right? So, I hear about it there. I don't hear about as much, I'm not gonna say it never happens, but I do think this access is an important point. And in some sense, digital takes space, makes some of the transportation costs lower. You do need to be able to have access, but it does actually expand access to much larger markets. So, in that sense, digital could well help. I like your question of what other kinds of technologies and where they can be useful solutions. Think people need to think really creatively about that.

There are a number of studies that have looked at blockchain and corruption, often in areas of public procurement where you can win and then having won the contract, the amounts of money received can go up. And so, trying to have that be immutable. But there's a whole thing around the transparency that also matters. And so, this is something that's been true for a number of years. And one of the first places I heard about it was in Senegal, where they made public procurement overwhelmingly sort of 90 plus percent of contracts were not competitive bid. They put them online and made them competitive and then over two thirds of them were then filled by SMEs that had not had before. The costs went down dramatically and the biggest winners were actually women owned enterprises that were then able to compete for contracts they otherwise were never really considered for. So, some of this making things open to a wider set of entrepreneurs. Having some more transparency really can help. And then the other piece of building a little bit on the sort of platforms for work is getting some more information about what are reasonable wages for the kind of work I'm offering online.

And so, there was some fear, and there still could be, that some people's wages get bid down because there's that much more competition with the online marketplace, but particularly for lower education and disproportionately for women and youth, they were able to see and raise the wages because they could see that's what others online were offering their services for. So, I'm not gonna paint digital as a cure-all for everything, but it does have a number of features which are actually really good and inclusive and can help address some of that access gap.

NGUIMKEU: Thank you, Mary. Victoria?

KWAKWA: Thanks, yes. I was also going to say almost something similar to what Mary has said. I think what you've experienced, I've heard about it too. And I do agree with Mary that you often tend to hear about it on the public sector side, public sector jobs. And this is part of the frustration, growing frustration of young people who feel I don't have an uncle or a rich uncle or brother or cousin that can pay so much money for me to get a teacher's job. Or to, here are my degrees, here's my qualification, I am being asked to pay. So, it does exist. I would hope that online matching and so on contributes or can help. But it is a problem and everything that we can do or governments can do to bring transparency, using technology, whether it's blockchain, or other things, I think really needs to be looked at because it's a major issue from some of what I've heard described.

ARCHIBONG: Can I just add almost, especially in the online platforms we have been studying like many years of data, government does not advertise for jobs on the online portals. So, all my comments only apply to private sector jobs. Let me just clarify.

KWAKWA: Hopefully, private sector space, it doesn't happen as much, but who knows. I think this is a question to be really studied, you know, to get at a time when jobs are needed and where people are frustrated and so on. I think it's really important.

ARCHIBONG: It's fair. I would say it would be a very costly strategy for these small private companies, because I'm paying as a small company to advertise on this platform. So, if I'm then

paying my own money to do this, and then that seems like a very costly strategy, in my opinion, based on our research.

KWAKWA: Your company is getting some money on the side.

NGUIMKEU: Thank you so much. So, there were a lot of questions online. Some of them are similar, others not. So, I'm going to, I selected two questions given the time constraints. So, one is about education and training required to capitalize on these new job opportunities. And the other one was about diaspora. How does the African diaspora play a role? And how does AI impact the idea of accelerating structural transformation in Africa, especially given the face of premature industrialization? Who wants to go first?

ARCHIBONG: Should I talk about? I think I already said it out, so I'm just gonna briefly say it again. Education and training and AI, I understand all the concerns that everybody in the room has, and again, I'm a college professor. We are all in an existential crisis right now for many reasons. So, I get it, I completely get it. Where I think again, what I think is optimistic is that statistic that I briefly mentioned where when we survey employers, and we've done this like both online and also in person, we've done a bunch of interviews with in-person employers in Nigeria, they say the number one thing they're looking for is soft skills, right? And one of the things that we as professors, right, will often say about AI is that now we're going to be able to figure, we're gonna need to learn and teach students how to use the AI in an efficient way, in a smart way, in an intelligent way. And I think these two things are connected. So, I think soft skills and liberal arts education, more so than ever, in my opinion, is more important.

NGUIMKEU: Thank you so much. I think we come at the end of this discussion. I would like to thank Richard, Mary, Victoria, and Belinda for this insightful and exciting discussion. I think you've learned a lot in terms of the potential of alternative economic development model for Africa based on industries without smokestacks and the insightful discussion that we engage today has enlightened our understanding. On how practical solutions can be implemented to realize the potential of this industry.

Thank you so much for who came in person and for those who join online. And see you in the next event.