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AND INFRASTRUCTURE FINANCING

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P R O C E E D I N G S

MR. COULIBALY: Hello. Okay, good afternoon everyone. We're going to get started. Thank you for joining us. I'm Brahima Coulibaly, the senior fellow in Global Economy and Development, and the director of the Africa program. And it's really our distinct pleasure and honor to welcome the high level delegation of the African Development Bank for an interesting discussion around their economic outlook report which came out earlier in the year.

The delegation is being led by the senior vice president and also the vice president and chief economist of the institution. The president, himself, could not make it to the spring meeting; so, if you expecting to see somebody in a bowtie (laughter), it may be for some other time.

In terms of the floor, we're going to have the senior vice president first provide some introductory remarks; and then that will be followed then by a presentation of the outlook, itself, by Abebe Shimeles who is the manager of the Macro Division and also the person who coordinated and led the report; and afterwards, a distinguished panel will join me on the podium here to provide their reactions. And I'll be sure to leave enough time at the end to get in as many of your questions and comments as possible.

So, without further ado, Mr. Vice President, you have the podium.

MR. BOAMAH: Dr. Brahima, thank you very much. Good morning, distinguished ladies and gentlemen, welcome. Welcome, to this presentation of the African Economic Outlook. It's my pleasure and also my privilege, actually, to welcome you all on behalf of Dr. Adesina, who cannot be with us this morning, or this afternoon already.

Let me start by first thanking Dr. Brahima Coulibaly, director of the

Africa Growth Initiative here, and his colleagues for providing this very visible -- I'm very impressed by the turnout -- this very visible platform for us to discuss a bit the AEO, the African Economic Outlook, for this year, the 2018 edition. And, as you know, our collaboration with the AGI goes way back.

We're particularly pleased with this year's report -- but we're pleased with every year's report -- but this year's report is particularly special for us; and special in terms of the content, as most of you, those who have seen the report already, the contents have been quite a bit streamlined.

Secondly, this year, the report was -- and thanks to the team led by Dr. Celestin Monga , and Abebe, and who also just joined the team, (Hanan) phonetic, who's sitting in front here. It was basically produced by the team entirely. You know, in the past we've had the different sort of co-collaboration arrangements; and this was one that was fully owned by the chief economist and his team; so, our kudos to them, and we are particularly pleased with the outcome.

And then the third, which is probably obvious -- I should have started there, is the launch date. You know, the president, if he were here, he probably would have said you know, what's the point of having a -- you know, usually in the past, we used to launch this at the annual meetings of the Bank, which is in a month from now -- so, well, what's the point of an economic outlook that is launched in the middle of the year? So, this year, it came out in January, and this is going to be the practice going forward to come early enough to be useful to those, to the many that use the report. So these are three distinct features of this year's report that make us particularly proud.

Of course, the main topic of this infrastructure financing -- always timely, but even more so now, as we look at the high five agenda -- which I will not get into -- I think most of you have heard about it -- banks have five priority areas -- is very, very timely in terms of what we're trying to do, the implementation of the high five agenda.

As you see in the report -- and I will not get into too much of the details -- I don't want to steal Dr. Abebe's thunder when he comes to the podium, and of course, the panel will be discussing at length -- but the many highlights, of course, you know the continent, as you all well know, was doing well, about five percent until 2014; and although, of course, a weaker growth in 2016, the African countries have recorded higher growth, you know, around three percent, and it' worth noting that, of course, within the aggregates are also the differences even within the regions, and even between countries. We have 15 countries recorded their growth rate item, 5 percent.

The outlook for us, for 2018 and '19 is positive, and the growth is expected to reach around 4.2 percent. And then, of course, foreign directive investment in FDI has increased significantly. I guess it used to be way back in the '90s around 2 billion and now we're looking at 59 billion in 2016 -- and we still need substantially more, of course; and part of that is also, of course, and the panel will get into the details, of course, and the improvement of the macro environment, etc. Many African countries, now, have suffered (phonetic) ratings, from 10 in 2013 to 26 -- it's doubled there -- in 2017.

So, we can talk about the resilience of the continent but, of course, we also acknowledge that there are challenges; and the growth rate needs to be substantially more than what is currently to make a dent in the poverty picture, which is what we're all about. On a daily basis, that's what we worry about; how do we, working with all of you in this room, our countries to, essentially, to make this significant dent.

The outlook, the report, also talks about the infrastructure gap. How many times are we going to similar gatherings and then, you know, the famous ICA Report, the 100 billion -- we think it's substantially more than that. Where we think the needs are somewhere in the 130 to 170 billion range and the financing gap is in the 68 to 108 billion. So, the amounts are substantially higher in terms of what is needed to make a dent in the infrastructure picture which is, of course, an absolute necessity for the industrialization, of course, of the continent.

Now, to tackle this, there are an array of options, of course, that are available to African countries. There is, of course, the challenge and there's a lot of work that the Bank has also been doing to work with countries in the area of domestic resource mobilization. It's a huge, huge area that a lot more work needs to be done, in my view, to essentially optimize a source of revenue to address -- in fact, that is, in terms of the sustainable financing of Africa's development. Clearly, if you haven't addressed that problem, there's no way you can expect to have a sustainable financing picture with regards to our developing financing needs.

So, there is that. There is, of course, all the work that is being done to improve the environment to attract a lot more private-sector participation. In that regard, the Bank, for example, is launching the African Investment Forum, which will be a platform that is going to be launched formerly in November in Johannesburg. And the point of that is bringing all the parties together to essentially substantially increase the feasible development of bankable projects and, of course, the financing of bankable projects. It's a platform that we have many of our development partners coming along with us from practically all the regional development banks, AAIRB (phonetic), etc., working together to create this platform; and I'm sure at some other time we'll have the opportunity to talk some more about the African Investment Forum.

So, this ladies and gentlemen, just a few remarks about the report that we are particularly proud about this year. Again about the timing, the content that has been substantially streamlined; and already our member countries, our ministers, many of them have their reports. I might even add for the first time, the team is -- at least the executive summary of the report -- has been translated in three of the most widely spoken languages on the continent -- Swahili, in Hawza (phonetic), and the Arabic. And the chief economist told me that he did, personally, check the quality of the translations (laughter) in all three languages. I kid you of course; but we had some good quality assurance that these have been properly translated into these languages.

But, more seriously, the point of that is to make this -- I would even argue that it's part of the inclusiveness agenda. I mean, clearly, you want to ask many people to be in the discussions, and the more we can have this available and can be read more people in their own languages, the richer the debate, the richer the conversations that will take place.

Ladies and gentlemen, I don't want to take too much time because I know we have the opportunity to get some more into the details of the report; but I wish to just on behalf of Dr. Adesina, President of African Development Bank, thank you so much for being here; and we look forward to a very rich conversation this afternoon. Thank you very much, again. (Applause)

MR. SHIMELES: Good morning, SEVP (phonetic), Madam, dignitaries, ladies, and gentlemen. So, allow me to thank Dr. Brahima Coulibaly for providing this excellent platform to talk about one of the premier flagship reports that the African Development Bank has been producing for the last 15 years. I've been here, I think, three or four times before, just in this similar even; so, we are very grateful for the Africa Growth Initiative to always think about the African Development Bank and strengthen the partnership. But also going beyond that to influence policy and advocate also on behalf of Africa and its people. Hopefully, it is a right match and the right perspective that can be beneficial not only just to Africa but also to development partners here in the U.S. and across the world.

This report has come, I think, at the right time in terms of content. We are talking about infrastructure financing in Africa, it's not new. Several reports have been published; but probably what we have done here is take a step back and say everyone in this room knows that infrastructure gap is not just an unique perspective of Africa but, rather, globally. Today, people estimate in trillions of dollars of financing gaps. So, it's going to be a paramount feature of any economy. I believe here in the U.S., as well, the infrastructure deficit and the estimates that have been made are also significant.

What's difficult for Africa is a critical basic infrastructure that is required to sustain and to keep the economy of South Africa competitive, and also build solid economy that has a great potential. I mean when we speak about Africa's growth potential, it's enormous, there's no limit. Actually, I see that continent as a place of infinite possibilities. It's just amazing what that continent has in store.

So, this discussion, this report, brings out those issues to the forefront; but also gives us a caution in terms of what are needed in financing infrastructure in Africa, the innovations, collaborations, the partnerships, the financial architecture that's needed.

So, I hope by reading this report all of us will be informed and together, also, we learn more. And this kind of platform is also important to get more views and perspectives that will help us sharpen the next edition of the African Economic Report.

In this presentation, I'll try to be very brief. It's not because we just want to shy away from the issues that are covered, but rather to give a chance to the panel, but also to the audience to discuss with us some of their issues.

This report, the African Economic Outlook, has three main components. One component, we call is the Main Report; the second component, which is a new feature we have brought in this year, the Regional Economic Outlook; and then we have another one we call the Country Notes covering 54 African countries. When you put it together, this report goes into thousands of pages; so, most of it is on line. It's a very rich resource to researchers, investors, and economics; and also this report has been widely used, including by the media. Recently, CNN and others featured the main message of this report.

Today, we'll just talk about the Main Report which has two parts; one is basically looking at the economic outlook of Africa, digging deeper into jobs and links with poverty and inequality, but also looking at the issues of infrastructure finance. As the senior vice president of the African Development Bank has just said, Africa has been growing, actually since 2000, the last 15, 20 years. We know the continent has started to move in the right direction. There has been a lot of hope and what we call the African Renaissance (phonetic). However, since 2013, there has been a dip in growth just because of the collapse in commodity prices for some countries, and the slowdown as a global economy. As a result, the outlook for 2017 and 2018 is really a recovery from that slowdown. We expect next year, and this year growth, GDP to be 4.1 percent.

Now, the main question, of course, is what are the proximate drivers of this growth, improved global economic condition, which I have said? And African countries have been improving their macroeconomic management and then there is a domestic demand which has been the source of growth in many African countries; and, hopefully, that domestic demand eventually will shift into growth in exports and investments.

When we think of Africa, it's a 1.2 billion people in 54 countries; so, we have so much variation. If you look at the map -- the east, north, west, central Africa -- the growth performance is really very much wide, and, as a result, you can see for the last 5, 10 years, the East Africa region has been the fastest growing region. In the last couple of years, West Africa has lagged behind just partially because of the collapse in commodity prices and affecting growing countries such as Nigeria. Then you have the southern Africa which is way down by the slow growth, anemic growth that characterized South Africa for a long time.

So, basically, in this report we try to project and provide estimates of growth outlooks for all of the 54 countries.

Now, what this report is motivating is beyond the growth focus. When you look at the average trend in Africa, there exists what you call slow pace of capital accumulation, which is really affecting the continent's growth. It is supposed to be supported by debt; so debt is supposed to provide an instrument for investment; however, recently, we have seen a surge in the level of debt in the continent which we take seriously in understanding the dynamics, but, most importantly, in infrastructure finance, the two are closely interlinked.

As mentioned earlier, Africa's fast economic growth has not generated enough jobs. I think this is a story repeated so many times. We don't need to say whether this part is true or not. What's important is what is preventing for growth not to generate enough jobs? One of the reasons we have identified and also reported in this outlook flagship is that the growth acceleration and the slow pace of infrastructural change seems to be impeding job creation, and poverty reduction, and inequality reduction as well. Therefore, there is a lot of interest now in Africa to talk about structural transformation.

The reason is the structural transformation assisted by faster infrastructure is a source of inclusive growth. I think the evidence we are highlighting here shows that countries that have a better infrastructure tend to have low inequality. But also there is a policy oversight in Africa. If you look at, for instance -- access to electricity across the board -- African countries tend to suffer more than any other region of the world despite the level of comparable per capita GDP. So, this also tells you that there is a lot of room for improvement at the same time also how far behind we are. So, these slides are basically also to show how critical infrastructure development is because Africa's capital accumulation has been moving very slowly.

Now, the question is, yes, the first thing to do is how much Africa needs to bridge its infrastructure gap. This report, for the first time, reports a new estimate 130 to 170 billion a year is required. Most of you may ask how did you come up with this; how different is it from previous ones. We can discuss this. The most important part, however, is that when you compare the way Africa invests in infrastructure compared to other regions of the world, as a share of GDP, Africa is still investing low, less than 5 percent of its GDP; and the gap is the largest than anywhere else in the world. Therefore, the criticality of infrastructure gap is more relevant for Africa than elsewhere.

In this report, you'll find how much funds in the continent invested in 2016 where we go to the reliable data. You could see that half of what is needed was invested in 2016, as an example, 62.5 billion; and is spread more or less equally across all regions, except the central Africa and southern Africa regions. When you look at where the money has gone, at least from the information we got, and the sources where it came from, you could see that governments spent on infrastructure less than 50 percent; so, most of it has come from other sources like the ICA (phonetic), which earlier mentioned by the senior vice president; but also China has provided significant amount of infrastructure financing for Africa; and largely it went to eastern and western Africa regions.

Now, the main question that we try to answer in this report is what is a way out of the financing constraint for infrastructure in Africa. So, we have provided detailed analysis of the reason of why we are getting so low infrastructure deficit in Africa; what are the risks, for instance, investors perceive when it comes to financing infrastructure projects in Africa; governance issues; institutional regulatory issues; but also procurement issues. There are so many detailed elements in this report that you find interesting because it's very open and we have not tried to just sale Africa by window dressing. It's a challenge. We have brought out into the picture. We have not minced our words; we just say the way it was; so, it's a very good report for you to see that infrastructure financing is not simply we are trying to tell a rosy picture. Rather, we've been very hard on our policymakers in terms of the things needed to be done.

The most important thing I think in conclusion what I would say is in this report, yes we have identified the risks; we've identified the challenge; we have also provided some possible solutions that policymakers and decision-makers can take into account. One of it is -- as most of you know, money is not in short supply in this world. The global seven gluts (phonetic) -- there is money sitting earning almost zero interest all over the world; it's estimated $100 trillion dollars, more than that. Africa's deficit is just 100 or 60 billion a year. So, why not tap into this sitting money that is floating around in the world?

So, in this report we provide a framework. How this could be accessed by African countries while providing also high interest rate for the investors; so, it's going to be a win-win situation. Just to give you an example, take Norway which has $1 trillion dollars somewhere sitting, earning nothing, literally, and yet Norwegians, I believe, would be very happy to see their money invested in Africa so long as it brings returns but also improves lives in the continent. This kind of social and financial contracts can be designed in such a way that not only Africa becomes a source of investment and a source of earnings for other peoples in the world but also, eventually, it becomes a part of growth and development for the rest of the world.

So, with this I would like to just conclude by saying the institutional architecture, the financial architecture, and most importantly, the leadership that's needed to convince investors to have a bankable asset class infrastructure projects is very critical for Africa's infrastructure development. So, at the end of the day, the ball is in our court, not in the rest of the world's court. So, as African Development Bank advocates and also campaigns for changing attitude and perception, but also, not only within Africa, but also outside of Africa.

Thank you for your hearing. (Applause)

MR. COULIBALY: Thank you Abebe for a great presentation. So, now we're going to move to the next phase where I'd like to invite the panelist to come take a seat at the table. I have to say that this report, itself, I read it as soon as it came out; and it just so happen to come out on the same day we're actually also launching our own Foresight Africa here; and I really liked the content, it was great; and we also were very fortunate to be hosted by the African Development Bank to launch Foresight Africa there as well; and as I mentioned then I saw a great deal of overlap in terms of some of the theme that we chose; but the one I hadn't read yet, it was in Arabic and Swahili version yet; but I said I might read this.

So, we're going to read now to the panel discussion; and we're really fortunate to have with us here a great and diverse panel of experts who will give us their perspectives; and then we'll open it up for then a question and answer discussion.

So, on your far right is Jeffrey Gutman; he's a Senior Fellow in Global Economy and Development here at Brookings, my colleague. Before Brookings, he was at the World Bank where he had a really long and distinguished career, I believe 30 years (laughter). So, by the time he left he was the vice president in charge of the Bank's operations and policy, as well as country services; and he actually led some of the major reforms on operational policies and practices.

Next to him is Bongi Kunene. She's Executive Director at the World Bank in charge of Angola, Nigeria, and South Africa which, as you know, were the big three countries in south Sub-Saharan Africa, making up more than half of GDP. So, you may have your work cut out for you at the World Bank. Before the World Bank, she held several high level positions in South Africa, the National Treasury, as well as also in the offices of the president and deputy of presidents; and she also serve as the Chairman of the Richards Bay Industrial Zone in South Africa.

Next to her is Alan Gelb who is a Senior Fellow and Director in the Center for Global Development. His research work includes development application of biometric identification technology. He actually have a recent book that came out earlier in the year on the subject; and his other research areas include the special development challenges of Africa, resource-rich countries and results- based aide. Prior to the CGD, he was also at the World Bank and Director of the Development Policy and Chief Economist of the Africa Region.

And Louise Fox is Chief Economist for USAID; and prior to the USAID, she's had some visiting professor positions at the University of California at Berkeley, and was doing some consulting work on developing economics. She also has a distinguished career at the World Bank where she advised several governments on development policies across Africa, Latin America, and east Europe. And while there, I think importantly, some of the work as it pertains to today's discussion has been on the issue of youth unemployment; where she published a widely-read book on the subject; and I think we all agree today that really getting the job situation right for the young people is kind of the holy grail of the development challenge that we are facing in Africa.

So, we're pleased to have you. So, perhaps I can begin with you Alan, if you can give us your reactions to the report; what issues or messages resonated with you; and what would you like to see the next report cover?

MR. GELB: Thank you so much for the opportunity to be here and to participate in this panel. I must say for me it's a great pleasure to see so many colleagues and friends, and to return to the questions of Africa's developments.

I found this a very interesting report. It covers a lot of areas that very much resonated with me and with my experience, and also brought in a few new issues; and because we don't have much time, let me just concentrate on four areas which I found very interesting; and I was asked for suggestions on material for the next report. These are things that really struck me coming out of the report.

The first is the concern over the resurgence of debt, including market-based debt. Now, we all know that especially under conditions of ample liquidity and world capital markets, borrowing can be a good strategy, but it depends on exactly what you use it for; and it seems to me that could be a very good topic for a future report into more specific details of what countries are actually borrowing for, both looking at the project-type data; what kinds of projects are being financed; but also at the macro data. It's quite possible that a country is borrowing for infrastructure projects, but it's actually substituting the borrowed funds for domestic resources and is using the domestic resources to pump up civil service pay, for example.

So, you would want to look at the direct affects and also at the indirect affects; and my sense is that in some countries there has been substantial borrowing but it's actually quite difficult to discern any particularly advantageous use of the borrowing; and then that becomes an issue of concern.

In some countries also there may not be adequate information on what borrowing is being used for; and it seems to be, again, a very useful purpose of the report could be to shed light on that, and maybe if there are countries which are obscure and reluctant to publish information to actually call them out in the report in some form. So, I'm suggesting a focus on the use of debt as opposed to simply the amount and what it should be used for.

The second that struck me in the report and it resonates with some of my past work is this combination of rather slow structural change in Africa. In fact, remarkably little if you look at the numbers in the report and you exclude extractives. That was quite an eye opener to me.

MR. COULIBALY: So, for the non-economist in the audience, could you explain what structural change means?

MR. GELB: Yeah; okay. We have a sort of mental model of a development process, right, in our minds. It goes back to the Lewis model and the idea is that there are these subsistent sectors, largely agriculture; and then countries will transition from agriculture towards industry by which we tend to mean manufacturing and similar industry; and then later on to services. And there's a lot of work looking at the structure of economies and how they, historically, have transitioned through this path.

Now, we can question whether or not that is going to be the future. Maybe it's not going to be the future. Perhaps the robots will take over the manufacturing; there not going to be any manufacturing jobs; and so, at least in terms of jobs, the economies are going to transition directly from -- well, there're not going to be any agricultural jobs anyway because, you know, we're going to have driverless tractors and agriculture's probably seen the greatest contraction in jobs -- but in any event, these patterns that we're used to may not prevail in the future, but this is our mental model that we come with; and if you look at the data in the report, and there're some very interesting pictures where they exclude extractives and look at their shares in GDP that there's really not much change in Africa and there is more change in some of the other regions which have grown.

So, it does raise a question; but at the same time, there's another very interesting observation in the report, and that's on the Gini coefficients. The Gini coefficients in Africa, according to the report, was .52 in 1993 and is .56 -- so I assume this is an average across countries in some way. These are really high Gini's for poor countries. If you take a scatter gram of Gini's versus income level across the world, you will see that they are generally higher in middle income countries and then they come down in poor countries except in Africa where they don't; and if you were to take Africa out of the picture, a typical Gini for a low income country would be about 0.4.

So, there is something going on here in terms of the combination of rather low incomes and rather high inequality. We need to understand what is going on here; I personally don't. I've been trying to understand this for a while; and we need to understand what is happening.

Third -- and this relates back to the question of economic change and structural change -- the question of costs and cost structures. By the standards of countries at other income levels, if you look at purchasing power parity data, African countries are actually quite costly. We estimated about 30 percent above the cost per comparable countries outside of Africa. I've just come back from travelling in India and Bangladesh. I must say, it has brought it home to me. Boy, is it possible to get cheap meals in those countries, in the cities? It is unbelievable. I don't think I could get anything like that in Nairobi, you know; maybe I could; maybe I don't shop in the right places but, you know? And if this is correct, why is it like this? One thing we know is that the cost differentials are substantially driven by food and beverages. And this gets us back to agricultural performance in Africa -- the continent with the greatest land resources, is also the continent with the highest relative price of food and beverages in its PPB bundle. Something is wrong, right; what is going on here?

And when we look at where investments are going, what do we see?

There was a picture of the Hiwaza (phonetic) Zone up there; Ethiopia; yes, there's a lot of labor, intensive investment going on in Ethiopia; but why Ethiopia? This is not the obvious country that you would expect having an industrial take-off in Africa. Kenya has a far more developed industrial sector. Why are projects like this not moving forward in Kenya and coastal Tanzania at an enormous rate; why Ethiopia? Is it something to do with the fact there are fiscal incentives being given to these that are unsustainable by the Ethiopian government; is it policy; is it something about the cost structure? Ethiopia actually is, by our calculation, by far the cheapest country in Africa; but why? It certainly doesn't have any transport advantages. So, what is happening here; how do we understand this process? Unless we understand this, we're not going to understand much about the drivers of structural change.

And let me go one more point -- because I know I'm running out of time -- and that's on the question of infrastructure. I think the report does a super job in setting out the infrastructural needs and some of the calculations for it, and some of the arguments for it. But, I think, we could go a little bit further to understand more about the details of where the problems lie; and to the extent which they're on the demand side versus the supply side.

The report has some stunning observations. I mean one was the observation that about 40 percent of the value of benefits of infrastructure in low income countries are lost because of poor planning, poor maintenance, and other things. Well, boy, if you're going to lose 40 percent of the value of your infrastructure benefits, you're not going to have many financeable projects, are you. I mean, you know, it is something quite serious, and we have to understand more about that.

Another thing I thought was really interesting was the observation that many African pension funds are not allowed to invest in infrastructure in their own continent, right; and that relaxing this would mean an increased flow of $4.6 billion a year. So, how can Africa look to global capital markets to fund its infrastructure when its own regulators are not confident enough in the quality of its domestic investments to permit its infrastructure, its own pension funds to invest, right? Again, very interesting questions coming out of the report.

So, when you look at the proposal to establish an infrastructure class of assets, right, it seems to me one thing that could be done -- and I think that's a very good idea -- is to look, specifically, for what kind of classes would you want that would enable African funds to invest in it in the first instance? Once you've got that, then you can go out and talk to the rest of the world. So, that could be a very useful project for the African Development Bank.

Anyway, thanks very much. As I say, a very stimulating report as you see; and thank you, Mr. Chairman.

MR. COULIBALY: Thank you, Alan. So, continuing on the theme of the infrastructure financing, Jeff, you're an expert in infrastructure financing. Have you read the report? What messages resonated with you; and what comment would you have for our colleague at the African Development Bank?

MR. GUTMAN: It's a very difficult question and very difficult to deal with in a rather tight report, concise. I think, number one, I welcome the attention to infrastructure once again for Africa in the gap; but I also welcome, in particular, the cautionary note and the realism that you are competing against a lot of gaps throughout the world; and if anyone took the Red Line this morning, we have a gap here in Washington that needs a lot of money. So, I think the realism is taken.

And I offer several comments, not so much to critique the report as much as Alan was doing is to say how do you move to the next level; how do you move to the policy level of what you do next; what thread do you pull when you look at the range of issues that you're dealing with to address the infrastructure gap.

I think what struck me, especially because I've looked at the report in 2009 that Vivian Foster (phonetic) would set up the 93 billion in the Eicher (phonetic) Report, that we're 10 years on and we're still talking about the same things -- we're talking about a shortage of money for preparation of projects; we're talking about PPI, which actually went up in 2011 and 2012, and then dropped; we're talking about the multilaterals not putting in enough money; we're talking about private sector, PPI being private provision of infrastructure; we're still talking about the same issues. And so, I thought back as to what are we missing; what has happened over the last 10 years, and why hasn't it -- we have initiatives; we have PEDA (phonetic); we have PIGE (phonetic); we have AICA (phonetic); we have all these funds that have been started and attempts -- we've been saying this for a very long time, and we're still having problems and we're not seeing significant improvement.

I think one issue is that we have to move from a discussion of infrastructure -- with a capital I -- down to the sectoral issues; because the issues specific on financing and what you can do and what you can't do will come down to those sectors.

And there I do have a critique of the index. I think the index is interesting -- and we're all looking for an index, and we can compare how infrastructure is in different countries; and, indeed, you can see how you can use an accessibility measure for how many households are connected to electricity; how many households are connected to other communications; how many households have water and sanitation -- but on transport, which is my background, doing it as amount of paved roads per square kilometer of exploitable land is not really going to indicate much to me as to what the transport needs in a country are and where their shortfall is. And when you try to part that together with an index -- and the index goes into a little more detail even in that paved and non-paved roads I think was exploitable -- it may give you misleading materials; whereas countries that just extend the road system look like they're wonderful but they may not have a port; they may not have an urban transport sector; may not have an airport; I mean it's -- and it's something in the transport sector that we've been wrestling with. We don't have a necessarily good answer, but I would say the use of an index beyond a certain point is a dangerous move; and you have to be cautious about that. And when you get into sectors, you get into the specificity of what's happening on the ground; where can you put private money. Some sectors like ICT was easy, but other sectors like water are not so easy. So, the question is how can you do that? And I only see that as if you get into the details of one sector versus another.

The second is by country. That you actually discuss, that the country context is important and that is you're going to get to a categorization of countries that can attract capital, and not, and why, and for what sectors. We did a study in 2015 of BPI in Africa for infrastructure and found almost 40 out of the 52 countries that were surveyed in the banks and database were getting PPI for infrastructure, but when you took out ICT, that went down to 20. So, the kind of infrastructure and the country are quite critical to determine what you do next.

But I'd add another level here that it's also important whether you're talking about national or you're talking about sub-national infrastructure, and here I'd go to urban; and it is the one missing element in the paper that urban infrastructure in Africa is critical, and it's probably the most problematic, and it is the future problem that Africa's going to face, and it is not covered by the index. It is a totally different element in terms of how to finance; how to get there; it has a governance issue; it has structural issues; it has land issues which are critical in Africa. There's a good report now by Shumek (phonetic) Lyle (phonetic), Tony Venebales (phonetic), and someone else, which actually begins to map that. So, there is quite a bit of progress; but I think that's going to be quite important.

One final point that I think is missing and needs to be addressed is the capacity in Africa to actually implement the projects -- and by that I mean the private sector, the construction sector. We did a study several years ago of who wins buying contracts for construction, ICB contracts, from the World Bank for construction, roads and other types. In other regions, it's a very high percentage of local and regional firms. It's the first sector to develop under civil engineering, construction, and it gets jobs as well as capital for the country. When you're talking about jobs in chapter 2, this is one industry that should be key, but we found in Africa, they were not getting their share; and I've been arguing tell I'm actually hoarse trying to say there needs to be a good analysis of the construction industry, and I really would put that on the African Development Bank. It is something really important and it has short-term benefits in terms of how to get jobs, capital for an industry that's really critical.

With that, I thank you, actually, and look forward to further work.

MR. COULIBALY: Thank you, Jeff. If I can move to you Bongi -- as I look at the charts that Abebe put up, the map, and the 2016 performance, I was struck by the low numbers in west Africa, central Africa, and southern Africa; and my suspicion, really, is that it's driven largely by Nigeria in west Africa, Angola in central Africa, and south Africa in South Africa. These just happen to be the three countries you're in charge of at the Bank. So, as part of your reaction to the overall report, you can tell us a bit more about the prospect for these countries, and given that they are really the big three, how concerned should we really be?

MS. KUNENE: You're asking me the easiest of questions. I have an anecdote when I refer to my three countries. I say that they are the noisiest, and you feel the quality of their noise when you tell the African growth story because when they're not growing, growth in Africa contracts. When they're growing, all of Africa seems to pick up. So the effect of the noise from these three countries is very easy to sell.

Now, parts of the explanation, I would like to believe, is on the issues we are not able to cover adequately on economic terms because the problems that you will find with growth anywhere in the world, there's a story of the political economy.

I'm really happy to say that for these three countries, this year, 2018, I think it's a beginning also of a beautiful story because there've been political changes that have happened in Angola, last year in August; in South Africa they have (inaudible) this year, starting in December last year; and in Nigeria, we have a continuation of very good, solid, political changes which will bring a bit more certainty because without certainty it's very difficult to talk about investments let alone new investments going into these countries. So, it's a different mood that prevails right now.

But, maybe the second issue when it comes to lack of investment and lack of growth. I really would have to put it squarely on the door of trust.

Money does not flow where there is lack of certainty; where policies still influx; and where you have a trust question unresolved because all investors want that certainty that they will be able to repatriate their profits, but more that they will also be able to reinvest their dividends in the same country.

So, if I can comment directly onto this report today, I would say that all that I did see was that the explanation of the problem was laid out beautifully, and this is an African story that is being told by Africans. I honestly like that very much; and the prospects for growth going forward are very good; but here are some pointers for me going forward, what I thought was lacking.

I was looking for data on domestic private investment and I didn't see that; and, of course, you won't be able to tell the story of Africa without attempting to answer the question on where are the domestic capital markets, and what is possible in developing those markets. And if you're talking about financing resources, how can you enhance that which already exists in countries?

The second absent part of this narrative for me was talking about education as a source of growth because Africa is a very young continent. There is still a lot where we can leap frog, but also because of all the new things that -- the new information and knowledge that is flowing around the world -- we need to be able to position Africa to go on that trend of that new knowledge that is pervasive now. And it may be too early to talk about this because most of our economies are dominated by agriculture. So, you look at the productivity in agriculture is very low, which means that those incomes are also low. But, I think, it's not too soon to start imagining an Africa which would also use disruptive technologies very well to its advantage; and, I think, that would contribute in further discussions on what we need to do as Africans.

And, lastly, on infrastructure -- I'll also say that we need to internalize the need to grow climate resistant, or climate smart, infrastructure because that is something where we will not be equal by anyone. Everybody else who have their infrastructure out, they did it the old way. We have an opportunity of coming up with infrastructure that is climate smart.

MR. COULIBALY: Thank you, Bongi. So, our last panelist -- the issue of jobless growth was quite emphasized in the report, as well as by the slide that Abebe put up with the elasticities about point four. So, basically, what that means is for each one percent of GDP growth, job creation is only growing by .4 percent, which is much lower than the norm, basically. In some part of your past research, you've taken issue with the notion that jobless growth is a big deal, or as bigger deal as it's sometimes portrayed. Are you still of that same view? If you could offer that, and answer that as part of your reaction to the overall report, that would be great?

MS. FOX: Sure; happy to talk about one of my favorite topics. So, but before I answer that question, I just want to say I found this to be a high-quality report; and I congratulate the development research group at the African Development Bank. I interacted with the group in some previous iterations of how this report was prepared, and I think this report really shows that group really owning the economics of Africa in a serious way; and, I think, Africa will be better for that; I think the World Bank think tank researchers on Africa will be better for that. I, as an economist, I always believe in competition, so, I think, that's great.

Just one point -- also, not on employment -- is that I was also glad -- but nobody's mentioned it -- to see the questions on the currency area and the operable currency area, and the CFA area. My own research, when I was looking at that question from the point of view of employment, was that it slowed financial innovation and inclusion. I can't point to the employment effects, although others have researched it at Martin Rahma (phonetic) during a previous period in the evolution of the exchange rate -- so, I think, it's courageous to bring that subject up and I think it's worthy of a debate.

Now, on employment -- I was also thrilled to see the focus on employment; and I found the discussion quite practical. I especially liked the more positive view of non-wage employment and the informal economy than some times has come out before. I agree with Alan, African countries clearly need to focus on structural transformation, and I would carry that over to the employment transformation. So, I think about employment as sort of, you know, the least developed country, everybody works with their household members on their own farm or making stuff at home; and in the most developed country everybody works for someone unrelated to them in a modern enterprise where there's a specialization and developed market structures that they operate in, etc.; and that's how you create more productive jobs; and that employment transformation from non-wage jobs to wage jobs is important; but it doesn't happen the way some people think.

I just heard a minister from a Nordic country say well, you know, we can get rid of the informal sector if we just have enough education and skills. I don't think so -- I just don't think so. I wanted to stand up and say, in your dreams; but, I guess, in my sixth decade, I'm a little better behaved. But, really, it'll take private investment. But I think a lot can be done to improve the quality of those jobs while they are non-wage jobs -- that's household, farms and firms -- and, I think, maybe we should focus on it, experiment with it, and evaluate the results better. And the report started to get into that and I think there's a lot more to be said on that point.

Now, was there jobless growth? Well, you know, Abebe you said no one disagrees, but you forgot about me. (Laughter) You invited a contrarian to the table -- or maybe you didn't -- you did -- but no, seriously, I don't dispute it for North Africa; I don't dispute it, for example, for the republic of South Africa; Angola and Nigeria haven't had growth, so we don't have to worry -- whether it's jobless or not -- but, you know, for low income countries, I don't think that's true; and the reason is you are measuring changes in employment with respect to change in GDP.

Now, as you point out, we don't want that to be won if we want productivity to improve, right? But you've also ignored the size of the labor force, the growth in the labor force, and why people may not be in the labor force. If people are withdrawing from the labor force, then they're not going to be in jobs so they won't -- and since in low income countries people create their own jobs because remember they're still in non-wage household, farms, and firms. So, if I'm in a low income country and I've expanded education and people are staying in school longer then you will a decline in the ratio of employment to GDP. That's just the way it is; that's just a numerical kind of a thing. So, I guess I would say, not so fast. But, I take the point about the richer countries, and I take the point about the overall focus.

Then, what do we need to do? And so, I said what we need to do is we need to focus rather than on employment, per se, on employment transportation -- raising the productivity of the no-wage sector which is farms and non-farms, and creating more wage jobs. The report talks a lot about creating more wage jobs -- that's an area AfDB has talked about before as well; but I have a more positive view of agriculture.

First of all, employment in agriculture is not 51 percent on a full-time equivalent basis. In other words, if you account for the hours worked as opposed to just whether you worked in this sector, you know, by ladder, then it's not 51 percent on a FTE basis; and rural farm is more important on a FTE basis in many, many countries in Sub-Saharan African. And also it's not mostly subsistence; sorry, it's not.

Okay, so, if most of the members are full time in non-farm, then the household agriculture is probably subsistence, but it's not subsistence because -- you know, for the reasons that people think of that oh, they're poor, and they have no access to technology markets; it's because they made a choice and they decided to just have basically a garden, and sow a little bit, and concentrate elsewhere.

But then, you know, over half of the food consumed in rural Tanzania is processed foods; and so -- they have cash, households have cash -- so, how are they getting the cash? They're semi-commercialized; they're not subsistence; they're semi-commercialized. They're not commercialized enough, and they're in rural non-farm. And the processed food revolution is making a big difference in the diets in Africa, and it's only happening, it cannot happen without people earning cash in rural areas; and that rural cash has the potential to transform rural areas with the right strategies; and I think that's maybe a discussion that needs to happen. I know that's an area that the African Development Bank is focused on, not the least of which because your president is a former minister of agriculture, but I think we need to be careful. And that just reminds me that we need better data to really look at these questions. So, I won't get on my hobby horse about labor statistics right now. If you want that rant just call me up; I'll be happy to give it to you.

I also think the report ignores demographics. It is going to be very hard to have employment transformation without slowing labor force growth which means lower fertility which will take a major effort; and I think that lesson was left out of the China story when you asked what Africa can learn from China; and that's unfortunate.

Now, maybe you don't want to talk about a China story of reducing fertility because it was very coercive; okay, talk about a Thailand story, if you want; but it happened at the same rate, at the same time. And if you look at how employment transformation happened in south East Asia, a lower fertility, and a lower labor force growth is a huge part of that story. I agree with Jeff, so I think that point bears emphasis.

I agree with Jeff and Alan on Sub-Saharan African cities and I think that urban governance is maybe one of the biggest challenges to employment transformation because modern industries like to be in cities, or near cities, for many reasons. And so, I think it's all -- and that is a lesson from China -- that urban land transformation is key; urban infrastructure is key; and urban governance is key.

On the policies, I thought, overall, the suggestions were quite sensible, and the focus on labor intensive industries was quite sensible. I think maybe there was a focus on training of workers. I'm not so into training of workers; my research suggests the importance of foundational skills and transferable skills as opposed to vocational and technical skills for a 21st Century economy; but I wonder is the problem the training of workers or training of managers and owners; and is the best way to subside new investment or to improve management? You know, the USA did a project in Tunisia which actually provided consulting services to managers of medium-sized firms and they expanded production revenues and employment; and the cost per job was quite low, lower than some training, and vocational training things. So, I think, you can think about a wage tax rebate instead of subsidizing new investment.

Management know-how involves tacit knowledge also, and that's a big issue; and I think linking that with FDI is really important; and linking that with -- everybody talks about youth entrepreneurship, but where do -- and everybody focuses on where does youth get the capital -- I want to know where youth gets the management know-how, including that tacit knowledge. Okay; those are the ideas I would throw out for the next report.

MR. COULIBALY: Okay; thank you, Louise. So, we'll get some pretty quick reactions from the presenter, and then we'll open it up for your questions. Or should we go straight to questions? Okay. If you could state your name and identify your institution.

MR. FREEMAN: Lawrence Freeman. I'm a political economic analyst for Africa for about 30 years; just came back from Ethiopia and Nigeria. I think one thing that at least was not discussed which should be at least be thought about in financing infrastructure is the role of the state and public sector. If you look at what the Chinese are doing on the Silk Road, its low-interest loans, 15 years, 3 percent, coming from China-backed banks. I was on the train in Ethiopia that was just built; you have the Standard Gage in Kenya; you have huge developments in Nigeria; and this also raised the question I was asked about Ethiopia. If you look talk to these European government, study Melo Santaway's (phonetic) writings; if you read the growth transformation plan 102 (phonetic), their thinking is infrastructure is essential for the survival of our country, and it's a very poor country; and they used the state; they put it in the capital budget for financing the railroads, to helping to finance the Grand Renaissance (phonetic) Dam.

So, I think if we look at the state role and public sector this is where you get the money that can pay for 10, 20 years of infrastructure. Private sector will never do everything, they can't. And this is the way our country, my country, United States, was built. All great countries are build this way; so, I don't know if that's in the report or this is something for a future report, but I think this is the key to filling the gap that you're talking about.

I mean 100,000 megawatts for Sub-Saharan Africa is literally killing people, and if we don't bring in a change, hundreds of thousands of megawatts of power, we're not going to see the power that we need to have. So, that's the question I have for the panel.

MR. COULIBALY: Okay; next question.

MR. MCCRAY: Hi, Chris McCray. So, last summer I was at the Asian Infrastructure Investment Bank summit and what bothers me a little bit is if you look at the way China draws infrastructure of ports and, you know, top-level infrastructure is sort of mapped logically all across a continent; so, how do you choose where to put your major ports when, you know, maybe you've got 50 different countries, all of whom have got to make that decision jointly if all the other infrastructures like the pipelines and things depends -- you know, how do you get the overall maps. So, how do get a map which all of your countries can work through and make it a win-win for everyone?

MR. COULIBALY: Okay; thank you. We'll take a couple of more questions.

MR. FARBOMY (phonetic): My name is James Farbomy (phonetic). My short comment is that somehow when we look at Africa, we kind of almost imply that Africa is on a different planet in terms of how we define some terms because if you look at infrastructure and the way it has played a role in many other parts of the world, infrastructure creates jobs within a country, and those jobs improve the GDP of the country, which eventually reduces the poverty level. Now, if you look at what happens in Africa is when you talk about $1 spent on infrastructure, ninety-cents of it goes to a foreign contractor, which invariably brings its own workforce from outside the country; and when that project is completed, there is no resident expertise within the African country neither to maintain the infrastructure or to pass on the know-how and the knowledge base to the next generation of contractors who can now continue to improve the country. So, my question is do we need to redefine infrastructure to include human infrastructure when we spend money on that in terms of saying look, if you want to build roads from point A to point B, I want to see indigenous people between those two points knowing how to build roads; knowing how to maintain those roads; and knowing how to build the next length of road for the country. That's my question.

MS YUN: Ngoyun (phonetic) Yun (phonetic), Foundation for Empowerment. I have a couple of questions. First of all, I can agree with Jeff and others that infrastructure is so important, and all about infrastructure is very important. One thing, though, I'd like to say, now given their limited resources and money, what is the infrastructure for. You cannot build everything. So, you should have some critical strategy why. Korean Government has built the Autobahn in 1963, why. *New York Times* did a (inaudible 18:01:34), why do you create. It's for your export or to enter economy from the Seoul area to Bushon (phonetic). There should be a clear strategy and then you can have the priorities. As an economist, I can say that.

Second, the education. Yes, education is important. On the other hand, Africa is very special. Quality of education is still poor, and even though girls went to junior high school and high school, the fertility rate has not gone down. As Jeff said, it's not a big capital I. What kind of a specific thing. Korea and China didn't grow because they are all kind of a great big -- just those who went to grammar school, and they did -- but they had the attitude on issues, very disciplined, they really work on time; they were valuable. So, education, what kind of education are you talking about and where do you put the priority for that?

And in terms of the agricultural sector -- yes. Agriculture sector is not too bad but, of course, you have been talking about the infrastructure so you are now saying you can hinder everything -- I didn't read the report -- but the development is integrating, you cannot go one thing. So, in terms of the agriculture, yes, land tenures (phonetic) are great problem, agricultural activity. On the other hand, put increase the agriculture productivity in rural area. China, Korea and they all succeeded in very small, the medium -- not micro size, or the food processing, all these things -- then, how do they do it? The road was funded by the government, but not everything -- only material, only cement was given. Then, they themselves -- so, that road, Chip Road, had a (inaudible 18:03:32) access to the urban area, plus they had a process for eating, well whatever.

So, this infrastructure is so important. The entire development sector has ignored infrastructure because they are so much a failure. It's a great thing to see infrastructure coming back, but what is it for. Each country should make their own strategy; what kind of development they want. And let's not fool ourselves, it's just development requires really sweat, and the tears, and blood, and sacrifice, but implementation, and implementation, and implementation is very important.

I have been working on the Africa from 1991, it's the same story; and you have so many commissioned papers only served, so please.

MR. COULIBALY: Thank you. Yes, Omar.

SPEAKER: Just a brief question. I think it is fair to say that Africa will see the biggest expansion in infrastructure of any region in the world. Asia is where it's happening right now, but the future is Africa. Infrastructure of Africa has to be very different than the infrastructure of the past in terms of urban sustainability and resilience; in terms of connectivity; and in terms of accelerating energy transitions. Now, that I think is a very important issue that I think the African Development Bank can lead on. You know, so, a much greater focus on sustainability, quality in all dimensions -- economic, financial, social, and environmental. So, I think that is the quality part of infrastructure is the next part of the debate.

MR. COULIBALY: Okay; thank you. We'll take the last question -- the gentleman behind Omar.

MR. SHUCKER: Mark Shucker (phonetic) with the Overseas Private Investment Corporation -- wondering if you could speak a little bit more about the problems of this growing debt, sovereign debt that we're seeing in Africa. The Center for Global Development put out a very interesting study within the past 30 to 60 days. Countries like Djibouti seem like they're getting way in over their head. It was one of the countries singled out. And also, again, to thank Brookings and the African Development Bank for this symposium and the tremendous amount of work that's gone into this book, but the Multilateral Development Banks have pioneered competitive international tender bids, and over, and over, and over again, these have been shown to have much better quality projects, and to have a much lower profit margin. Everything is disclosed, is transparent. But we seem to be moving away from that in many of the infrastructure projects in Africa. Can you comment on that?

MR. COULIBALY: Okay, I think we'll give a chance to the presenting panelist to react to it. One thing I would note, which I think is related to the second and the fourth question, and the report does make this point.

So, the estimate currently now showing that gap is much wider than the $93 billion that was -- at least in needs -- is much wider than what was estimated in the past and that has been used up until now. So, if in your reaction, Abebe, you can elaborate the reason for increase. Is it because we had a loan back then or just that the problem has grown even more since then. And I think the report highlights that no country ever started out with state-of-the-art infrastructure; and I thought that was a really powerful message is to say despite the size of the problem, you need to not wait for it before you begin really addressing the problems. And that gets to the second and fourth question, maybe you need to be more targeted. So with that, I'll turn it over to the panel.

MR. SHIMELES: Thank you very much. I think these are very useful and quite insightful comments and suggestions we have received. So, of course, the idea is to get your inputs in improving further this type of engagement that we do in terms of our flagship reports but also other specialized reports that we are producing. So, let me very quickly just highlight, and probably give out some clarification without also taking the time in responding to every issue that the distinguished panelist raised. I'll put them, maybe, into three components.

Madam raised about the political economy situation in really driving what's happening in Africa; and I think this very much at the heart of, of course, social and economic development. The idea that countries like Angola, South

Africa, and Nigeria, and many others -- Senegal, Ghana, we can count -- so the Africa yesterday, in the 10 years, 15 years, is completely different in terms of democratization; in terms of accountability; in terms of good governance. Yes, very few bad behaviors can contaminate the image of the entire continent, but we should recognize also the heroes of leaders who have given up power voluntarily, people who are struggling every day to ensure the rule of law prevails; so, our job here is to celebrate that effort by Africans. Yes, we have our critics, so the critics can say; but from our side also we provide as a true picture.

So, you're right, Madam. But in the report also we have been very clear -- which have been raised by many, smart infrastructure that reduces wastage; we recognize it. We recognize also that the state -- yes, it is a leading and very important institution, but also part of the reason for weak infrastructure. So, we should not subscribe to the idea that yes, you need the state to lead infrastructure development, per se. I mean I come from Ethiopia and I know, yes we talk a lot about that country's progress in terms of infrastructure development; but I can tell you even the government acknowledge so much embezzlement and resources that have been misused also -- the wastage is railways, for instance, that are planned in areas that are not productive, or road construction that has nothing to do with the economic benefits. So, the issues that have been raised here have been highlighted in the report in terms of priorities -- how you reduce leakage, and also how countries should plan in terms of infrastructure development.

But, very quickly, I would like to, I think, share this information. I hope the chief economist is here, the research director is here, so they can also jump in. But we are working on debt issues as well. I mean we are seriously alarmed by the way the debt situation is evolving in Africa, but we come also from a different perspective. So, that is, I think, for another day, but we are taking it seriously.

But the job issue -- there is now a jobs report we are producing where I think the ideas reflected here by Alan from the sense on why for instance you tend to have high inequality coexisting with low income in Africa? Basically, is that is because of the labor market structure, partly. I mean I don't have all the answers; but if you look at the earning gaps between those in the subsistence; yes, Louise may not agree to this term -- and then the urban wage gaps, there is a significant amount of lack of pattern. You don't believe the labor market is functioning the way it should. But also the slow structural change that's happening is a major factor driving this. So, all of this will be, I think, addressed in the next report.

I think a couple of issues from Jeff. We should really breakdown infrastructure financing, not only at the aggregate level, but we should deepen sectors. ICT versus (inaudible) give a very good example, and the Autobahn infrastructure, which are very, very important insights in terms of developing our policy recommendations.

And finally, from the audience, I think they overlap. So, what I can say is it's good you also have a look at the report, itself. It discusses about leakages, which we have said already 40 percent inefficiency in the value addition of infrastructure.

And also maybe one thing that we have not emphasized is yes, the role of Africa of engineers and firms in really developing Africa's infrastructure. I think that's a bit of a shame; it's true. I mean look at any infrastructure projects in Africa, the foreign competence is astonishing. So, that will make even infrastructure programs unsustainable. I mean if you don't have people who can maintain the roads; the engineers who can maintain the power stations; and the heavy industry that is needed to supply the inputs for this heavy infrastructure, I think we will be going backwards. So, this are very well noted.

MR. COULIBALY: Okay; thank you Abebe. So, it's up to the other panelist; any thought or reaction.

MR. GUTMAN: I'll be quick. I think, you know, this issue -- the question on regional infrastructure map, is a very good one. You have this issue of cross-border infrastructure and how to prioritize. I don't think we have all the solutions. I know all the multilaterals, and the African Bank, and the World Bank, even MCC, they're all trying to deal with this issue; and I can tell you from everywhere in the world, it's not one that's easily rectified.

On the creation of jobs, I think one has to be careful that it's a moving target. Things have changed in Africa; there's a lot more use of local labor compared to what might have been used maybe 5, 10 years ago, but it's still an issue with how the relationship is between the main contractor and subcontractors, and that's why I argue that there really is a need for an analysis of the construction industry; and I know my partners over in the African Development Bank in the procurement side, were pushing for that, and it is really quite urgent.

I also take on Omar's question on the urban as key, and doing it differently; but time is very short. You have a legacy issue; you have people moving, and you have a key issue of land; and land policy in nowhere more particular doesn't come up in terms than in terms of the urban areas.

MS. KUNENE: I also wanted to respond to the question of use of land. My experience when I was the head of treasury in South Africa is when you are planning, most planning takes time and the planning professions are very well structured in some markets; but when you're thinking structural transformation of your economy, the gap always appears, and who is approving what. Fast approval processes happen at local government level, and the gap of information between local government and national government is always quite wide. I got in at some point into a conversation because we're financing the Gautrain, the train from the airport in Johannesburg to different areas, on how we did some of the land requisition for that, and how the procurement processes worked. In most instances, they worked because the planning was taken away from local government; and that is quite actually a success, but a shame because you should allow a process that allows the decision-making process to be at local government with sufficient information to be able to have this transfer of knowledge but just the skill of doing this because land use, how is managed, and how it will be appropriated for the future is something that really needs to be localized a lot; and in most of these decisions, it's difficult to see this land transformation in most African cities happening rapidly just because of the gap in information and who holds it, and who takes the decision.

If I could make the suggestion to the African Development Bank --not on land, but on the financing because we are talking now infrastructure as a different asset class -- I would say go to African capitals; speak to asset management companies, and the financiers. Take this report and start asking questions on how do we operationalize this information; how do you make it work? Because some of these industry holders hold quite a bit in terms of the funds that they hold. I happen to have a conversation with fund managers in South Africa in March, and in the room I had with me there were holding assets to the tune of $1.1

trillion rent (phonetic) -- and this is just a report that they can make use of, but they'll also be able to tell you why they will not be able to invest in some of the areas; and if we can have that kind of discussion, I think you would be hitting a better spot than where we are right now.

MR. GELB: Thank you. A lot of issues have come up, including the debt issue and it's always very risky to cite sort of a, you know, an incident or an example; but sometimes, you know, you find them and then they make you think. And on this question about the human infrastructure and the use of skills and, you know, is the problem in Africa that there aren't skills, or that the skills are not being used and developed? It's a big question.

I had a very interesting, long plane ride with an engineer; this was about six months ago. And this was an engineer who worked for a very large international company and they installed -- its metrology, measuring and flow measurement systems for large hydrocarbon projects, right; so they could measure oil flow and things like this. And he was on his way to an African country to maintain the system; and this was a well-managed country, and I said this must be a very complicated system for an engineer like you to be called in to maintain it. And he said actually no, the maintenance is really simple. It's about the same level as maintaining a motor car. You know, you've got oil, and you flush the oil. So, I said well, why are they asking you to do it? Haven't you trained anybody; and he said, actually we have. We trained a lot of people in this country to maintain the system. And I said well, why aren't they doing it? He said well, the reason is that the training costs -- the first starts off, it was conducted in a foreign country; there was great competition to be selected for the training course, and the people who were selected for the training course, were relatively well-connected people, relatively high up, and they went on the training course, right. And these are not people who expect to get down in the dirt with their hands in the oil, rubbing around in a project like this. So, they've been trained but they don't actually do anything. So, I said doesn't the government lose an awful lot of money when this thing is not working. He said, absolutely. So, why doesn't the government do anything about this? Well, the government doesn't seem to focus on it. So, it doesn't get maintained, it breaks down, and I come, and I come several times, I do it and it's all totally unnecessary. He says well, you know, it's good business for me and my company, but that actually isn't what I like to do.

So, it made me think. I mean what is the incentive structure that is operating in this country, in this industry -- which is a very big money industry by the way -- that require that the costs for the country not to develop its own capacity to manage its own installations and calls in foreign management. So, I think that there are some incentive questions in some -- this is the government, this is not a private institution -- which would maybe worth thinking about in terms of trying to understand questions like this. Certainly, in this area -- I mean this person was under no doubt that it was utterly ridiculous to be calling in foreign contractors to do this. Thanks.

MS. FOX: Well, I think, Alan, you made my point about is it the worker's skills or the manager's skills that are missing.

MR. GELB: Yep.

MS. FOX: And I won't add to the number of stories at this point in the session, but we have a few. I think the question was raised about why infrastructure isn't creating jobs for Africans is really important; and I agree with Jeff that it needs some study. Before I took this job at USAID, I was trying to raise some money to do a study of it; and who knows, I still think it's an important point.

I know some of the answers. I'm sort of, again, it goes, -- it's the same problem in a way with manufacturing. So, when Korea, or the U.S., or whatever was building their roads, the construction industry wasn't as internationalized. They were not global value chains in construction that went down to, you know, sort of national roads, level and national construction level; and so, while, as has been pointed out, internationally big contracts are saving a lot of money and reducing a lot of waste, they may be hindering the development of these local companies. And I know that DIVIT (phonetic) had a project to try to develop local companies through road procurement in Uganda, and it failed because of public expenditure management, primarily. So, we need to work more on that.

And then finally on debt, I want to give a shout out to your recent blog on future development about -- the Brookings blog -- about African debt. I commended it to everyone, it's really good.

MR. COULIBALY: Okay; thank you. This is basically all the time that we had. So, I apologize to those who had hands up, particularly the gentleman in the blue tee shirt was eager to get a question in. Well, I'll remember you for our next event (laughter); and, I think, as the discussions have reflected here, this was really a good report, and the changes that were made to it by the new leadership are very much welcome. And we certainly look forward to reading the next edition in January of 2019.

So, with that, please really join me in thanking the delegation as well as the panelist for a fascinating discussion; and enjoy the rest of your spring meetings.

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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