**Lessons for Africa from China’s Growth**

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**As Prepared for Delivery**

Respected Professor QIAN Yingyi, Dean of the Tsinghua School of Economics and Management (SEM); and respected Professor BAI Chong-En, Associate Dean; esteemed faculty members; honored guests, ladies and gentlemen: Good afternoon. It is indeed an honor and great pleasure to be here at Tsinghua University today. I express my profound gratitude for this unique opportunity to address you today and for the warm hospitality you have extended to me and my delegation. I am humbled by your invitation to speak at this prestigious university, which boasts so many distinguished graduates.

There is much talk of China and Africa in the news: A recent online search found more than 51 million articles! Much of this news is about current Chinese investment in Africa – solar power in Malawi, nuclear power in South Africa, oil production in South Sudan – and the discussion centers largely around Chinese investments and business ventures in African countries. In 2012, one-quarter of Africa’s merchandise exports came to China.

Trade between China and Africa began long before this current phase of investments and the range of views that have accompanied it.  For example, Chinese coins from the Song dynasty, more than one thousand years ago (960-1279), have been recovered in Tanzania. There were Chinese ships sailing on the coast of Kenya in the 1400s, leaving Chinese porcelain behind and taking giraffes back to China with them. We in Africa enjoy our long, rich history with China, as China has accompanied Africa on the road to economic development since we achieved our independence more than fifty years ago.  China has taught us that history matters – as does a firm commitment to growth and development.

As an African looking at China, today I want to go beyond the story of trade between Africa and China. The benefits of China’s investments for African development run far deeper than a mere mercantile relationship based on extraction and export of basic commodities.

As I undertake this, my third visit to China, I am keen to draw on China’s experience and success and identify ways in which the World Bank can work with our African client countries to achieve a sustained trajectory of economic growth – growth that is inclusive and built on poverty reduction and shared prosperity.  In this current period of falling commodity prices, I am particularly keen to look to China’s experience for lessons to take forward.

**What Africa Can Learn from Chinese Growth – It *is*Possible to Change the Course of History – China Did So**

In 1978, China was among the poorest countries in the world.  Since then, China’s real per capita income has grown, on average, by more than 8 percent each year – this is indeed a striking level of growth. In contrast, per capita income in Africa actually fell consistently between 1976 and the mid-1990s. Since then, Africa has experienced consistent growth, but that growth has been very heterogeneous across countries, with countries rich in natural resources growing much faster than those without. *What can Africa learn from Chinese growth*?

Africa has seen a remarkable turnaround in economic growth beginning in the mid-1990s.  Real GDP growth has averaged 4.5 percent a year during 1995-2013, with nearly one-fifth of countries in the region growing at an average rate of 7 percent or better.  The region’s growth has been comparable to that of developing countries outside the region, and has been outperformed only by East Asia and the Pacific region.  Overall, the size of the regional economy has more than doubled (in real terms) during this period.  The results of recent rebasing of the national accounts— the size of Ghana’s economy was 60 percent larger than previously thought and Nigeria’s was around 80 percent larger—suggest that the increase in Africa’s economic size during this period is likely to be even larger than previously thought.

Prospects are for Africa to grow by 4.6% in 2015, and reach a growth level of 5.1% in 2017, lifted by infrastructure investment, increased agricultural output, and an expanding services sector.  On the external front, African growth has been closely linked to the commodities boom – growth in China and the emergence of China as one of Africa’s main trade and investment partners – as well as the surge in cross-border financial flows. On the internal front, improved and sustained macroeconomic management in the Region has resulted in lower inflation, better fiscal outcomes, and lower growth volatility.  Crisis volatility was sharply reduced as the Region became less susceptible to macroeconomic disasters. The way in which the African continent weathered the 2008 financial crisis is a good indication of African Economic Resilience.  In addition, the regulatory environment has improved, as reflected in our rising Doing Business indicators.

All that said, there are some caveats to this African Growth:  it has been based on factor accumulation, particularly in capital-intensive sectors; there has been a very low poverty-to-growth elasticity; there has been low creation of quality jobs, leading to insufficient income growth; growth has been more rapid in capital-intensive/low-productivity sectors; and per capita growth has been lower than in other developing countries due to the high fertility rate.  This factor accumulation model in Africa will face limitations as we now move into a period of lower commodity prices.

I will focus today on a central lesson – China’s focus on boosting productivity – and the associated emphasis on rapid and large investments in human and physical capital, high savings rates, and an overarching ability to consistently drive toward long-term objectives.  I believe that African countries can draw important lessons from the ways in which China achieved this steady trajectory of growth.

**Productivity**

Africa’s steady growth in real GDP – averaging 5% per year over the past decade, was possible thanks to strong underlying fundamentals in terms of inflation, fiscal deficits and financial sustainability.  It resulted from factor accumulation as investments in extractives and other commodities helped to grow the labor force.  As positive as such growth is, in fact it equates to 2.1% per capita real growth:  it has not been accompanied by an increase in productivity, and has been further limited by high rates of population growth. The bottom line is this: African economies must address the challenges of productivity in order to achieve sustained, shared growth *and* reduce overall poverty.

China has enjoyed extremely high increases in productivity over the last several decades. Early on, this productivity growth was driven by the agricultural sector, followed by productivity growth in township and village enterprises in the 1980s and 1990s, and then by privately-owned firms and a restructured state-owned sector into the 2000s.

As I just mentioned, Africa’s recent growth has been highly dependent on exports of raw materials and commodities. Much of the population remains working in agriculture, and while many have shifted to working in services, much of that growth in services is restricted to low-productivity activities such as informal sector trade and production. However, to cite other examples, there is Uganda’s growth in manufacturing; and Rwanda has moved into the services sector. Some of the growth in African manufacturing has been supported by China, such as the Huajian shoe factory in Ethiopia, which opened in 2012 and turned a profit in its first year of operation.

Manufacturing is not the only way to move up the value chain from exports of extractives. There is also the possibility of producing higher-value agricultural products, such as cassava flour in Nigeria, cut flowers in Kenya, or chocolate in Madagascar. These shifts may deliver some of the agricultural productivity gains that Africa needs. Some African countries have demonstrated success in diversifying exports: Rwanda has expanded exports of vegetables and beverages, while Ethiopia has expanded leather exports as well as horticulture. All three of these strategies – shifting into manufacturing, moving up the agriculture value chain, and diversifying across exports – can help Africa’s economies increase both productivity and resilience to global trends.

**Pro-Poor Growth**

Beyond growth, productivity increases in China have been dramatically pro-poor.   Between 1981 and 2004, China went from more than two-thirds of the population living on less than $1 a day, to fewer than one person in ten living in poverty. A recent analysis of the impact of growth on poverty, comparing China, India, and Brazil, found that China’s growth reduced poverty at a rate 50% higher than that of Brazil, and even higher relative to poverty reduction in India. This has been especially true for growth in agriculture, where growth has had four times as great an impact on reducing poverty than growth in manufacturing or services.

In contrast, growth in Africa has been accompanied by much slower poverty reduction. In the developing world broadly, a 10% increase in national income translates into a 20% reduction in poverty. In Africa, the same increase in income translates into only a 7% reduction in poverty. A recent study across six African countries found that growth in agriculture reduced poverty by between 50 and 127% more than growth in other sectors.[i] And because more than three-quarters of Africa’s poor are employed in the agricultural sector, productivity improvements in agriculture – moving up the value chain – may hold exceptional promise for reducing poverty.

A significant amount of China’s productivity growth has been driven by market reforms. While African nations enacted major market reforms throughout the 1980s, 1990s, and 2000s, the increases in productivity have not been at the levels that were hoped for.  So we must ask:  *what is Africa missing?*

There has been a resurgence in the debate over the factors and prerequisites to structural transformation in Africa. Overall, economic transformation characterized by a reallocation of resources from low-productivity activities into modern, high-productivity sectors such as manufacturing has been lacking from Africa’s boom.  This has fueled a debate on whether sustainable growth in fact requires a shift in favor of manufacturing (as advocated by McMillan, Rodrik, Verduzco-Gallo); or moving up the quality ladder in sectors where countries can exploit and build on their current patterns of comparative advantage and sustain growth (as espoused by Hausmann and Hidalgo). As another example, India’s growth pattern suggests that a shift into high-productivity services, bypassing manufacturing, represents yet another path to sustainable growth (as noted by Ghani, Goswami and Kharas). Modern services such as software development, and manufactured products, enable innovative and technology-savvy countries to leverage services as an important driver of growth.  Although there is clearly no “one size fits all” approach, cross-country analysis points to a set of “horizontalist” (i.e., neutral across sectors) factors which have contributed to diversification: Improving infrastructure and trade networks; investing in human capital; encouraging financial deepening; reducing barriers to entry for new products; and R&D.

**Human Capital:  Education**

Beyond reforms that increased productivity, China has nurtured a population with high levels of human capital. The average years of schooling for Chinese adults (ages 15 and up) rose from 1.5 in 1950 to more than 7.5 in 2010, a five-fold increase!Clearly human capital has been one of many enabling factors in China’s meteoric growth.

When we look at human capital in Africa by the simple metric of years of schooling during the same period, average years of schooling rose from 1.3 to 5.2, a four-fold increase. The really stark differences arise, however, when we examine the *quality* of schooling. While there are no direct comparisons of learning outcomes in various regions of China versus individual countries in Africa, there is a very real disparity between learning outcomes – with profound related impacts -- in Africa and China.

Africa needs a skilled labor force in order to experience growth like China’s. After decades of limited engagement in post-secondary education, the World Bank Group and other partners are directing a long-overdue focus on higher education and, most importantly, on the content of university studies and the skills students need to enter the job market and contribute to Africa’s growth and development – notably, science and technology. Skilled graduates are crucial for Africa to move up the value chain and achieve critical productivity increases. Here – again – there is room to learn from China, where more than 40 percent of all tertiary degrees are awarded in science, technology, engineering, and mathematics (the so-called “STEM” fields). In contrast, the number of African university graduates students in STEM fields is closer to 22 percent. Africa needs scientists and engineers to improve the productivity of its crops and to build the infrastructure required by Africa’s booming cities.

The quality of education and an emphasis on STEM will be essential to African productivity and income growth. This new direction has been recognized by the leaders who convened last March in Kigali, Rwanda, at a forum on Higher Education for Science, Technology, and Innovation. At the conclusion of the forum we committed to double the share of students graduating from African universities with degrees in science, mathematics, and technology by 2025, bringing Africa more in the range of China in this regard. China is already working with the Africa Region on this ambitious agenda and we welcome further cooperation.

At the same time, Africa needs to get more students into tertiary education so that they have the option of studying science and technology. University (or other post-secondary) enrollment is under ten percent in Sub-Saharan Africa, the lowest of any region in the world. Some of the best evidence on improving lower levels of education comes from China. The World Bank recently reviewed hundreds of studies on improving primary education in middle- and low-income countries, and twenty-five studies from China informed recommendations for improving education in Africa and beyond, especially on effectively incorporating technology into schools.

While I began this discussion with an emphasis on higher education, secondary (and even basic, quality primary) education remain essential to boosting productivity, particularly in the informal sector. Poor learning outcomes in turn impact the productive sector, in terms of shortages in qualified labor to meet the needs of the growing manufacturing sector, and to increase productivity in services sectors as well.  Another critical area for African human capital development is technical and vocational education and training – so-called “TVET”.  China’s success in developing the skills needed to adopt technology has created the conditions to attract investment in manufacturing.  Here again, Africa has much to learn from China’s experience in order to adopt new technologies and thereby create jobs.

**Human Capital:  Health**

Another component of human capital is health. Allow me, first, to acknowledge China’s generous support to the response to the recent Ebola outbreak in West Africa. Beyond this crisis, we see the fundamental importance of improving basic health systems to increase life expectancy, which remains low in most African countries, and create viable health systems. China has demonstrated, for decades, a commitment to broadening access to health, beginning with the Cooperative Medical System and the so-called “barefoot doctors” in the 1950s. These programs offer valuable lessons in how to provide health care to rural areas that are suffering from inadequate health services.

It is clear that without a healthy population, there can be no hope for sustained economic growth.  African countries have recently adopted creative solutions to increase access to and quality of health care, including so-called “results-based financing”, whereby health centers receive resources per service rendered rather than a flat budget.  Evidence from Zimbabwe, Zambia, Rwanda, Burundi, and the Democratic Republic of the Congo suggests that such financing increases accessing of pre-natal care, institutional childbirths, and post-natal care visits. Evidence from Nigeria and Rwanda shows that not only is coverage improving, but so is the quality of care provided by these centers.

**And what about Agriculture?**

There are differing views on the role of agriculture in African development.  As indicated earlier, there is a view advocating a rapid move from agriculture into manufacturing, with higher value-addition to move the economy towards higher productivity.  In the context of current African economies, there is a lot to be learned from the Chinese experience in agriculture.  The first phase of Chinese growth, as noted earlier, was driven by agriculture.  Africa is a continent with the basic elements for successful agriculture – abundant land and water resources. The cost of food products in Africa weighs heavily on the balance of payments. For example, the Democratic Republic of Congo imports more than $1.5 billion per year worth of food, which places pressure on the balance of payments and depletes foreign exchange reserves.  Low productivity and low supply of food products in Africa is having an impact on prices and related negative impacts on the poorest countries. As one example, in one African country, a kilo of tomatoes currently costs nearly $8!

As such, any changes to improve agricultural productivity and reduce the costs of the consumption basket will have a positive impact on lowering food costs and reduce pressure on wages as well.

There is, as well, a pro-poor element to agricultural growth. It is possible to move up the value chain (for example, cut flowers in Kenya) and increase technology adoption.  Furthermore, as urbanization increases, increased agricultural productivity will provide food supply for urban populations and thereby enhance labor productivity.

In the current context, there is no contradiction in advocating for both increasing agricultural productivity and manufacturing.  The experience of some Latin American countries shows that agriculture can play a major role in economic growth (for example, soy and poultry industries in Brazil) while also pursuing manufacturing at the same time. This can contribute to more inclusive growth and poverty reduction – as we have seen the elasticity of agricultural growth for reducing poverty.

**Physical Capital**

China has also invested heavily in physical capital. About two-thirds of roads in China are paved (compared with one-third of paved roads and just 7 percent of roads paved in select African countries). In China, 89 out of every 100 people have cell phone subscriptions, whereas just half of people in Tanzania and even fewer in the Congo have mobile telephones. But where we see the starkest difference is in access to power. Power consumption per capita in China is more than twenty times higher than in Nigeria or Kenya. China’s rapid advancement in physical capital is not surprising given the levels of investment: An estimate from the early 2000s suggested that more than 45 percent of national income in China was invested in physical capital. There is debate among economists as to the return on this investment relative to productivity growth. At least some estimates put this investment in physical capital as contributing to 50 percent of China’s growth in the post-reform years.

One of the crucial constraints to growth in Africa is the lack of physical capital. It’s very difficult to develop higher-value, higher-return manufactures or even agricultural goods without access to roads and power. Consider, then, that fewer than one in three Africans has access to electricity (and only one in seven in rural areas) – in contrast  with near universal electricity coverage in China. Furthermore, consumers in Sub-Saharan African countries face the highest connection charges of any other region. Beyond simple investments in infrastructure, Africa also needs to make essential improvements in the efficiency of trade (such as simplifying border clearance processes and harmonizing customs regulations.

**Savings**

Much of the investment that has fueled China’s exceptional growth has been facilitated by strikingly high savings rates. The most recent data suggest savings rates of about 50 percent in China, while the savings rates in most African countries are well under half of that. Some of China’s high savings comes from the corporate sector: Enterprises have risen in profitability, and limited access to bank financing has motivated enterprises to save in order to finance their own investments. When we look back at China, we see that household savings rates have risen dramatically along with public savings. How relevant is this for Africa?

African growth has been driven to a significant extent by commodities, the prices for which can fluctuate wildly as we are seeing right now.  Higher levels of savings are needed in Africa – at both the public and household levels – to sustain the needed level of investment and a smooth growth trajectory over the long term. Savings decisions of households reflect a combination of income level, inter-temporal and inter-generational decisions, and the level of uncertainty in a country. We expect African households will experience increasing levels of income and confidence, as reduced levels of uncertainty, resulting in higher levels of savings to plan for future generations – as has been the case in China.  This transition to a higher rate of savings will be critical to supporting needed levels of investment.

The fertility transition in Africa – another important factor in sustained economic growth -- has been much slower than in other regions. Fertility rates in three-quarters of African countries remain at four children or higher. Access to family planning and maternal health services – as well as education for girls – typically results in improved economic opportunity for women and lower fertility. Similarly, lower fertility rates can afford greater economic opportunity to women and improved economic growth overall.

Some governments in Africa are seeking innovative ways to achieve lower overall fertility rates. In Niger, for example, a so-called “School of Husbands” is delivered by trusted, traditional community leaders. This education program highlights the benefits of family planning and reproductive health. The World Bank is working with governments across the Sahel (the belt across Africa from Senegal to Eritrea) to strengthen reproductive health and empower women to make their own fertility choices in its $200-million Demographics in the Sahel Project.

Of course, falling fertility links not only to increased savings but also to improved human capital for women.  These two factors always move together, and neither of them can be achieved alone. There are complementarities that make productivity growth, investments in human capital, and physical capital investments crucial ingredients to the overall growth recipe.

**Set goals and stick with them**

I don’t need to remind this esteemed audience of the wisdom offered by one of your former leaders:  “While the prospects are bright, the road has twists and turns”.  Shocks and temporary setbacks should not divert us from our long-term goals of Africa’s development.

Although productivity increases may have been the principal driver of China’s growth over the last 35 years, that growth has come from a variety of sectors: first agriculture, then village enterprises, then private firms. It seems that whenever one set of productivity-enhancing reforms has been exhausted, the Chinese economy found a new way to reignite productivity growth. Over this period, there has been an ongoing focus on productivity, through a range of policy choices that propelled China towards the goal of sustained economic growth.

Success in achieving economic growth with increased productivity, employment, and poverty reduction, will be built on sound economic principles. African leaders must also remain pragmatic and develop their own home-grown solutions.  As Deng Xiaoping said, “it doesn’t matter whether the cat is black or white, as long as it catches the mouse”. African countries need to bring pragmatic solutions to newly evolving problems. We must respond quickly and nimbly – and adapt our modus operandi to changing conditions – while maintaining a long-term perspective.

**Conclusion**

I am humbled by the opportunity to draw on your country’s vast and successful experience. African countries are not going to mimic China’s institutions, nor should they. Rather, we must create the conditions to define our own growth path, based on our history, our culture and our institutions.  Various models for structural transformation, as offered by different groups of academics, will need to be adapted to our unique circumstances and the conditions in subsets of African countries.

No single approach will be suitable for the entire continent.  Often the question is asked as to which economic model Africa should adopt.  I would answer: “the African Model”, or more precisely, “the African *Models*”. The importance of such self-reliance is well-expressed by one of your former leaders, who wisely noted “We hope for foreign aid, but cannot be dependent on it.  We depend on our own efforts, and on the creative powers of our entire people.”

We look forward to incorporating principles behind China’s impressive growth into the strategies of African nations as they seek to build on their improved growth of the last two decades. I hope that, going forward, Africa can look to China not only as a trading partner, but as a growth mentor. In turn, we look forward to sharing the African experience back with China. I thank you again for this opportunity to address you today, and to visit your prestigious university.