Growth ResearchProgramme

China-Africa: a maturing relationship? Growth, change and resilience



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Current policy and research debates

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Key information

On 3 December 2015, the DFID-ESRC Growth Research Programme (DEGRP), South African Institute of International Affairs (SAIIA) and the Overseas Development Institute (ODI) co-hosted a one-day event in Johannesburg, South Africa, to discuss issues being examined as part of DEGRP's China-Africa research.

Held in parallel with the sixth ministerial conference and second summit of the Forum on China-Africa Cooperation (FOCAC), the event focused on three areas:

- China's changing role in the global economy and the impact of this on African economies, as well as on development in Africa generally;
- the role of natural resources and wildlife in China-Africa trade, including opportunities for diversification away from a natural resources-based economic model; and
- issues of governance, peace, and security.

The event aimed to shift the discussion towards an increased awareness of the complexity of the relationship between China and Africa, and the potential benefits of their ongoing interaction. In particular, the event aimed to highlight how African countries can actively engage with China to promote their growth and development.

This publication is the result of the event. It features the keynote speech by Justin Yifu Lin, Professor at Peking University and ex-World Bank Chief Economist, a speech by UNIDO Goodwill Ambassador Helen Hai, contributions from DEGRP China-Africa researchers, and SAIIA and ODI researchers, as well as additional contributions from ODI and commentary from a delegate at the event.

Key messages from the event:

 Changes in China have created a wealth of opportunities which African countries could take advantage of in order to transform their own economies, and to transition from natural resources-based activities towards more valueadded activities such as manufacturing.

- China and African countries can learn much from each other, and could engage in South-South cooperation both in the private and public sectors.
- Strong collaboration between China and African countries means extending the focus of relations to include issues such as wildlife conservation, peace and security. These issues need to be dealt with in coordination with existing African initiatives to ensure that they complement national and regional objectives

For more information about the event, including links to the webcast and media interviews, visit the DEGRP website: http://bit.ly/24NSYii

DEGRP's China-Africa research

Launched in 2015, DEGRP's China-Africa research aims to examine the impact of China's engagement in Africa, and evaluate what China's own economic transformation can offer other developing countries. It comprises five research projects:

- Local government, economic growth and human development – http://bit.ly/1OTDuRg
- Chinese national oil companies and the economic development of African oil producers – http://bit.ly/1FK0Gfy
- Chinese firms and employment dynamics in sub-Saharan Africa http://bit.ly/1J9LuZf
- Natural resources, rural poverty and China-Africa trade – http://bit.ly/1KkaRIS
- Chinese foreign direct investment and structural transformation in Africa – http://bit.ly/1KnDXvg

Watch a series of short video interviews with DEGRP's China-Africa researchers at: http://bit.ly/1MvmbIR

Introduction

Linda Calabrese, ODI

China's changing economy

The past few years have seen several notable changes to China's economy. Since the early 2000s, after a long period of high and often double-digit growth, China's GDP growth rate has slowed to less than 10% from 2011 onwards (World Bank, 2016), with a forecasted growth rate of between 6-7% for the next few years (IMF, 2015). At the same time, the Chinese government is attempting to shift the economy away from an export and investment focus towards a household consumption-led model (Huang, 2013).

These changes are likely to have a significant impact on global trade and investment patterns. Chinese investment has sustained commodity prices after the global financial crisis (IMF, 2015), so lower levels of investment tied to the slowed economy might bring these prices down (Bremmer, 2015). Meanwhile, the move away from manufacturing – paired with the rapid expansion of the Chinese middle class (Barton et al., 2013) – is set to boost imports of consumer goods.

While trying to rebalance its economy internally, China is also aiming for an enhanced role on the global stage. The 'One Belt, One Road' initiative (OBOR) for example, proposes a New Silk Road Economic Belt and accompanying maritime trading route to facilitate trade between China and more than 60 countries in Asia, Europe and Africa (Hofman, 2015; Johnson, 2015). This initiative will make it cheaper for these countries to access regional and global markets, and is likely to strengthen China's economic and political relationships with many of the countries along the two routes.

Effects on China-Africa engagement

Changes to China's economy are already affecting Africa, its main trading partner. African exports of commodities to China are declining. But these changes have also created

opportunities. Lin (2011) argues that if China moves up the value chain, it will shed up to 85 million jobs in the manufacturing sector. The resultant gap could then be filled by low income countries with abundant workforces, as long as the right policies are applied by governments in these countries.

The OBOR initiative could boost African economies too. The inclusion of East African ports in the Maritime Silk Road route will connect Kenya, Djibouti, and Egypt with the rest of the world (Olander et al., 2016), while investment in road and rail infrastructure to serve the ports could also enhance trade within the African continent.

That said, it is important to recognise that while changes in China present both challenges and opportunities for Africa, African countries play an active role in negotiating their engagement with China. They are not simply recipients of beneficial trade and investment, but also set terms and conditions for this relationship.

In Ethiopia, late Prime Minister Meles Zenawi actively encouraged Chinese investors to set up light manufacturing firms in the country (ChinaAfrica Blog, 2012). Similarly, the Rwandan government has pursued Chinese investment to boost and diversify the country's exports, establishing a Chinese garment factory in Kigali (Namata, 2014). Africa also invests in China, with South African investment in China larger than the latter's investment in South Africa in dollar terms (Gelb, 2014).

In addition, African countries play a key role in shaping Chinese engagement in their own territory. New research suggests that the behaviour of Chinese firms in Africa is more heavily influenced by host countries' policies and regulations, as well as local institutional practices and social norms, than by the rules and guidelines set by the Chinese government (Weng and Buckley, 2016).

The Forum on China-Africa Cooperation

The sixth ministerial conference and second summit of the Forum on China-Africa Cooperation (FOCAC) took place against this complex backdrop. Held in Johannesburg in December 2015, the summit was the latest meeting of Chinese and African heads of state and government officials engaged in building and maintaining strong links between China and Africa.

The packed agenda dealt with a wide range of issues, from agriculture to peace and security, and end-of-summit resolutions were cemented with the creation of the 2016-2018 Johannesburg Action Plan specifying what needs to be done by each party to strengthen collaboration between them.

The plan's ambitious objectives were also accompanied by pledges to provide additional financial support and develop stronger implementation mechanisms (Carey and Li, 2016). China has committed to: scaling up its direct investments to Africa to a stock of \$100 billion in 2020 (from \$32.4 in 2014); providing more inclusive and accessible loans; expanding the China-Africa Development Fund (a Chinese equity fund to promote investment in Africa); and to setting up a China-Africa production capacity cooperation fund. The latter was launched in January 2016 to support investment in manufacturing, agriculture, energy, and infrastructure.

This set of policy essays brings together contributions from a range of China-Africa experts in attendance at the DEGRP/SAIIA event in December 2015, as well as contributions from ODI and SAIIA researchers. The essays provide insight on a host of issues addressed at the FOCAC summit, and of ongoing importance.

In section 1, former World Bank Chief Economist and Professor at Peking University **Justin Yifu Lin** reflects on the importance of industrialisation for the development of African countries, and how governments might support this process. UNIDO Goodwill Ambassador **Helen Hai** shares her experience of setting up a shoe factory in Ethiopia, and its role in creating a vibrant new manufacturing sector in Africa. **Hannah Ryder** comments on the importance of accurate data on China-Africa engagement.

Section 2 focuses on the opportunities that Chinese investment offers for boosting African economic growth. Giles Mohan discusses the possibility for African economies to use commodities as an engine for industrialisation. Deborah Brautigam reflects on what kinds of manufacturing firms have established a presence in Africa and where, and looks at the extent to which these investments may create linkages with the local economies. Carlos Oya and Terry McKinley focus on the employment effects of Chinese investment in Africa. Stephen Gelb highlights the existing cooperation between China and Africa in the financial services sector.

Section 3 addresses what lies beyond investment, examining how increasing cooperation on issues such as trade and environmental protection offers both opportunities and challenges. Yu-Shan Wu highlights how the recent FOCAC summit opened space for new discussions about maritime cooperation and wildlife conservation. Xiaoxue Weng highlights the importance of recognising informal natural resources trade between China and African countries, an issue often overlooked in high-level discussions. Ross Harvey explores how African countries might adapt to Chinese-influenced changes to the commodities market, and the potential environmental implications of these changes. Roger Calow highlights the environmental risks of relocating manufacturing from China to Africa, with a focus on the water resources 'hidden' in manufactured products.

Section 4 focuses on the importance of governance, institutions and diplomacy in shaping the China-Africa relationship. **Lina Song** considers whether China's experiences of government decentralisation could yield lessons for African local governments seeking to contribute to economic growth and human development. **Dan Large** provides an overview of the evolution of China-Africa engagement in peace and security matters.

Event speeches and commentary



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How to jumpstart industrialisation and economic transformation in Africa

Justin Yifu Lin, Peking University

2 Why invest in Africa: markets, know-how and comparative advantage

Helen Hai, UNIDO Goodwill Ambassador and CEO of Made in Africa Initiative

3 Why two new FOCAC commitments could help improve Africa-China relations

Hannah Ryder, UNDP

How to jumpstart industrialisation and economic transformation in Africa

Justin Yifu Lin, Peking University

Keynote speech, DEGRP/SAIIA event Johannesburg, 3 December 2015

Summary

In his keynote speech, Justin Yifu Lin argued that industrialisation is crucial to Africa's structural transformation. With reference to the past successes of East Asia and China, and current successes in Ethiopia and Rwanda, he highlighted the importance of sound industrial policy, realistic goal-setting and political commitment to lasting change.

Currently, many African countries are trapped in poverty. But poverty is not destiny. In 1952, Taiwan, China was as poor as any country in Africa. Now it is a high-income economy. In 1979, per capita GDP in China was less than a third of the average in sub-Saharan African countries. Today, China is a high- to middle-income country, and on the way to becoming a high-income country by around 2020.

This is the story of many other East Asian economies, like South Korea. In the 1950s, South Korea was one of the poorest countries, and one of the poorest post-colonial economies, in the world. Now it is a high-income economy, showing that it is possible to escape the poverty trap and grow dynamically for decades, eventually becoming middle- or high-income.

All the countries in the world were poor, including today's high-income countries. When they were poor, they shared a unique feature: they all relied on agriculture for their living. Some 90% of their populations lived in rural areas and relied on agriculture. Now these countries share another unique feature: they all relied on transformation from agriculture to manufacturing, and then to the postmanufacturing stage, to increase their income.

Africa is poor because African countries have not yet completed this transition. Today, over 75% of African countries' exports are either agricultural or primary resources. Where natural resources are available, government budgets rely heavily on them. But resources are often subject to boom and bust, so the market is very volatile, and productivity levels are low.

The issue is how to achieve the transformation from an agrarian primary economy to industrialisation. For this, industrial policy will be necessary.

Industrial policy for transformation

For structural transformation, it is imperative to have first movers, a role which certainly carries a lot of risk. A first mover's project can be either a failure or a success. If it is a failure, the first mover bears all the cost, and sends a signal to other people to say 'we are not ready' or 'the direction is wrong'. That way, other people don't have to encounter similar failures. If the first mover succeeds, then they will attract imitation. With competition, the first mover will no longer have a monopoly position however, therefore there is a kind of asymmetry between the cost of failure and gains from success.

But regardless of whether a first move is a failure or a success, the first mover produces valuable information for other people. Without first movers, there would be no structural transformation. The government needs to compensate for the information externalities generated by first movers.

The probability of the first mover being successful not only relies on their entrepreneurship, but also relies on coordinated improvement of hard and soft infrastructures. For example, moving from agriculture to manufacturing requires improvements in logistics, power, roads, port facilities, etc. Those improvements cannot be made by any individual manufacturing investor. In addition, equipment investments in manufacturing are larger than those required by agriculture. Therefore, financial institutions are needed to mobilise the financial resources for investment. Likewise, institutions are needed to share the risk linked to the new industry. Entrepreneurs are not able to make these kinds of financial improvements by themselves. The government needs to coordinate those changes, either by engaging the private sector, or by providing coordination itself.

For the government to play this role, industrial policy is required, as coordination should be sector-specific. The infrastructure and human capital needed differ for each sector. For example, agriculture requires irrigation, whereas the industrial sector requires power facilities.

If the government had unlimited resources, then it could provide all necessary improvements in hard and soft infrastructures, but resources are limited, as is implementation capacity. As a result, the government needs to act strategically, according to what kind of sectors they want to promote, and what hard and soft infrastructure is desirable.

Achieving successful industrial policy

Successful industrial policy needs to meet certain requirements.

Latent comparative advantage

Policies should promote sectors in which a country has latent comparative advantages. That is, the sectors in which the country can have the lowest possible factor cost of production that is consistent with comparative advantage determined by their endowment structure. The factor cost of production should be the lowest in the world.



Competitiveness in the global markets is based on total cost, which has two components: factor costs of production and transaction costs. Transaction costs are related to hard infrastructure as well as soft infrastructure, i.e. institutions and business environment. If the hard infrastructure and business environment are poor, even if the factor cost of production is low, the transaction cost will be high, and so will the total cost.

Industrial policy should aim to improve business environments and institutions, as well as hard infrastructure, in order to lower the transaction cost.

Realistic goal-setting

In the past, there have been many attempts at industrial policies, but most have failed. The main reason is that they were too ambitious. They tried to target certain kinds of sector, which looked very modern but which were too capital intensive. These industrial policies went against the countries' comparative advantages. As a result, even where sectors were built up with government help, the factor cost of production was higher than in high-income countries with comparative advantages in these sectors.

In a low-income country, the transaction cost, by definition, would be higher than in a high-income country, and, as a result, total cost would be too high to be competitive with products from high-income countries in an open market. Consequently, the survival of those sectors has relied on continuous subsidies from the government. That is the main reason why industrial policy has failed in the past.

What can be learned from history?

Identifying which sectors have latent comparative advantage has become a theoretical and policy challenge. A lot can be learned from historical experience.

All successful countries have practised industrial policy making, starting from the 16th Century, when England wanted to catch up with the Netherlands in the wool textile sector.

Currently, all successful countries have some kind of industrial policy in place.

What is there in common between these industrial policies - Korean and English industrial policies, for example? Industrial policies will be successful if they use a dynamic, growing country as a reference point, and, second, if they target credible sectors within these dynamic, growing countries. A third criterion is that the reference country should have a similar endowment structure, with per capita GDP at most one to two times higher.

In the past, most industrial policies have failed because they were too ambitious. They have tried to emulate countries with a per capita income ten times or twenty times higher than their own, and they have tried to build up their industry with reference to these countries.

In the 1950s, China wanted to overtake Britain in ten years, and catch up with the US in 15 years – but Chinese per capita income at the time was only 5% of that in Britain and the US. As a result, even though China was able to build up its industries, these were very uncompetitive, because factor cost as well as transaction cost in China were too high, and they relied on excessive protection to survive.

Based on this, I have tried to understand, how can an industrial policy successfully target a country with the right characteristics? First, it is necessary to look at countries with similar endowment structures, so that they have similar comparative advantages. If a country has been growing dynamically for several decades, then most of the industries in the country should be consistent with its comparative advantages.

Countries that are able to grow dynamically for several decades can accumulate capital quickly. Industries that have had competitive advantages in the past are going to lose those advantages, and will become the country's sunset industries. For a country with a similar endowment structure, however, the sunset industries of the reference country can become sunrise industries – that is, the latent comparative advantage industries.

Lessons from Asia and Mauritius

Following these ideas provides a golden opportunity for industrialisation in Africa. The few countries that have succeeded in catching up since World War II have generally done so by capturing a window of opportunity for the relocation of light manufacturing, a window created by rising wages in higher-income countries.

In post-WWII US, the wage rate rose, and so the US lost competitive advantage in light manufacturing sectors such as garments, textiles and electronics. At that time, Japan took that opportunity and became a very successful country in the 1950s and 1960s.

Eventually, due to the success of those two decades, wage rates in Japan also rose. This time, South Korea, Taiwan, Hong Kong and Singapore captured the opportunity to enter into the light manufacturing sectors, earning themselves the label 'Asian Tigers'. By the 1980s, however, their wage rates had also risen, and they had lost competitive advantage. China took advantage of this, and has been growing dynamically for three decades now.

China has now reached the same stage that Japan reached in the 1960s, and the Asian Tigers in the 1980s. China is about to relocate its light manufacturing sectors – to Africa.

The idea of capturing opportunities is already practised in Africa. One of the most successful African countries is Mauritius. In the 1960s, Mauritius was poor, but it has actually become the most successful African country, with a per capita GDP already exceeding \$10,000.

How did Mauritius become successful? In the 1970s, it grasped the opportunity of rising wages in Taiwan and Hong Kong. It developed an industrial path, actively inviting the relocation of firms manufacturing textiles and garments, from Taiwan and Hong Kong. Now that Mauritius has become industrialised, it has transformed from a mono-economy of sugar production to an African industrial success story.

New opportunities for industrialisation

The rise of China will be a huge opportunity for Africa. In Japan in the 1960s, the total number of workers employed in manufacturing sectors was 9.7 million. In South Korea in the 1980s, the figure was 2.3 million, and over 1.5 million in Taiwan, a million in Hong Kong and half a million in Singapore. In the light manufacturing sectors alone, China currently employs 85 million workers. These jobs are about to relocate to other low income countries. Can this idea work for Africa? Can we really learn from past experiences, and duplicate the same quick success to facilitate structural transformation in Africa?

I'm delighted that Helen Hai, UNIDO Goodwill Ambassador and CEO of the Made in Africa Initiative, is here, because she has created two quick successes in African countries in a very short period of time, both of which captured opportunities and created a huge number of jobs. The first one is the Huajian shoe factory in Ethiopia.

Shoe manufacturing in Ethiopia

When I was at the World Bank as chief economist, I started to advocate the above ideas and show the opportunities that would be available for African countries. I'm delighted that the then prime minister of Ethiopia, Meles Zenawi, listened to this advice and went to China in 2011 to do some investment promotion and invite Huajian shoes to relocate production to Ethiopia.

With the entrepreneurship of Helen Hai, they quickly created 2,000 jobs in a year, in 2012, and more than doubled the export of shoes from Ethiopia to the global market. By the end of the second year, 2013, they had created 4,000 jobs. Before 2012, no-one really believed Ethiopia could produce light manufacturing products for the global market, but the success of Huajian has convinced people that it's possible.

The Ethiopian government now knows how to really capture these opportunities: in 2013, they built up an industrial park near Addis Ababa, with 22 factory units. Within three months, all units had been leased to light manufacturing firms producing goods for export to the global market. International buyers also come to Africa, as they see that production costs in Africa are much lower than in China, and there is also the benefit of no customs duty for importing from low-income countries in Africa.

Garment manufacturing in Rwanda

This is not only a success story for Ethiopia. After understanding Ethiopia's success, Rwanda wanted something similar. President Kagame engaged in active investment promotion, and invited Helen Hai to help set up a garment factory there. They decided to make the investment in February this year (2015), recruiting 300 workers. They completed planning and training work in May 2015, and started to export by August, with a total of 500 workers. Now this company has become the largest employer in Rwanda, but, in the past, no-one really believed Rwanda could be a manufacturer for the global market.

Concluding remarks

So, from all this, I think that poverty is not destiny. Diversification and continual industrial upgrading is the path to generating jobs and to achieving prosperity. Dynamic growth and rising wages in China will provide an opportunity for Africa. And not only China - other emerging economies will need to relocate sectors when their wages rise.

African countries, if they can capture these opportunities, can grow as dynamically as the East Asian countries because, fundamentally, all successful countries started their structural transformation from light manufacturing. We hope that, through our work, we will really see that African countries can seize upon these opportunities and become as successful as other East Asian economies, and other successful countries in the world. Thank you.

Why invest in Africa: markets, know-how and comparative advantage

Helen Hai, UNIDO Goodwill Ambassador and CEO of Made in Africa Initiative

Speech highlights, DEGRP/SAllA event Johannesburg, 3 December 2015

Summary

In her speech, Helen Hai shared her experiences of investing in Africa, from setting up shoe and garment factories in Ethiopia and Rwanda, to consulting with the governments of Ghana, Nigeria, and Ivory Coast. This selection of highlights includes her reflections on what made the Ethiopian shoe factory a success, and why investors should do business in Africa.

Introduction

I first came to Ethiopia in 2011, as Vice President and general manager of Huajian Shoes. It took us three months from deciding to invest in the shoe sector to actually begin production for export. By the end of year one, we had recruited 2,000 local workers. By the end of year two, we had recruited 4,000.

Ethiopia has an industrial zone called the Eastern Industrial Zone. Prior to 2011, they had struggled for five years to attract a single manufacturer from anywhere in the world.

After we created 4,000 jobs, the Government of Ethiopia asked us to work with them to promote the first state-owned industrial zone, Bole Lemi, which is in Addis Ababa. Less than three months later, this was all turned into a factory unit. They leased it out to international manufacturers from India, Turkey, Bangladesh, Hong Kong, Thailand – all over the world. How? Because success brings success.

We brought an investor in. I showed them what I did, explained the business, the concept behind it. They signed a contract immediately. That same year – 2013 – was when the World Bank gave \$250 million to support the second phase of the Bole Lemi industrial zone, on the basis of the success of the first phase. It is the first time in the World Bank's history that they have supported industrialisation.

Why invest in Africa

A lot of people ask me, why did you choose Ethiopia? The first thing I want to share with you is that we did not pick Ethiopia - Ethiopia picked us. The story started in March 2011, when Justin Lin met the late Prime Minister Meles Zenawi, who talked to him about three things. First, poverty reduction – Justin advised him that the only key to poverty reduction is job creation. Second, how the fundamental secret of China's economic transformation in the 1980s, and of the so-called Asian Tigers in the 1960s, is that they captured the window of opportunity during industrialisation shifting, enabling them to create millions of jobs. This gave them the power to jumpstart their economic transformation.

Third, Meles Zenawi asked how they could do this in Ethiopia. Justin replied: 'You need to create a quick success story, because that is the best way to bring inspiration, leadership, confidence, and experience to the country and to the continent.'

That is how the story started. Six months later, Meles Zenawi took his advice and went to China to invite a group of investors to Ethiopia. From that one success story, we have now seen a sort of industrialisation movement over the past four years in Africa.

Vision and leadership are behind all of this. But is it sustainable? The private sector does not come to Africa to give aid – they come to Africa to do business. But through business they achieve development goals. In order for this development to be sustained, there has to be a solid business reason behind investment.

Look at the supply chain. It has three components – manufacturers, traders and retailers. What are their business reasons?

Labour and logistics

First, the manufacturer. Labour costs in China are about 22% of overall costs. In China, each labourer represents about \$500. In Ethiopia, that figure is about \$50. Before, there was a myth that Africa offers competitive labour but isn't efficient. Is this true? No.

When I first came to Ethiopia, I went to the local manufacturers and asked them, where's the efficiency? They told me that the day after the workers receive their salary, a quarter of them disappear. Fifteen days later, after all the money is gone, they return.

Efficiency is very low, so even though wages are low it does not make sense to invest there. We experienced exactly the same problem in China, 20 or 30 years back, but over the years we've developed ways and training to overcome it. So when I came to Ethiopia with the right training, I achieved 70% efficiency, meaning my direct labour costs fell from 22% to 3%, giving me a 19% saving.

In the past, a lot of people have argued that Africa doesn't have the infrastructure, that it's not ready for industrialisation. That is not true either. I have been exporting 12 containers of finished goods from Ethiopia every month to the United States. In order to achieve that, I import eight containers of inputs. Let's look more closely at the figures.

In China, the logistic cost is about 2% of overall costs. While I was importing eight containers in order to export 12 containers, I had to pay four times more, which is 8%. So that's a difference of only 6% above the costs in China. I've still got my 19% saving with the labour costs, minus the 6% logistic cost. That leaves a 13% saving.



So the first point I want to raise is that today, with the current infrastructure, there is a profit to be made in manufacturing. That is the business reason behind this kind of movement. It is already there, but the right infrastructure will make it even more attractive.

Trade savings from low import duty

But what the manufacturer saves is only one part of the puzzle. The second component is also very important – the import duty. Today, Africa only has around 2% of global GDP. Africa has to sell to the markets with bigger GDPs, that is, the United States and Europe. Both have more than 20% of global GDP. Africa must aim to reach those markets if it wants to create millions of jobs as China did.

US and European traders are beginning to shift orders from Asia to Africa. With rising labour and raw material costs in China, traders ask for a 5% discount from the factories. But Chinese manufacturers are saying no. If those traders move their orders to Africa, they can save up to 37.5% on import duty on specific items under the African Growth and Opportunity Act and Everything But Arms trade initiative. This is actually an even bigger profit than the manufacturing profit, making this the second part of the puzzle.

New retail purchasing strategies

The last part of the supply chain is the retailers. Before the financial crisis, Europe's big retailers had a purchasing strategy they called 20-80. That means they purchase 20% from the home country, and 80% in the Far East, in countries such as China and Bangladesh. But during the financial crisis, Europe's purchasing power shrank. Retailers could not sell goods as quickly as they wanted. Goods normally stay on the shelves for six weeks, but these retailers had huge containers of goods from China sitting in European ports. So they had to heavily discount the goods on the shelves to make space for those in the ports and avoid paying huge fees to keep the containers there.

After the financial crisis, a lot of retailers realised the 20-80 purchasing strategy no longer worked. They began to look for closer markets. Quite a lot of retailers are changing the purchasing strategy to 40-60 and are desperately looking for new manufacturing locations. In Ethiopia, we're seeing well-known retailers desperate to place orders. In the past, the problem has often been that local workers don't know how to do international manufacturing. But it doesn't have to be this way: things are changing.

The key to success: markets, knowhow and comparative advantage

When I first set up the shoe factory in Ethiopia, I went to Italy to meet a well-known Italian footwear brand. I asked them to pass orders to my factory in Ethiopia. The boss told me to forget it. He said he'd tried that 10 years ago, and although prices were cheap, there were problems in getting international-level quality and delivering on time. So I showed him a video on my laptop about my factory.

I saw sparks in his eyes as he watched the video: he saw that things are different. The reason for the shoe factory's success is the 'triangle' of collaboration.

What is the triangle? The triangle is: the global market, plus Asian manufacturing know-how, plus local African comparative advantage. Each African country has its own different comparative advantage. In Ethiopia it is competitive labour and cheap electricity. For Senegal it comes from being only seven days by sea to Europe and the United States. Even though labour costs are higher, they can do faster trade. Once you have found your advantage, you connect it up with the other points to form a triangle of collaboration. My current venture, the Made In Africa initiative, also champions the triangle of collaboration.

Challenges of investing in Africa

It is not easy to run a manufacturing business in Africa: I have discovered various problems along the way. For example, when I first came to Ethiopia, the Prime Minister promised that all the raw materials I used would be tax free. Yet it is not the prime minister sitting at the port, clearing my goods. It is probably a young African being asked to make a decision he has never made before. So when I imported brushes to brush shoes, the port authorities insisted it was a toothbrush and that it needed to be taxed. A machine we needed to make a hole in ladies' shoes, we were told, looked like a weapon and so now it is stuck in the port.

To resolve these issues, I had to personally meet the Director-General of Tax in Ethiopia and his six Deputy Directors-General. I then gathered the 20 people who were in the next layer of management in a meeting room to see a presentation about me and my work and most importantly, the problems I have encountered. Afterwards I invited all of them to the production line.

Since then things have improved, but why did I go to such efforts in the first place? Like a lot of investors, I previously only saw Africa from the outside, via media reports. But when you are inside, you see things differently.

Two things impressed me. When I first went to Ethiopia, I went on a field trip with the Minister of Industry to a rural part of the country. We saw some children suffering from hunger. On behalf of the company I wrote a cheque of \$100,000. I gave it to the Minister and asked him to use it to buy food for those children. The Minister looked at the cheque for about two minutes and then he handed it back to me. He said: 'Helen, I don't want fish from you. I want you to use this cheque to buy some machines to teach my people how to do manufacturing, to teach us how to catch the fish'.

The second thing was people's willingness to work together to solve problems. People talk about corruption in Africa, but I found in Ethiopia that when I had a problem I could call the Minister at midnight. Despite his busy schedule, he was willing to meet me at 7am the next day to try to understand my problem. So as an investor, I saw that Ethiopia has a Minister willing to come to the office earlier than anyone else.

African entrepreneurship at a crossroads

If you ask me to compare what I learned from European entrepreneurship and Chinese entrepreneurship, I would say this: If you have a tiger in front of you, the European entrepreneur would say, 'When you see the tiger, get your laptop. Research it solidly to study its characteristics, then discuss with your colleagues how you are going to form a good strategy to overcome the tiger.' You can do all of that, but once you finish, the tiger may not be there anymore. Chinese entrepreneurship is very different. It advises that if you have a tiger in front of you, jump on top of it, ride it and learn the skills while riding. I think Africa is at this junction - figuring out what is the right type of entrepreneurship for them. Are they going to miss the tiger or conquer it?

For the full version of Helen Hai's speech, watch the DEGRP/SAIIA event video at: https://www.youtube.com/watch?v=jyAYEV4Lt1I

3. Why two new FOCAC commitments could help improve Africa-China relations

Hannah Ryder, UNDP

Delegate commentary, DEGRP/SAllA event Johannesburg, 3 December 2015

Summary

Hannah Ryder, Head of Policy and Partnerships for the United Nations Development Programme (UNDP) in China, comments on the potential of recent developments to deliver much-needed data on China-Africa engagements.

African heads of state and government leaders recently gathered at two key events. The first was the sixth summit of the Forum on China-Africa Cooperation (FOCAC) in December 2015. The second was the 26th African Union (AU) Summit in January 2016, at the AU headquarters in Addis Ababa, Ethiopia, which were built by China in 2012 as a signal of an ever-strengthening relationship with the continent.

In the margins of both summits, various non-governmental and business organisations held 'side events' on themes such as HIV and AIDS, women's empowerment and conservation. The DEGRP/SAIIA workshop was one such event, and was striking both for the breadth of issues discussed and the diversity of perspectives around the table. Participants addressed topics from industrialisation to peacekeeping, with supportive and sceptical views represented.



One issue was consistently raised – the ongoing lack of credible, multi-country data to supplement and reinforce the rigorous research already being conducted on China-Africa relations. Many are working hard to address this. Deborah Brautigam presented new information on Chinese investment in several African countries, backed up by fieldwork. I also made a contribution as a delegate, citing a recently published UNDP report (2015) that combined several case-studies with a comparative historic analysis of Chinese and African Special Economic Zones.

However, while collection of and access to data about China's engagement in Africa is improving, there are still gaps. Without data, analysis of past successes and failures, and planning for future scenarios, remains difficult. This is why two new additions to FOCAC's Johannesburg Action Plan (MOFA, 2015) for strategic and cooperative partnership are particularly important.

The first addition, in Section 8.2, outlines a commitment to the systematic collection and review of information on whether - and how - agreements made by FOCAC are implemented. This will include drawing on the experience of its operation over the last 15 years. The second addition, in Section 2.4.6, outlines a plan to set up an office for the AU in Beijing. This commitment has appeared in previous FOCAC agreements but is stronger than ever in the latest version.

These commitments could have significant implications for the collection and dissemination of data on China-Africa relations. An AU office in Beijing could enable Union participation in the collection of FOCAC implementation data. Until recently, gathering data in China has typically been a challenge for non-Chinese actors. In addition, were such information to be made publicly accessible, it could play a valuable part in confirming or dispelling the numerous interpretations of Africa-China relations that have dominated academic and media spheres alike.

Until this improved scenario arrives, academics, businesses and non-governmental organisations must continue to share research and perspectives. Programmes like DEGRP and organisations such as SAIIA and UNDP can help by continuing to play a supporting role, pulling together other types of data, comparisons and perspectives – for instance from Chinese companies or other actors on the ground. UNDP could even assist with coordination and data collection between the Chinese government and African country representatives in Beijing until the planned AU office is created. Most of all, we should all continue to follow-up and keep our eye on further opportunities that might emerge from flagship events such as the FOCAC and AU summits.

Chinese investment and African economic growth



4 Beyond resource dependency in Africa? Developing linkages for industrialisation

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4. Beyond resource dependency in Africa? Developing linkages for industrialisation

Giles Mohan, Open University

Summary

Many African economies depend on exports of natural resources. Conventional wisdom suggests that this forms an unstable base for wider development: reliance on commodities trade increases vulnerability to global economic shocks, and some resource-dependent African countries have historically experienced exploitation by industrialised trading partners. This essay discusses the possibility of using commodities as an engine for industrialisation via the development of positive linkages.

Introduction

Last year, China's economy grew by 7.4%, but current projections are that it has slipped below 7%. This suggests a significant slowdown, manifested in dwindling export figures (Elliott and Inman, 2015) and plunging stock markets (Alfred, 2015). The Chinese government responded by devaluing the Yuan by 4% (Brautigam, 2015) and cutting benchmarks for interest rates (Wei, 2015).

The accompanying downturn in China's demand for certain African commodities brings back to light long-standing issues of Africa's resource dependence. There are real concerns for the negative knock-on effects on Africa, rooted in the seeming reliance of some African countries on trade with, and foreign direct investment from, China. The International Monetary Fund has revised its economic growth projections for Africa in 2015 downwards, from 4.5% to 3.75% (England, 2015). Razia Khan, Standard Chartered's Chief Economist, argued recently that African countries should pay more attention to how they will manage 'external pressures of economic headwinds, affecting the global economy' (Nkabinde, 2015). According to Aubrey Hruby, of The Atlantic Council, the Chinese economic slowdown should persuade African governments that 'relying on the beneficial economic climate that has fostered complacency with market inefficiencies is now

no longer an option' (Hruby, 2015). It's clear that African governments need to speed up implementation of their agendas for economic transformation.

Making the most of commodities

So what are the prospects for African resource-based economies to use their commodities sectors as engines for industrialisation? Much of the conventional wisdom on the linkages between commodities and wider development is negative in tone. For some, China's foray into African resource sectors reinforces the stereotype of Africa as the supplier of raw materials for other countries' industrialisation (Okeowo, 2013). There is much that is true in this analysis, but we need a more nuanced understanding of these dynamics if we are to encourage the types of economic transformation that Hruby, Khan and others call for.

Research conducted in 2008-2012 by the Open University and the University of Cape Town is a good example of the kind of deeper understanding required. Featuring a comparative study of a number of African resource-producing countries and the prospects for developing linkages beyond the resource sector, the 'Making the Most of Commodities' project addressed the following core question: whether and how countries can engender virtuous linkages between resource extraction and wider industrial development. The analysis

drew on a series of case studies of different commodity sectors in African countries. The broadest finding was that, in some cases, meaningful linkage development *is* possible.

Oil field services - Angola and Nigeria

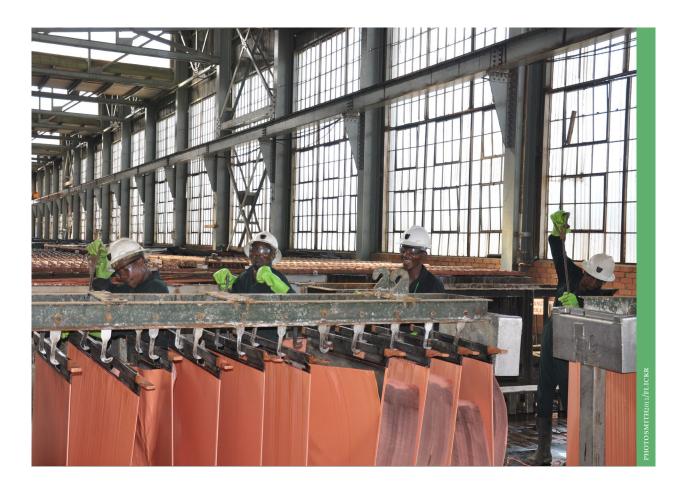
For oil field services in Angola, research revealed the existence of an active local content policy which, coupled with the powerful Angolan national oil company, saw the creation of some local linkages. But these were largely in low-skilled and low-value-added fabrication operations, with joint ventures led by foreign multinationals.

In contrast, in Nigeria's oil sector we have seen local content laws at work in the upstream sector – exploration and drilling – and attempts to add value in downstream sector activities such as refining. Local suppliers account for around 50% of inputs, and this increases further down the supply chain, so there is depth, as well as breadth, of linkages. Additionally, the larger multinational oil firms have active supplier development programmes, although these vary in how effectively they are implemented.

Diamonds and timber - Botswana and Gabon

In Botswana, the government pushed hard for forward linkages in the diamond sector, via investment in the cutting and polishing sectors. It was relatively successful, in part due to bargaining with mining giant De Beers, which sought to renew its concessions in the country.

In contrast, research found that Gabon's timber sector is relatively unregulated and that entry costs are low, with chainsaws the only equipment required. As such, the forests have been exploited by domestic and foreign firms, some operating on the margins of the law. Here, the final markets affected linkage development: European buyers required certain standards and preferred semi-processed timber, whereas Chinese buyers would take unprocessed logs. Hence, with the shift to China as an export market, linkage development was curtailed.



Gold and copper mining - Ghana, South Africa and Zambia

In Ghana's gold sector, there has been gradual development of a supplier industry, although Ghanaian firms are mainly second and third tier suppliers, while first tier suppliers tend to be branches of multinational mining service and equipment firms. In South Africa, there is a well-developed mining equipment sector that is globally competitive. Technical expertise was built up locally, given the complexity of the country's deep mines, and this has fed into development of new products that are sold beyond South Africa.

In Zambia's copper sector, we see quite reasonable backward and forward linkages. Large mines procure 60-80% of supplies locally, and forward linkages are found around smelting, although energy and infrastructure remain problems. The Chinese are active here too – in Zambia's copper belt, they have invested in three mines, including those at Chambishi and Chingola, as well as a smelter, suggesting potential for China-Africa resource sector linkages.

Interpreting the findings

The case studies show that certain factors influencing the development of linkages – such as outsourcing and global supplier policies – are intrinsic to the operations of multinational companies and also determined by the specificity of the commodity. Yet, other factors are more contextual, and so more amenable to policy innovation.

Ownership and national origin

A firm's origins are important because firms tend to bring with them the business practices they know best wwhen they invest overseas. Chinese-owned firms are somewhat different from western or African-origin firms, with distinct implications for linkage development. They tend to import more labour and capital equipment from China, as opposed to localising supply or dealing with

other international firms who also localise their services. Western mine operators, for example, typically prefer to outsource large plant machinery (like diggers and trucks) from international firms who they then encourage to set up close to their mining operation, thereby creating more local benefits. In contrast, Chinese firms are often more horizontally integrated, producing inputs or secure services internally, and outsourcing less.

Chinese firms also face less shareholder or civil society pressure than western firms, resulting in fewer Corporate Social Responsibility efforts. The 'Angola mode' of financing, a form of resource-backed loan found in Angola and some other countries besides, means other Chinese state-owned enterprises (SOEs) win construction contracts and then bring labour and inputs with them. This is highly internalised, and so creates a limited number of backward and forward linkages, Chinese firms tending to provide little support to would-be suppliers.

In terms of processing, Chinese firms tend to refine and process in China, which also limits backward and forward linkages. Chinese consumers seem to be less concerned about sustainability and standards, which has resulted in downgrading in Gabon's timber industry.

There are, however, important differences between Chinese SOEs and private Chinese transnational corporations (TNCs), with the latter much more willing to enter into market-based supply relations. There is also a sense that Chinese firms' procedures reflect a lack of experience, and a corresponding expectation that, as they gain knowledge and confidence, they will increasingly behave like other, non-Chinese multinational firms. Evidence from Ghana shows that Chinese SOEs have gradually localised their workforce in a manner quite similar to the behaviour of companies from the West.

Infrastructure and skills

Other important factors affecting linkage development are well known, and relate to infrastructure and skills. Some resource-related infrastructure does create public goods but, in general, it is poor across Africa and has inhibited resource development and linkages. China has invested a lot in African infrastructure (Kuo, 2015), but much more needs to be done. Skills were a problem in all cases, although levels varied. Some countries had better training programmes and there has been some evidence of the mobility of skills, such as in Angola, where former Chinese SOE employees set up their own firms.

Policy planning

All cases showed that policy is important, in terms of creating a vision of how to capitalise on the linkages, and mechanisms for achieving it. Most countries investigated have a vision, but relatively few had the means of realising it. Governments need to develop a roadmap, aiming for low-hanging fruit, identifying embryonic capabilities and resourcing, rather than going for linkages that are 'beyond feasible'. This will require multi-stakeholder approaches, and local content requirements, skills development and infrastructure investment are all important. However, TNCs also need to develop better 'policy', especially when it comes to supplier development and skills.

Conclusion

The resource sector has the potential to foster industrial linkages and thereby promote development, but the extent to which this can happen depends on a number of factors. Some of these factors are intrinsic and lie with the international firms themselves, such as the degree to which they are pursuing quality, cost and delivery efficiencies, and how much they outsource their operations. The contextual factors relate to the ownership of the firms, and there are significant differences between Chinese and non-Chinese TNCs, with the former less willing, at this stage, to outsource and so potentially develop linkages.

But this seems to be changing. With the recent slump in commodity prices, all international firms are looking to cut costs, and localisation is one way to do that. There has also been evidence of a positive shift in 'host' country business behaviours, in terms of skills endowment and training provision, although across much of Africa it is still inadequate. Likewise, localisation and industrial policies exist, though to limited effect – the challenge is to strengthen their implementation.

Our DFID-ESRC project, entitled 'Chinese national oil companies and the economic development of African oil producers', aims to develop these insights further. It examines whether and how the recent rise in investment by Chinese oil companies in Africa can generate inclusive growth. The oil sector is highly internationalised and capital-intensive, which means it has limited employment benefits for producer countries. In this respect, the Chinese are no different to other international oil companies. Yet, with their tying of investment to infrastructure deals and their long-term loans, the net effect may be positive. Research will help us to understand the different corporate strategies of China's leading oil firms, the contexts that shape whether and how these investments deliver local benefits, and what policy interventions might be needed to enable such benefits.

5. Chinese manufacturing investment in Africa: trends, challenges and opportunities

Deborah Brautigam, Johns Hopkins University

Summary

Growing Chinese investment in African manufacturing can undermine local firms but it can also offer opportunities. Initial research into the issue suggests that new kinds of investors are bringing with them more collaborative ways of working that could help boost economic growth and enhance structural transformation. However, accurate information on Chinese engagement in Africa is lacking, making it difficult to assess whether investment can genuinely help promote transformation.

Introduction

China's rising production costs and the restructuring of its production from low-end manufacturing to higher-value activities are creating opportunities for other developing countries. Initial evidence suggests that Chinese manufacturing firms are interested in investing in Africa. This essay reviews the kinds of firms that have established a presence in Africa, the countries that have proven to be attractive, the types of manufacturing investments being undertaken by Chinese firms, and the extent to which these investments might offer opportunities for technology transfer and skills development for Africa.

Increased manufacturing investment

From the available data it appears that manufacturing may be a significant sector for Chinese investment in Africa. According to China's Ministry of Commerce (MOFCOM), as of 2011 Chinese investment was predominantly in mining (31%), finance and banking (20%), construction (16%) and manufacturing (15%) (SCIO, 2013).

Analysis by the Johns Hopkins China Africa Research Initiative (CARI) of Chinese investment applications approved by MOFCOM shows that by the end of 2014, the Chinese authorities had approved 128 manufacturing projects in Nigeria, 80 in Ethiopia, 77 in South Africa, 48 in Tanzania and 44 in Ghana (CARI, 2015).

This has important implications. In general, fewer opportunities for learning exist in large, capital-intensive extractive activities like mining or petroleum exploitation. The only significant Chinese banking investment, the 2008 purchase of 20% of South Africa's Standard Bank by the Industrial and Commercial Bank of China, was intended partly as a learning opportunity for Chinese investors. This leaves construction and manufacturing as two sectors where employment and training might reasonably be expected to generate learning and skills transfers for African firms and workers.

'Flying geese' revisited - new types of investors

In 1962, Japanese scholar Kaname Akamatsu used the term 'flying geese' to describe the relocation of Japanese firms offshore. Rising costs prompted certain parts of the production chain to move offshore earlier, while others followed as their costs rose (Akamatsu, 1962). Labour-intensive garment production, for example, would move offshore before capitalintensive textile weaving or spinning. The last activities to move would be those designing and producing the factory machines. Southeast Asia and later China were the investment destinations for Japanese firms. Substantial technology transfer occurred and many other countries in Asia learned how to industrialise as a result of their connection with Japan.

This metaphor, while useful, is not a perfect match for our initial findings on the kinds of manufacturing firms now being established in Africa. We propose instead some different kinds of flying geese.

'Geese seeking raw materials'

These investors set up factories to process raw materials in Africa that, at an earlier time, would have been purchased in Africa but processed in China. Leather tanneries and leather shoe factories in Ethiopia are one example. China Nonferrous Metals Corporation's investments in Zambia are another good example: it has ore smelters and concentrators and processes not only its own ores but also those from the Canadian firms First Quantum Minerals and Barrick Gold. Tianli Spinning contracts to buy cotton from Madagascar farmers to use in its spinning mill in Mauritius. These firms export most of their products. The opportunities for technology transfer are mixed. In some countries, Chinese buyers work to upgrade the skills of their suppliers.

'Small geese travelling and settling together'

Most of these came to Africa following the recommendation of friends, business contacts and relatives who made the journey earlier. They are seeking to exploit some small niche in local markets and often find themselves involved in industries in which they had no experience back in China. Firms tend to be small, family-owned and recently started by single entrepreneurs. Companies tend to diversify into different activities rather than grow their companies into prominent manufacturing ventures. Examples would be the plastics cluster in Ghana, where a group of Chinese firms recycle plastic bags into inexpensive plastic products. Already we see African firms in places like Ghana copying the relatively simple Chinese technologies in this sector.

'Large, market-seeking geese'

This is predominantly the mode of entry for firms in the construction materials sector, automobile and vehicle assembly, and white goods assembly. Haier and First Automotive Works in South Africa are good examples, as are the many firms that produce construction

materials such as cement, or rebar from recycled steel. We see fewer opportunities for technology transfer in things like automobile assembly but considerable opportunities for learning in the construction materials sector.

What attracts investors

Where are Chinese manufacturing firms locating in Africa? Would-be manufacturing firms do not seem to be investing in countries that rank high on the World Bank's Doing Business scale. For example, Nigeria has the largest number of approved Chinese manufacturing projects yet it ranks 170 in the 2015 Doing Business rankings. Likewise, Ethiopia scores only 132. South Africa is ranked at a respectable 43, Tanzania is only ranked 131, while Ghana is ranked 70. This could reflect Chinese investors' assessment that other factors are more important to their business decisions than a country's position on this scale.

In this they may not be so different from other foreign investors. China itself only ranks 90th as a place to do business on the same scale. The other factors influencing business decisions could instead be things like population and market size. If we consider only population size, as a proxy for local market size, the top five African countries for approved Chinese investment are ranked first, second, fourth, fifth and seventh in terms of the size of their population compared to other African nations. This suggests that local market size might be the more important factor for a large number of would-be Chinese manufacturers.

Lack of reliable data

However, the opportunities presented by these points are offset by a lack of accurate information on the scale of Chinese investment in Africa. According to official figures from MOFCOM (2014), Chinese outward-bound foreign direct investment flows worldwide came to \$123.1 billion in 2014. Just \$3.2 billion of this was directed to Africa, a figure that has been more or less constant since 2011.

Yet the media has reported sharply varying numbers. A database collected by the *Financial Times*, for example, reported that Chinese investment figures for Africa had plunged by 84% in the first half of 2015 compared with the same period a year earlier (Klasa, 2015). In June 2015, a MOFCOM spokesman suggested that the first quarter of 2015 had seen a drop of 45.9% on a year-to-year basis, consistent with the *Financial Times* figure (MOFCOM, 2015). On the other hand, a database collected by Deloitte saw an increase of 360% for the same period (Deloitte, 2015).

Lack of accurate information on trends in Chinese investment can complicate efforts by African governments to target their limited resources in investment promotion activities and efforts by the Chinese government to promote Africa as an attractive investment destination. Furthermore, there is a possible herd effect from these perceptions. A perception that Chinese investment is plunging can have an impact on other potential investors who may decide against making a new investment,

while a perception that Chinese investment is expanding strongly can encourage other potential investors who want to get in on an attractive option.

Conclusion

Our research is at an early stage but we expect that a more accurate picture of Chinese manufacturing investment will be of great assistance to Africa's low income countries and governments that want to provide greater incentives for particular kinds of Chinese firms to relocate to their countries. It will also be of assistance to donor partners who might want to work with these governments to help build the 'nests' where the flying geese will land and to set up the incentive structures for technology transfer and skills development.



6. Chinese firms and employment dynamics in Africa

Carlos Oya and Terry McKinley, SOAS University of London

Summary

Chinese investment in Africa has often been accompanied by concerns about the working conditions experienced by African employees of Chinese firms, but there is reason to believe that employment in Chinese firms could in fact offer a variety of advantages. However, since comprehensive information on Chinese investment is still lacking, more research is needed to understand the full extent of the employment-related opportunities – and challenges – associated with Chinese firms in Africa.

Introduction

In recent years China has become more involved in international development processes. Institutions such as the Forum on China-Africa Cooperation (FOCAC) have played an important role in introducing and strengthening the concept of South-South cooperation. But while FOCAC has made headway in promoting China-Africa relations as a 'win-win' outcome, rumours about exploitation still abound.

Working conditions in Chinese firms in sub-Saharan Africa are a key part of the debate. It has been claimed that Chinese firms often hire a majority of Chinese immigrant workers instead of local African recruits (Flynn, 2013) and even rely at times on Chinese prison labour (Chellaney, 2010; Hairong and Sautman, 2012). Working conditions in Chinese firms are said to be exploitative and worse than in national firms or other foreign-owned firms, especially in terms of wage levels, health and safety, and overtime (see for instance Human Rights Watch, 2011 or Baah and Jauch, 2009).

However, there is little concrete data to support such claims. They also tend to overlook the potential advantages of employment in Chinese firms and through Chinese engagement more generally. Though information on the scale and effects of Chinese firms in Africa is currently limited, there is nonetheless cause to believe that Chinese engagement offers a variety of employment-related opportunities as well as challenges.

Globalisation and employment dynamics

Chinese investors and contractors in sub-Saharan Africa are subject to the same powerful forces of economic globalisation as other actors. The globalisation of value chains in particular has important ramifications for employment conditions: the temptation is to create value by continuously exerting downward pressure on labour costs. African governments have an important role to play in ensuring that the employment outcomes from Chinese investment, as well as other foreign investment, are as development-oriented as possible.

However, Chinese firms and contractors that invest in sub-Saharan Africa certainly have the potential to promote economic progress. Investment can be an important vehicle for expanding and upgrading the employment of African workers as part of the gradual process of building an emerging industrial workforce. Chinese firms typically concentrate in sectors and activities with previously limited development in most African countries, building large-scale infrastructure (such as roads, dams, bridges and railways systems) and investing in manufacturing. These efforts create space for the development of specific technical skills usually acquired through on-the-job training.

Economic downturn - challenges and opportunities

Changes to the global economy present a similar combination of obstacles and potential opportunities for Africa. The increasing probability of a slowdown in global economic growth, as well as heightened instability associated with the increased 'financialisation' of investment flows is likely to exert a major influence on foreign investment in sub-Saharan Africa.

On the one hand, planned private investments and public investment could be substantially revised downwards (Patrick, 2016). The latter could have a significant effect on public works and on foreign contractors in countries such as Angola that are likely to be more severely hit by crises. On the other hand, excess production capacity in countries such as China in low-technology manufacturing and construction materials could lead to an incremental process of localisation towards lower-cost production sites, some of them likely in Africa (Lin, 2012).

Meanwhile, financial instability could make these processes more uncertain over time. The recent precipitous fall in the prices of commodities (especially of oil) has already sparked fears of a slowdown in African countries dependent on commodity exports (Rowden, 2015). However, these trends could instead help to accelerate more investment in manufacturing and services, relieving pressure on the commodities market. This is beginning to happen in Angola, a major oil exporter, while Ethiopia has already been enjoying unprecedented foreign direct investment in its manufacturing sector.

In Angola, the government – which is currently immersed in a fiscal crisis – has started to articulate more openly the need for diversification and manufacturing development (Ovadia, 2016), with an increasing emphasis on the promotion of manufacturing of construction materials, agroprocessing and agricultural production (MIND, 2014). The scarcity of foreign exchange is also gradually pushing firms to source local products instead of importing, especially for construction materials (Winsor, 2016).



In Ethiopia, the combination of a bold industrial policy and pressures in China and elsewhere to move the production of labour-intensive manufacturing to countries with lower costs and increasing market opportunities has led to new investment interest in the country (Oqubay, 2015). Chinese and Turkish firms have spearheaded the increased interest in developing labour-intensive manufacturing in the country, especially in textiles, garments and leather products (Hamlin et al., 2014; Rowden, 2015).

Understanding employment dynamics

These are only some of the broader possible advantages for African workers hired by Chinese employers. More research is needed to understand the full extent of the challenges and opportunities associated with Chinese firms in Africa. To this end, researchers at SOAS University of London have undertaken a project designed to assess in detail some of the main employment effects of Chinese firms on the continent.

Focusing on two important and rapidly growing sectors – construction and manufacturing – the project team plans to conduct firm-level and worker-focused surveys in Angola and Ethiopia, countries in which there has been significant Chinese investment as well as operations by Chinese contractors.

Core issues for analysis include the share of African workers employed by Chinese firms in the two sectors, in comparison with other firms, and the reasons underpinning such workforce composition in specific situations. The project will also analyse comparative evidence on wages and working conditions of African workers across Chinese, other foreignowned, and national firms. Data collected on such conditions will also be compared to data on relevant firms in China itself.

The project also aims to conduct targeted surveys of a subset of African workers who have worked in Chinese firms and already moved on to employment in other firms in the same country. The objective in this case will be to assess whether such workers benefitted from skills development, training or valuable job experience in Chinese firms that improved their future employment prospects.

The findings could provide valuable policy lessons for African governments that want to maximise the positive impact of foreign investments, especially for expanding productive employment.

7. Financial services in China and South Africa: already working together

Stephen Gelb, ODI

Summary

Collaboration between financial institutions is one of a number of objectives that emerged from the most recent summit of the Forum on China-Africa Cooperation (FOCAC). This essay shows that successful cooperation is already in place between banks and insurance companies in China and South Africa, based on the different but complementary strengths of each country's financial services sector.

Introduction

FOCAC's Johannesburg meeting in December 2015 resulted in the Johannesburg Action Plan (MOFA, 2015). The plan urges Chinese and African financial institutions to 'strengthen their cooperation' (point 3.9.4) but in fact, there has long been close cooperation between banks from China and Africa, primarily South Africa, in the African continent and beyond.

The best-known example of financial institutions joining forces is the purchase in 2007 of 20% ownership of South Africa's largest bank, Standard Bank, by China's largest bank, Industrial and Commercial Bank of China (ICBC) for \$5.5 billion. At the time, this was the largest single outward investment from China. But research examining foreign direct investment links between China and South Africa showed that this was only one of at least five linkages between Chinese and South African financial institutions, both banks and insurance companies (Gelb, 2010; 2014).¹

At that time, four major Chinese banks had representative offices in South Africa and three of South Africa's four major banks were operating in China, as were two major insurance companies. More noteworthy, however, are the close alliances between individual Chinese and South African institutions. Three banking alliances focused on the Africa market, involving China Construction Bank and FirstRand and Bank of China, EcoBank (the multinational African

bank headquartered in Togo) and Nedbank from South Africa. There were two alliances in the Chinese insurance market: Ping An (China's second largest life insurer) and Discovery Health from South Africa, and South African insurance giant Old Mutual and Beijing State-Owned Assets Management.²

Different but complementary financial strengths

Why do each country's institutions have such a significant market presence in the other? And why the large number of formal alliances between institutions? The explanation lies not in policy measures but in the internationalisation strategies of the financial institutions, drawing on the very different histories of the two countries' financial services sectors. Each country has a 'strong' financial sector, with strengths – the capabilities of financial services firms in each country – that are different but complementary.

South Africa

In South Africa, there is a long history of foreign investment in banking going back 200 years, while the emergence of mining in the late 19th century was linked with the establishment of a stock exchange in Johannesburg. As a result, complex corporate and project financing products requiring significant credit and risk management capabilities have long been central to South African banking.

The growth of a sizable (white) middle class under apartheid created a retail financial services market in which product innovation and cost reduction were crucial in banking, insurance and consumer credit markets, dominated by a small number of institutions seeking competitive advantages. Thus South African financial institutions have a broad range of capabilities and skills, but South Africa's small market size has limited their capital base and pushed them to expand their international networks.

They have followed three internationalisation strategies since the mid-1990s. Some have followed South African corporate customers in *their* international trade and investment activities, in what may be termed a market-sustaining approach. Others have followed a more conventional market-seeking approach, seeking new customers but primarily in other emerging markets. A third group, also market-seekers, have entered industrialised countries.

China

China's financial sector is very different, its main features being a very large but shallow domestic market in both corporate and retail banking, and state backing (and control) of financial institutions (Naughton, 2007). The four major state-owned banks – three are present in South Africa – are young, having been created in the 1980s via the break-up of the central planning 'monobank'. Given the economy's size, the banks' capital base is very strong but the product range is narrow. Together with borrowers' soft budget constraints, this has limited the development of capabilities and skills in the sector, for example in risk and credit analysis.

Chinese banks have internationalised cautiously – in 2006, only 2% of revenue was earned outside China (Gelb, 2010). Yet two of the 'big four' entered South Africa right after the 1998 Asia crisis, at the same time as the major banking reform and recapitalisation triggered by the crisis. South Africa was amongst the first foreign markets the Chinese banks entered.



China-Africa trade and investment was then extremely small in value terms, so this was not a market-seeking or market-sustaining strategy. The only plausible explanation for their entry is strategic asset-seeking, or 'reverse spillovers': South Africa, with its small but very sophisticated 'westernised' financial sector, was seen as a good 'classroom' for the Chinese banks to learn about internationalisation.

South-South cooperation

Internationalisation of financial services most often requires firms to establish a commercial presence in the foreign market. This may be difficult and risky if a firm does not have the full range of requisite capabilities, as is likely for 'Southern' financial institutions. In this situation, the alliances between Chinese and South Africa firms have enabled both to expand internationally into third countries, as each side's competitive advantages complement those of its alliance partner. Linking with another 'Southern' partner has the additional benefit that the partner will be familiar with the challenges of the operating environment and of risk assessment in developing country markets. The advantages of such 'South-South' links therefore also apply to expansion into new segments of a 'Southern' firm's domestic market, as in Ping An's move into health insurance in China.

The choice of 'Southern' alliance partners is therefore usually intentional. Jiang Jianqing, ICBC's Chair at the time of its purchase of a 20% stake in South Africa's largest bank, Standard Bank, indicated that the partial acquisition would support 'ICBC's ambition to expand into investment banking, private equity and insurance': half of Standard's profit was derived from those activities (Russell, MacNamara and Anderlini, 2007). Similarly, Ping An solicited an alliance with Discovery, the large and entrepreneurial South African health insurer, after exploring links with US insurers and deciding against the latter. Discovery supplies technology and skills needed by its Chinese partner in a pattern similar to the evolution of many manufacturing industries in China which developed on the basis of joint ventures with foreign companies. Discovery gets access to a huge market which it could not have afforded to enter alone.

Conclusion

The alliances in the financial services sector did not occur in response to explicit policy measures beyond China's general 'go out' strategy. But they illustrate the potential for collaboration between African and Chinese firms in sectors where firms on each side have some strong capabilities, but where their strengths are limited in scope and do not cover the full range of capabilities required for expansion into new markets.

Firms on both sides can benefit from joint action where their strengths are complementary. In sectors which provide key inputs to other firms or to households, such as financial services and infrastructure, this can enable significant downstream benefits to users. The Johannesburg Declaration's urging of collaboration in infrastructure development for Africa is thus to be greatly welcomed.

Beyond investment: trade and the environment



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8. China-Africa partnership for conservation and maritime trade

Yu-Shan Wu, SAIIA

Summary

China's economy is changing, with significant implications for its trading partners, particularly Africa. A shift away from manufacturing, and corresponding fall in demand for resources, has already had a negative effect on resource-rich African economies. However, the recent summit of the Forum on China-Africa Cooperation (FOCAC) suggests that new opportunities for collaboration have emerged around the issues of wildlife conservation and maritime trade.

Introduction

The sixth ministerial conference and second summit of FOCAC, held in South Africa in December 2015, coincided with reports that China – seeking to move away from resource-driven export-oriented manufacturing towards services and consumer-led growth – is fundamentally restructuring its economy (Wildau, 2015; Aberdeen Asian Equities, 2015).

While the impact of this shift has been global, the effects have resonated particularly in Africa. There is growing concern as China, the continent's largest trading partner, has reduced its demand for commodities, which are at the core of many African economies (Mbele, 2015; Alfred, 2015). China's imports from Africa declined by 38% in 2015 compared to the previous year (Mail & Guardian Africa, 2015) due to slower economic growth and lower commodity prices.

However, these changes have also thrown a spotlight on potential new areas for China-Africa cooperation beyond natural resource trade. The Johannesburg Action Plan, which emerged from the recent FOCAC summit, identifies a number of possibilities, among them maritime trade (section 3) and wildlife protection (section 4) (MOFA, 2015).

Building an 'Ocean Economy': maritime trade

In 2013, Chinese President Xi Jinping announced the launch of the 'One Belt, One

Road' initiative. Primarily an effort to create a multi-country economic region based on the historical Silk Road trading route, it also features plans for a new 'Maritime Silk Road' across the China Sea and South Pacific and Indian Ocean areas (NDRC, 2015). As part of these plans, China has undertaken the construction of significant transport infrastructure in East Africa: a railway between Mombasa and Nairobi in Kenya and a port in the town of Bagamoyo, Tanzania. If connected with the land route, the proposed maritime route could offer access not only to China but also to other regions (including Europe).

East Africa is not the only part of Africa set to benefit from the new maritime route. In early 2015, China signed an agreement with the African Union to connect major African capital cities through transport routes (railway, air and roads), which suggests that projects such as the Mombasa-Nairobi railway link may be part of a larger drive to link up the economies of neighbouring landlocked countries Uganda, Rwanda, Burundi and South Sudan (Tiezzi, 2015).

There are some challenges to overcome. The success of the maritime road plan depends on the extent to which it complements continental objectives such as Africa's Integrated Maritime Strategy 2050 (African Union, 2012), a comprehensive plan to address the common maritime challenges and opportunities faced by African Union member states. The maritime road also needs to address the concerns of national ocean strategies, such as South

Africa's 'Operation Phakisa'³ launched in July 2014. Nevertheless, China's effort to collaborate with Africa in the building of an 'ocean economy' represents a positive step away from natural resource trade.

Collaboration for wildlife conservation

The Johannesburg Action Plan also features commitments from both sides to enhance environmental cooperation, including in the area of wildlife protection. This high-level appreciation of the importance of conservation is a testament to the evolution and deepening of China-Africa relations. Recognition of the need to address illegal wildlife trade in particular suggests a change in the nature of engagement between the two actors and builds on landmark occasions such as the bilateral discussion between China's president and US President Obama in late 2015 on phasing out their domestic ivory trade markets (Schweig, 2015).

The question is whether high-level recognition can translate into change on the ground. Responding to illegal wildlife trade requires an understanding of a wide range of actors, the complexities of supply and demand drivers and the intricacies of domestic contexts.

Moreover, wildlife trade goes beyond China-Africa relations, forming part of the larger and longer-term issue of Africa's own engagement with the issue. In particular, there seems to be a general lack of consensus among African countries (and within societies) about the intrinsic value of wildlife (Wu, 2015). Approached separately from socio-economic development, conservation is perceived largely as a middle-class concern. Conservation efforts therefore need to address other issues such as:

- Participation of local communities in conservation projects
- Demonstration of the contribution of conservation to national revenue

 For example, there needs to be adequate related infrastructure and marketing of national parks as well as domestic and regional political stability in order to ensure that conservation is profitable.

 The linkages between biodiversity and sustainable development

Since Africa's conservation agenda cannot be seen as separate from its development agenda, it is important to address how society can be encouraged to value biodiversity, not only as a source of profit, but also in and of itself.

Conclusion

The examples highlighted here, alongside others discussed at the FOCAC summit, suggest that mutually beneficial opportunities for collaboration between China and Africa do exist, despite current economic challenges.

As high-level relations diversify over time to include new issues such as maritime trade and wildlife conservation, it remains to be seen whether relations between stakeholders on the ground will follow suit. Despite progress at the high level, there is arguably still a limited understanding of one another's societies. Hopefully efforts made by FOCAC to address a wider range of issues will encourage more overlap between formal and informal spheres, further prompting relations to extend beyond economic and high-political engagement.

There is also the question of how engagement with China fits with Africa's other relationships. Sound management of a growing engagement portfolio depends more than ever on the ability of African counterparts to manage their multiple partnerships and ensure follow-up mechanisms are in place to monitor progress. FOCAC is one of a number of processes and forms of engagement in which African countries are involved. African partners should ideally approach it as one part of a wider strategy, using it as an opportunity not only to engage with China but to identify and consider possibilities elsewhere.

9. Informality in China-Africa natural resource trade

Xiaoxue Weng, IIED

Summary

The impacts of large Chinese investments and formal trade flows to and from Africa are the subject of global debate. By contrast, the informal sector – where small-scale Chinese traders and African producers interact – has received little attention. As the majority of most of African countries' populations rely on informal economic activities, efforts to promote sustainable and pro-poor engagement by China in Africa must take informal economies into account. This essay looks at the possible benefits of informal trade between Africa and China in the natural resource sector with reference to a case study from research conducted in Cameroon.

Introduction

China is now Africa's largest trading partner. Over the past 15 years, the value of trade between the two has risen from \$10 billion to \$200 billion (Blas, 2014). Current debate on the contribution of China-Africa trade to African development tends to focus on the impacts of industrialisation, technology transfer and manufacturing. Yet while these issues are important to the continent's long-term economic growth, a crucial element is missing from the policy debate: the role of Africa's vast informal economy and Chinese involvement in it. As thousands of poor families depend on informal activities for their livelihoods, Chinese and African efforts to promote sustainable, pro-poor development must take the informal sector into account.

Understanding Africa's informal economy

No single common definition of an informal economy exists, but at its broadest it can be characterised as 'any economic activity or source of income that is not subject to government regulation, taxation or observation' (Schneider, 2002). By any definition, Africa's informal economy is huge and complex.

Research shows that informality is the daily reality of natural resource extraction and production in rural Africa in particular (Weng, 2015; Spiegel, 2012; Vorley et al., 2012). Complex governance issues, such as contested rights over land and resources, and high regulatory barriers prevent small businesses operating in the formal economy. As a result, rural residents such as farmers, loggers and miners must look outside the formal economy to earn cash income to supplement subsistence production. The informal economy sustains their livelihoods, in the process producing large volumes of goods that rival those produced by the formal economy (see e.g. Lescuyer and Cerutti, 2013 for timber; World Bank, 2008 for mining; and Livingston et al., 2011 for agriculture).

Informal markets are often the only place where the poor — largely women and young people — can participate in the economy (ILO, 2009). They are also places where opportunistic business people, African and foreign alike, can become rich. Evasion of regulations is common, as is bribery among underpaid local officials (Benson et al., 2014).

The informal sector may also act as an arena for rural defiance of top-down state decisionmaking. In many African countries, land and resource ownership are the subject of bitter conflict between rural communities and government, the former often questioning the legitimacy of the latter's policies and institutions (Perry et al., 2007). In this context, participation in informal sectors is more than a poverty issue: it becomes an economy-based form of rural resistance to government intervention.

The result of this complexity is that working with the informal economy is one of the biggest development challenges facing Africa today (Chen, 2005).

Chinese involvement in the informal sector

Where does China fit in? China-Africa research to date has focused on large-scale projects and big players such as China's state-owned enterprises. Yet there are thousands of Chinese entrepreneurs and migrants conducting smallscale trade and investment in Africa. And, despite a comparative lack of research in the area, we know that their activity has a direct impact on local communities, most notably rural communities engaged in natural resource management. Farmers, loggers and miners may work as suppliers, labourers, intermediaries and business partners for Chinese traders and investors (Weng et al., 2014). In doing so, they link Chinese businesses firmly to rural informal resource and land economies.

This small-scale informal Chinese trade and investment in Africa's natural resources has often been portrayed as legally and morally suspect by Western media (Guardian, 2015; Hirsch, 2013). African and international policymakers and practitioners advocate stricter law enforcement to tackle this kind of trade, criminalising Chinese and local economic actors who participate in informal value chains (Chambwera et al., 2011; Weng, 2015). But legalistic approaches that fail to appreciate the complex interaction between informal activity, law enforcement and rural livelihood challenges could do more harm than good.

Informal logging in Cameroon

Research by the Center for International Forestry Research (CIFOR) into illegal logging of the Bubinga tree in Cameroon suggests just that. Typically used for the production of luxury furniture, Bubinga wood commands a high price in the Chinese timber market. As such, it seems the ideal commodity for illegal exploitation by small-scale Chinese businesses hungry for resources and keen to take advantage of rural residents with few options.

However, interviews with more than 60 stakeholders in the summer of 2013 – 33 of whom were rural residents engaging directly in illegal logging and trade with Chinese businesses – revealed that forest-dependent communities trading with Chinese buyers had benefited from the cash income provided by the illegal trade (Weng et al., 2014). This is in line with previous research in Cameroon (Cerutti et al., 2011) and also in the Congo Basin. A study there has shown that, despite unequal distribution of profits across the value chain, small-scale informal logging provides up to four times the revenue to the local economy than area-based forestry tax revenue (Wit and van Dam, 2010).

Fieldwork also revealed that the government's decision to impose a partial export ban on Bubinga effectively excluded the informal small loggers from lucrative trade while allowing large industrial concessions to continue logging. Rural interviewees repeatedly reported the disastrous impacts of this policy on their livelihoods, some rural loggers further stating that they considered participation in illegal trade an opportunity to resist a system they perceive to be unfair. Meanwhile, policymakers and academics familiar with the conservation status of the tree conceded that the conservation of the Bubinga – an endangered species - was not improved by the ban.

Conclusion

These findings suggest that, while the informal sector may not provide a sustainable long-term solution to poverty alleviation, the short-term benefits it confers cannot be discounted. Talking about informality does not mean approving of Chinese or local businesses that engage in criminal activity; it means acknowledging reality. Given its importance to rural livelihoods, policymakers planning for sustainable growth – especially with Chinese involvement – must take it into consideration or risk the further economic marginalisation of informal actors.

The case study also highlights the need for more credible fieldwork-based research into African informality, its effects on natural resource governance and the particular role of Chinese actors. Researchers need to get out to the markets, forests and mine sites to speak with businesses and communities and understand the roles of Chinese and local actors, the relationships between them and the

socioeconomic and environmental impacts of their engagement. Critical questions include: Does informal trade and investment provide crucial income for rural communities? Do rural villagers participate to 'protest' against what they see as illegitimate tenure arrangements by the government? Do local businessmen and intermediaries drive the value chains in the informal economy? Are Chinese actors unique in their social and environmental impacts?

As part of the Africa-China Informal Resources Trade research project funded by DEGRP, IIED researchers, together with scientists at CIFOR, Indaba Agricultural Research Institute (IAPRI), the Agricultural Economics, Policy Research and Information Centre (APERIC) and others will delve deeper into these questions in the coming years through systematic research designed to understand informal value chains. Our initiatives over the next three years include examining the informal and small-scale trade of timber, minerals and agricultural products linked to Chinese actors and/or markets in East and Southeast Africa.



10. From extractives to biodiversity: China's evolving role in African economies

Ross Harvey, SAIIA

Summary

Global economic slowdown and declining demand for commodities such as oil and iron ore, especially in China, have had a knock on effect on African countries reliant on the export of natural resources. However, rising demand for different types of commodities offers new opportunities for African countries willing to work together to make the most of their advantages. The question is whether new opportunities can be balanced with the increasing need to protect African biodiversity.

Introduction

Secular stagnation continues to characterise the economies of the developed world, signalling limited potential future demand for many commodities. Climate change mitigation commitments from deals concluded at the United Nations Climate Change Conference (COP21) held in Paris in December 2015 indicate that fossil fuels are dead. The demand for coal and oil is unlikely to recover. Changing economies such as China's have also played a role, with shifts away from resource-intensive industry and towards the services sector compounding an already weakened demand for commodities.

As the market truly bottoms out, there are likely to be bankruptcies along with more mergers and acquisitions across the extractive industries. Anglo America, BHP Billiton and Rio Tinto, the world's three largest mining companies, have seen share prices plummet and assets written down. There are also implications for the supply side for economies dependent on commodity exports. All African countries should have been paying close attention and adjusted their price expectations accordingly.

But this scenario does not necessarily mean the end of commodities. Analysis of China's recent economic changes suggests that despite a decline in demand for resources such as oil and iron ore, new needs will arise, in turn generating fresh opportunities for their fulfilment. Increased consumption and the lifting of the one-child policy in China mean that more food will be needed along with commodities that are inputs to high-end technology products. If they play their cards right, resource-rich African countries could be in prime position to supply such inputs.

China's changing economy

When China's twelfth five-year plan was introduced in 2011, the government signalled that China's 'industrialisation phase' would be complete by 2020 and that the economy would be rebalanced away from export-led manufacturing towards services and consumption (Roach, 2011).

Many of the plan's rebalancing targets have already been exceeded (Roach, 2016). In 2015, the services sector grew by 8.3%, while the manufacturing and construction sectors together grew by 6% (Roach, 2016). Services require roughly 30% more jobs per unit of output than manufacturing and construction (Roach, 2014), which means that despite an average growth slowdown, urban employment opportunities continue to grow, generating higher levels of income and therefore higher levels of both savings and consumption. Urban job creation rose to 11 million in 2015, above the government's target of ten million (Roach, 2016). As such, the recently announced thirteenth five-year plan, running from 2016 to 2020, is essentially a continuation of its predecessor.

Implications for Africa

For most of the African continent, whose terms of trade with China (and most of its trading partners) have historically been characterised by the export of raw material and the import of manufactured products, these changes have resulted in a significant slowdown in growth. Even though many African countries have produced rapid growth outside their commodities sectors, this is from a low base and in many instances still heavily linked to commodities. For instance, construction, finance and retail services tend to flourish initially as complementary but mining-dependent sectors (McKinsey & Company, 2010).

The bursting of the commodity bubble has caused many analysts to question whether the 'Africa rising' narrative was premature (McGroarty & Parkinson, 2016). Weak economic and political institutions continue to characterise too many African nations, along with continued commodity-concentrated growth and therefore over-reliance on the extractive industries.

However, as mentioned above, the Chinese spending class continues to grow despite average slowdown. This suggests that there is in fact potential for Africa to maintain valuable trade links with China, albeit in new ways.

Intra-African cooperation

If Africa positions itself well, it could take advantage of the 'new normal' of lower oil and commodity prices. Copper and platinum are likely to be in increasingly high demand along with other minerals used to produce the technology-laden goods upon which modern society has become so dependent. Copper is a crucial component of most electronic goods, from solar power technology to smart phones. Platinum will play an increasingly important role in the electric car as fuel cell technology starts to expand. Meanwhile the Chinese central bank, along with a number of other prominent countries across the world, is purchasing increasing volumes of gold as a form of security in the midst of geopolitical uncertainty and instability.



In order to capitalise on these emerging trends, African countries have to implement regionally sensible strategies. Instead of competing with each other to export low-value, high-bulk commodities, countries need to harness complementarities arising from their respective endowments. Zambia has copper and South Africa has technological expertise. The two countries could work together to produce something that China - and the rest of the world - really needs. Similarly, South Africa possesses over 75% of the world's platinum. With the right strategies it could become a global hub for producing fuel cells. This is not to say that immediate downstream metallurgical value addition is necessarily the way forward - often the opportunities for growth and specialisation lie in horizontal and backward linkages. However, the point remains that if each African country follows its individual ambitions, the continent might continue to suffer from negative terms of trade.

Calculating the cost of extraction

In light of the shifting dynamics outlined above, African countries must also decide what is ultimately more valuable in the instances where extractive industry growth generates opportunity costs that are incorrectly priced. With potential and existing resources typically situated close to or within wilderness areas, careful consideration is needed to ensure that the prospect of new opportunities does not obscure the environmental impacts of extraction.

This will not be easy. At present, natural capital – the resources, land and ecosystems that enable the existence of the economy as well as of human life (OECD, 2005) – is not correctly priced into our global accounting systems. The best method we currently have at our disposal for measuring opportunity costs is to calculate potential tourism revenue generation foregone if a mine is permitted to encroach or destroy valuable biodiversity.

But tourism does not constitute a good benchmark: it does not deliver the volume of jobs that African economies require if they are to absorb the youth bulge demographic. As for the extractives sector, mining projects are increasingly located in areas that are ecologically sensitive. However, the short-term reward of mining rents often eclipses government conservation incentives even if the inherent value of biodiversity, and need for its preservation, is appreciated.

Moreover, the increasing global demand for food means that wilderness areas in Africa are at risk of being devoted to agricultural production if new technologies for localised food production are not widely adopted. And not only do agricultural and extractive industry expansion threaten the ecological integrity of wilderness areas: infrastructure projects to transport food, minerals and hydrocarbons to ports are also creating new threats to biodiversity preservation.

Conclusion

China's economic restructuring does not signal the end of commodities but it does signal a shift in the composition of the mineral export basket of the future. While resources such as iron ore and coal exports are likely to continue to diminish over time, demand for minerals such as copper and platinum is likely to expand. This is potentially economically positive for African countries provided there is a greater degree of collective action.

In the midst of this shifting composition, African governments need to ensure that the expansion of the extractive industries, along with the expansion of agriculture, does not threaten the biodiversity upon which Africa's future ultimately depends. In cases where mineral and hydrocarbon extraction deposits are located near protected areas, governments need to value natural capital more reliably so as not to sacrifice potential future revenue streams from sectors such as ecotourism.

11. Hidden from view? The environmental consequences of an evolving China-Africa relationship

Roger Calow, ODI

Summary

As labour and resource-intensive manufacturing shifts to Africa, so too will the environmental burden of producing manufactured goods. This essay focuses on the hidden flows of water embedded in traded products and services, and considers whether Africa can avoid the harmful environmental impacts of water resource degradation that have, until now, been borne by China.

Introduction

It is commonplace to observe that the rise of China is transforming the world. China now has the world's largest economy, surpassing that of the US in 2014 (World Bank, 2016a). High rates of growth have been based on the state channelling vast under-priced savings into huge investment projects driven by cheap labour and, more recently, by a boom in the manufacturing industry. However, unconstrained growth has come at a high environmental price. China's success in lifting 800 million people out of poverty since market reforms began in 1978 is widely acknowledged (World Bank, 2016b), yet within China popular discontent over environmental degradation has forced an economic rethink and a shift towards a more sustainable development path (Shambaugh, 2013; Doczi et al., 2014). As China tightens up its environmental regulation and moves up the economic value chain, we ask: what impact will these changes have on China-Africa trade? More specifically, what are the environmental implications of a changing trade relationship for Africa?

China's environmental footprint

Most commentaries on China's environmental footprint focus on concerns around greenhouse gas emissions, land-grabbing and the environmental performance of Chinese private and state-owned enterprises. Less-frequently tackled are the environmental impacts of the 'hidden' flows of natural resources, such as water, in trade. Yet these resource flows, embedded in internationally-traded products and services, also have important environmental and economic implications. An overview of hidden flows of water in Chinese trade, and China's changing water 'footprint', provides a useful illustration of this.

Hidden flows of water

A water footprint is a measure of the amount of water used to produce each of the goods and services people use (Water Footprint Network, 2002). It can be measured for a single process (e.g. growing rice), for a product (e.g. a pair of jeans) and for a multinational company (e.g. through its supply chain and export markets). Building on the concept of virtual water trade – the hidden water embedded in traded goods and services – a 'foot printing' approach can also tell us whether a country is a net 'importer' or 'exporter' of water (Allan, 2011).⁴

As China's economy and population has grown, so has its thirst for water. With just 10% of the world's farmland and 6% of the world's freshwater, China feeds roughly 20% of the world's population (Doczi et al., 2014). Water is needed to grow food, to feed livestock, to support energy production and to fuel industry. Rapid urbanisation and changing diets have also increased demand as an increasingly wealthy population consumes more meat and other water-intensive products (Allan, 2011). But while the BRICS economies of Russia and Brazil have huge water endowments and the potential to increase their food production substantially, China does not. Water scarcity, and associated problems of water pollution, have therefore become national concerns (Doczi et al., 2014).

Chinese policy makers have reacted by investing heavily in water conservation and by quietly relaxing their definition of food self-sufficiency (ibid). The latter move allows the country to import more food, under the radar of public awareness, mostly from waterabundant South and North America. As a

result, China's virtual water 'imports' have soared. In 1986, net imports amounted to roughly seven cubic kilometres. By 2009, that figure had risen to over 135 cubic kilometres (Shi and Pinter, 2014).⁵

Most of these water 'imports' are concealed in soybeans for animal feed from Brazil, Argentina and the US (Doczi et al., 2014). In 2014, China became the largest single destination for US agricultural exports (Brautigam, 2015), allowing China not only to reduce the volume of water it would otherwise need to grow crops, but to do so at the expense of US taxpayers paying large farm subsidies.

Meanwhile, food trade with Africa remains minimal. China's imports of agricultural commodities from Africa are dominated by cotton, rubber, sesame seeds, tobacco and cocoa beans, and even these are tiny compared with the volumes of commodities coming from the Americas (Brautigam, 2015). In addition, few African countries export surpluses beyond the continent. This is perhaps not surprising given that population growth in sub-Saharan Africa



is roughly double that in South Asia, and the continent has enough trouble feeding itself, even before factoring in the damaging effects of climate change. It follows that 'exports' of virtual water to China are also tiny, and that Africa will therefore not make up China's growing water deficit. Indeed, China doesn't need it to, as long as it can access cheap food and virtual water from the Americas.

But as China moves up the value chain and African countries industrialise, a different environmental footprint may bind Africa and China together.

Environmental implications of African industrialisation

While China's water footprint in Africa is unlikely to be felt through food – via trade or unnecessary land grabs – it will be felt through the manufacturing industry.

Chinese manufactured goods have been cheap and plentiful, so the argument goes, because of low labour costs within China. This is only partially true. Another key reason is that the costs of environmental damage – borne by the Chinese – have not been included in the price of the goods it produces (Watts, 2010). Those costs are huge. Growing water scarcity and pollution are reckoned to cost the country some 2-3% of GDP – a sizeable sum in an \$18 trillion economy (Doczi et al., 2014). This is one reason why China's 'exports' of water in industrial products far outweigh its imports. In short, exports are environmentally subsidised.

This situation is likely to change. As labour and resource-intensive manufacturing shifts to Africa, and China begins to import rather than export such goods, the environmental burden will shift from China to Africa. The question then arises: will Africa learn from the mistakes of China and take steps to avoid the damaging effects of water degradation?

The omens are not good. While the economies of sub-Saharan Africa are making long overdue

investments in 'hard' water infrastructure for growth – dams, pipes and taps – investment in the 'soft' plumbing of water management lags behind. Governments don't see the point – yet. Meanwhile, donors are preoccupied with measurable results. Support for long-term water management and protection is difficult to justify, unlike investment in water supply and sanitation. The result, in many countries, is weak environmental governance and institutions that are ill-equipped to deal with new and accelerating water demands, whether from Chinese or home-grown industries (Calow and Mason, 2014).

Conclusion

China's trade relationship with Africa conceals hidden flows of natural resources. As the relationship changes, so too will patterns and levels of resource flows. China has become a major importer of food – and of the water needed to grow it - but rising imports of both will continue to come mostly from the Americas, not Africa. However, as labour and resource-intensive manufacturing moves from China to Africa, the environmental footprint of manufacturing will also shift to Africa. To protect water resources from overexploitation and pollution, African governments will need to strengthen environmental governance. Better to learn from the mistakes China has made and invest in the institutional plumbing of regulation now rather than bear the costs of expensive 'clean-up' later.

Governance, institutions and diplomacy



12 Local government, economic growth and human development: Chinese lessons for Kenya and Uganda?

Lina Song, Nottingham University

China's evolving peace and security engagement in Africa

Dan Large, SAIIA

12. Local government, economic growth and human development: Chinese lessons for Kenya and Uganda?

Lina Song, Nottingham University

Summary

During much of China's economic reform period, local governments played a key part in driving GDP growth, taking the lead role in local service provision. As China-Africa cooperation increases beyond questions of trade and investment, could African local governments learn from Chinese experience? This essay looks at Chinese local government successes and failures in healthcare and education, analysing what they might have to offer for Kenya and Uganda in particular.

Introduction

Chinese local governments are one of the driving forces of the country's remarkable development since the economic reforms of the late 1970s. They have fostered GDP growth by attracting foreign direct investment, promoting exportoriented manufacturing and encouraging other economic activities to increase the level of local employment. They also manage local welfare allocation and oversee interventions to reduce poverty (Lin and Liu, 2000; Zhang, 2006).

Given China's extensive engagement with Africa in recent years (Brautigam, 2009), the DEGRP project 'Local government, economic growth and human development' aims to identify whether Chinese local government approaches might offer inspiration to Africa. Local authorities in low-income Africa have generally not played as proactive a role as their Chinese counterparts. Are there lessons that African authorities could learn from them? Focusing on Kenya and Uganda, the project considers how China's experiences might provide useful insights into a diverse set of issues, including health and education.

Kenya and Uganda: natural parallels with China

After experiencing two 'lost decades' of economic growth at the end of the last century (Collier and Gunning, 1999), some African countries have started to grow strongly (Radelet, 2010). Yet sub-Saharan Africa as a whole still suffers

from serious extreme poverty, poor healthcare and educational systems, and weaknesses in the institutions and infrastructure needed to sustain economic development (UNDP, 2012).

Uganda and Kenya have both experienced these problems and in this sense are typical of low-income Africa, in so far as that claim can be made. As neighbouring countries, they share some similarities of climate, geography and history that make them a natural experiment for evaluating differences in policies and institutions. More importantly, both countries share some parallels with China and are therefore especially suitable for research into the transferability of Chinese local government insights.

Uganda has been classified by Radelet (2010) as one of Africa's emerging economies, by virtue of its strong sustained growth after a period of disorder and civil wars ending in 1986. Though not a one party state, it resembles China in certain respects. The ruling National Resistance Movement came to power with a strong system of local political institutions (Resistance Councils) and embraced decentralisation in the mid-1990s, making it a suitable country to study variations in local governance and their impact.

Kenya, meanwhile, is described as a 'threshold economy' (Radelet, 2010), capable of achieving economic take-off but still sluggish after a long period of economic stagnation since 1978. Following the advent of multi-party democracy in 1992, political power in the country has been more contested and subject

to change than in Uganda. Kenya is currently embarking on a major devolution exercise, with the 2010 Constitution empowering 47 county administrations (previously districts) with the key role of service delivery, including healthcare, pre-primary education and road building, services that were previously the responsibility of central government. This makes the study of local governance in Kenya timely, as its devolution is too recent to have been carefully analysed yet.

China's local government successes

Spearheaded by Deng Xiaoping in the late 1970s and lasting well into the early 2000s, Chinese economic reforms delegated control of economic projects to local governments. As a result of these reforms, the rural enterprise sector alone has grown from 5% of GDP in 1978 to 28% in 2005 (OECD, 2009). During this time, local governments acted as mini-states, but were subject to a hard budget constraint, unable to indulge in protectionism, and typically profit-oriented in the goals they set rural enterprises.

Xu (2011) characterises China as a regionally decentralised authoritarian state and sees regional competition and experimentation in reform as being the key to the 'China puzzle': how China's exceptional growth can be explained despite having institutions that are conventionally considered ill-suited to economic success. The incentives provided to local government in China are conducive to economic development both because promotion is based on the relative performance of the local economy and because local governments share a proportion of collected revenues with the central government (Zhang, 2013).

Less well-known but of equal importance is that the Chinese reforms and rapid urbanisation increased the variability and importance of local governance at all levels, from provincial governments down to street committees. Lower level governments were given more flexibility in implementing policy and even initiating interventions. Different localities would have different resources,

capacities and interests, sometimes conflicting with each other. This certainly caused competition for investment or skilled labour among local authorities of different regions.

Effects of localisation on healthcare and education

Local governments in Africa have generally not played a similar entrepreneurial role. That said, while China has achieved remarkable success in economic and human development, not all of China's experiences should be emulated. Decentralisation in China has both pros and cons, with the latter particularly apparent in the case of healthcare and education. It is here that interesting comparisons can be drawn between China and Africa.

Decentralised healthcare

Prior to reform, and given its income, China was an outstanding performer in terms of health outcomes. Yet while reform spurred remarkable economic growth, progress in health outcomes – for example, life expectancy – slowed and the country's performance has become less exceptional. Fiscal decentralisation in China arguably encouraged the neglect of investment in health (and education) and led to widening spatial inequalities (Zhang and Kanbur, 2005).

Some of the explanation lies in the country's move towards a predominant fee-for-service model of payment for healthcare, which led to problems in terms of quality, cost escalation and equity (Eggleston et al., 2008). Concern about these issues was the primary motivation for additional reforms initiated in 2009, reforms which aim to provide universal coverage of medical insurance by 2020 (Meng and Tang, 2013).

Recent trends in health outcomes in Africa in some ways mirror those in China: poor early outcomes, even for low-incomes, but marked improvement in more recent years coinciding with economic recovery (UNECA, 2015). Poverty and policy have both played a role. During the crisis years, and following the 1987 Bamako Initiative, user charges for healthcare

were introduced but were often found to be disappointing (Ridde and Morestin, 2011). In Kenya, Mwabu et al. (1995) found that the introduction of user fees reduced the use of facilities by 50% and raised revenues equal to only 2% of healthcare costs. The removal of user fees for primary health by Uganda in 2002 is estimated to have been 'pro-poor' (Nabyonga et al., 2005) although private health expenditures remain high.

Following the administrative and fiscal decentralisation introduced by Uganda in the mid-1990s, districts allocated to healthcare only one quarter of the 'shadow budget' deemed adequate by the Ministry of Health (Jeppsson, 2001). A World Health Organisation (WHO) study of the composition of health expenditures found decentralisation in Uganda tended to reduce health expenditures with a 'public good' element (Atkin et al., 2007). As in China, fiscal decentralisation sometimes appears to have threatened investments in health.

Decentralised education

Delivering basic education is the responsibility of local government in China and most of low-income Africa. As with health outcomes, the gap in school enrolment between China and Africa increased during Africa's economic stagnation in the 1980s and 1990s, but has since narrowed (UNESCO, 2014; Lewin et al., 2011a, b). This is in part due to centrally-directed initiatives to remove school fees, such as the one rolled-out in Uganda in 1997, which resulted in a 50% increase in primary enrolments.

However, drop-outs from school remain a key issue for many African countries, with only 32% of Ugandan students estimated to complete primary school (UNESCO, 2012). By contrast, China has attained near-universal primary enrolment, although post-primary educational inequalities remain: rural girls, for example, remain disadvantaged (Song et al., 2006).



Concern over school enrolment is partly motivated by evidence of the wage returns to education: standard estimates are typically modest in China but rising over the last two decades (Appleton et al., 2005) and arguably understated (Heckman, 2005). In Africa, returns on education are conventionally thought to be high, but evidence suggests that this has changed over time (Colclough et al., 2010). For example, returns collapsed in Kenya during its economic malaise from 1978 to 1994 (Appleton et al., 1999) but rose in Uganda during its economic recovery in the 1990s (Appleton, 2001).

There is increasing attention being given to the quality of education, in part due to concerns that increases in quantity come at the expense of quality, and in part due to the burgeoning literature on the effects of cognitive skills on productivity. Although there are path-breaking studies using micro-data, the impetus for increased attention has been due largely to macro-level studies of the apparent effect of student test scores on national income (Hanushek and Woessmann, 2008; Atherton et al., 2012).

In China, as with health, decentralisation has been argued to have contributed to low investments in education and to spatial inequalities (Zhang and Kanbur, 2005). In Uganda, the national government has struggled to avoid misdirection of funds at the local government level: a public expenditure tracking survey found only 13% of non-wage expenditure allocated by the centre to primary education in 1991-95 actually reached the schools (see Reinikka and Svensson, 2004). It took concerted action at the centre (notably publicising capitation allowances in schools and newspapers) to markedly increase this figure. In Kenya, Kremer et al. (2003) provide a cautionary tale about the effect of decentralisation in education, arguing that it created perverse incentives to build too many small schools, employ too many teachers and exclude poor children unable to pay school fees.

Conclusion

There remain questions around the transferability of the Chinese local government model. Though countries such as Uganda and Kenya may share some similarities with their Chinese counterparts, China has a more centralised and hierarchical political and administrative structure than many African states. This may permit greater fiscal decentralisation without risking richer regions trying to become independent. In democratic states, the incentives of local officials may be quite different from those in a one party system. Other Chinese experiences can also provide lessons on what not to do. For example, the recent concern over large local government debts in China provides another cautionary lesson for Africa of something to avoid (Song, 2012).

Despite these challenges, Chinese local government initiatives could still provide a source of inspiration for African countries seeking to strengthen their economic recovery. Though there are conflicting perspectives on the benefits of decentralisation, variations in local service provision and governance – both between Africa and China and within local governments in particular countries - provide opportunities to estimate the effectiveness of government interventions. This is the premise of the DEGRP project 'Local government, economic growth and human development', which will collect and analyse micro-data on local government from China, Kenya and Uganda.

13. China's evolving peace and security engagement in Africa

Dan Large, SAIIA

Summary

At the most recent summit of the Forum on China Africa Cooperation (FOCAC), Chinese and African officials pledged enhanced collaboration on issues of peace and security, recognising that peace is essential if economic and cultural links are to be strengthened. This essay reviews recent changes to China's role in African peace and security, reflecting on the challenges, as well as potential advantages, of increased Chinese engagement in African countries.

Introduction

Not so long ago, many considered China to have a unique immunity to investment risk. China's activity in conflict-affected markets regarded as off-limits to other investors was seen a sign of their particular ability to benefit from state fragility (Child and White, 2005). However, despite some high-profile examples – China's oil investments in war-torn Sudan after 1995 for instance – the reality is that Chinese investments are vulnerable to the same risks faced by other external investors.

Conflict between Sudan and South Sudan, and also within South Sudan, for example, resulted in the shutdown of Chinese-owned oil operations. Combined with the downturn in global oil prices, the effect on Chinese investments was considerable (Wu, 2014).

In late November 2015, an assault on the Radisson Blu hotel in Bamako, Mali, killed three senior Chinese employees of the China Railway Construction Corporation. Shortly afterward, amidst claims that the bulk of attacks on Chinese employees overseas are taking place in Africa, China's Foreign Minister pledged to fight extremism and strengthen counter-terrorism cooperation with Africa (Wee, 2015). While the attack did not target China per se, the death of Chinese workers will no doubt raise concerns around how China's proposed investments in the country will proceed.

Similarly, in Zimbabwe, a recent government decision to take over all diamond mines in the Marange diamond fields threatens Chinese investments, leading to concerns that the all-weather friendship between the two countries may falter and that recent economic agreements with China may be affected (Kachembere and Majaka, 2016).

Promoting cooperation on peace and security

It is no surprise, therefore, that the 2015 FOCAC summit strengthened measures to promote cooperation on peace and security (DIRCO, 2015; MOFA, 2015a).

This move is the latest in a series of efforts to tackle the question. Before, and at the time of the first FOCAC in 2000, China had emphasised political relations and economic development, with questions of security largely confined to bilateral military ties with individual African states.

Since then, China's engagement with African peace and security has travelled from the margins to a more prominent and mainstream position in policy frameworks. In 2012, against the backdrop of the Arab Spring and regime change in Libya, the fifth FOCAC ministerial conference focused overtly on growing risks to Chinese economic interests in Africa, establishing the China-Africa Cooperative Partnership for Peace and Security to provide financial assistance, capacity building and other forms of institutionalised support.

China's complex role in African security

It's clear then that enhanced measures are needed for the protection of Chinese actors and stability of Chinese engagements in Africa. However, this is no easy task given the complexity of China's current role in African peace and security.

China today occupies a more exposed, prominent and at times politicised role in Africa, with elevated expectations about what Beijing should do to move beyond a predominantly economic role. China's engagement in security-related issues cuts across various scales and performs various functions:

 First, China's active UN peacekeeping role remains high profile and is regarded as a means to enable China to raise its international profile, improve relations with host countries and Western governments, and protect interests abroad.

- Second, China's engagement in peacebuilding involves debate about the conceptual differences between Chinese, African and Western understandings of the term and appropriate responses.
- Third, China's peace and security engagement involves multiple elements and is evolving concurrently with its changing African and global role. While partly included in the FOCAC process, China's military engagement also has a bilateral element. The leasing of military logistics base in Djibouti, formally announced in early December 2015, marks the first such arrangement for China on the continent.
- Finally, in supporting what it deems to be legitimate peacekeeping interventions based on state consent and due UN process, Beijing continues to uphold noninterference. At the same time, facing a combination of reputational liability and, in places like South Sudan, threats to existing economic interests, it has had to negotiate the difficult terrain between noninterference and non-indifference.



Evolving Chinese engagement in South Sudan

China's engagement with and in South Sudan since its independence in July 2011 illustrates the difficulties China faces, but also indicates that a larger and more active role for China in peace and security issues could be advantageous.

South Sudan saw the first deployment of Chinese combat troops under a UN Chapter VII mandate as well as efforts to mount a diplomatic-political intervention to try to assist a negotiated settlement between the Government of South Sudan and the main rebel group fighting against it, the Sudan People's Liberation Movement/Army-in-Opposition.

This marks a shift in China's levels of engagement, reinforcing a view held by some Chinese analysts that South Sudan is a testing ground for a new form of 'proactive' Chinese diplomacy (Shen, 2011). Chinese activities in South Sudan were carried out as part of its role on the UN Security Council and influenced by China's relations with the African Union and the Intergovernmental Authority on Development. China's engagement has also featured efforts to protect its corporate interests in South Sudan's oil sector.

While the influence of this case should not be overstated, the tactical responses China has been developing and deploying in South Sudan indicates a potentially transferable set of responses: negotiating uncharted political waters, responding to security threats and changing calculus of risk, addressing external expectations of assuming greater responsibility, seeking to address reputational concerns, and moving into more active efforts to support conflict resolution.

Conclusion

Peace and security may now have assumed a more prominent position in China-Africa relations, but it is unclear whether and how these aspirations will be converted into practice within the existing African - and global – peace and security architecture. Questions have arisen around China's engagement with the UN Sustainable Development Goal 16 (peace, justice and strong institutions) and there is ongoing, long-standing tension around Beijing's efforts to square its foreign policy principle of non-interference with that of non-indifference enshrined in the African Union's Constitutive Act (Article 4). How China's ambivalence towards the normative aspects of African peace and security architecture is reconciled with the implementation of FOCAC securityrelated initiatives will be important to watch.

The changing economic context of China-Africa relations may also compound tensions caused by security issues. Opening the Johannesburg FOCAC summit, Chinese President Xi Jinping stated 'development holds the key to solving all problems' (MOFA, 2015b), echoing the common official view in China that development is the greatest form of security (CFR, 2014). Given the ongoing economic downturn, however, there are fears that development initiatives will suffer (Harlan, 2016). Exactly how this affects challenges of insecurity remains to be seen, but either way it is clear that working towards greater peace and security in Africa is of vital importance for all parties involved.

Conclusion

Summary

China-Africa relations have developed considerably in the past decades. As attested by the recent summit of the Forum on China-Africa Cooperation (FOCAC), an initial focus on cooperation in economic matters has matured to include additional issues such as peace, security, the environment, and governance.

The DEGRP/SAIIA event addressed many of these issues, offering expert insight into the complex relationship between China and Africa, and raising important questions for further consideration.

Jumpstarting African industrialisation

In their opening remarks, Justin Yifu Lin and Helen Hai both emphasised the power of industrialisation to jumpstart African economies and enhance development, and shared their thoughts on how best to achieve this in the context of China-Africa relations.

With reference to historical case studies, Lin suggests that the key to successful industrial development lies in realistic goal-setting, government support for industrialisation, and an ability to keep track of and seize emerging opportunities. For Africa, this means choosing suitable country role models for emulation, development and implementation of industrial policy, and being ready to 'fill the gap' as China moves away from light manufacturing.

Reflecting on her experience of setting up a shoe factory in Ethiopia, Hai draws attention to the advantages of industrialisation both for investors and for host countries. According to Hai, China and Africa are well-matched for business: Asian manufacturing know-how and African comparative advantage form two sides of what she terms the 'triangle of collaboration' for business success, the third side being the global market.

Developments in China-Africa investment

Discussion of the nature of Chinese investment in Africa, as well as the potential opportunities it brings, is continued in essays by Giles Mohan, Deborah Brautigam, Carlos Oya and Terry McKinley, and Stephen Gelb.

In his exploration of whether African natural resources sectors can act as engines for the creation of value-adding activities, Mohan looks at a variety of factors influencing the development of these activities. Firm origin and behaviour are identified as particularly important factors, with the power either to enable or to limit positive change. For example, Chinese-owned firms tend to be more horizontally integrated (and to outsource less), which can have a limiting effect. However things seem to be changing, with both Chinese transnational corporations and state-owned enterprises increasingly willing to engage with local economies.

Brautigam goes into further detail about the nature of Chinese investors in Africa, extending the 'flying geese' concept to describe different types of investors engaging with Africa, and the opportunities for collaboration they might bring. However, she also points out that more research is needed into the specifics of Chinese investment in Africa to understand the conditions under which it can promote structural transformation. Without accurate data, African governments risk targeting their investment promotion resources in the wrong direction. Likewise, misperceptions about existing investments could dissuade would-be investors from setting up new enterprises.

The lack of data on Chinese engagement in Africa is also flagged by Oya and McKinley, and Ryder. The former suggest that Chinese (and other) investments in Africa could not only boost employment in the short-term, but also promote the creation of a skilled industrial workforce in the longer-term. However, an absence of detailed information on Chinese investment in Africa – and employment dynamics in particular – means there is a need for further study of the topic. Ryder's commentary highlights the potential of high-level agreements – such as FOCAC's Johannesburg Action Plan – to encourage increased data collection.

That said, examples of ongoing positive collaboration do already exist in certain sectors. As Gelb notes, there are strong links between South African and Chinese firms in the financial sector, each country benefiting from the other's different but complementary strengths. For China, partnership with South Africa gives them access to first-hand knowledge of the risks and benefits of setting up in developing country markets.

Beyond investment: trade, informal economies and the environment

Other areas such as environmental issues, transport and informal trade also offer opportunities for enhanced collaboration between China and Africa. Wu's essay highlights China's recent commitments to maritime trade with Africa as part of the 'One Belt, One Road' initiative, as well as to wildlife conservation. Weng's piece draws attention to the importance of the informal natural resource trade. Using a case study of illegal logging in Cameroon, it argues that informal interactions between local traders and Chinese buyers are an important source of rural livelihoods, and should therefore be taken into account in discussions of China-Africa cooperation.

However, new opportunities must be weighed against their environmental implications. As Harvey notes, the 'new normal' of low commodities prices could prove advantageous for African countries willing to work together to supply emerging demands. But these countries must also ensure that natural resources and biodiversity are not overexploited in the process, a challenging task given the difficulty of correctly valuing natural capital.

Similarly, Calow points out that the potential shift of labour- and resource-intensive manufacturing from China to Africa will involve a simultaneous transference of resource depletion from one to the other due to the 'hidden' resources – in this case water – embodied in manufactured products. To protect African water sources, and other resources, from overexploitation African governments will need to strengthen environmental governance.

Governance, institutions, peace and security

Institutions play an increasingly important role in the China-Africa relationship, but it remains to be seen how much they can achieve. Song explores whether China's experience of government decentralisation in healthcare and education might provide insights for local governments in Kenya and Uganda, two countries with a similar decentralised structure. While she concludes that China could offer some lessons for Africa, it's not yet certain whether these lessons are really transferable.

Similarly, Large argues that peace and security issues have assumed a more prominent position in China-Africa relations. Drawing on examples such as recent Chinese military engagement in South Sudan, and a progressive increase in FOCAC commitments to security issues, he outlines the benefits of attention to peace and security, but also underlines the challenges. The key issue is whether and how decisions made at the high-level will be converted into practice.

Africa's role

Running through all of the essays is the question of Africa's role in the China-Africa relationship. China's engagement presents a number of opportunities and challenges, but this engagement is very much shaped by how African countries respond. To take advantage of what China has to offer, African countries should be active in defining their position in the relationship with China. As these essays demonstrate, this is already happening, but there is still much more that can be done.

Endnotes and References

Endnotes

- Also worth noting are links between Nigerian and Chinese banks in 2010: two Nigerian banks, Oceanic and First Bank, had representative offices in China, and there was an alliance between a leading Nigerian bank, United Bank of Africa (UBA), and the Chinese Development Bank (CDB), the main sponsor of the China Africa Development Fund.
- Old Mutual had moved its primary domicile to London in 1999, but in 2015 announced it would return to South Africa. Its joint venture with BSAM was through its Swedish subsidiary Skandia.
- Phakisa is a Sesotho word for 'catching up'. Information and documents related to this initiative are available at: http://www.operationphakisa.gov.za/Pages/
 Home.aspx
- 4. This approach helps explain how countries such as Japan, Singapore and Jordan, with very little locally available surface and ground water, manage to be both water and food secure, if not self-sufficient. Egypt, for example, meets around 40% of its water needs through virtual water trade, mostly through food imports. Indeed, throughout the Middle East and North Africa, it is economic systems, rather than hydrological or engineering ones, which compensate for local water deficits and help achieve water (and food) security.
- To put that in perspective, China's massive South-North Water Transfer Project, aimed at easing water stress in the north and costing in excess of \$60 billion, will have a maximum capacity of around 45 cubic kilometres per year.

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