# Resources for Infrastructure: The sustainability dynamics of Sino-Afro trade



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Author: BreeAna Jones Guidance: Anna-Sterre Nette



# **EXECUTIVE SUMMARY**

China's foreign direct investment (FDI) to Africa is estimated to have reached USD\$15 billion in 2010, with over 800 companies engaging in activities on the continent. Despite the magnitude of China's investment across Africa, in depth information on this activity is relatively scarce and Sino-Afro trade still largely remains opaque. This report seeks to analyze the paramount nature of Sino-Afro trade: Resources for Infrastructure (RFI). In its simplest form, China helps fund and construct infrastructure projects in return for natural resources. We conclude that the benefits that arise from China's investment in Africa have helped stimulate economic growth. Nonetheless, it is necessary for Chinese and African officials to address sustainability issues that are present in the trade model. The report offers recommendations for sustainably strengthening the Sino-Afro trade model.

**Introduction:** The RFI deal is quite typical in the context of Sino-Afro cooperation: in its simplest form, China helps fund and construct infrastructure projects in return for natural resources. This trade structure is ideal because China and Africa have complementary competitive advantages – China has strong construction capabilities, but is resource scarce while Africa is resource abundant with a severe infrastructure deficit.

#### Part I. Understanding China's OFDI Policy

*China's Natural Resource Appetite.* China's economic growth depends on natural resources. Despite China's large land area, it is relatively resource-scarce, but where China is lacking, Africa is abundant. Oil, copper and leather are examples of natural resources that are abundant in Africa and play a major role in Chinese development.

*Going Global.* Since China opened up its economy in 1979, Beijing has been encouraging companies to "go global" and invest abroad. In particular, several trade facilitating organizations have been established that stimulate trade with and investment in Africa.

*Political Influence*. China has adopted a "hands-off" policy when it comes to trade, and this approach has had the unexpected effect of increasing its political influence as African countries are more willing to engage in trade with China than accept conditional aid from Europe.

#### Part II. Resources for Infrastructure: The Sino-Afro Model

*Sino Afro Trade Model.* In the RFI trade model, loans for infrastructure development are negotiated through trade facilitating organizations. In many cases, a joint venture, consisting of Chinese large SOEs and African state-run companies, is formed to implement the construction projects. RFI loans often stipulate that a majority of the loan must go to Chinese contractors. In many RFI deals, the loan is repaid with resources, but it can also be repaid by making smaller loans to third parties, or using the revenue from the joint venture.

#### Part III. Examining the Sustainability of Sino-Afro Trade



*China and Africa are Ideal Trading Partners.* The RFI trade model enables China to get access to prized resources, and Africa to develop its own infrastructure through business development rather than aid. Building these infrastructures improves logistics, thus paving the way for global businesses to invest in Africa. The presence of Chinese goods in African markets can also help stimulate stagnant industries by providing a competitive environment. RFI loans generally present fewer risks because loans can be repaid in resources, which are more stable than uncertain cash flow from projects, and because Chinese companies benefit from the strong support of the Chinese government.

*Case Examples.* Anti-Chinese sentiment in Africa seems to be growing, and can pose a threat to China's long-term vision for the continent. By developing one particular resource industry in African countries, China also contributes to the lack of diversification of their economy in and to the corruption from within their governments, thus slowing down growth in African countries. In addition, the quality of Chinese infrastructure is often considered subpar and there is a lack of knowledge transfer to African nations who often do not have sufficient training to continue operations on their own.

#### Recommendations

Drafting a customizable contract template could not only help reduce the time and costs involved in the negotiation of RFI deals but also ensure that the trade and investment is equitable, and is not always made to favor China. Such a contract might also suggest the establishment of some sort of technology transfer scheme, for instance through joint ventures with local firms. Finally, Sino-Afro trade needs more transparency to obtain a social license to operate.



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# **INTRODUCTION**

On a hot summer's eve in August 2011, after several days of heated discussion and debate, the Ghanaian Parliament approved a US\$3 billion dollar loan from China, the largest ever loan received in the country's history. Arriving on the heels of the discovery of Ghana's "Jubilee" oil field, the loan held provisions to use a portion of the funds to develop the country's infant oil industry and production capabilities. The other portion would be dedicated to further building up the country's infrastructure<sup>i</sup>. Although this loan was a landmark one for Ghana, deals of this nature have been occurring for several years between China and the African continent, particularly in the case of oil and mineral-producing countries.

The "Resources for Infrastructure" (RFI) deal is quite typical in the context of Sino-Afro cooperation: in its simplest form, China helps fund and construct infrastructure projects in return for natural resources. This trade structure is ideal because China and Africa have complementary competitive advantages – China has strong construction capabilities, but is resource scarce while Africa is resource abundant with a severe infrastructure deficit.

China's foreign direct investment (FDI) to Africa is estimated to have reached USD\$15 billion in 2010<sup>ii</sup>, with over 800 companies engaging in activities on the continent.<sup>iii</sup> Despite the magnitude of China's investment across Africa, in depth information on this activity is still relatively scarce. The Ghana-China deal is rather unusual and unique because it offers an unprecedented amount of transparency in disclosing the details and stipulations of the loan. The Ghana-China loan offers curious outsiders, analysts and policy makers a rare glimpse into how China financially engages with the African continent.

However, the Ghana-China deal is still a diamond in the rough – that is, although the amount of transparency is unprecedented, it still leaves much room for clarity. In general, Sino-Afro trade still largely remains opaque. It is clear that China's investment has spurred positive activity in Africa, but is it possible that China's trade may also help fuel the resource curse present in resource-rich countries? Better understanding the relationship between Asia's fiercest Tiger, and the awakening African Lion will be increasingly important for the world arena in the next several years.

#### Scope of This Report

This report seeks to analyze the paramount nature of Sino-Afro trade: Resources for Infrastructure. We analyze the three main driving factors behind China's OFDI strategy: 1) Satisfying its insatiable energy appetite, 2) Fortifying itself as a major player in global markets, and 3) Gaining political influence, particularly as a buffer against the West.

Then we assess the process in which RFI deals are implemented, from conception to construction. To do this we analyze three Sino-Afro cases in depth: the US\$3 billion China-Ghana loan for the development of the Jubilee oil fields, the China-Zambia copper Special Economic Zone, and China's heavy investments in Ethiopia's leather industry.



Finally, we attempt to analyze the long-term sustainability of Sino-Afro trade. What are the positive and negative fallout effects of Chinese investment on local industries? And what can be done to improve Sino-Afro trade overall?



# PART I. UNDERSTANDING CHINA'S OFDI POLICY

In order to better understand why Chinese and African trade holds important implications for the world, it's necessary to first understand China's outward foreign direct investment (OFDI) policy. China's overseas investment is largely directed by the Chinese government, and has the objective of increasing China's energy security, propelling Chinese brands and businesses into international markets, and fortifying Beijing's political influence.

# **1.1 CHINA'S NATURAL RESOURCE APPETITE**

Between 1989 and 2011, China has maintained an average annual GDP growth rate of 9.3%<sup>iv</sup>. Much of this growth has been fueled by China's rapid construction and infrastructure development of its eastern coastal cities. In 2008, Beijing (the Chinese government) helped to protect the Chinese economy against the global economic crisis by implementing a USD \$570 billion stimulus, most of which was focused on spurring major fixed asset construction<sup>v</sup>.

Now economic growth is cooling and Beijing is trying to coordinate a "soft landing" for the economy – that is, they want growth to slow, but at a pace that will not greatly rattle China's "harmonious society"<sup>vi</sup>. At the same time, Beijing seeks to wean its economy from being the "world's factory" to one that is driven by domestic consumption. The government wants to transform its eastern coast to a high-tech services and innovation hub, while pursuing the urbanization of China's lesser developed western regions<sup>vii</sup>. All of these factors indicate that natural resource supply will be pivotal in the success of Beijing's national goals.

Despite China's large land area, it is relatively resource-scarce: it has only 1.1% of the world's proven oil reserves<sup>viii</sup>, and has 4.35% of copper reserves<sup>ix</sup>. However, where China is lacking, Africa is abundant. China has strategically been developing a strong relationship with resource rich countries around the world, and particularly with those in Africa. Examining China's 5-year national plan helps highlight the role that African countries will play in China's future.

# 1.1.1 12<sup>th</sup> Five Year Plan

Every half-decade, Beijing offers economists, businessmen, policy makers, and average citizens alike a rare insight into what the capital has planned for the development and direction of the nation for the next five years. Appropriately called the "Five Year Plan" (FYP), this document details the environmental, economic, and social goals that Beijing has set for the country, and how it plans to implement them. More specifically, this document is more of a decree than a suggestion. One can expect Beijing to firmly and steadfastly steer national efforts to achieve the goals prescribed in the FYP. For the purposes of this research, it helps shed light onto China's drive into the emerging economies of Africa.



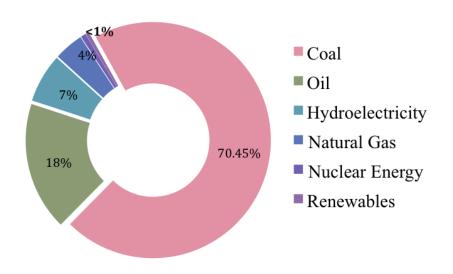
In the recently released "12<sup>th</sup> Five Year Plan (2011-2015)"<sup>x</sup> China underlines several strategic sectors in which it wishes to cultivate growth. In particular, urbanization, energy security, and moving up the supply value chain are dominant themes throughout the report. To further highlight the connection between China's national goals and Sino-Afro trade we examine three resources in depth. Oil and copper are obvious resources to analyze, as both are fundamental inputs to any economic machine. We also examine China's consumption of leather as a raw material because it serves as a wider reference to China's ascension into more value added manufacturing.

#### 1.1.2 Oil -The Lifeblood of the World

In 2010, China produced about 71% of its energy needs by burning coal<sup>xi</sup>. To put this in perspective, China burned more coal than the United States, European Union and Japan combined<sup>xii</sup>. However, the consumption of coal is extremely polluting and is at the root of many of China's environmental issues. As a result, China has put great emphasis in diversifying its energy supply into renewable and nuclear energy, natural gas, hydroelectricity, and of course, oil<sup>xii</sup>.

Oil, as some may critically observe, is the lifeblood of the industrial world. China is no exception – in 2010, China was the second largest importer of petroleum after the United States at 5.08 million bbl/day, or 11.3% of world share<sup>xiv</sup>. In 2010, the consumption of oil supplied China with 18% of its energy needs<sup>xv</sup>. The FYP makes direct mention of China's oil strategy and states that it must, "strengthen the exploration and development of petroleum... resources."

# China's Energy Supply 2010



According to Japan's Institute of Developing Economies IDE-JETRO,

"Heavy industry in China [accounts for] up to 70 percent of total Source: BP Statistics consumption [of oil], followed by residential at 10 percent, transportation at 7 percent and commercial at just 2 percent".<sup>xvi</sup>

Although China has some domestic oil reserves, it mostly relies on the foreign import of oil from emerging economies, particularly those in Africa. In 2010 for example, China imported about 30% of its oil from Africa [Table 2] – of which Angola, Sudan, Libya,



and Democratic Republic of Congo accounted for around 27%.<sup>xvii</sup> It is noteworthy however that these countries all rank relatively low on international corruption indices. For example, these countries all ranked in the bottom half of the 2011 Mo Ibrahim Index of African Governance (a widely respected African-run organization), with 100 representing the best governed and 0 representing the most corrupt governments<sup>xviii</sup>. Chinese and African officials must take steps to ensure that Sino-Afro trade does not fan the flames of the resource curse.

Country of Origin	Exported Amount (Tons)	Percent Share (World Total)	Mo Ibrahim Index
Angola	32,173,244	15.79%	41
Sudan	12,192,303	5.98%	33
Libya	6,344,540	3.11%	50
DRC	4,089,643	2.01%	32
Eq. Guinea	2,221,260	1.09%	37
Algeria	1,604,803	0.79%	55
Nigeria	1,393,229	0.68%	41
Cameroon	581,837	0.29%	45
Mauritania	407,444	0.20%	47
Gabon	270,718	0.13%	51
Chad	139,969	0.07%	31
Total	61,418,990	30.14%	

# 1.1.3 Copper – Big Input for Big Industry

In 2011, China consumed 7.9 million tons of copper and was the largest consumer of the metal globally. According to the International Copper Study Group, China's consumption accounted for about 40% of world demand, and this consumption is expected to grow by 3.6% in 2012, as compared to 3.3% world consumption growth.<sup>xx</sup>

60-65% of all copper produced worldwide is used for electrical applications due to copper's high electrical conductivity. Power generation, electricity transmission, vehicle manufacturing, PC and TV wiring, small electrical appliances, as well as cell phone manufacturing are all dependent on copper – these are all products that are heavily manufactured in China. In addition, renewable energy sources such as solar, wind, geothermal, fuel cells and other technologies are all heavily reliant on copper due to its conductivity.<sup>xxi</sup>

In addition to electrical purposes, copper is a major resource that is crucial for industrial development. In fact, after iron and aluminum, copper is the third most consumed metal for industrial uses worldwide<sup>xxii</sup>. Due to its corrosion-resistant characteristics, about 25% of copper produced is used in the construction industry, particularly for plumbing and roofing<sup>xxiii</sup>. It's also a critical input for shipbuilding.



Given the targets set in the 12<sup>th</sup> FYP we can foresee that copper demand in the following years will be significant. Beijing plans to,

Construct large wind power generating sets and parts, new assemblies of efficient solar power generation and heat utilization... Accelerate the building of a modern power grid system... develop advanced large-capacity, high-efficiency and long-distance power transmission technologies... Establish a strategic plan for urbanization... Steadily promote rural residents to become urban residents... Standardize the construction of new townships... Improve the ship equipment industry.<sup>xxiv</sup>

In order to facilitate China's acquisition of copper, the China Nonferrous Metal Mining Group designed and implemented a Special Economic Zone (SEZ) in Zambia. Although China holds 4.35% of the world's copper reserves, its investments in Zambia (which has 2.9% of the world's reserves)<sup>xxv</sup> were a strategic step to ensure that it maintains a steady inflow of the resource. In 2010 China imported USD\$2.4 billion in refined copper from Zambia.<sup>xxvi</sup>

Copper Ore		Refi	<b>Refined</b> Copper	
Chile	3,933,772,000	Chile	10,953,518,000	
Peru	2,048,717,000	Japan	3,135,926,100	
Australia	1,346,926,000	Zambia	2,396,977,500	
Mongolia	894,841,900	Taiwan	2,329,850,800	
Mexico	793,570,900	Korea	2,089,356,500	
United States	707,174,800	Kazakhstan	1,614,622,000	
Kazakhstan	512,575,300	DRC	1,234,864,900	
Turkey	445,522,500	Australia	988,520,250	
Canada	408,784,400	India	868,970,950	
Laos	379,000,800	Belgium	757,205,940	

TABLE 4: China's Worldwide Copper Imports, 2010 (USD)

#### Source: UNCTAD

In the graph above it is important to note that China imports *refined* copper from Zambia, as opposed to unrefined cooper ore, because China has constructed a special economic zone in Zambia in order to process raw copper ores. This allows Zambia to move up the supply chain and capture more value for their copper reserves, while China is able to import ready-to-use refined copper. The Zambia-China SEZ is discussed further in Chapter 3.

#### 1.1.4 Leather – Moving up the Value Chain

Although Africa, "possesses about 25% of the world's sheep and goat population", it is still a relatively low exporter of raw materials such as hide and leather<sup>xxvii</sup>. The Ethiopian



government has taken measures to bolster the country's leather industry. By welcoming investments from foreign companies and governments, particularly those in India and China, Ethiopia is seeing an increase in the production of leather.

Leather, although not a rare mineral or strategic resource, is a crucial input to the consumer goods industry, and is particularly important for the products that China typically produces. Leather is commonly used for the production of shoes, bags, clothing and accessories, furniture, and upholsteries, and in 2011 China consumed USD\$74 billion of leather.<sup>xxviii</sup> The President of China's Leather Industry Association estimated that the leather sector would continue to grow by 10% per year.<sup>xxix</sup>

For the past several decades, China has served as the premier manufacturing hub of the world, and has been the producer of these leather products. However, China has been moving up the supply value chain, evolving from manufacturer to originator. First, there are a growing number of Chinese firms that are producing rival products to the ones that foreign companies have traditionally commissioned China to manufacture. For example, Li Ning, a Chinese sportswear company, poses considerable competition to well-established brands like Nike, commanding 36% of the market in China<sup>xxx</sup>. Second, these firms are increasing their value-added activities by directly investing in and acquiring raw material companies that supply inputs for their products.

Chinese companies have begun to strategically invest in leather producing businesses. For example, China-Africa Overseas Leather Products launched a USD\$27 million factory in Ethiopia in 2010. Just one year later, China Huajian International Shoe announced in 2011, its intentions for investing USD\$2 billion in the Ethiopian leather industry.

# **1.2 GOING GLOBAL**

Shortly after opening up to the world in 1979 under the Deng Xiaoping reforms, China's Central Planning Committee issued a directive encouraging companies to "Zou Chuqu" or "Go Global". According to the directive Going Global would help,

"Supplement the resources of [China's] needs, promote the export of goods and services, and foster multinational companies and well-known Chinese brands."

#### 1.2.1 Outward Foreign Direct Investment

Since then, a profusion of Chinese firms have ventured abroad and in a variety of industries. Some of the most prominent State Owned Enterprises (SOEs) abroad include China National Petroleum Corp, China National Offshore Oil Corp, and China State Construction Engineering Corp<sup>xxxi</sup>. These companies in particular are crucial components in the Sino-Afro RFI trade structure.



#### China's 2010 OFDI to Africa, USD Millions

Country	FDI Flows	FDI Stock	Total
South Africa	411.17	4152.98	4564.15
Nigeria	184.89	1210.85	1395.74
Algeria	186	937.26	1123.26
Zambia	75.05	943.73	1018.78
Congo DR	236.19	630.92	867.11
Sudan	30.96	613.36	644.32
Niger	196.25	379.36	575.61
Angola	101.11	351.77	452.88
Ethiopia	58.53	368.06	426.59

Source: 2010 Statistical Bulletin of China's OFDI

#### Financial Institutions as Facilitators of Sino-Afro Trade

China has established several government agencies to facilitate trade and investment with Africa.

#### Ministry Of Commerce

China's Ministry of Commerce (MOFCOM) by and large directs the country's overseas initiatives. MOFCOM creates incentives for companies to go abroad by issuing tax breaks and subsidies. It's easier for Chinese companies to secure loans and financial support when investing in countries with which MOFCOM has established favorable trade partnerships.

Underneath MOFCOM, there are several Chinese institutions that facilitate trade between China and Africa.

#### Forum of China Africa Cooperation

The Forum of China Africa Cooperation (FOCAC), established in 2000, holds forums every three years that bring together Chinese ministers, and African representatives and heads of state with the goal of agreeing on bilateral trade and investment. For example, during the 2009 forum held in Sharm el-Sheikh, Egypt, Chinese premier Wen Jiabao announced that China would,

...provide 10 billion U.S. dollars in concessional loans to African countries, and support Chinese financial institutions in setting up a 1 billion U.S. dollar special loan for small and medium-sized African businesses. For the heavily indebted poor countries and least developed countries in Africa having diplomatic relations with China, we will cancel their debts associated with interest-free government loans due to mature by the end of 2009.<sup>xxxii</sup>



In the 2012 forum held in Beijing, President Hu Jintao pledged an additional USD\$20 billion credit line to African nations to, "assist them in developing infrastructure, agriculture, manufacturing, and small and medium-sized enterprises."<sup>xxxiii</sup> In addition to fortifying regional integration, China vowed to implement the "African Talents Program", which would, "train 30,000 personnel in various sectors for Africa, offer 18,000 government scholarships, and build cultural and vocational skills training facilities in African countries."<sup>xxxiv</sup>

#### China ExIm Bank

Another institution that facilitates Sino-Afro trade is the China Export Import (ExIm) Bank. Founded in 1994, the bank's main responsibilities are to,

"Assist Chinese companies with comparative advantages in their offshore contract projects and outbound investment, and promote Sino-foreign relationship and international economic and trade cooperation.<sup>xxxv</sup>"

China ExIm Bank has three main investment tools, which facilitate Sino-Afro trade.

- First, there is "Export Seller's Credit" which are loans issued to Chinese companies to help boost Chinese exports. These loans are often used to purchase equipment, which boosts the production of exports. Export Seller Credit loans can also be used for overseas construction contracts<sup>xxxvi</sup>.
- China ExIm Bank also offers Export Buyer's Credit loans which are issued to foreign borrowers to assist with the import of Chinese goods, or Chinese contracting projects.
- In addition, China ExIm issues Chinese Government Concessional Loans, which are typically long-term, low interest rate loans to foreign governments. These loans are used mostly to,

"Implement manufacturing projects with favorable economic returns or good social benefits, infrastructure and social welfare projects, or to purchase mechanical and electronic products ... as well as materials from China.<sup>xxxvii</sup>,"

By and large, RFI trade deals are financed by Chinese Government Concessional Loans. For example, in the Republic of Congo, China ExIm Bank has issued a concessional loan backed by guarantees of crude oil to construct the Congo River Dam.<sup>xxxviii</sup>

#### China Development Bank

The China Development Bank (CDB) also plays a large role in China's development projects in Africa. It is estimated that CDB has issued up to USD\$10 billion in loans to the African continent<sup>xxxix</sup>.

#### China Africa Development Fund

CDB's China Africa Development Fund (CAD Fund) was established in 2007 with USD\$5 billion in assets, and invests specifically in Sino-Afro projects. CAD Fund is slightly different from China ExIm Bank in that the institution raises funds for



investments in capital markets, and takes equity shares of projects in return for loans and investment. For example, CAD Fund signed a 10-year deal with China Huajian International Shoe Company, to help assist the business' USD\$2 billion investment in Ethiopia's leather industry.<sup>xl</sup>

It is clear that China has made a strong commitment to Africa through the quantity and quality of institutions and programs that it has launched dedicated to stimulating Sino-Afro trade.

# **1.3 POLITICAL INFLUENCE**

Despite its late start to the global arena China has been leveraging its economic surplus to strengthen its political position throughout the world. In addition to its acceptance into the World Trade Organization (WTO), China also wields considerable power in the United Nations (UN) due to its ability to veto any UN decisions. Moreover, China's financial assistance in bailing out the failing Euro-zone will allow it to demand more respect and influence within international decision making processes.

In addition to direct political influence, China has garnered much indirect political sway through its international economic policies. When it comes to bilateral trade with target countries, China has traditionally pursued a "hands-off" approach. China prefers to engage in trade with a country largely on its economic merits, and rarely attempts to directly exert political influence or pressure over the country<sup>xli</sup>. According to Hong Lei, China's Foreign Ministry spokesman,

"China conducts cooperation with Africa based on the principle of equality and mutual benefit and common development." He went on to add that, "China fully respects African countries' right to choose their development path. China never imposes its will on African countries, nor adds political conditions to its aid for Africa."<sup>xlii</sup>

Beijing's strategy to leave politics out of its economic dealings has inadvertently increased the country's political sphere of influence. Many African nations prefer to engage in trade with China, rather than receive aid from the World Bank for example, which imposes regulations on its government. As a result, China's no-strings-attached investment has begun to shift political influence away from the traditional world powers like Europe and the United States, and towards itself. Furthermore, China is finding that it is gaining friends in African governments in lieu of China's construction of the African Union headquarters in Addis Ababa, and several hundred infrastructure and civil projects spanning across the continent. In the opening ceremony of the African Union headquarters, Ato Meles Zenawi, the late Prime Minister of Ethiopia expressed his affinity for the Chinese and their contributions:

China, in its amazing re-emergence and its commitments for a win-win partnership with Africa is one of the reasons for the beginning of the African renaissance. Over the past decades China Africa cooperation has gone from strength to strength. The future prospects of our partnership are even brighter.



It is therefore very appropriate for China to decide to build this hall ... of African renaissance ... I am sure I speak for all of you when I say to the people and the government of China thank you so very much. May our partnership continue to prosper.<sup>xliii</sup>

Overall, Beijing's hands-off econ-political strategy has been quite successful, however recent events have challenged the sustainability of this strategy. As evidenced by conflicts in Sudan, Nigeria and Zambia, China's neutral political stance can lead to serious economic consequences. We will examine some of the implications of China's non-interference policies in Chapter 3.



# PART II. RESOURCES FOR INFRASTRUCTURE: THE SINO-AFRO MODEL

China regards its trade, particularly in resources and minerals, as a national confidentiality. Therefore, it is generally difficult to acquire in depth information on the scope, and level of Sino-Afro trade. However, more light is beginning to be shed on this topic by interested parties like the World Bank<sup>xliv</sup>, and political groups involved in these deals<sup>xlv</sup>.

By analyzing several Sino-Afro trade deals, we attempt to further this effort by constructing the Sino-Afro trade model starting from loan disbursement to loan repayment.

# 2.1 SINO AFRO TRADE MODEL

#### Step 1

Trade between China and Africa is usually initiated with a visit between corresponding officials from the two governments. For example, in 2010 President John Atta Mills of Ghana met with his Chinese counterpart, President Hu Jintao in Beijing to sign a memorandum of understanding (MoU).<sup>xlvi</sup> MoUs are bilateral agreements that indicate that each party intends to act upon the agreement, however they are not legally binding and deals may sometimes fall through<sup>xlvii</sup>. Other times, an executive from China may take interest in a particular industry or business in an African country. For example, the Zambia China Economic and Trade Cooperation Zone was initiated by the China Nonferrous Metal Mining Group Company

#### Step 2

After signing a MoU or coming to a similar agreement, one of the trade facilitating institutions like the China ExIm bank will enter negotiations with its respective organization within the target country. The target nation will approve or disprove the loan in its parliament or respective government branch. For government-to-government loans China ExIm Bank, or the China Development Bank will work with the African governments to formulate favorable and reasonable loan terms. For smaller investments, and projects spearheaded by Chinese SOEs the CAD Fund will work with the lead company to form an equity joint venture structure.

For larger government to government contracts, loans may sometimes come in two tranches.

- One tranche will be dedicated to constructing or improving the target nation's natural resource production capabilities.
- The other tranche is typically used for building civil projects like schools, hospitals, roads and other public infrastructure.

For example, in the USD\$9 billion loan from China to Congo (decreased to USD\$6 billion after pressure from the IMF), one USD\$3 billion tranche was used to renovate the



nation's copper mining infrastructure. The other USD\$3 billion tranche was used for building dams, bridges and airports amongst several other civil projects<sup>xlviii</sup>.

#### Step 3

In many cases a joint venture will be formed to implement the construction projects. These joint ventures usually consist of large Chinese construction and resource SOEs like Sinohydro, China State Construction Engineering Corporation Corp., China National Petroleum Corp., and China National Offshore Oil Corp. The target country is usually represented by a state-run company. Most Sino-Afro loan terms will stipulate that at least a majority percent (upwards of 60%) of the loan must go to contracting Chinese companies for the construction work. This means that only a minority portion of the loan can be used in contracting the target African nation's construction companies.

However, many times the target African nations simply do not have competent contracting capabilities and seldom enter the bidding process. Moreover, it is rare that international construction companies win bids for these contracting projects because rival Chinese firms significantly outbid them<sup>xlix</sup>.

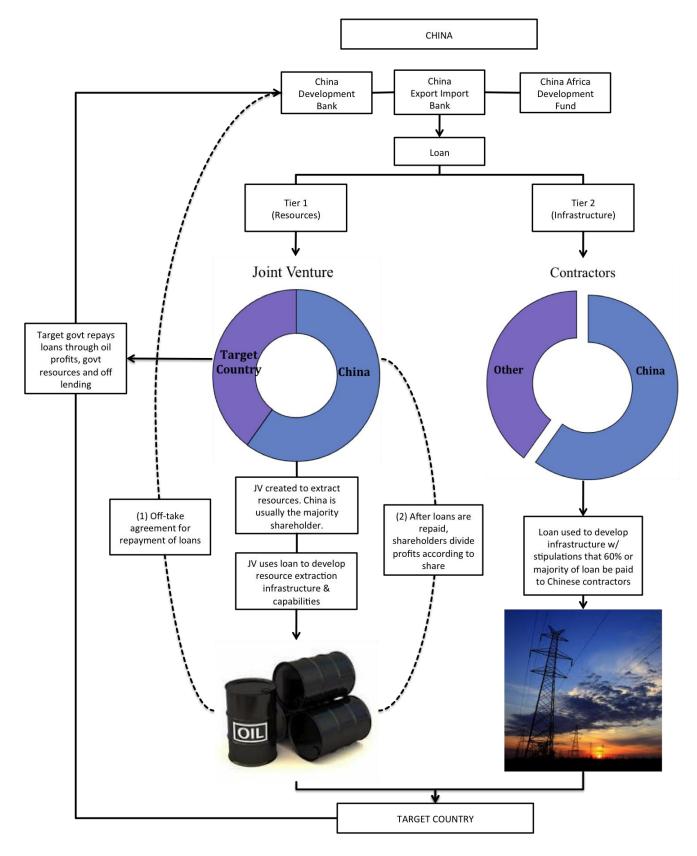
#### Step 4

After construction takes place and resource production begins, there are several methods in which the target nation can repay its loan.

- In many RFI deals, the loan contract holds provisions that resources be used as payment. Commonly known as an "off-take" agreement, China and the target nation may agree to a fixed quantity of the resource to be transferred from the producing country to China. It is unknown how China uses the resources once they are transferred.
- Another method for repayment is "off-lending" which includes the target government using the original China loan to make smaller loans to third parties.
- The government can also use the revenues made from the joint venture (if the joint venture contains a state-run firm) to repay the loan. For example, the loan's contract may state that after a pre-defined portion of the original loan is repaid, the joint venture may split the subsequent profits from resource production according to the equity structure. Therefore, an African state owned resource company, with an equity share in the joint venture could use its share of the profits to further repay its loan from China.



# Sino-Afro Trade Model Example





#### **2.2 CASE EXAMPLES**

#### 2.1.1 Ghana, Jubilee Oil Field

In August 2011 the Ghanaian Parliament approved a USD\$3 billion dollar loan from China, the largest ever loan received in the country's history. Although some may argue that the Ghanaian government has not been entirely transparent on the deal, it has still set a precedent for African nations in disclosing the terms of trade in China's Resources for Infrastructure (RFI) trade model. According to reports released by the Parliament, the goal of the loan is to, "enhance the efficiency and effectiveness of the oil and gas sector operations, as well as industrial minerals processing and agro industrial ventures."<sup>1</sup>

The USD\$3 billion Chinese loan is structured as such:

The loan will be divided into two tranches, both worth USD\$1.5 billion. The first tranche will be used primarily for public projects like the renewal of the Western Corridor railway and infrastructure, irrigation of the Accra Plains, upgrading coastal fishing harbors, and a multi-modal transportation project, amongst many others<sup>li</sup>.

The second tranche of the loan will be dedicated to building up the infrastructural capacity of Ghana's new oil industry. Projects include an offshore gathering pipeline, a gas processing plant, the "retrofit of the Tema Oil Refinery to enable the processing of natural gas liquids", and purchasing of a helicopter fleet. Other projects include installing a security and surveillance ICT platform to monitor the infrastructure and facilities, and reviving abandoned road construction works<sup>lii</sup>.

Each tranche of the loan has its own stipulations and payback structures.

Stipulations of China-Ghana Loan			
Tranche 1	Tranche 2		
5 Year Grace Period	5 Year Grace Period		
1% (\$15 mill) commitment fee	1% (\$15 mill) commitment fee per annum		
.25% (\$3.75 mill) upfront fee (flat)	.25% (\$3.75 mill) upfront fee per annum		
2.95% interest rate	2.285% 10 year tenure interest rate		
6 months LIBOR (London Inter-Bank Offer Rate)	6 months LIBOR		
15 Years Repayment Period			

Source: Modern Ghana

Ghana's government has indicated that it will repay the loan through several channels. First, it has stated that it would use some of the profits from production of oil in the Jubilee field to repay the loan. Ghana National Petroleum Corporation (GNPC) owns 10% equity in the fields. This means that if oil from the Jubilee fields produces at the high end of analysts' projections of USD\$6 billion<sup>liii</sup>, GNPC would earn approximately USD\$600 million from Jubilee's operations, or 1/5 of the face value of China's loan (not including interest, fees, and other charges).



Ghana has also stated that in order to reduce the impact of the projects on public debt it would repay some of the loan with the off-take of oil (payment with oil instead of money), on-lending (using the original loan to provide smaller loans to third parties) and escrow arrangements (finalizing payment once the project has been completed). <sup>liv</sup>

# 2.2.2 Zambia-China Economic and Trade Cooperation Zone

Many economists credit China's huge economic development success on its utilization of special economic zones (SEZs). China launched its first SEZs in Shenzhen, Xiamen, Shantou and Zhuhai in 1979. Since then, it has launched several dozen SEZs across the main land, in a variety of industrial clusters. In 2006 Beijing announced that as part of its "Going Global" strategy, it would implement around fifty SEZs across the world in order to strengthen its industrial fortitude.<sup>1v</sup>

The Zambia-China Economic and Trade Cooperation Zone (ZCCZ), constructed in Chambishi and Lusaka, was inaugurated by President Hu Jintao and the late President Levy Mwanawasa in 2007 and was China's first overseas SEZ in Africa<sup>lvi</sup>. The China Nonferrous Metal Mining Group Company (CNMC) is the sole owner of the zone, and administration of the zone is run by ZCCZ Development Limited, a subsidiary of CNMC. CNMC made its first foray into Zambia in 1998 when it purchased an 85% share in one of Zambia's largest copper mines.<sup>lvii</sup> This shows that China has been a longtime player in Africa, and has shown its propensity for taking risks in the continent. In 2006 CNMC initiated the proposal with the Zambian government to launch ZCCZ, and its main focus is on the extraction, and refinement of Zambia's mass copper reserves.

According to MOFCOM, China has committed USD\$1.28 billion in investment to the zone, and USD\$700 million has been invested thus far<sup>lviii</sup> including USD\$200 million to construct a copper smelter.<sup>lix</sup> According to statistics released by the zone's officials, the zone has attracted 17 companies (most of which are Chinese subsidiaries or affiliates of CNMC), with a total investment of USD\$1 billion, and has "generated nearly USD\$500 million in taxes and sales revenues of USD\$4.35 billion".<sup>lx</sup> It is estimated that the zone has generated 6,000 local jobs.<sup>lxi</sup>

China's investment in Zambia's copper mines is a bit different than the typical RFI deals. This is because a sole Chinese firm, CNMC, is responsible for the development of the zone. Most likely, the SOE received an Export Seller Credit from China Development Bank to construct and administer the zone. However, it has not been made clear that the investment in Zambia's copper industry is contingent upon the construction of infrastructure or public buildings. Although there is no direct loan to the Zambian government to build infrastructure in exchange for copper resources, China has provided various loans such as the USD\$1 billion concessional loan to Zambia in 2010.

To increase the mainland's soft power, and strengthen political ties in Zambia, China has engaged in the construction of several civic projects in Zambia. Since China's



investments in Zambia's copper industry are long-term, there is an incentive to improve the civil areas of society to provide long-term stability to industrial investments. For example, in 2012 China donated 30 cars, 25 public buses and 10 coach buses to the Zambian government, a USD\$6 million value. The donation ceremony was held at Zambia's Government Complex, which had been newly renovated by the Chinese<sup>lxii</sup>.

Moreover, building public infrastructure to and around ZCCZ will help reduce the costs and time associated with transporting copper from the zone to China. According to an indepth report commissioned by the School of Advanced International Studies (SAIS), China is "refurbishing two strategic railroads"<sup>1</sup><sup>xiii</sup>. China International Fund – a Hong Kong based company with no affiliation to the Chinese government – has committed USD\$300 million to revamping the Benguela railway line which connects Zambia to the border of the Democratic Republic of Congo, and has possibilities of being extended to Angolan ports further west<sup>lxiv</sup>. This is important as it will not only allow for the export of Zambian copper to international markets, but will also open up inter-African trade. However, it's worth noting that the Hong Kong-based China International Fund has had issues with its reputability, and development on this line has been hampered due to payment dispersal issues.<sup>1xv</sup>

The Tanzam railway line (also called Tazara) was first built by the Chinese Railway Engineering Corporation in the early 1970s as a turnkey aid project<sup>lxvi</sup>. There is a strong possibility that this rail line may also be refurbished, as it would lead to a strategic water port in Tanzania, which would further facilitate the export of Zambian copper.

# 2.2.3 Ethiopia, Leather Factory

Ethiopia's leather industry has seen significant investment activity from China. In 2009, Xinxiang Kuroda Mingliang Leather Co. signed a deal to open a USD\$27 million leather factory in Ethiopia. Xinxiang Leather, in partnership with China Development Bank formed a joint venture to finance the factory, with ownership split 55% to 45% between Xinxiang and CDB respectively. After only 16 months of construction, the joint venture – called China-Africa Overseas Leather Products – was opened in November 2010.

The 80,000 square meter factory has the capacity to produce 4.5 million pieces of processed leather and is expected to generate 500 local jobs.<sup>Ixvii</sup> The factory enjoys a 5-7 year tax-free status from the Ethiopian government. However, to meet these requirements, the firm must export all of its products<sup>Ixviii</sup>. Therefore, a majority of the leather produced in this factory is exported to China. The group is planning a second investment of USD\$25 million to expand production capabilities<sup>Ixix</sup>.

Ethiopia's leather industry also received an investment of USD\$2 billion from China Huajian International Shoe Company. The investment, in partnership with the China Africa Development Fund, has plans to establish a light manufacturing zone. It is slated that the zone will create 100,000 jobs (both local and foreign), with an annual production turnover of USD\$4 billion.<sup>lxx</sup> Mingliang Leather and China Huajian's investments not



only align them to be able to better satisfy a growing demand of leather in China, but also help stimulate the Ethiopian economy.

These investments are similar to CNMC's investment in Zambia's copperbelt. The investment isn't purely RFI because it is a private company that is investing in the country, rather than the Chinese government. Despite this, China has engaged in dozens of civil construction projects in Ethiopia.

In 2011, China ExIm Bank provided Ethiopia with a two-tranche USD\$400 million loan. The first USD\$100 million tranche was dedicated to developing water projects in Ethiopia, and the second USD\$300 million tranche was designated for other varying development projects. According to Ethiopia's Minister of the Ministry of Finance and Economic Development,

The Bank has assisted many development projects of ours, especially infrastructure development; and the first long road in Ethiopia was financed by [China Exim Bank]. These projects contribute to the economic development of the country.<sup>lxxi</sup>

China has proven that it is taking a long-term stance on the investment and growth of Ethiopia, and the greater African continent. While the many benefits of China's presence in Africa have been outlined above, it's necessary to also consider the potential risks that this investment may produce.



# PART III. EXAMINING THE SUSTAINABILTY OF SINO-AFRO TRADE

China has clearly shown its interest in investing in Africa. While increased FDI is a positive factor in any economy, African nations must ensure that this investment is sustainable, and healthy for society. This chapter will analyze the advantages, disadvantages and sustainability of China's investment in Africa.

# 3.1 CHINA AND AFRICA ARE IDEAL TRADING PARTNERS

China takes a different approach to engaging in trade with Africa than does the West, and there are several factors that make these two regions ideal trading partners. First, Resources for Infrastructure (RFI) contracts have complements between Chinese and African competitive advantages. China, due to its own domestic construction boom over the last three decades, has strong infrastructure and contractor capacities. On the other hand, as mentioned previously, China has a huge natural resource appetite, but lacks many resource reserves. Africa on the other hand is abundant with natural resources, and is one of the most highly resource-concentrated regions in the world. However, it also has a massive infrastructure deficit. According to the World Bank, the continent of Africa would have to spend USD\$93 billion (or 15% of Sub-Sahara's GDP) every year to bring its infrastructure up to par with its Asian and Latin American peers<sup>laxii</sup>.

Second, RFI deals have an advantage over traditional deals because loans are repaid with natural resources as a physical asset, or the proceeds from those resources. This is less risky than the repayment of a loan using uncertain cash flows from a project, because the project could underperform, resulting in less cash flow than predicted, or the cash flows could be mishandled or usurped by corrupt officials. The most risk involved with using natural resources as a loan payment is that the two parties may agree on a fixed value of the resource which may be under or overvalued compared to market prices.

Another factor that makes Sino-Afro trade ideal is that Chinese SOEs have a higher risk tolerance than their Western counterparts. This is for several reasons. First, Chinese SOEs are "going global" to pursue national goals, and therefore have strong governmental support. Western companies on the other hand make investments based on free market mechanisms, and risk of a failed project fall entirely on the company.

Beijing leverages its political sway and huge cash reserves to cushion SOEs from risks encountered abroad. For example, when Sudan and South Sudan were at risk of engaging in a physical conflict in early April, 2012, China National Petroleum Company (CNPC) and the Chinese government were caught in the middle. CNPC is the major shareholder of a joint venture created to extract and produce oil in the Heglig oil fields, which lie along the borders of the rival nations. For a typical Western oil company, the risks involved in investing in these fields would outweigh the potential profits from the project. However, because CNPC is an SOE and its operations are aligned with China's national targets, it has a higher risk tolerance than its Western competitors. A report by Japan's Institute of Developing Economies (IDE-JETRO) summarizes it well:



"problems associated with political risk for Chinese companies investing in Africa are significantly offset by the willingness of the Chinese government to invest considerable 'diplomatic and political capital' in boosting Africa's influence..."

Western firms on the other hand, usually take free market risks, which are based on very sensitive political risk indicators, and will almost never be bailed out by the government. IDE-JETRO continues,

"Western companies are essentially on their own in making investment pitches in African countries. Chinese companies enter a market with the full institutional backing of the state covering financial resources, diplomacy, trade and development projects, and security and intelligence assistance."

There are also social reasons why trade and investment between Africa and the West have been dwarfed by China-Africa trade. There may be lingering negative sentiment from Europe's period of colonization in Africa. Mutual distrust could notably discourage and hamper any trade between the two regions. Furthermore, many Africans feel that Western institutions and nations adopt a superior and condescending tone when engaging in relations with Africa. Parallelly, China's trade and engagement with some of its Asian neighbors may be flecked with undertones of past wars, conflicts, or other negative events. On the other hand, China and Africa have had diplomatic ties for decades and its history is by and large clear of major conflict. A blemish-free history makes it easier for Chinese and African government officials to foster an environment of friendship and to work cooperatively to facilitate trade.

China has continuously emphasized that it seeks to pursue a win-win relationship in Africa. To prove its genuineness China has engaged in many soft power projects on the continent. Furthermore, China has less bureaucracy when it comes to initiating and implementing trade deals. As mentioned in Chapter 1, China's OFDI is considered an economic strategy for energy and growth security, and the government will steadfastly pursue these targets. Less bureaucracy results in rapid project implementation, an increasing flow of resources, and thus more success in meeting national targets.

This is in contrast with the World Bank, which is highly bureaucratic:

"I have found that a contract that would take 5 years to discuss, negotiate and sign with the World Bank takes three months when we have dealt with the Chinese"<sup>lxxv</sup>

Finally, the Sino-Afro trade model is a business development model, rather than an aid based model. African governments that engage in trade with the Chinese often realize immediate, physical results from trade. Infrastructure lays the foundation for the sprouting of businesses, which in turn encourages growth and finally more investment.



# Comparison of Chinese and Western Trade Models with Africa

#### China

- RFI trade complements Chinese-African economies
- Chinese are very cost competitive and can tolerate high risk
- Chinese SOEs pursue national targets and are backed by the government
- Chinese-African relations are relatively blemish free
- China's government strongly promotes win-win results and mutual benefit
- China has less bureaucracy and red tape for RFI deals, and less stringent ESG and risk management processes

#### Western nations

- Western contractors cannot compete as well on price, and find investing in Africa high-risk
- Western firms assume risks individually
- Europe's colonization of Africa may have lingering social effects, which impede investment
- Western nations, and multilateral institutions assume a patriarchal role
- Loans from institutions like the World Bank and IMF may take years to implement, however there are usually more measures taken to ensure that ESG factors are protected

#### **3.2 CASE EXAMPLES**

#### 3.2.1 GHANA – ENSURING SOUND INVESTMENT PRACTICES

In China's USD \$3billion loan to Ghana, it is required that a majority of the funds go to Chinese contractors for the slated construction projects. This presents a potential issue in terms of accountability and transparency.

With a lack of transparency comes the risk that nepotism may occur during the bidding process. Certain Chinese SOEs may be selected as a contractor based on preferential treatment rather than based on cost or quality leadership.

When resource contracts are signed, particularly those in the oil industry, executives sometimes receive "signing bonuses". Without transparency, there is a risk of embezzlement and misuse of funds. Disclosing every monetary aspect of a contract can help citizens hold their officials accountable to redirect the revenues made from resource extraction activities back into the economy and ultimately benefit the people, rather than being pocketed by a select few elite.



# 3.2.2 ZAMBIA – NEW INFRASTRUCTURE BUT INADEQUATE RISK MANAGEMENT

#### Building Infrastructure

In the annual "Global Competitiveness Review" the World Economic Forum uses 12 pillars to judge the competitiveness of an economy. The 2<sup>nd</sup> pillar used to assess competitiveness is infrastructure<sup>lxxvi</sup>. Undoubtedly infrastructure is one of the most paramount factors to economic development. Business executives continuously cite lack of infrastructure and the associated high transaction costs as a deterrent from opening businesses in Africa<sup>lxxvii</sup>.

In the case of the Zambia-China Cooperation Zone (ZCCZ), Chinese-built copperproducing infrastructure presents Zambia an opportunity to increase income from copper exports. Moreover, the Chinese have built several roads encompassing and connecting ZCCZ to regional areas and neighboring countries. It is reported that Chinese SOEs are working on building a transnational railway linking Zambia and its copper mines to ports in Tanzania<sup>lxxviii</sup>. Increased transportation not only lowers transaction costs for Chinese businesses operating there, but also for other foreign firms that may wish to start enterprises in Zambia but have been discouraged up until now due to infrastructural concerns. Therefore in many ways, the Chinese are laying the foundations for global businesses to enter Africa.

China also benefits from these construction contracts. As explained in Chapter 1, China in Africa contributes to Beijing's push for Chinese companies to "Go Global". Winning governmental contracts in Africa allows Chinese SOEs to gain industry and regional expertise, as well as to capture market share. It is reported that after finishing an infrastructure project in Africa, some Chinese will stay behind to open smaller businesses like restaurants, import-export trade centers, or small scale manufacturing plants<sup>laxix</sup>.

In addition to industrial infrastructure, China builds civil and public infrastructure as part of the resources for infrastructure (RFI) contracts. This includes schools, dams, bridges and hospitals. One well-publicized (albeit highly controversial) public project was the donation and construction of the African Union's headquarters in Addis Ababa, Ethiopia by the Chinese government and China State Construction Engineering Corporation<sup>1xxx</sup>. Dubbed "China's gift to Africa" projects like the African Union's headquarters help strengthen China's soft power and political relationships with African nations. Moreover, the civil projects help address societal needs like providing healthcare and education to citizens.

#### Anti-Chinese Sentiment

Anti-Chinese sentiment in Africa seems to be growing, and can pose a threat to China's long-term vision for the continent. Despite China's investment in Zambia's copper belt, for example, many Zambian citizens have protested China's industrial presence in the country and claim that their operational practices are harmful. There have been reports



issued on labor abuses of local citizens by the Chinese, including a highly publicized incident in which two Chinese managers shot 11 Zambian miners for protesting over wages.<sup>lxxxi</sup> Michael Sata, for instance, was recently elected President of Zambia using a strong anti-China platform.<sup>lxxxii</sup> It is highly unlikely however, that Zambia will cut its ties with China. Since being elected, Sata has changed his position and has actually encouraged Chinese investment. It will be necessary for both China and Zambia to require safety and environmental standards in their practices, in order to ensure that joint investments have the highest economic and social return.

# 3.2.3 ETHIOPIA – STIMULATING STAGNANT INDUSTRIES

Many question if China's investment may yield similar results as the "Wal-Mart Effect". That is, big business establishes itself in underdeveloped markets and offers consumers a greater variety of choice at a lower price point. Although consumers benefit, the local industry suffers because it simply cannot compete with bigger corporations on price. It is important to analyze how China's presence in African markets has affected local industries.

Peacock Shoe Manufacturers for example, is one of Ethiopia's largest exporters in the shoe industry<sup>lxxxiii</sup>. The company was started in 1992 with just four employees, and since then has expanded to 300 employees and three production factories.

Although the Ethiopian shoe market was experiencing an upward trend in growth, the markets were shaken around 2002 with the entrance of Chinese goods and competitors. Cheap and attractive Chinese shoes began to flood the market, absorbing market share from Ethiopian-produced genuine leather footwear, which was comparatively considered uncomfortable and unfashionable. Dozens of smaller manufacturers that were unable to adequately adapt to Chinese competition were forced to shut down. The workers employed in these factories were subsequently laid off, and finding new work was difficult since their job skills were very shoe leather-specific.

In this case, it is very clear to see that Chinese goods have had an initial negative impact on the market. However, it can be argued that increased competition has made the Ethiopian shoe industry stronger in the long run. Although many smaller Ethiopian shoe manufacturers were wiped out, there were several larger manufacturers that were able to adapt to the new competitive environment, and significantly improve their operations. For example, Peacock Shoe Manufacturers met the challenge presented by Chinese competition by importing manufacturing machinery from Europe. This equipment helped boost Peacock's output to 2,000 units per day and has resulted in annual revenues of USD\$4.5 million.

Moreover, Peacock worked to further improve the quality and attractiveness of its shoes. According to the Addis Fortune,



"the Chinese challenge presented an opportunity for Ethiopian shoe manufacturers by pushing them to focus on the quality, design and durability of their products so that they could win the hearts of... the local users."<sup>lxxxiv</sup>

At the same time, local consumers were beginning to realize that although Chinese shoes were cheaper, they were made from synthetic materials, and were of poor quality. This gave Ethiopian producers an advantage in recapturing market share.

It can be said that Chinese investment is acting as an electric shock for stagnant African markets. Although some smaller companies will surely flounder in China's shadow (a knee-jerk effect), the local markets as a whole will be forced to innovate and improve operations, which serves as a pathway to becoming globally competitive in the long run.

China, on the other hand, faces long-term risks of diminishing reputability. Africans are gradually beginning to recognize and criticize some Chinese imports as being cheap and of low quality.

# **3.3 OTHER SUSTAINABILITY ISSUES**

#### Fueling the Resource Curse

The "Resource Curse" is a commonly cited phenomenon in which countries rich in resources – particularly oil, and rare and precious metals – actually achieve less economic growth than countries with comparatively fewer resources. There are several causes for this paradox including exposure to price volatility in resource markets, mismanagement of resources, currency appreciation, lack of diversification of the national economy, and corruption from within the government. It can be said that China's investment in Africa contributes to the latter two factors.

The Zambia-China Cooperation Zone (ZCCZ) is undoubtedly a step forward for Zambia in strengthening its foothold in the global economy in the long run, however is it also possible that the ZCCZ has short-term negative impacts? Zambia has a highly copper-production-concentrated economy, which is made all the more concentrated with the construction of the ZCCZ. Copper accounts for 65% of Zambia's exports<sup>lxxxv</sup> and 20% of Zambia's entire GDP<sup>lxxxvi</sup>. This makes the nation incredibly vulnerable to swings in global markets and recessions. A healthy economy is one that is well diversified in both industrial and service sectors, and has diverse export offerings.

China's investment in Africa may also encourage corruption amongst government officials. China has adopted a non-interference foreign policy under which Beijing engages in trade with a country on purely economic terms, and with no consideration for the state's political or civil practices<sup>lxxxvii</sup>. For example, China continued to import Sudanese oil at the height of the Darfur conflict. This is in contrast to loans from the IMF, which are accompanied by stipulations such as "the privatization of national industries and democratic reform".<sup>lxxxviii</sup>



Moreover, the resource course is exacerbated by corrupt officials who may sometimes pocket income from oil. For example, in Nigeria, USD\$540 million out of USD\$1.675 billion in oil signing bonuses was unaccounted for and 3.1 million barrels of oil were missing from official records.<sup>lxxxix</sup> Nigeria was China's 5<sup>th</sup> largest recipient of FDI and 7<sup>th</sup> largest exporter of oil on the African continent in 2010. This is in no way to suggest that China is the cause of Nigeria's corruption, but rather that countries which are heavy exporters of natural resources are more prone to the resource curse.

Sudan also highlights a case in which oil production has created conflict. In April 2012, South Sudan seized a portion of northern Sudan's Heglig oil field for "illegally siphoning oil".<sup>xc</sup> The Heglig fields lay on the border of the rival countries and have been a highly contentious issue for the sovereignty of the two countries. China is a major shareholder with a 40% stake in the development of the Heglig oil field<sup>xci</sup>. The country's relationship with Sudan is particularly important because Sudan is China's 5<sup>th</sup> largest exporter of oil, supplying the country with 6% of its oil. Although China did make efforts to promote negotiations between the two countries, this measure was reactive rather than preventative, and it is possible that this oil producing region could stir up additional conflict between Sudan and South Sudan in the future.

Although it is difficult to pinpoint one specific factor that contributes to corruption and the "resource curse", China can help prevent the inflammation of these issues by adopting stronger governance standards, increasing transparency and disclosure, and lessening its "non-interference" policy.

# Poor Quality and Inadequate Knowledge Transfer

Some critics assert that the quality, durability and safeness of Chinese-built roads are substandard when compared to roads built by foreign contractors. The situation is exacerbated by the fact that many African nations lack the technical capacities to maintain the roads on their own. This lack of knowledge transfer extends to China's civil projects in Africa as well. It is reported that medical goods donated to a Chinese-funded malaria center in Tanzania have not been used because they only included Chinese language instructions, and Tanzanian doctors were given very little training on how to use them. According to an article written by the Financial Times, almost 10,000 Chinese malaria treatments have been "collecting dust for almost two years... [and] are within a few months of their expiry date."<sup>xcii</sup>

These examples highlight that constructing physical infrastructure is not enough. If China is very serious about strengthening African capacity and stimulating economic growth, there must be an adequate transfer and sharing of knowledge.



#### **Conclusion Remarks**

There are several solutions that both China and Africa can employ to ensure that Sino-Afro investment is both economically and socially beneficial.

- First, it would be useful for a multilateral institution like the African Development Bank to develop a uniform and customizable contract to be utilized between Chinese and African officials when negotiating RFI deals. This contract would help reduce the time and costs necessary when implementing these transactions. The contract template would be distributed to government delegates across the continent, and can be custom-tailored to the unique aspects of the deal.
- China usually takes the biggest piece of the cake in RFI deals, sometimes stipulating that at least 60% of loans be used to hire Chinese contractors. Africa must "more competently negotiate contract terms as to get the best deal possible."<sup>xciii</sup> The prefabricated contract would be designed to ensure that the trade and investment is equitable, and Africa is receiving as much as it is giving. The contract may also suggest establish some sort of technology transfer scheme. African governments may find it beneficial to adopt laws like those in China that require foreign firms to establish a joint venture with a local firm, in order to be able to conduct business within domestic territory. This allows the local company to tap into its partner's wealth of knowledge, and over time economic growth can be less dependent on FDI and more fueled by domestic business.
- Finally, Sino-Afro trade needs more transparency. Improved transparency is the first step to tackle resource curse in Africa, as it will help to reduce the possibility of bribery and inadequate allocation of revenues. Better disclosure is also the best way for Chinese companies to obtain their social licenses to operate and to reduce reputational risks in Africa. Only if the local communities and employees of Chinese companies can get access to the information that Chinese companies are doing fair play, they will not protest against Chinese investment and contribute to the win-win development of Sino-Afro trade.

China has played a crucial role in Africa in the last decade, and the former has recently pledged USD\$20 billion to the latter in the upcoming years. There is no doubt that China is helping Africa unlock its economic potential through the construction of infrastructure and investment into key economic industries. At the same time, these investments pose some risks. The resource curse, inequitable trade, and increasing social friction are dangerous to the long-term benefit and success of China's presence in Africa. In order to mitigate these risks, it's necessary to adopt stronger standards when negotiating Resources for Infrastructure contracts. Moreover, transfer of knowledge will be one of the largest determinants of Africa's ability to become economically dependent. The next decade will see several African countries become major players in the global arena, perhaps much in thanks to China.



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