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The Effect of Chinese Oil and Gas Exploration on the Economies of Africa

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Introduction

This paper aims to explore the techniques and effects of Chinese oil and gas exploration in the oil-rich nations of Africa, and to compare the market infiltration strategies Chinese firms use in underdeveloped markets with the strategies that bring results in developed markets. In evaluating the strategies employed and the outcomes of each, this paper will show that Chinese outsourcing of oil and gas production to Africa has ultimately been a negative influence for those African nations impacted by these efforts. Additionally, the strengthening of ties between the government of China and small African nations has created a lopsided political dynamic, upsetting international political stability and prompting the United States and other influential nations to vie for control within the African political sphere. Chinese corporate strategy has created an environment which supports Chinese development and national interests at the expense of smaller nations.

Historical Presence

Since the early second century BC, China has played a significant role in economic, social, and political development within Africa.¹ Records of Sino-African exchanges reveal encounters occurring with heightened frequency between China and Africa beginning in the Tang Dynasty (which began in 618 AD)². More recent records, dating back to the Ming Dynasty (1368–1644 AD)³, show serious military and political involvement in the area. For example, between the years of 1404 and 1433, the Ming Emperor XuanDe sent seven separate expeditions with the ultimate goal of expanding China's sphere of influence to the east and south of the empire. The largest of the expeditions involved 37,000 troops and 62 vessels.⁴

A slightly more sinister side of China's involvement in Africa is revealed by the systematic importation of African men, women, and children to feed the demand for slave labor in China. This systematic practice of buying and selling African slaves dates back to the Tang, as evidenced by Professor Chang Hsing-Lang's excerpt from the Ping Chiu: "Many wealthy people of Canton (Guang Zhou) keep Kwei-nu ('devil slaves'). These are endowed with prodigious strength..... Their skin is inky black, their lips red, their teeth white, and their hair is woolly and tawny."⁵

¹ "Friendly Exchanges between China and Africa." 中非发展基金. China Africa Development Fund, 20 Dec. 2007. Web. 2 Feb. 2014. <<http://www.cadfund.com/en/NewsInfo.aspx?Nid=76>>.

² Chen, John. "New Thoughts on the Use of Chinese Documents in the Reconstruction of Early Swahili History." JSTOR. African Studies Association, 1995. Web. 20 Feb. 2014. <<http://www.jstor.org/stable/3171921>>.

³ Ibid

⁴ Ibid

⁵ Chang, Hsing-Lang. "THE IMPORTATION OF NEGRO SLAVES TO CHINA UNDER THE TANG DYNASTY (A. D. 618-901)." CATHOLIC UNIVERSITY OF PEKING BULLETIN NO. 7 7 (n.d.): 37-59. University of Oregon Library. Web. 20 Feb. 2014. <<http://library.uoregon.edu/ec/e-asia/read/tangslave-3.pdf>>.

Regardless of the motives for China's presence in Africa, the effects of Chinese international strategy were felt long before modern industrialization of Chinese firms. It is perhaps worthwhile to consider the parallels between the historical intrusions of Imperial China on the African continent and the present-day frenzied quest for natural resources—particularly oil reserves—of the modern, industrialized, monolithic China. The similarities between the Chinese "imperialism" of old and the resource production of today offer an interesting lens through which modern Chinese involvement in Africa can be viewed.

Modern China

The recent expansion of Chinese interest and activity in the African continent has focused largely on investment into the field of oil exploration. China has entered into an era of economic expansion and international influence that it has not seen since the KangXi Emperor of the 1700's. Since 1999, China's domestic economic growth has ranged between 7% and 12%. Per capita PPP surged from \$253 in 1980 to \$9,900 in 2013⁶. To fuel such massive growth, China has expanded its resource-gathering efforts to the international stage. With much of the industrialized world looking the other way, China moved rapidly into the African nations of Angola, Nigeria, Sudan, and other oil rich African nations.⁷ The unexploited resources in these impoverished settings seem to offer a fast and workable solution to China's sudden outside demand. Resources in Africa provide an ideal opportunity for growing Chinese manufacturing firms to meet the burgeoning demand for petroleum based products. By structuring long-term deals and by reserving the rights to natural resources throughout the continent, Chinese firms have managed to gain long-term access to strategic resources throughout a wide swath of Africa.

In return for these oil rights, China has been able to provide a much-needed injection of capital into the domestic markets as well as essential funding for infrastructure projects. Among the temptations that could be had with Chinese capital were such sorely needed infrastructure projects as modern roads, hospitals, and schools.⁸ These and other projects contain the implicit promise of rapid domestic development and increased economic activity. Given the nature of Chinese funding, the potential benefit of large-scale economic activity by the Chinese on the African continent should have provided a stable platform for a multiplied return on investment. Improvements to and investments in health, education, and infrastructure all offer long-term benefits for the people of those nations whose oil wealth the Chinese are buying.

⁶ "GDP per Capita by Country 1980-2012 - Knoema.com." Knoema. IMF World Economic Outlook, n.d. Web. 21 Apr. 2014. <<http://knoema.com/pjeqzh/gdp-per-capita-by-country-1980-2012#China>>.

⁷ "China in Africa." US Africa Journal. US Africa Journal, n.d. Web. 25 Feb. 2014. <<http://www.usafricajournal.com/wp-content/uploads/2013/04/China-in-Africa-300x336.jpg>>.

⁸ Umejel, Emeka. "Why China's 'Infrastructure for Resources' Failed in Nigeria." American Daily Herald. American Daily Herald, 31 Aug. 2013. Web. 25 Feb. 2014. <<http://www.americandailyherald.com/world-news/africa/item/why-china-s-infrastructure-for-resources-failed-in-nigeria>>.

Unfortunately, such idealized consequences of Chinese investment are not a reflection of the true nature of these structured deals. With respect to infrastructure projects, such as roads and bridges leading into extraction sites, much of what has been built by Chinese firms has lasted just long enough to allow for oil extraction. Once the extraction of resources is complete and the wealth of an area is exhausted, the Chinese firm departs; it has been the general pattern that the Chinese- built elements of the modern infrastructure that the firms leave behind soon fall into disrepair.⁹ Of the capital that is invested directly into the domestic markets, much is lost to corruption, inefficiencies, and poor investment decisions, meaning that there is only a faint lasting impact on the region; little of what the Chinese have brought in to help fund long-term development in the region makes it to its final destination.

Energy Consumption in China

China's booming domestic economic growth has fueled a dramatic increase in energy consumption and production. Between 1978 and 2000, while the Chinese economy was growing at a rate of 9% annually, the demand for energy grew at a more subdued 4%.¹⁰ After 2001, economic growth continued at about the same rate as previously, while the growth in energy demand more than tripled, to reach 13% a year¹¹. China is currently the world's largest energy producer and consumer, having overtaken the lead once held by the United States in 2010¹².

Historically, most of China's energy production has come from coal. In the 1950's for example, coal accounted for 95%-99% of all domestic energy production in China.¹³ More recently, however, coal's dominance over the Chinese energy market has dropped, and by 2011 coal accounted for a substantially reduced 69% of total energy production.¹⁴ China has balanced this decreasing reliance on coal by shifting the national energy focus to oil and gas sources. Whereas in the 1950s oil and gas accounted for less than 2% of all energy production, as of 2011 it accounted for 18%. Such a percentage may seem somewhat trivial—but viewed in a global perspective, it takes on new meaning: 18% of the world's

⁹ "Mapping Support for Africa's Infrastructure Investment." OECD. OECD, 2012. Web. 26 Feb. 2014. <<http://www.oecd.org/daf/inv/investment-policy/MappingReportWeb.pdf>>.

¹⁰ Rosen, Daniel H., and Trevor Houser. "China Energy A Guide for the Perplexed." (n.d.): n. pag. May 2007. Web. 20 Feb. 2014. <<http://www.iie.com/publications/papers/rosen0507.pdf>>.

¹¹ Ibid

¹² Schwartz, Spencer, and Shai Oster. "China Tops U.S. in Energy Use." Wall Street Journal. N.p., 18 July 2010. Web. 20 Feb. 2014.

<<http://online.wsj.com/news/articles/SB10001424052748703720504575376712353150310>>.

¹³ Key China Energy Statistics. Publication. Lawrence Berkeley National Laboratory, June 2012. Web. 20 Feb. 2014. <<http://china.lbl.gov/sites/all/files/key-china-energy-statistics-2012-june-2012.pdf>>.

¹⁴ "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." US Energy Administration-China. U.S Energy Administration, 4 Feb. 2014. Web. 20 Feb. 2014. <<http://www.eia.gov/countries/cab.cfm?fips=CH>>.

largest energy market, for example, represents an amount that is more than twice the total energy used by New Zealand in 2012.¹⁵

Such enormous demand, with no sign of abating, presents China with a pressing problem. The Chinese consume more oil-based energy than most other nations consume total energy. China simply lacks the natural resources to support such economic growth; and the risks inherent in failure to meet demand are dangerous. Reliance on oil has the potential to cripple the nation, if the required oil reserves to sustain such consumption are not made available.

China is by no means an oil-rich nation: it has proven domestic oil reserves of 20.4 billion barrels—a figure dwarfed by Saudi Arabia's domestic reserves of 270 billion barrels. In fact, at the current rate of domestic oil consumption, were China to rely on solely on domestic oil to fuel national energy production, the domestic supply would only last another 5.5 years.¹⁶ If energy production and consumption continue to grow exponentially, this life expectancy of domestic reserves will be even shorter.¹⁷

In order to address the increasing gulf between domestic oil production and consumption, China has become highly dependent on imported oil. In fact, in 2014, China is expected surpass the United States in volume of imported petroleum¹⁸. As has been the case in the United States, China's reliance on foreign oil has created uncertainties in supply, dependency on other nations, and international vulnerability. In an attempt to rectify the issue, China has recently begun a massive overseas mission of oil exploration and extraction. This is where the oil-rich and cash-strapped nations in Africa take center stage, and the exploitation of African resources comes into play.

Chinese Oil Firms and Production

Firms

Many of the most important industries in China are led by hybrid so-called “state-owned enterprises” (SOEs). The nature of such firms provides a dynamic business environment and allows for highly creative and flexible exploitation of the local and international marketplace in a range of industries. SOE's are structurally different from standard publically owned firms in that their ultimate purpose is to fulfill the needs of the state. They are an extension of national interests, and are tools through which governments accomplish set tasks. The main fault of SOE's lies in their corporate structure. They are

¹⁵ "New Zealand" CIA World Factbook. Central Intelligence Agency, n.d. Web. 25 Feb. 2014.

<<https://www.cia.gov/library/publications/the-world-factbook/geos/nz.html>>.

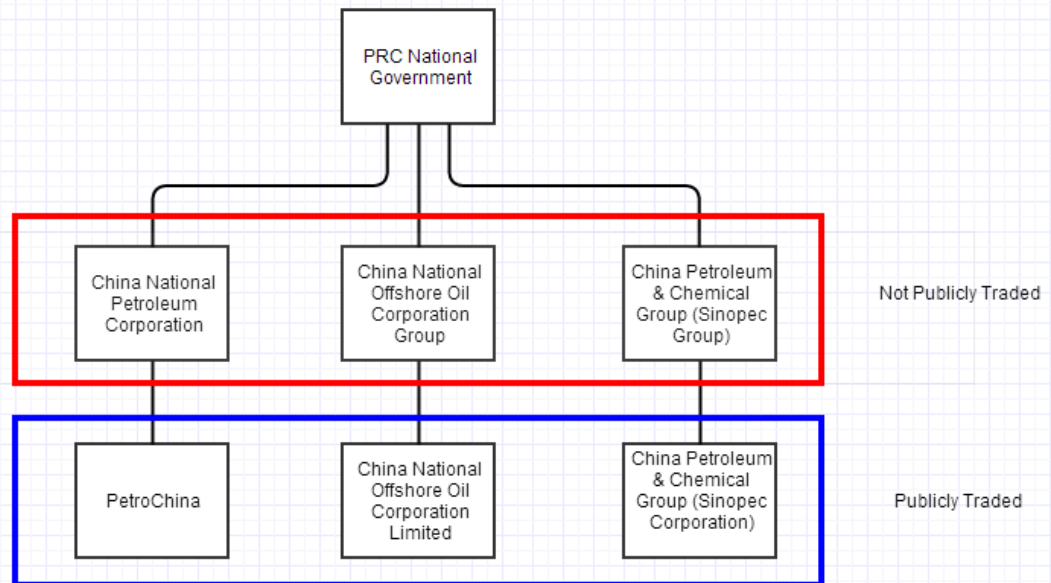
¹⁶ "EIA Countries-Oil Consumption." *U.S Energy Information Administration*. U.S Energy Information Administration, n.d. Web. 21 Feb. 2014. <<http://www.eia.gov/countries/index.cfm?view=consumption>>

¹⁷ Ibid

¹⁸ Ibid

owned, run, and funded by the government. Competition is minimal, and incentives for increased efficiencies and cost cutting strategies are non-existent. SOE's therefore provide an environment which encourages wasteful resource allocation and promotes inefficiency. Nonetheless, they are an effective tool in meeting the demands of national governments, and are therefore seen extensively throughout the world.

Chinese oil companies are one of the chief recipients of the advantages afforded SOE's; all three of China's largest oil firms reflect a dual government-corporation structure. China National Petroleum Corp (CNPC) is a 100% government owned Petroleum Company. CNPC owns an 88% share of PetroChina,¹⁹ which acts as a corporate front for CNPC in international stock markets. The remaining 12% of PetroChina is traded on the NYSE and Hong Kong Stock Exchange (SEHK). China National Offshore Oil Corporation (CNOOC), has a similar structure in the CNOOC Group is a 100% government owned parent company for CNOOC Limited, of which they own 65%.²⁰ CNOOC Limited is traded on the NYSE and SEHK, while CNOOC Group is not. The third and final petroleum company is the China Petroleum & Chemical Group (CNPC, also known as Sinopec Group).²¹ CNPC owns 73% of China's second largest publicly traded petroleum company, Sinopec²² Corporation. These relationships are outlined in Figure 1 for clarity.



The three main Chinese petroleum firms operate very differently in international markets. CNPC and PetroChina will generally work together in the international market to ensure both parties receive a desirable outcome. For example, when conducting international acquisitions, CNPC will front the capital and push through an acquisition. After the deal is

¹⁹ "Sino-Africa Oil Information." E-mail interview with David Hurd (Senior). 23 Feb. 2014.

²⁰ Ibid

²¹ Ibid

²² Ibid

successful, CNPC will turn around and sell part of any international acquisition to PetroChina. The CNOOC Group is typically not active in the international markets, and more often than not lets its subsidiary, CNOOC Limited, conduct international business. On the other hand, Sinopec Group, the parent company of Sinopec Corporation, generally runs international market involvement. Only on rare occasions will Sinopec Group then resell assets to Sinopec Corporation.²³ The importance of firm structure will be made apparent in the Comparing International Strategy section.

National Production

As mentioned under *Energy Consumption in China*, national reserves currently hover around 20 billion barrels. Between the big three oil firms, current domestic production hovers around 4.3 million barrels per day (while domestic consumption in China is currently at 10 million barrels per day). Of the 4.3 million barrels, CNPC accounted for 2.3 million barrels per day²⁴ (110.33 millionx7=barrels/year. Brls/year/365=barrels per day), CNOOC Limited produced approximately 800,000 barrels per day,²⁵ and Sinopec accounted for the remaining 900,000 barrels per day.

International Production (With Focus on Africa)

Before exploring the impact Chinese firms are having in Africa, it is necessary to understand the drivers for international expansion. As has been made clear, current domestic oil consumption in China far exceeds production. In order to deal with current and future energy crisis and issues, China formed the National Energy Commission in 2010. The stated mission of this government-backed body is to "increase oil and gas reserves, expand production, and diversify sources of supply"²⁶

After its first meeting on April 10th, 2010, the Commission declared "securing energy supply through international co-operation"²⁷ to be one of the six major focus areas. Though initially the proposals of the National Energy Commission may not seem critically important, it is crucial to note that the goals of the national government are reflected in the actions of its organizational entities, which include the parent companies of China's three largest petroleum firms. Thus, the goals of the Chinese government are reflected in the actions of CNPC, CNOOC Group, and SINOPEC Group, which then impose the goals of the government onto the publicly traded companies they own (PetroChina, CNOOC

²³ "Sino-Africa Oil Information." E-mail interview. 23 Feb. 2014.

²⁴ "China National Petroleum Corporation 2012 Annual Report." China National Petroleum Corporation. China National Petroleum Corporation, 2013. Web. 26 Feb. 2014.

<<http://www.cnpc.com.cn/en/press/publications/annualreport/2012/PageAssets/Images/0-2012%20Annual%20Report.pdf?COLLCC=2370407706&>>.

²⁵ "CNOOC Limited Annual Report 2012." 中国海洋石油有限公司. 中国海洋石油有限公司, 2013. Web. 25 Feb. 2014. <<http://www.cnoccltd.com/cnoccltd/>>.

²⁶ Julie, Jiang, and Sinton Jonathan. "OVERSEAS INVESTMENTS BY CHINESE NATIONAL OIL COMPANIES."

International Energy Agency. International Energy Agency, Feb. 2011. Web. 25 Feb. 2014.

<http://www.iea.org/publications/freepublications/publication/overseas_china.pdf>.

²⁷ Ibid

Limited, and Sinopec Corporation). Therefore, the Chinese government has indirect control over all three major public petroleum firms within China. This means the corporate strategies of these public firms often reflect the national strategies of China. With that in mind, China's drive to "supply energy through international cooperation" is being enacted by PetroChina, CNOOC Limited, and Sinopec Corporation.

Oil in Africa

In order to understand the interest China has in Africa, it is critically important to understand Africa itself. With 54 countries in total, Africa is the least developed of any inhabited continent. With all but two countries ranking between low and medium on the Human Development Index Scale²⁸ of country classification, Africa provides a hotbed of untapped development potential. With the continent's oil reserves totaling near 10% of the world's total,²⁹ the potential benefit for developing African energy resources is clear. In terms of oil reserves, the five most oil-rich nations in Africa are Libya (48 billion barrels), Nigeria (37 billion barrels), Algeria (12.2 billion barrels) Angola (10.47 billion barrels) and Sudan (5 billion barrels).³⁰ It is worth noting from the outset that two of these countries (Libya and the Sudan/South Sudan) are places that have long been subject to international trade restrictions based on human rights and political issues—in other words, the Chinese companies, as they began exploitation in these areas, were unlikely to meet with heavy competition from more established international petroleum companies. All of Africa has an estimated grand total of nearly 130 billion barrels of oil (more than 5 times China's 20-plus bb of reserves); the top five oil-rich nations account for 113 billion barrels³¹ (87% of the entire continental reserves). It is hardly astonishing that China, poised to be the world's largest consumer of energy, is eager—or possibly desperate—to secure a firm grip on the petroleum resources that are hidden in Africa. China needs these reserves to survive; and the niceties of human rights or political considerations conveniently do not obstruct China's path.

Countries of Operation

All three large Chinese oil firms have substantial operations in African oil fields. Both the Chinese parent entities and the publicly traded entities have gained a significant foothold

²⁸ "Human Development Reports." United Nations Development Programme. United Nations, 14 Mar. 2013. Web. 25 Mar. 2014. <<http://hdr.undp.org/en/countries>>.

²⁹ Katsouris, Christina. "Africa's Oil and Gas Potential." ChathamHouse.org. Chatham House, n.d. Web. 25 Feb. 2015. <<http://www.chathamhouse.org/sites/default/files/public/Research/Africa/161111katsouris.pdf>>.

³⁰ "Oil and Gas in Africa." *KPMG Africa*. KPMG, 2013. Web. 25 Feb. 2014. <<https://www.kpmg.com/Africa/en/IssuesAndInsights/ArticlesPublications/Documents/Oil%20and%20Gas%20in%20Africa.pdf>>.

³¹ "Oil and Gas in Africa." *KPMG Africa*. KPMG, 2013. Web. 25 Feb. 2014. <<https://www.kpmg.com/Africa/en/IssuesAndInsights/ArticlesPublications/Documents/Oil%20and%20Gas%20in%20Africa.pdf>>.

on the continent; today, Chinese firms have been granted access to oil fields in Libya, Sudan, Nigeria, Angola, Uganda, Mozambique, and Algeria.³² With the extent of China's, and with China's new drive to "supply energy through international co-operation,"³³ Africa suddenly becomes an attractive investment site for Chinese oil firms.

China's Strategy in Africa

When looking at markers of development, as outlined in the 2013-2014 World Competitiveness Report, most large oil producing nations in Africa are seen to be underdeveloped (Figure 2)³⁴. This enticingly unexploited and untested situation provides China's oil giants with an investment opportunity unique to any other. Flexible and unhampered by restrictive structures of corporate responsibility, China's oil companies can take ready advantage of the African environment by modifying their ordinary international market strategies and adapting their approach to suit these less-developed nations. This section seeks to prove that normal international regulations and generally accepted practices play a less central role in African oil development than in other energy sectors around the world.

Figure 2:

Country	Market Size	Infrastructure	Macroeconomic Environment	Protection of Intellectual Property Rights	Ethical Behavior of Firms
Algeria	48	106	34	145	138
Angola	65	145	54	137	145
Libya	80	103	16	146	102
Mozambique	104	130	98	129	124
Nigeria	32	135	46	121	131
Sudan	N/A	N/A	N/A	N/A	N/A
Uganda	89	133	133	119	98

Source: World Competitiveness Report³⁵

Mergers and Acquisitions

Spearheading China's international energy strategy are mergers and acquisitions of foreign oil and gas firms in order to secure domestic energy resources. For example, in March 2013 CNPC acquired a \$4.2 billion stake (28%) in Eni Mozambique.³⁶ Eni is Italy's largest

³² "China in Africa." US Africa Journal. US Africa Journal, n.d. Web. 25 Feb. 2014.

<<http://www.usafricajournal.com/wp-content/uploads/2013/04/China-in-Africa-300x336.jpg>>.

³³ "EIA Countries-Oil Consumption." U.S Energy Information Administration. U.S Energy Information Administration, n.d. Web. 21 Feb. 2014. <<http://www.eia.gov/countries/index.cfm?view=consumption>>.

³⁴ Schwab, Klaus. "The Global Competitiveness Report 2013-2014." World Economic Forum Reports. World Economic Forum, 2013. Web. 1 Mar. 2014. <<http://www.weforum.org/reports/global-competitiveness-report-2013-2014>>.

³⁵ Ibid

³⁶ Haas, Benjamin, and Aibing Guo. "CNPC to Buy Stake in Eni Mozambique Assets for \$4.2 Billion." Bloomberg.com. Bloomberg, 14 Mar. 2013. Web. 22 Apr. 2014. <<http://www.bloomberg.com/news/2013-03-14/cnpc-to-buy-stake-in-eni-s-mozambique-assets-for-4-2-billion.html>>.

integrated energy company with operations all around the world.³⁷ In Mozambique, they run an operation dubbed "Area 4", of which CNPC and PetroChina now own 28%. Area 4 is expected to provide 75 trillion cubic feet of natural gas, meaning CNPC has acquired access to 21 trillion cubic feet of natural gas, the energy equivalent of billion barrels.³⁸

In 2011, according to CNOOC Limited's key operating areas overview "the Company entered into a sales and purchase agreement with Tullow and TOTAL S.A. to acquire one-third of the interest in each of Exploration Areas 1, 2 and 3A in Uganda." The deal was finalized in February 2012, and the goal throughout 2013 was to "actively develop the Kingfisher oilfield."³⁹

Sinopec Group's offer to buy the Houston-based Marathon Oil Corp offshore Angolan oil and gas field for a total of \$1.5 billion is another example of Chinese acquisition of African oil fields. The transaction was headed by Sinopec Group's subsidiary, Sinopec Limited.⁴⁰ Other transactions include the 2006 deal by CNOOC Limited which secured 45% of working interest from South Atlantic Petroleum Limited in the Nigerian oil field OML 130 for \$2.268 billion cash.⁴¹

As it is clear China's involvement in Africa relies heavily of the acquisition on local oil fields, it is important to understand what this strategy tells us about the current situation and future prospects of Chinese oil exploration. Why are mergers and acquisitions driving Chinese expansion in Africa? Why do licensing, Green Field investments, and joint ventures not play a more central role? The answer, in my opinion, is a very simple one: China has money. This will be elaborated on in the next section.

Oil Backed Loans

As part of China's policy of engagement in Africa, resource (oil) backed loans serve a central role in assuring Chinese firms are well received. Resource backed loans are guaranteed transfers of capital backed by resources like crude oil, "In the case of China, it develops

³⁷ "Eni - Company." Eni. Eni, n.d. Web. 22 Apr. 2014.

<http://www.eni.com/en_IT/company/company.shtml?home_2010_it_tab=navigation_menu>.

³⁸ Haas, Benjamin, and Aibing Guo. "CNPC to Buy Stake in Eni Mozambique Assets for \$4.2 Billion." Bloomberg.com. Bloomberg, 14 Mar. 2013. Web. 20 Mar. 2014. <<http://www.bloomberg.com/news/2013-03-14/cnpc-to-buy-stake-in-eni-s-mozambique-assets-for-4-2-billion.html>>.

³⁹ "Key Operating Areas." [Http://www.cnoc ltd.com/](http://www.cnoc ltd.com/). [Http://www.cnoc ltd.com/encnooltd/aboutus/zygzq/overseas/1961.shtml](http://www.cnoc ltd.com/encnooltd/aboutus/zygzq/overseas/1961.shtml), n.d. Web. 25 Feb. 2014. <www.cnoc ltd.com/encnooltd/aboutus/zygzq/overseas/1961.shtml>.

⁴⁰ "Sinopec Buys Marathon's Angola Oil Fields for \$1.52 Billion." [Http://www.african-markets.com](http://www.african-markets.com). Reuters, 24 June 2013. Web. 25 Feb. 2014. <www.african-markets.com/2Fen%2Fnews%2Finternational%2F605-sinopec-buys-marathon-s-angola-oil-fields-for-1-52-billion>.

⁴¹ "CNOOC Limited Acquires 45 % Stake in Offshore Nigerian Oil Mining License 130 for US \$2.268 Billion Cash." CNOOC LIMITED. CNOOC Limited, 9 Jan. 2006. Web. 22 Apr. 2014. <<http://www.cnoc ltd.com/encnooltd/newszx/news/2006/809.shtml>>.

infrastructure, which is lacking in most African countries and gets paid with resources."⁴² According to Ana Alves, this model "was first developed in London by private banking institutions (British, French, Dutch) to mitigate the risk of lending to resource-rich African governments."⁴³

Why China's Corporate Structure is Important

China's current trade surplus amounts to \$32 billion per year.⁴⁴ Much of this surplus manifests itself in terms of foreign exchange reserves, which total \$3.66 trillion. These reserves are used to purchase debt and securities worldwide. China's stable monetary position has a trickledown effect for national enterprises. CNPC, CNOOC Group, and Sinopec Group all reap the benefits of a financially healthy China. With the financial backing of the world's most wealthy nation, the financial cost of mergers and acquisitions is relatively small. Even when purchases are conducted through the publicly listed subsidiary to national energy firms, financial backing from China may be supporting the transactions. An issue raised by government involvement in public firms is phrased well in the 88 Queensway Group case study, "Are investments in Africa by Chinese companies state directed and made for strategic purposes, or are they commercially oriented and profit driven?"⁴⁵ This question is inherently difficult to answer, as oftentimes it depends entirely on the individual circumstances. Analyzing investment trends will give insight into the fundamental purpose for investment. The next section, titled, *FDI and National Interest*, will attempt to draw links between national interest and FDI trends in Africa by top oil firms in order to prove investment is driven by nation interest and not private profit.

The second and probably most crucial aspect of indirect national backing for publicly traded firms is that international corporate regulations do not apply. Deals can be orchestrated directly between African firms or investors and the Chinese government. For example, companies listed on the NYSE are expected to follow US corporate and international law. As a result, when the United States imposes sanctions on a foreign nation, companies are expected to adhere to the regulations laid out by sanction documentation. US sanctions against Sudan⁴⁶ for example, make it difficult, if not

⁴² Umejel, Emeka. "Why China's 'Infrastructure for Resources' Failed in Nigeria." American Daily Herald. American Daily Herald, 31 Aug. 2013. Web. 25 Feb. 2014. <<http://www.americandailyherald.com/world-news/africa/item/why-china-s-infrastructure-for-resources-failed-in-nigeria>>.

⁴³ Ana Christina, Alves. "Chinese Economic Statecraft: A Comparative Study of China's Oil-backed Loans in Angola and Brazil." Journal of Current Chinese Affairs (2013): 99-130. Web. 5 Mar. 2014. <<http://journals.sub.uni-hamburg.de/giga/files/journals/3/articles/593/public/593-618-1-PB.pdf>>.

⁴⁴ "China Balance of Trade." Trading Economics. Trading Economics, Jan. 2014. Web. 1 Mar. 2014. <<http://www.tradingeconomics.com/china/balance-of-trade>>.

⁴⁵ Lee, Levkowitz, McLellan Martha, and J. R. Warner. "The 88 Queensway Group." US-China Economic and Security Review Commission. Economic and Security Review Commission, 10 July 2010. Web. 3 Mar. 2014. <www.uscc.gov%2FResearch%2F88-queensway-group-case-study-chinese-investors%25E2%2580%2599-operations-angola-and-beyond>.

⁴⁶ "US-Sudan Relations." Embassy of the United States Khartoum, Sudan. Embassy of the United States, n.d. Web. 26 Feb. 2014. <http://sudan.usembassy.gov/ussudan_relations.html>

impossible, for direct investment in Sudanese assets. State run enterprises in China, such as CNPC, need not abide by US rules and regulations. For example, in 2000, CNPC entered the Sudanese oil market with the construction of the Khartoum Refinery, "with an annual crude processing capacity of 2.5 million tons." That same refinery is now listed as a PetroChina asset in Sudan.⁴⁷ PetroChina was successfully able to circumvent US sanctions against Sudan while staying within the confines of international law.

FDI and National Interest

Referring back to the question initially posed by Lee Levkowitz, Marta McLellan Ross, and J.R. Warner in their case study of The 88 Queensway Group, "Are investments in Africa by Chinese companies state directed and made for strategic purposes, or are they commercially oriented and profit driven?"⁴⁸, we see one of the strategic challenges confronting western companies attempting to penetrate the African market. Though the findings of the 88 Queensway study suggested that Chinese national interests were being represented by a host of private Chinese firms working in Angola, these findings were not conclusive, and were focused solely on the activities of The 88 Queensway Group. This question, therefore, remains a hotly debated issue. Without direct evidence it is difficult to draw precise conclusions as to the true nature of Chinese investment in Africa. Indirect evidence, however, may provide insight into the true investment motives driving Chinese oil firms.

Trends in Chinese oil offshoring projects reflect the hidden political agenda of publicly traded Chinese oil and gas firms. While some may argue there is no direct correlation between Chinese political goals and the goals of publicly held firms, there exist a variety of examples which may help refute this claim. The most important example comes not in the form of a single occurrence, but rather as a constant trend in African oil production. The first step in many Sino-African oil projects is the advancement of a loan to the host African nation by a national Chinese bank. The Chinese Government can then make a claim on oil rights within the African nation. This has been seen, for example in the case of the 2004 loan to Angola in return to oil block 18 rights.⁴⁹ After a nationally owned Chinese firm, such as Sinopec Group, moves in, exploration is conducted and assets are then transferred to publicly traded Chinese oil firms such as Sinopec Limited. In this manner, it can be concluded that Chinese oil firms are present in Africa not in the interest of fair trade and cost savings, but rather as agents to meet the political goals of the Chinese government.

⁴⁷ "Petrochina Refineries." A Barrel Full. Petrochina Company Limited, n.d. Web. 22 Feb. 2014.

<<http://abarrelfull.wikidot.com/petrochina-refineries>>.

⁴⁸ Lee, Levkowitz, McLellan Martha, and J. R. Warner. "The 88 Queensway Group." US-China Economic and Security Review Commission. Economic and Security Review Commission, 10 July 2010. Web. 3 Mar. 2014.

<www.uscc.gov/research/88-queensway-group-case-study-chinese-investors-operations-angola-and-beyond>.

⁴⁹ "Greater Plutonio, Block 18, Angola." *Offshore-Technology*. N.p., n.d. Web. 25 Mar. 2014.

<http://www.offshore-technology.com/projects/greater_plutonio>.

Difference in International Strategy

China's oil and gas strategy in Africa is unique to the African continent. Differences between China's international strategies allow for insight into how the unique structure of Chinese oil firms is able to adapt to individual circumstances. For the most part, Chinese investment in Africa is in the form of oil- or resource-backed loans. These loans are financial injections into local African economies provided by China and backed by promises of access to oil fields or continuous oil supply from one African nation to China. The reason the strategy employed in Africa is interesting is because it is unique, and completely distinct from strategies used in more developed nations. For example, in another one of China's large oil markets, Australia, the construction of infrastructure and offering of oil-backed loans is not applicable. Competing in a developed market means Chinese acquisitions of domestic oil fields and petroleum firms are based on a competitive capital market structure. While the variation in market strategies may be self-evident, what it says about the Chinese petroleum industry is important. Structurally and financially, Chinese petroleum companies are flexible and adaptable to diverse international conditions. This is due in large part to their ability to access nearly endless funding. A constant stream of capital from the Chinese national government provides flexibility: Chinese petroleum firms can quickly access and allocate large funds. This allows for swift changes in corporate strategy as planning and saving become less important. It also gives Chinese firms an advantage over the competition by granting Chinese SOE's the ability to outbid the competition whenever necessary.

Benefits Provided by Chinese Investment

Infrastructure

Supporters of Chinese investment in Africa argue that the economic growth, social stability, and investment projects offered by China create an environment which ultimately has a beneficial effect on African nations. It is important to keep in mind that not only is the oil sector providing jobs directly, but resource-backed infrastructure projects and infrastructure for oil projects also create construction jobs, manufacturing jobs, and material transportation jobs. That being said, this section will discuss the benefits of Chinese investment in an overall sense, because isolating jobs created by oil- and gas-related activities is beyond the scope of this paper.

China's role in building domestic infrastructure is cited as a direct benefit the Africa people receive from Chinese investment. For example, Wei Jianguo, former vice-minister of commerce and secretary-general of the China Center for International Economic Exchanges, was quoted saying, "Chinese companies have made big contributions to local

communities when they expand abroad, such as building roads and schools".⁵⁰ Projects ranging from hydropower plants in Nigeria, trade ports in Mauritania, modern railways in Gabon, roads across the continent, and water and sanitation projects in Angola and Nigeria.⁵¹ Financing for these projects is provided by China on the basis of a resource backed loan, such as a US\$2 billion dollar investment to rebuild infrastructure damaged by the civil war in Angola that was secured with the promise of 10 000 barrels of Angolan crude per day for 17 years.⁵²

Another example is the construction of two gas-fired power plants in Nigeria in exchange for " a [renewable] deal to purchase 30 000 barrels of crude oil a day from the Nigerian National Petroleum Corporation (NNPC) for a period of one year"⁵³ These projects have a generally positive effect on the economies of Africa, as many lack the supporting infrastructure required to build a strong economy. This is most clearly depicted in figure 2, originally found on page fourteen, and reinserted below.

Figure

2:

Country	Market Size	Infrastructure	Macroeconomic Environment	Protection of Intellectual Property Rights	Ethical Behavior of Firms
Algeria	48	106		34	145
Angola	65	145		54	137
Libya	80	103		16	146
Mozambique	104	130		98	129
Nigeria	32	135		46	121
Sudan	N/A	N/A	N/A	N/A	N/A
Uganda	89	133		133	119

Trade

Chinese oil firms outsourcing to and developing of African oil resources has created trade revenues for African nations and supported export growth, as "the majority of Africa's exports to China are in oil."⁵⁴ Figure 3 depicts the nature and origin of African trade with China, and conveys the importance oil plays in Sino-African relations. It is estimated that 71% of Nigeria's trade is petroleum based, in Angola, the figure hovers around 72%, Algeria

⁵⁰ Ding, Qingfen. "Creating Jobs Seen as Key Responsibility." China Daily Africa. China Daily, 06 Sept. 2013. Web. 25 Feb. 2014. <http://africa.chinadaily.com.cn/weekly/2013-09/06/content_16949465.htm>.

⁵¹ "China in Africa - China's Infrastructure Footprint in Africa." IDE-JETRO. IED-JETRO, n.d. Web. 26 Feb. 2014. <http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_10.html>.

⁵² Ibid

⁵³ Ibid

⁵⁴ "Expanding China-Africa Oil Ties." Council on Foreign Relations. Council on Foreign Relations, 8 Feb. 2012. Web. 27 Feb. 2014. <www.cfr.org/china/2Fexpanding-china-africa-oil-ties%2Fp9557>.

76% and Libya a staggering 98%.⁵⁵ With such importance placed on Africa oil exports, it is no wonder that Chinese production outsourcing, technology transfer, and investment in oil infrastructure has allowed African nations to benefit from increased trade.

Figure 3:

	Economic type	Average annual trade, 2006-2010 (US \$ million)	Share in total China-Africa trade
Angola	Oil export	18,627	21%
South Africa	Diversified economy	166,86	18%
Sudan	Oil export	6,445	7%
Nigeria	Oil export	5,774	6%
Egypt	Diversified economy	5,384	6%
Algeria	Oil export	4,155	5%
Libya	Oil export	4,154	5%
Republic of the Congo	Oil export	3,241	4%
Morocco	Diversified economy	2,548	3%
Benin	Agriculture	2,097	2%
Weight of top ten trading partners in total China-Africa trade			76%

Technology Transfer

It is often argued that one of the largest benefits seen in Africa as a result of Chinese outsourcing activities is the transfer of technology. As noted in an article published by David Haroz, a Nigerian official has been quoted saying "The western world is never prepared to transfer technology—but the Chinese do, [and] while China's technology may not be as sophisticated as some Western governments', it is better to have Chinese technology than none at all"⁵⁶. The transfer of technology is essential to the furtherance of national interest. Advanced technology allows for access to previously undiscovered resources, creates market efficiencies, and reduces costs; when combined, these factors contribute to improvement of the overall quality of life. So important is the transfer of technology to the advancement of nations, that it was suggested that Africa "must first prioritize and ensure that they receive technological transfer [from China] to add value to their rich, natural resources."⁵⁷ In granting African nations access to more advanced technologies, Chinese oil firms are increasing long-term African output tremendously.

⁵⁵ "How Oil Divides The Economies Of Africa Into Winners And Losers." Diverging Markets. N.p., 20 Mar. 2013. Web. 26 Feb. 2014. <<http://www.divergingmarkets.com/2013/03/20/how-oil-divides-the-economies-of-africa-into-winners-and-losers/>>.

⁵⁶ Haroz, David. "China in Africa: Symbiosis or Exploitation?" *Fletcher Forum*. N.p., Summer 2011. Web. 26 Feb. 2014. <http://www.fletcherforum.org/wp-content/uploads/2013/12/Haroz_FA.pdf>.

⁵⁷ "China in Africa - China's Infrastructure Footprint in Africa." IDE-JETRO. IED-JETRO, n.d. Web. 26 Feb. 2014. <http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_10.html>.

Cost of Chinese Investment

Critics of Chinese oil production and outsourcing in Africa argue that while on the surface China's presence may offer short-term gains, the long-term effect of resource exploitation by Chinese firms is detrimental to African development. One of the most substantive arguments refuting the benefits of Chinese petroleum based investments is, with regards to the infrastructure projects backed by African crude, that "tied to the Chinese loan was the agreement that the public tenders for the construction and civil engineering contracts would be awarded primarily (70 percent) to Chinese state-owned enterprises approved by the Chinese government".⁵⁸ While Chinese firms argue that job creation and capital investments created by off shoring Chinese production to Africa has created an environment that facilitates domestic growth, in actuality Chinese firms are the real winners from the strategy. CNPC alone, for example, owns the Chinese Petroleum Pipeline Bureau, which in turn discloses the ownership of 20 national and international construction firms. These firms offer services including pipeline installation, specialized transportation, road construction, offshore drilling, and specialized refinery and chemical plant construction. In particular, a subsidiary known only as CPP No. 6 Construction Company, has expertise in:

"Design in oil & gas (offshore petroleum) industry and municipal industry, Grade 1 General EPC Contracting of national chemical and petroleum projects, municipal utilities and highway projects, Grade 1 Professional Contracting of pipeline project, offshore petroleum engineering, road pavement and subgrade engineering, Grade 2 General Contracting of civil construction engineering, Grade 2 Professional Contracting of steel structure engineering and coating & insulation engineering, Grade 3 General Contracting of hydraulic and hydropower projects , Grade 3 General Contracting of power transmission & transformation engineering and subgrade & foundation engineering".⁵⁹

With firms offering services as wide ranging as CPP No. 6 Construction Company, how are African firms expected to develop the expertise required to strengthen the foundation of the domestic economy? All the outsourcing being conducted in these situations is an elaborate family affair: the Chinese national oil company is hiring not the locals, but its own people, from the ground up. The Chinese oil giant hires Chinese subsidiaries to employ Chinese workers. In many African nations, the situation is ripe for just this sort of

⁵⁸ "China in Africa - China's Infrastructure Footprint in Africa." IDE-JETRO. IED-JETRO, n.d. Web. 26 Feb. 2014. <http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_10.html>.

⁵⁹ "CPP No.6 Construction Company." China Petroleum Pipeline Bureau. CNPC, n.d. Web. 5 Mar. 2014. <<http://cpp.cnpc.com.cn/gdj/en/qygk/cyqy/6.shtml?COLLCC=2878281413&>>.

exploitation. The regulations in place for the protection of local industry and local labor are weak and in places the enforcement of such regulations is non-existent.⁶⁰

Debt and Sustainability

The use of low-interest, resource-backed loans in many African economies has created a highly leveraged environment which has seen growth supported by foreign capital injections. The issue with this, however, is that China's loans have created "a new wave of Africa debt."⁶¹ Angolan oil production, for example, has been largely influenced by Chinese oil demand and outsourcing projects. As of end 2011, there were four credit lines extended the Angolan government, totaling \$9 billion, "the lion's share of Chinese credit lines to Angola, which have been provided by China Exim Bank (2 billion USD in 2004, 2.5 billion USD in 2007 and 3 billion USD in 2011), are all secured by oil"⁶². These loans have also come with strings attached, mainly the stipulation that 70% of all contracts be carried out by Chinese firms (as outlined in the preceding section). Repayment of these loans will be made in oil.

Shortly after the 2004 loan (the extension of the first line of credit between China and Angola) Sinopec Group "acquired its first stake in an Angolan oil block."⁶³ Observers at the time contended that the awarding of the oil concession was directly tied to the loan; only a brief time elapsed between the granting of the loan and the arrival of a Sinopec Group subsidiary, Sinopec Overseas Oil & Gas, in the area, ready to conduct exploratory drilling.⁶⁴ As a result of the first of four credit lines, totaling \$2 billion, China has (or will) receive repayment of \$2 billion (in cash or cash equivalents such as oil) plus interest, non-exclusive rights to oil block 18 in Angola, tax revenue from national oil firm sales, and business for nationally owned firms hired to carry out the required 70% of all related economic activities. To put this in perspective, the total reserves of Angolan oil block 18 are estimated to be 250 million barrels, equal to \$25 billion at current crude oil prices (\$100/barrel).⁶⁵ Chinese oil firms have rights to 50% of the 25 billion. Assuming a gross profit margin of 25%, total returns equal 6.25 billion. This is in addition to the interest on the loan, plus the economic benefits of bringing in Chinese firms to manage 70% of all

⁶⁰ Ana Christina, Alves. "Chinese Economic Statecraft: A Comparative Study of China's Oil-backed Loans in Angola and Brazil." *Journal of Current Chinese Affairs* (2013): 99-130. Web. 5 Mar. 2014. <<http://journals.sub.uni-hamburg.de/giga/files/journals/3/articles/593/public/593-618-1-PB.pdf>>.

⁶¹ Alan, Beattie, and Eoin Callan. "China Loans Create 'new Wave of Africa Debt'." *Financial Times*. Financial Times, 7 Dec. 2006. Web. 26 Feb. 2014. <<http://www.ft.com/intl/cms/s/0/640a5986-863a-11db-86d5-0000779e2340.html#axzz2zdww26X0>>.

⁶² Ana Christina, Alves. "Chinese Economic Statecraft: A Comparative Study of China's Oil-backed Loans in Angola and Brazil." *Journal of Current Chinese Affairs* (2013): 99-130. Web. 15 Mar. 2014. <<http://journals.sub.uni-hamburg.de/giga/files/journals/3/articles/593/public/593-618-1-PB.pdf>>.

⁶³ "Greater Plutonio, Block 18, Angola." *Offshore-Technology*. N.p., n.d. Web. 25 Mar. 2014. <http://www.offshore-technology.com/projects/greater_plutonio>.

⁶⁴ Ibid

⁶⁵ Ibid

activities. Total returns on the initial \$2 billion investment are therefore in the \$8 billion range.

Therefore, not only have Chinese firms repatriated billions in natural resources, they have also reaped the benefits of nearly all the economic activities developed by the initial loan. All of these benefits come from a loan that was presented to the public as a "fund [for] the reconstruction of shattered infrastructure".⁶⁶ The above results are the returns from one oil-backed loan in Angola. Extrapolating the returns on the first loan to the two subsequent oil-backed loans since 2004, we see a total investment by China of \$7.5 billion and a return (not including principal repayment) of \$30 billion.

To conclude the above argument, while Angola did receive billions in aid from Chinese banks between 2004 and 2011, the subsequent outsourcing of Chinese oil production in Angola diverted nearly four times the principal investment away from the Angolan market and back into the hands of the Chinese government. While investments seeking high yield returns are nothing new, most are classified as such. The classification of these loan payments as righteous investments for the benefit of Angolan (and in a larger sense, African) society is baseless. The outsourcing of Chinese oil production has left Angola in worse economic standing than it would have been in had it sought funding from an international bank syndicate offering slightly higher interest rates.

International Implications

What oftentimes is overlooked when studying Chinese outsourcing of oil production in Africa is a precarious adversarial balancing act: while China's role is expanding, the United States remains the largest importer of African oil. This creates a situation where international competition for resources has developed into political tension between the world's two largest economies. So what is it that has made Sino-African relations an area of "concern to many policymakers and experts, especially in the United States"?⁶⁷ The answer, unfortunately, is American ethnocentrism in a world where increasing foreign powers are playing a more dominant role in international markets. Many have argued that "China's involvement in Africa has eroded Western, developed countries interests and influence on the continent."⁶⁸ The United States, it seems, is afraid of losing international power and influence. China's offshoring to Africa has created a situation where large American firms are in competition with the Chinese firms backed by the resources of the

⁶⁶ Indira, Campos, and Vines Alex. "ANGOLA AND CHINA, A Pragmatic Partnership." CSIS. N.p., 5 Dec. 2007. Web. 25 Mar. 2014. <http://csis.org/files/media/csis/pubs/080306_angolachina.pdf>.

⁶⁷ "A Trilateral Dialogue on the United States, Africa and China." *Brookings*. Brookings, 13 May 2013. Web. 25 Mar. 2014. <<http://www.brookings.edu/~media/Research/Files/Reports/2013/08/us%20africa%20china%20trilateral%20dialogue/All%20China%20Oil%20Papers.pdf>>.

⁶⁸ Ibid

Chinese government. According to Robert I. Rotberg, "Chinese companies often outbid their competitors in major contracts awarded by governments of African countries."⁶⁹

Non-Discriminatory Policies

Chinese oil firms do not differentiate between opportunities which support relatively stable government regimes, such as the South African National Government, and those that provide funding for hostile or unstable regimes. For example, the former CNPC-owned Khartoum Refinery (currently listed under PetroChina), is the largest refinery in Sudan. In fact, the refinery was heralded as a "Model of a diligent and pioneering spirit, a monument to Sino-Sudanese friendship."⁷⁰ CNPC also claims it "will continue to play a positive role in deepening cooperation and strengthening friendship with Sudan."⁷¹ In fact, because CNPC is a government entity, oftentimes trades between China and Sudan for access to oil rights and off shoring opportunities encompass the mutual exchange of goods instead of financial assets. According to Bloomberg Businessweek, "A new report by a nongovernmental organization links Beijing's access to Sudan's oil with China's sale of small arms used in the Darfur conflict," meaning that "China's thirst for oil is causing bloodshed." Whether or not these claims are substantial is still an area of debate between the Chinese government and human rights groups around the world. However, it is evident that China is indeed supporting hostile regimes with foreign investment and outsourcing of oil production. In this case, China's support is aimed at a nation that is accused of genocide, crimes against humanity, and is currently on the US terrorist watch list. What does this mean for Africa? Though no direct evidence exists linking China with the perpetuation of national conflicts and civil unrest in unstable countries within Africa, it is clear that Chinese international oil production does not distinguish between stable and unstable governments.

Quality of Infrastructure Projects

Infrastructure projects in Africa contracted by Chinese firms have been met with mixed reviews as poor Chinese business practices and workmanship has led to the failure of several major projects. For example, according to an article published in the economist, "A hospital in Luanda, the capital of Angola, was opened with great fanfare but cracks appeared in the walls within a few months and it soon closed. The Chinese-built road from Lusaka, Zambia's capital, to Chirundu, 130km (81 miles) to the south-east, was quickly swept away by rains."⁷² While these projects may not necessarily have been funded by Chinese oil interests, this pattern of project failure and poor construction practices can be seen throughout Africa. There are a great many successful projects that are completed by

⁶⁹ Rotberg, Robert I. *China into Africa: Trade, Aid, and Influence*. Washington, D.C.: Brookings Institution, 2008. 57. Online.

⁷⁰ "CNPC In Sudan." CNPC.cn. China National Petroleum Corporation, 2009. Web. 25 Mar. 2014.
<<http://www.cnpc.com.cn/resource/english/images1/pdf/CNPC%20in%20Sudan%202009%20Report/CNPC%20in%20Sudan.pdf?COLLCC=2088470046&COLLCC=1408604094&>>.

⁷¹ *ibid*

⁷² "Trying to Pull Together." *The Economist*. The Economist Newspaper, 23 Apr. 2011. Web. 26 Feb. 2014.
<<http://www.economist.com/node/18586448>>.

Chinese firms, however, and these are often praised as successes for the African people. There is no denying that the successful construction of large infrastructure has the potential to be beneficial to domestic economies. Unfortunately, according to an OECD report published in May of 2012, "while Chinese companies have been commended for their efficiency in executing physical projects, there are often few or no provisions for their maintenance and operations, nor support for policy or institutional aspects related to the infrastructure. This therefore reduces the sustainability of the newly built infrastructure assets."⁷³ While Chinese firms have the knowledge, tools, and financing to construct and maintain large infrastructure projects, most African nations are lacking in at least one of these three departments. This creates a situation where what was originally viewed as a long-term investment by national governments in Africa becomes a short-term gain and a long-term liability.

Combining the factors of poor initial construction quality and lack of proper maintenance, the long-term return on these new commercial assets is diminished. Whether or not these projects are ultimately beneficial or detrimental to national interests must be evaluated on a case-by-case basis. However, risks associated with Chinese infrastructure projects have created an environment where these undertakings must be viewed for what they are: not a panacea meant to lift African nations out of the third world, but rather a long-term and very expensive gamble on the part of African governments.

Future Activities

African resources are expected to play a more and more important role in China's energy strategy in the coming years. With the general consensus being that oil and other fossil fuels will be the cornerstone of energy production for the foreseeable future, securing a steady supply becomes paramount to the continued success of nations. As previously mentioned, China is now the world's largest importer of oil. This position could be a hedge against future drops in domestic oil production. With domestic oil production expected to peak within the coming 5-10 years,⁷⁴ China will need to replace domestic production with oil imports or risk an energy shortage. By securing oil-backed loans and controlling stakes in African oil fields, China has begun the process of mitigating a potential future energy crisis.

⁷³ "Mapping Support for Africa's Infrastructure Investment." OECD. OECD, 2012. Web. 26 Feb. 2014. <<http://www.oecd.org/daf/inv/investment-policy/MappingReportWeb.pdf>>.

⁷⁴China." China. Crude Oil Peak, Sept. 2013. Web. 26 Mar. 2014. <<http://crudeoilpeak.info/global-peak/china>>.

It is predicted that by 2020 China will be importing almost 10 million barrels of oil per day.⁷⁵ To put this figure in perspective, China currently consumes 10.3 million barrels per day. It is therefore imperative that China has secured its future oil supplies.

The drive to diversify oil supply has been one of the factors driving Chinese offshoring in Africa. Historically speaking, the Middle East has always been China's largest supplier of petroleum and petroleum byproducts. In recent years, however, African countries have been playing an ever-increasing role in ensuring China's energy future. Angola, for example, now supplies China with 46% of all its crude oil exports, up from 38% in 2011. In 2012, Sudan and South Sudan exported 80% of all oil produced to China, up from 77% in 2011. While Indonesia, Thailand, and Italy all stopped imports during the war for South Sudanese independence, China's non-interventionist policy meant it was able to secure their share of oil exports (totaling 3-4%,⁷⁶ which is, as one will note, the exact increase in percent exports to China between 2011 and 2012).

The main source of this increase in supply stems from China's use of oil-backed loans. Promises to supply China with oil equal to the required principal and interest payback have ensured years of future oil supply. On average, "Chinese loans offer an interest rate of 3,6 percent, a grace period of 4 years, and a maturity of 12 years."⁷⁷ The 2004 oil-backed loan between China Exim Bank and Angola is payable over 12 years, with a 3-year grace period. This means that China has effectively secured energy imports from Angola for the coming 15 years. In some cases, however, loan maturity periods may last up to 25 years and have grace periods of up to 10 years, meaning China is able to secure energy resources for the next 35 years by granting a comparatively small loan with high rates of return to oil-rich African nations.

Conclusion

In summary, the benefits of Chinese offshoring oil production to Africa are as follows: 1) Chinese capital injections have a multiplied effect on the economies of Africa; 2) trade boosts for both Africa and China; 3) access to low-interest loans for African nations; 4) the transfer of more advanced technologies from China to African nations; and 5) modern infrastructure projects headed by Chinese corporations.

These benefits provide a substantive argument for the continuation of Chinese off shoring in Africa. It initially appears that both sides benefit from burgeoning Sino-African relations and investments. Africa receives a much-needed injection of discretionary capital, while

⁷⁵ Ibid

⁷⁶ "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." Sudan and South Sudan. N.p., 5 Sept. 2013. Web. 26 Feb. 2014. <<http://www.eia.gov/countries/cab.cfm?fips=su>>.

⁷⁷ "The Role of China's Financial Institutions." China in Africa. IDE-JETRO, n.d. Web. 26 Mar. 2014. <http://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_11.html>.

China is able to secure future energy resources for the foreseeable future. Unfortunately, digging deeper into the current situation reveals many risks associated with current offshoring and compensation practices. These risks include: 1) destabilizing levels of national debt; 2) supporting hostile and abusive regimes; 3) increased international tension between two world powers; 4) the loss of economic activities to Chinese firms; and 5) the expatriation of African national resources. The total monetary value of what is being expatriated alone, is, in my opinion, greater than the total worth of long- and short-term capital investments by Chinese firms in Africa.

The purpose of this paper was to present the risks and benefits of continued Chinese involvement in African oil production so as to evaluate if Chinese energy outsourcing in Africa has ultimately had a positive or negative impact on the people, economies, and future of a select group of oil-producing African nations. In my opinion, the net impact on African economies is a negative one. In the short run, capital injections and employment opportunities may spur growth in Africa. However, the long-run drain on African resources, coupled with the trend of returns being less than what was promised, has created a situation where China is extorting Africa for resources without proper compensation, and labeling this extortion as economic support.

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