

Resource Curse and China's Infrastructure for Resources Model: Case Study of Angola

Luka Durovic*

Abstract: Resource-rich Sub-Saharan countries have found themselves trapped in the so-called resource curse. The importance of the aforementioned countries both as sources of natural resources and as consumer markets has been recognized by major world powers. It is rational to assume that the world power that manages to assist Sub-Saharan countries in dealing with the aforementioned curse will be given a preferential treatment in their future economic interaction. Thus finding an instrument that can deal with the resource curse has become of large importance. One of the major powers that has been present in Africa for a long time is China; which has recognized this opportunity and thus enhanced its engagement in the Sub-Saharan region, primarily through the Infrastructure for Resources model. This model enables developing countries to expand their infrastructure by relying on their resource wealth. Thus, it partially subdues the resource curse, which is empirically verified through a case study on its implementation in Angola. It is important to note that there is no consensus among scholars regarding the nature of China's involvement in Africa. However, this research avoids ideological debates, and focuses solely on the efficiency of the model in dealing with the resource curse.

Keywords: Infrastructure for resources, oil for Infrastructure, resources for loans, resource curse, tied loans

Introduction

It is a widely held view that the majority of resource-rich countries in Sub-Saharan Africa (Angola, the Sudan, DRC, Equatorial Guinea, Sierra Leone, Liberia and others) have been trapped in the so called resource curse, which has hindered their development.¹ Thus, it is unsurprising that many authors, such as Mabikke (2012), Kelley (2012), Cheru (2013), Kennan (2009), have recognized the importance of finding a way to subdue it. In fact, now there is an extensive amount of literature available on the causes and consequences of the resource curse, and this research does build upon that foundation.² However, only a small share of the literature makes the connection between Chinese presence and the resource curse in Africa, while none focuses specifically on the role of China's Infrastructure for Resources model. The authors that did draw a connection between China and the resource curse in Sub-

* Luka Durovic is a postgraduate student at RSIS, Nanyang Technological University, Singapore. E-mail:luka.durovic@hotmail.com

This paper is based on the author's MA thesis submitted to China Foreign Affairs University (外交学院), Beijing in 2015.

¹ See: Mailey (2015) and McKay (2012).

² See: Ross (1999), Kelley, (2012), Auty (2002) and Kennan (2009).

Saharan Africa came to negative conclusions. For example, Kelley dealt with the increase in Chinese investment in African infrastructure, and concluded that it “has the potential to exacerbate the misgovernance aspect of the resource curse” (Kelley, 2012: 39). Furthermore, Meyersson, Padró and Qian highlighted how exporting to China does benefit economic growth, but with regard to human rights their results “show that exporting natural resource to China has an adverse effect” (Meyersson, Miquel and Qian, 2008: 4). Kennan put forward that, in Angola, China’s involvement allowed the government to evade implementing the IMF required reforms, which he claims would have improved Angola’s governance and thus helped it deal with the resource curse (Kennan, 2009).

In fact, the majority of researchers have taken a skeptical approach towards China’s involvement while the stance that resources are the primary reason for China’s growing involvement in Africa has become almost unanimous (Butts and Bankus, 2009; Cheru, 2013). As Cheru correctly pointed out, African countries are encountering considerable obstacles, but also opportunities, owing to the worldwide increase in demand for natural resource (Cheru, 2013). A divergence in opinion is noticeable between Western and African researchers, with African researchers portraying this involvement in more positive terms.³ This is unsurprising when bearing in mind the fact that the local population holds correspondingly positive views (Egbula and Zheng, 2011). On the other hand, authors such as Hughes Butts and Bankus are more cautious towards this interaction and highlight the potential damage that China’s actions might have on the democratic development of African countries (Butts and Bankus, 2009). Egbula and Zheng also share this view (Egbula and Zheng, 2011).

Rather than add to the amount of research done on the nature of China’s involvement, and its side-effects, this research will focus on a specific characteristic of the Infrastructure for Resources model. More precisely, this research claims that the Infrastructure for Resources model can partially subdue the resource curse, and thereby remove one of the main obstacles to the development of resource-rich African countries. This research utilizes an empiricist/positivist approach, and as stated in the rational choice theory, presupposes that both parties act solely on the basis of their own rational interests. The first half of the paper, which presents the key characteristics of the model and of the resource curse, is based on qualitative data, while the latter part utilizes a quantitative analysis of data in order to, through

³ For examples of African researchers that present a favorable view of Chinese involvement see: Mthembu-Salter (2009), Umejei (2013) and Adekola (2013).

the Angola case study, to empirically verify the main hypothesis. This research will not delve into the obstacles to its implementation nor its implications for the political development of countries. The motivation for this research stems from the aforementioned lack of such an analysis of the Infrastructure for Resources model, which has become an integral part of China's contemporary economic interaction with African countries.

Historical Background

Two key factors, China's domestic experience with a specific type of Japanese economic involvement, and the inefficient Western developmental assistance policies in Africa, were behind China's decision to reformulate its economic policy towards Africa. In 1973, concerned about its energy security in the wake of the first oil price crisis, Japan decided to branch out its supply sources by importing oil from China, thus becoming the first country to move into the Chinese market. Few years later, oil represented almost half of Japanese imports from China. A step further was made in 1978, when China and Japan agreed upon a long term trade agreement. The trade agreement was based on Japan providing China with low interest loans as a way for China to finance technology imports from Japan, while China was to subsequently repay these loans by exporting oil and coal of a corresponding value (Brautigam, 2009). It was said that "the construction of an oilfield will be paid for with oil, construction of a coal mine will be paid for with coal, and construction of a factory will be paid for with the products of the factory" (Brautigam, 2009: 49). Japan's initial loans were used to build infrastructure for facilitating the export of raw materials to Japan. More precisely, China used the loans to expand its transport and export capacity. Subsequently, Japanese companies thrived while China's infrastructure expanded to facilitate the growth of its economy (Brautigam, 2009).

China has drawn from the aforementioned experience in shaping the Infrastructure for Resources model. However, it was the lagging development of African countries and the policies being implemented by international institutions and Western countries that created the grounds for the implementation of the model. In the 1970s, Africa's industrial growth started to slow down. During this period, structural adjustment programs that came in tandem with demands for market liberalization and privatization were the most common instruments of economic assistance, even though their effectiveness was increasingly being questioned (Brautigam, 2009). Thus, some researchers hold the World Bank and IMF's structural

adjustment policies responsible for such a development.⁴ The situation was especially precarious in Sub-Saharan countries, whose economies were negatively influenced by a mixture of vast debt, austerity measures and the aforementioned structural adjustment policies demanded by international financial institutions in exchange for access to loans (Ibid.). Furthermore, inadequate funding for infrastructural development has been restraining the pace of African economic development (Africa Finance Corporation, 2015; Deloitte, 2014; Mbaku, 2013).

By the late 1980s, World Bank loans came with around sixty various conditions (Kelley, 2012). These conditions included economic and/or governance reforms, which unsurprisingly made it unpopular among African leaders (Brautigam, 2009). One Ugandan government employee specified: “The fact that a country gives you aid makes them think they have a license to tell you how to run your affairs. These conditions are probably well-intentioned, but they are humiliating” (Ibid.: 149). Nowadays, many economists are questioning the effect that conditions attached to aid had during the previous decades.⁵ Jeffrey Sachs, a proponent of providing assistance to Africa, stated that: “The idea that aid should be heavily conditioned with political conditions was a mistake. The best way to end conflict is to end poverty” (Reuters, 2006). Even before the onset of the global financial crisis, the World Banks’ projects in Sub-Saharan Africa had a realization rate smaller than 50 % (Brautigam, 2009: 230).

If we focus our attention only on resource-rich Sub-Saharan countries, which were among those receiving aid, then we can argue that the reason why such resource-rich countries required economic assistance from the international community is due to them being trapped in the so-called resource curse. Otherwise, such countries, due to their resource wealth, were supposed to be in no need of assistance.⁶

The Resource Curse

In fact, through time we have been able to spot patterns highlighting how resource-rich countries with lacking democratic institutions, have trouble translating resources into development (Kennan, 2009). Such countries tend to do a poor job of building efficient state

⁴ See: Stone (2004), Woods (2008), Kanbur (2000) and Havnevik (1987).

⁵ See: Mbaku (2013), Bovard, (1986) , Prokopijevic (2007); for an overview of the academic debate see Andrews (2009).

⁶ See: DRC, the Sudan, Nigeria and others.

institutions. This is because governments that gain most of their revenues from the export of natural resources are freed from the pressure of taxing their citizens. Furthermore, such countries are vulnerable to civil wars since political parties (also called elites) in such countries build loyal political networks through the distribution of patronages. More specifically, the political parties will use bureaucracies as instruments for patronage, and will try to make them as big as possible. Such a situation has been termed the resource curse (Ibid.).

A short-sighted emphasis on the extraction of natural resources as an instrument of economic development is an enticing option for many resource-rich African countries. However, it is an approach that might endanger their long-term growth (Cheru, 2013). For decades, such countries have experienced various negative side effects of their reliance on exports of natural resources; these effects were later jointly termed the resource curse (Kelley, 2012). The widespread view among the researchers is that without the simultaneous growth of the manufacturing sector such countries can find themselves unable to evade the resource curse (Ibid.).

The resource curse includes three main aspects: 1) Dutch disease⁷, 2) vulnerability due to commodity dependence, 3) and adverse effects on the governance of the country (Ibid.). According to the so-called Dutch disease, income from the export of natural resources drives a country's currency to appreciate, resulting in its exports becoming uncompetitive (Condon, 2012). The subsequent higher price of the products decreases international demand and thus the domestic manufacturing sector gradually decreases. Therefore, the inability to produce competitive manufacturing exports prevents such countries from attaining a sustainable long term economic development (Kelley, 2012). Furthermore, the inability to create a stable economic growth is closely related to the vulnerability of resource-reliant economies to the oscillations of prices on the global market (Ibid.).

In addition, because the government of a resource-rich country does not have to tax its citizens, they are not as likely to ponder over how and on what the government budget is used (Kelley, 2012). Thus, such large resource revenue can also interfere with the governance of a country (Condon, 2012). Some would say that "the heart of the resource curse is that resource

⁷ Termed after the negative influence that the extraction of gas had on the Dutch economy in the 1960s.

rents make democracy malfunction.” (Kelley, 2012: 37). More specifically, corruption and bad governance are the consequence of patronage politics, which come into play due to the aforementioned revenue from resource exports. In addition, the more a country is fragmented with different ethnicities, the larger the influence of patronage politics; this is the reason why Africa is plagued by widespread corruption. Together, patronage politics and ethnic division enable political parties to use the resource revenues for gathering political support (Kelley, 2012).

Western developmental approaches have been unable to efficiently tackle these issues, and therefore have been unintentionally hindering African development (Kelley, 2009) However, China has recognized the importance of utilizing an economic approach that would subdue the resource curse. In the next part of the research we shall examine how China managed to develop an economic model that can subdue the resource curse and thereby immensely help these resource-rich developing countries.

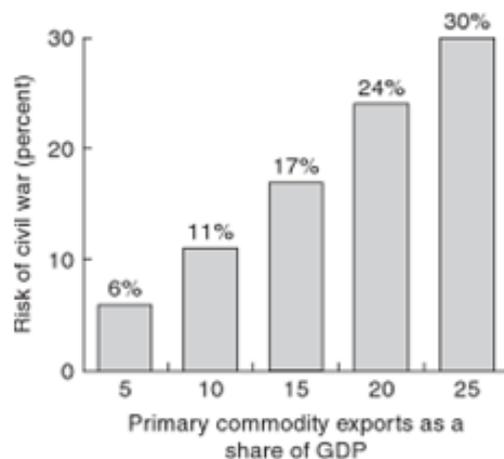


Figure 1: Causality between Resource wealth and Conflict.⁸ This figure highlights the resource curse that threatens resource-rich developing countries. It does so by linking overreliance on resource exports with the potential for internal conflict; the bigger the share of resource based exports in the overall export volume, the higher the chance of internal conflict.

⁸ Source: World Bank, Angola: Oil, Broad-based Growth, and Equity (World Bank Country Study, Washington DC, 2007), p. XXXVII.

The Infrastructure for Resources Model

The Chinese government noticed that Western countries and institutions were moving funding away from infrastructure in Africa (Brautigam, 2009). Seeing an opportunity for a different approach, China started using resource-backed loans as a practical instrument for diversifying its supply of natural resources (Butts and Bankus, 2009). Thus, it would provide economic assistance while simultaneously gaining long term access to sources of natural resources (Brautigam, 2009). The primary motivation behind the creation of this model was that economic growth was overtaking China's natural resources production, and thus in 1993 China turned into a net importer of oil (Alden, 2009). This was the starting point of the Infrastructure for Resources model.

The Infrastructure for Resources model is a framework in which the repayment of the loans utilized for infrastructure projects is done through natural resources (OECD, 2011). This deal was innovative since, for the first time, it seemed like African countries' resource-wealth could be directly converted into development projects. Therefore, the contemporary China-Africa relationship highlights an era in which countries have an additional option for financing their development. The fact is that African countries need to extend their infrastructure and that China is fulfilling this demand. These countries are incapable of attracting enough donor aid and nobody else is willing to provide funding for infrastructural development (Brautigam, 2009). Ex-Minister of Foreign Affairs of Sierra Leone Alhaji Momodu Koroma elaborated on the difference between China and other donors by stating: "There is a difference, and it is huge. What they want to help you with is what you have identified as your need. With Britain, America, they identify your needs" (Ibid.: 140).

However, to consider infrastructure as a sort of prerequisite for economic development is not a novel approach. The "Four Modernizations" that China embarked on in the 1970s put an emphasis on infrastructural development (Ibid.). Infrastructural development is a key feature of China's economic engagement with Africa, just as it was for other actors, like the World Bank. Between 1946 and 1961, 75% of World Bank loans were given for infrastructural projects, but the focus was shifted to other areas prior to the independence of most of the African states (Ibid.).

Since then, China has experimented with various approaches, and its Infrastructure for Resources model revolves around implementing successful experiments (Ibid.). Thus, while

the West has shifted its efforts from infrastructure to distributing food and medical assistance, Chinese engagement remains focused on extending the infrastructure (Ibid.).

China's decision to enhance its interaction with Africa is based on the pragmatism of the Infrastructure for Resources model, which envisages developing countries using their natural resources as a foundation for their development, in the same way as China did previously. More precisely, the model shows African countries how to develop by using natural resources as collateral in loans aimed at infrastructural construction (Tapula, 2013). Such an approach allows partaking African countries to avoid spending their limited foreign exchange reserves for infrastructural development (Brautigam, 2009). The reason why the model emphasizes infrastructure is in order to decrease the local production costs, and subsequently boost the local production and the need for Chinese manufacturing equipment (Ibid.). China is also assisting African countries in extending their energy infrastructure, thus reducing electricity shortages that were once hindering their economic growth (Information Office of the State Council, 2013; World Bank, 2004).

Today, resource-backed loans are a key instrument in the increasing Chinese interaction with Africa. This is because they form the Infrastructure for Resources model. Such loans use natural resources as collateral for the construction of infrastructure (Brautigam, 2009). In fact, through the Infrastructure for Resources model, the Chinese government can use the same funds twice. First, China can use the funds to import resources, and second, to reimburse Chinese companies for the infrastructure that they constructed overseas (Ibid.). Furthermore, as mentioned before, the loan is used both to pay the companies and as payment for resources (Corkin, 2011). Thus, it is used twice by the Chinese government while never leaving its full control. Furthermore, it is also considered a tied loan because involved companies (usually constructor companies) are generally Chinese ones, and have to use Chinese goods (Brautigam, 2009).

Hence, it is understandable why the Infrastructure for Resources model requires careful coordination between the various participants. In addition to the two governments, a Chinese company is utilized for building the infrastructure, and another one is required for extracting the resources (see Figure 2). Furthermore, the resource backed loans are dispensed through Chinese state-owned enterprises (SOEs), the main one being the Export-Import Bank (EXIM

Bank). EXIM Bank is one of China's three policy banks, and by 2007 it had developed into the World's biggest export credit agency (Ibid).

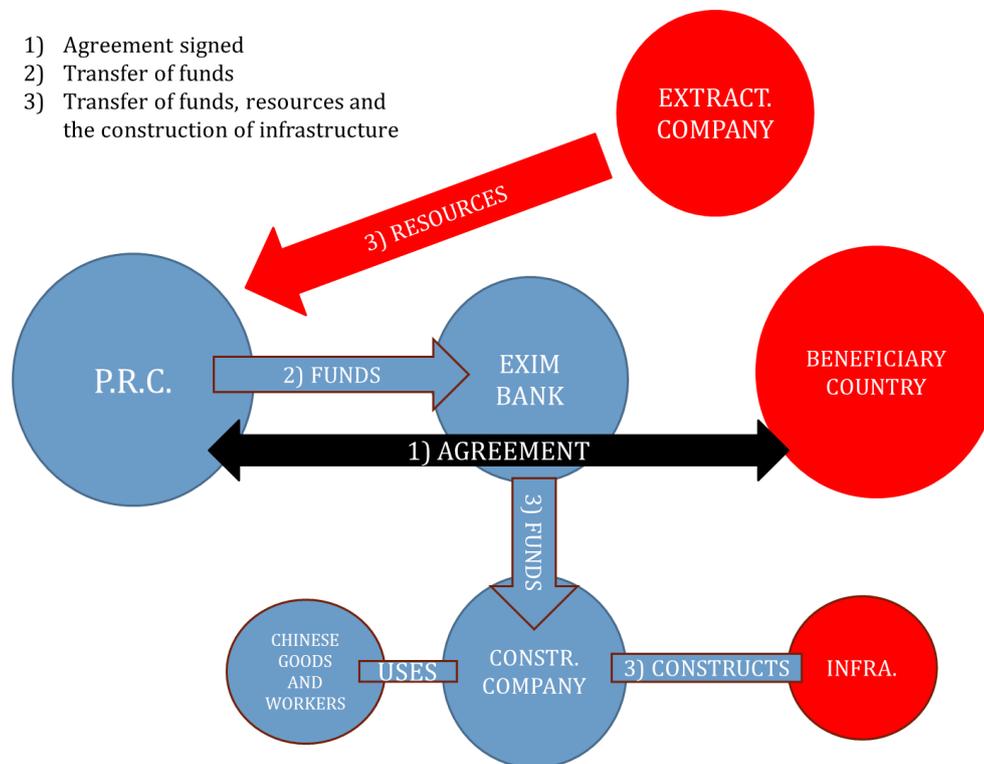


Figure 2: Framework of the Infrastructure for Resources Model⁹.

As per the terms of the Infrastructure for Resources model, Chinese companies carry out infrastructural projects and are reimbursed by the EXIM Bank, which deducts the construction expenses from the value of resources that African countries transfer to the Chinese government (Tan-Mullins, Mohan and Power, 2010). Therefore, instead of transferring the loan funds to the African governments, the funds are transferred directly to the companies undertaking the construction work (Corkin, 2011). Thereby, the Infrastructure for Resources model reduces the chance of corruption occurring, which in turn helps to subdue the resource curse (Tan-Mullins, Mohan and Power, 2010). These payments by the EXIM bank are guaranteed by, and based on, the resource backed loans (OECD, 2011).

According to the terms of the aforementioned resource backed loans, 30% of the contracted companies have to be domestic ones, and thus Chinese construction companies have become

⁹ Made by the author.

comprehensively involved in the on-going projects (Campos and Vines, 2007). This was incorrectly recounted as being inherent to the Infrastructure for Resources model; actually, the guarantee of a 30% involvement for local companies was the condition that Angola had included into the agreement (Brautigam, 2009). Even though such an arrangement sounds good, it also has a drawback. The aforementioned 30% guarantee leads to subcontracting, which implies that when a company wins a contract, it then contracts another smaller company to do the job instead, but for a smaller fee than it received. In Angola, Angolan companies that receive the contracts due to the 30% clause, subcontract them to Chinese companies that can do the same job more efficiently, and less costly (Ibid.). Other important aspects of the model are that three Chinese companies bid for each project. The aforementioned Chinese construction companies are selected by EXIM Bank and the Chinese Ministry of Commerce and are later approved by the African government (Thompson, 2012). The price of the resources that back the loan is not determined up-front, but calculated at the market price on the day it is sold (Brautigam, 2009). Furthermore, loans that form this model are tied, and this model shows how China has learned how to assist foreign countries while also fulfilling its own rational national interests. Loans that are tied to products and services which originate from the benefactor country have a lot of critics, and for objective reasons (Ibid.). Tied loans ensure that recipient countries have to spend them on goods and services from the benefactor country. One research argues that tying loans reduces their efficiency from 15 to 30% (Kegley and Blanton, 2014). If the benefactor country is a highly-developed country then its products have a comparatively high cost, thus reducing the real value of the loan (Brautigam, 2009).

The Model and the Resource Curse

As stated previously, there are three main characteristics of the resource curse. This section will present the effect of the model, from a theoretical standpoint, on the aforementioned aspects of the resource curse.

Theoretical effect of the model on the resource curse:

1. Dutch disease – Positive effect

The model would not lead to inflation, since the funds are not to be transferred to the recipient country; rather the funds are to be used to reimburse the companies constructing the

infrastructure. Furthermore, by expanding the infrastructure the model is to create the foundation for the expansion of the manufacturing sector.

2. Vulnerability due to commodity dependence – No effect

Resource-rich countries would still be vulnerable to the change in prices of commodities due to the fact that the price of the resources that back the loans would not be determined up-front, but rather it would be calculated at the market price on the day that they are sold (Brautigam, 2009; Economy and Levi, 2014).

3. Adverse effects on the governance of the country – Positive effect

Having a loan administered by the lender can ensure that it is not used for other purposes (Brautigam, 2009). This model does not function in the same manner as loans from the IMF or the World Bank, which are transferred directly into the government's account, from where they can be misused. Revenues from sales of natural resources at the international markets are vulnerable to the same risks (Ibid.). In the case of Chinese resource-backed loans, the funds are never physically transferred to the African governments. Thus, by keeping the funds in China, the chance that any misuse of funds would transpire is reduced. Furthermore, this aspect of the model would also help African leaders endure patronage pressures coming from their populations, because the funds would stay in China for the duration of the project, preventing them from being used for other purposes.

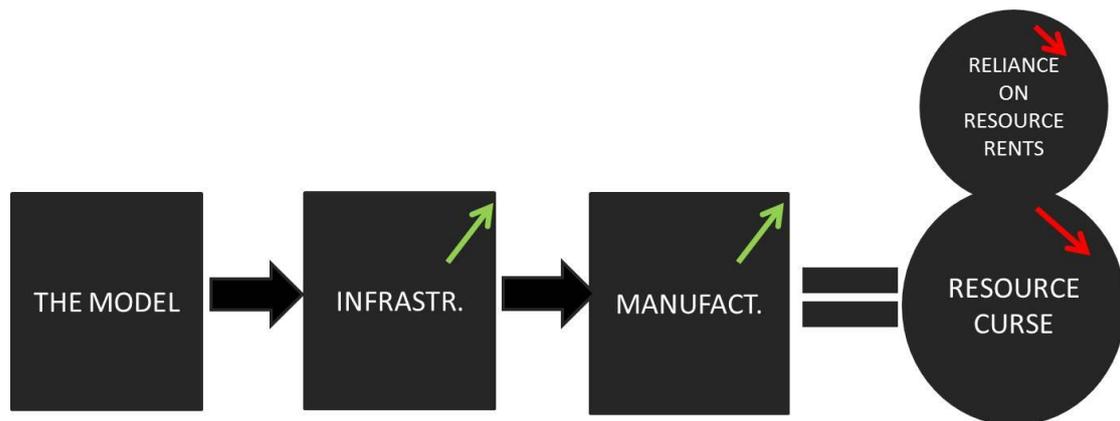


Figure 3: The Ideal Outcome of the Infrastructure for Resources Model¹⁰. The implementation of the Infrastructure for Resources model leads to the expansion of the infrastructure in the recipient country. Since infrastructure is a prerequisite for manufacturing activity, it eventually leads to a growth of the manufacturing sector. Thus, a resource-rich country becomes less dependent on the resource rents, and enjoys a more diversified economy. Overall, the resource curse loses its grip on a resource-rich, developing country.

Angola Case Study

A case study on Angola will be utilized to empirically verify the previous claims about the Infrastructure for Resources model and its effect on the resource curse. Angola is a resource-rich developing country, exactly the type of a country that is most often trapped by the resource curse. More precisely, for the Angolan economy oil is of utmost importance. According to the African Development Bank, oil production and supporting activities are responsible for 38% of GDP, 98% of exports, and almost 80% of government income in 2012 (African Development Bank, 2012). Another characteristic of countries trapped in the resource curse is instability and civil conflict, in fact, Angola experienced one of the longest civil wars in Africa (Newitt, 2000). A key player since the end of this 25-year long civil war has been China, which has been instrumental in the reconstruction of Angola (Stead and Rorison, 2010). This relationship has become so important that, since 2004, the Infrastructure for Resources model has also become known as the “Angola model” (OECD, 2011).

Effect of the model on the resource curse in Angola:

1. Dutch disease – Positive effect

¹⁰ Made by the author.

Angola has been experiencing inflation, but the model itself did not lead to inflation neither did it inhibit local production; rather, by expanding the infrastructure it is creating the prerequisite for attracting FDI and increasing local manufacturing (see Table 2). In fact, Angola's manufacturing sector experienced the fastest growth in Africa in the period from 2005 till 2013, expanding on average by 18.3% (KPMG, 2015). This data carries substantial weight if we have in mind that the model is being implemented since 2004. Furthermore, electricity production is constantly increasing, highlighting the infrastructural expansion in the field of energy (see Table 2).

| Indicators | Year | | | | | | | |
|--|------|------|------|------|------|------|------|------|
| | 2004 | 2006 | 2007 | 2008 | 2010 | 2012 | 2013 | 2014 |
| Electricity Generation ¹¹ | 2.1 | 3.2 | 3.1 | 4 | 5.3 | 5.4 | - | - |
| GDP From Manufacturing ¹² | - | - | 241 | 303 | 464 | 726 | - | - |
| % Inflation of Consumer Prices ¹³ | 43 | 13 | 12 | 12 | 14 | 10 | 8 | 7 |

Table 2: Angola: Dutch Disease Related Indicators. The indicators highlight an increase in electricity production, an expansion of the manufacturing sector and a relatively constant inflation rate.

2. Vulnerability due to commodity dependence – Slightly positive effect

In 2011, the Angolan Trade Minister stated that Angola's foremost challenge and task is diversification of its economy beyond oil (People's daily, 2011). Nevertheless, Angola is still vulnerable to the volatility of oil prices, due to the fact that, as a part of this model, the price of resources that back the loan is not determined up-front, but calculated at the market price on the day it is sold (Brautigam, 2009). Thus, it is not surprising that the falling oil prices have led to a slowdown of the economic growth (Muzima and Mendy, 2015). However, the

¹¹ Source: U.S. Energy Information Administration; In Billions of Kilowatthours.

¹² Source: National Bank of Angola; In Billions of Dollars.

¹³ Source: World Bank, World Development Indicators.

dependence of the Angolan economy on oil rents has been reduced, thus, albeit in a limited manner, easing this aspect of the resource curse on Angola (see Table 3).

| Indicators | Year | | | | | |
|-------------------------------------|------|------|------|------|------|------|
| | 2004 | 2006 | 2008 | 2010 | 2012 | 2013 |
| GDP per capita ¹⁴ | 1300 | 2800 | 4400 | 3900 | 5500 | 5900 |
| Oil Rents as % of GDP ¹⁵ | 53.9 | 65.3 | 38.1 | 45.5 | 41.1 | 34.6 |

Table 3: Angola: Commodity Dependence Related Indicators. The indicators point to an overall positive economic development, which includes a reduction in the reliance on oil rents, even though that reliance is still significant. The fact that the GDP per capita continues to grow while, at the same time, the dependence on oil rents subsides is of significant importance.

3. Adverse effects on the governance of the country – Inconclusive

Angola has done a poor job of building efficient state institutions. One of the main reasons being that the ruling party (MPLA) builds loyal political networks through the distribution of patronages (Paul, Clarke and Serena, 2014). However, revenue that funds such patronage politics originates from oil sales on the international market, not from the deals made through the Infrastructure for Resource model. It can be said that the corruption would be worse if the model was replaced by the traditional cash for oil sales on the international market.

On the other hand, there are reports of social housing, which is built through the model, being allocated preferentially. If proven correct, that would imply a negative influence of the model on the quality of governance in Angola. In the aforementioned example, the purchase cost of the housing was initially very high; it catered to a small middle class and thus excluded the majority of the people. However, recently the prices have been decreased and funding criteria eased (Benazeraf and Alves, 2014). Claims that the model has a negative effect on governance are not backed up by the Country Policy and Institutional Assessments, Worldwide Governance Indicators and Corruption Perceptions Index, which highlight the relatively stable level of governance since the beginning of this model’s implementation (see

¹⁴ Source: World Bank, World Development Indicators.
¹⁵ Source: World Bank, World Development Indicators.

Table 4). Thus, more research is needed into the nature of the allocation of the housing built through the Infrastructure for Resources model. At this point, the most precise answer that this research can give is that perhaps the effect of the model on the quality of governance, even if negative, is not of sufficient significance to have an effect on the aforementioned governance indicators.

| Indicators | | Year | | | | | |
|--|--------------------------|------|------|------|------|------|------|
| | | 2004 | 2006 | 2008 | 2010 | 2012 | 2014 |
| Country Policy and Institutional Assessments ¹⁶ | | - | 2.4 | 2.4 | 2.4 | 2.3 | - |
| Corruption Perceptions Index ¹⁷ | | 20 | 22 | 19 | 19 | 22 | 19 |
| African Governance Index ¹⁸ | | 28 | 34 | 38 | 40 | 41 | 40 |
| Worldwide Governance Indicators ¹⁹ | Control of Corruption | -1.3 | -1.2 | -1.3 | -1.3 | -1.3 | -1.5 |
| | Government Effectiveness | -1.3 | -1.4 | -1.1 | -1.1 | -1.0 | -1.1 |

Table 4: Angola: Governance Indicators. Three of the indicators state that the quality of governance has remained relatively the same since the model started being implemented, which challenges the initial assumption that the model would have a positive effect on governance. On the other hand, the African Governance Index highlights a relatively large improvement in the quality of governance; however, there is no other data available that would back such a result.

¹⁶ Source: World Bank, World Development Indicators; CPIA public sector management and institutions cluster average; (Score 1-6, 6=best).

¹⁷ Source: Transparency International; (Score 0-100, 100=best).

¹⁸ Source: Ibrahim Index of African Governance, 2014; (Score 0-100, 100=best).

¹⁹ Source: World Bank, World Governance Indicators; (Score -2.5 to 2.5, 2.5=best).

| Aspects of the Resource Curse | The Effects of the Model |
|---|--------------------------|
| Dutch Disease | Positive |
| Vulnerability due to commodity dependence | Slightly Positive |
| Governance | Inconclusive |

Table 5: Findings of the Angola Case Study. Even though the model does not successfully tackle all the three aspects of the resource curse, it still is a valuable instrument that can partially subdue the resource curse.

Conclusion

To conclude, China's economic involvement in Sub-Saharan Africa is increasingly based on the Infrastructure for Resources model, through which the Sub-Saharan countries' infrastructural needs are being fulfilled. Furthermore, this model directly transforms resources into development projects and thus it is an efficient instrument for dealing with the resource curse that hinders the development of many Sub-Saharan countries. However, further research needs to be undertaken on the nature of the allocation of the housing that is built through this model, with the focus on whether, and to what extent, it can be used as a tool of patronage politics. Even though the model does not tackle all three aspects of the resource curse, the ones that it manages to tackle demonstrate its substantial potential in, at least partially, subduing the resource curse. That is why the Infrastructure for Resources model highlights China's innovative approach to the economic development of Sub-Saharan Africa. Furthermore, to many Sub-Saharan countries it is an enticing alternative when compared with loans from international institutions with democracy-promoting conditions attached to them. Bearing in mind the fact that many Sub-Saharan countries possess vast deposits of resources, we can anticipate an ever greater interaction between China and Africa, primarily through the Infrastructure for Resources model.

References

Adekola, Oluwole. 2013. "New perspectives to Nigeria's foreign policy towards China". *OSR Journal of Humanities and Social Science* 6 (5): 01-06.

African Development Bank. 2012. "Angola: Private Sector Country Profile". Available at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Evaluation-Reports-_Shared-With-OPEV_/Angola%20-%20Private%20Sector%20Country%20Profile.pdf [Accessed on 18 December 2015]

Africa Finance Corporation. 2015. "Developing to Improve African Economies". Available at <http://www.africafc.org/Publications/Publications-Documents/AFC-Corporate-Brochure.aspx> [Accessed on 10 January 2016]

Alden, Chris. 2009. "China and Africa: from engagement to partnership", in Marcus Power and Ana Cristina Alves ed. *China & Angola: A Marriage of Convenience*. Cape Town: Pambazuka Press.

Alves, Ana. 2012. "China's economic statecraft and African mineral resources: changing modes of engagement".

Andrews, Nathan. 2009. "Foreign Aid and development in Africa: What the literature says and what the reality is". *Journal of African Studies and Development* 1 (1)

Auty, Richard. 2002. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. Routledge.

Benazeraf, David and Ana Alves. 2014. "Oil for Housing: Chinese-built New Towns in Angola". Available at http://www.saiia.org.za/doc_view/507-oil-for-housing-chinese-built-new-towns-in-angola [Accessed on 16 December 2015]

Brautigam, Deborah. 2009. *The Dragon's Gift: The Real Story of China in Africa*. Oxford: Oxford University Press.

Bovard, James. 1986. "The Continuing Failure of Foreign Aid". Available at <http://object.cato.org/sites/cato.org/files/pubs/pdf/pa065.pdf> [Accessed on 16 January 2016]

Butts, Kent and Brent Bankus. 2009. "China's Pursuit of Africa's Natural Resources". Available at http://www.csl.army.mil/usacsl/publications/CCS1_09_ChinasPursuitofAfricasNaturalResources.pdf [Accessed on 25 October 2015]

Campos, Indira and Alex Vines. 2007. "Angola and China: A Pragmatic Partnership". Available at http://csis.org/files/media/csis/pubs/080306_angolachina.pdf [Accessed on 28 October 2015]

Cheru, Fantu. 2013. "Emerging Economies and Africa's Natural Resources." Available at <http://www.nsi-ins.ca/wp-content/uploads/2014/01/Brief-Cheru-Emerging-Economies-and-Africa%E2%80%99s-Natural-Resources.pdf> [Accessed on 24 October 2015]

Condon, Madison. 2012. "China in Africa: What the Policy of Non-intervention Adds to the Western Development Dilemma." *Fletcher Journal of Human Security* 27: 5-19.

Corkin, Lucy. 2011. "China and Angola: Strategic partnership or marriage of convenience". *Angola Brief* 1 (1).

Deloitte. 2014. "Addressing Africa's Infrastructure Challenges". Available at <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/dttl-er-africasinfrastructure-08082013.pdf> [Accessed on 15 January 2016]

Economy, Elizabeth and Michael Levi. 2014. *All Means Necessary: How China's Resource Quest is Changing the World*. OUP USA.

Egbula, Margaret and Qi Zheng. 2011. "China and Nigeria: a Powerful South-South Alliance" Available at <http://www.oecd.org/china/49814032.pdf> [Accessed on 25 October 2015]

Havnevik, Kjell. 1987. *The IMF and the World Bank in Africa*. Uppsala: Scandinavian Institute of African Studies.

Information Office of the State Council. 2013. "China-Africa Economic and Trade Cooperation" 29 August. Available at <http://www.scio.gov.cn/zxbd/wz/document/1344818/1344818.htm> [Accessed on 25 November 2015]

Kanbur Ravi. 2000. "Aid, Conditionality and Debt in Africa" in Finn Tarp ed. *Foreign Aid and Development: Lessons Learnt and Directions for the Future*, Routledge.

Kegley, Charles and Shannon Blanton. 2014. *World Politics: Trend and Transformation: 2014–2015*. Boston: Wadsworth Publishing.

Kelley, Jeremy. 2012. "China in Africa: Curing the Resource Curse with infrastructure and Modernization." *Sustainable Development Law & Policy* 12(3): 5-41, 57-60.

Kennan, Patrick. 2009. "Curse or Cure - China, Africa, and the Effects of Unconditional Wealth". *Berkeley Journal of International Law* 27(1): 84-126.

KPMG. 2015. "Sector Report: Manufacturing in Africa". Available at <https://www.kpmg.com/Africa/en/IssuesAndInsights/Articles-Publications/General-Industries-Publications/Documents/Manufacturing%20sector%20report%202015.pdf> [Accessed on 15 December 2015]

Mabikke, Samuel. 2012. "Africa's Wealth of Resources, Blessing or Curse". Available at http://www.hss.de/fileadmin/media/downloads/Berichte/120120_Mabikke.pdf [Accessed on 21 December 2015]

Mailey, J.R. 2015. "The Anatomy of the Resource Curse: Predatory Investment in Africa's Extractive Industries." Available at <http://africacenter.org/wp-content/uploads/2015/05/ASR-3-Apr-2015.pdf> [Accessed on 23 February 2016]

Mbaku, John. 2013.. "Building Opportunities: Addressing Africa's Lack of Infrastructure". Available at http://www.brookings.edu/~media/research/files/reports/2013/01/foresight-africa/foresight_mbaku_2013.pdf [Accessed on 15 January 2016]

McKay, John. 2012. "Natural Resources: Curse or Cure for Africa?" Available at <http://www.thebrenthurstfoundation.org/files/Brenthurst-paper-201205.pdf> [Accessed on 23 February 2016]

Meyersson, Erik Gerard Miquel and Nancy Qian. 2008. "The Rise of China and the Natural Resource in Africa." Available at <http://siteresources.worldbank.org/INTMACRO/Resources/June5%2662008MGConferencePAPERQIAN.pdf> [Accessed on 26 October 2015]

Mthembu-Salter, Gregory. 2009. "Elephants, Ants and Superpowers: Nigeria's relations with China". Available at http://www.saiia.org.za/doc_view/105-elephants-ants-and-superpowers-nigeria-s-relations-with-china [Accessed on 25 October 2015]

Muzima, Joel Daniel and Fernanda Ramalho Mendy. 2015. "Angola 2015". Available at http://www.africaneconomicoutlook.org/fileadmin/uploads/aeo/2015/CN_data/CN_Long_EN/Angola_GB_2015.pdf [Accessed on 17 December 2015]

Newitt, Malyn. 2000. "Review of the Origins of the Angolan Civil War: Foreign Intervention and Domestic Political Conflict by Fernando Andresen Guimarães". *International Journal of African Historical Studies* 33 (1): 167-169.

OECD. 2011. "Economic Diversification in Africa: A Review of Selected Countries". Available at <http://www.un.org/en/africa/osaa/pdf/pubs/2011economicdiversification.pdf> [Accessed on 15 November 2015]

Paul, Christopher, Colin P. Clarke and Chad C. Serena. 2014. *Mexico Is Not Colombia: Alternative Historical Analogies for Responding to the Challenge of Violent Drug-Trafficking Organizations, Supporting Case Studies*. Rand Corporation.

People's Daily. 2011. "China pledges to help Angola in diversifying". January 14, 2011. Available at <http://en.people.cn/90001/90776/90883/7260548.html> [Accessed on 15 December 2015]

Prokopijević, Miroslav. 2007. "Why Foreign Aid Fails". Available at <http://www.doiserbia.nb.rs/img/doi/1452-595X/2007/1452-595X0701029P.pdf> [Accessed on 10 January 2016]

Reuters. 2006. "UN adviser: China's presence a boon to Africa".

Ross, Michael. 1999. "The Political Economy of the Resource Curse". *World Politics* 51 (2): 297-322

Stead, Mike and Sean Rorison. 2010. *Angola*. Bradt Travel Guides.

Stone, Randall. 2004. "The Political Economy of IMF Lending in Africa". *American Political Science Review* 98 (4).

Tan-Mullins, May, Giles Mohan and Marcus Power. 2010. "Redefining 'Aid' in the China–Africa Context". *Development and Change* 41(5): 857–881.

Tapula, Tobela. 2013. "China's Involvement in Resource Extraction in Africa: the South African case". Available at http://www.ccs.org.za/wp-content/uploads/2013/08/CCS_Commentary_South_Africa_Case_TT_2013.pdf [Accessed on 21 November 2015]

Thompson, Reagan. 2012. "Assessing the Chinese Influence in Ghana, Angola, and Zimbabwe: The Impact of Politics, Partners, and Petro". Available at http://iis-db.stanford.edu/docs/785/CISAC_Thesis_Thompson.pdf [Accessed on 23 November 2015]

Umejei, Emeka. 2013 "Why China's 'Infrastructure for Resources' Failed in Nigeria". *African Arguments*. September 2. Available at <http://africanarguments.org/2013/09/02/why-did-chinas-infrastructure-for-resources-deal-fail-in-nigeria-by-emeka-umejei/> [Accessed on 26 November 2015]

Woods, Ngaire. 2008. "Governance Matters: the IMF and Sub-Saharan Africa", in James Boughton and Domenico Lombardi ed. *The IMF and Low Income Countries*. Oxford University Press.

World Bank. 2007. "Angola: Oil, Broad-based Growth, and Equity". Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/10/24/000090341_20061024104820/Rendered/PDF/35362.pdf [Accessed on 10 October 2015]

World Bank. 2004. "Project Information Document". Available at http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2004/11/17/000104615_20041118094813/Rendered/PDF/Project0Inform1Appraisal0Stage1doc2.pdf [Accessed on 16 January 2016]