



**LUND UNIVERSITY**

## **Deepening or Dampening the Resource Curse?**

The effects of Chinese lending on the resource curse in African countries

— Bachelor's thesis —

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## **Abstract**

Natural resource abundant countries, especially ones rich in oil, tend to suffer from political and economical problems as an effect of their resource wealth. This phenomenon has been observed and studied by many scholars and has been labelled the “Resource curse”. The occurrence of resource curses is mainly observed in countries that are not wealthy, aside from the wealth they have accumulated from their main natural resource meaning that they are largely dependent on exports of this abundant resource. There are many countries in Africa that fall into the category of suffering from a resource curse, as many states rich in oil can at the same time struggle to democratise, gain economic growth and build reliable and quality institutions. This study finds that countries rich in, and dependent on, oil have received significantly more lending from Chinese financiers to initiate different projects. The paper goes on to examine the case of Angola, finding that investments from Chinese banks have contributed greatly to the prosperity of the state-owned oil company Sonangol, which is known to be the most important rentier tool for the Angolan regime. Thereby the Chinese lending to Angola, at perhaps also other oil-dependent states in Africa, can be said to have contributed to the deepening of the resource curse.

Key words: Resource curse; Chinese lending; China; Africa; Natural resource dependency; Angola

Word count: 8704

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## 1.0 Introduction

During the last 20 years, it has become increasingly common to observe Chinese workers carrying out infrastructure projects in African countries. These observations may seem strange at first, why would Chinese workers be carrying out for example road work in poor countries overseas? Today, however, more and more people are familiar with the fact that China is getting increasingly involved in Africa through investments, trade and cooperation. As the Chinese economy continues to grow at a pace unparalleled in history, the need for expansion and global partnership increases. For these reasons, looking into how the China-Africa relations are developing and what implications the development has, both politically and economically, is more relevant than ever. In addition to this, Africa is rich in natural resources, but yet many of the continent's countries are, and have for a long time been, struggling with autocratic rule and lagging economic growth (Mulwa & Mariara 2016, pp. 5).

For many decades the observation that some countries rich in natural resources suffer from political, social and economic problems, has puzzled political scientists. The academic discourse around this puzzle has labelled it the *resource curse*. Since it was first observed, increasing evidence has been presented supporting the claim that abundance of natural resources in a country, especially petroleum, can counter intuitively have several negative effects on development. (Ross 2015, pp. 240) While this relationship continues to remain true, China has entered the stage in Africa, for example by committing US\$ 153 billion in loans to African states during the last twenty years, mainly through state-owned banks. These loans have financed a significant portion of infrastructure investments all over the African continent, and continue to be an important source of financing. (Acker & Brautigam 2021, pp. 1, 6)

This fairly sudden and extensive inflow of capital and initiation of projects in Africa, combined with the continent's history of struggling to industrialise and making itself less dependent on raw material exports makes these two phenomena relevant to bring together. What happens with resource dependence and its associated effects, when large capital inflows and industrial expertise suddenly become available? From this outset, the paper aims to examine whether Chinese lending has a deepening or dampening effect on the occurrence of resource curses in African countries with an observable dependence on natural resource exports. The structure of the study will follow a conventional pattern, starting with describing the research problem, moving on to give

a literature overview and clarifying the theoretical frameworks, declaring methodological choices and research design, to then proceed with an analysis of the chosen empirical material and finishing off with discussion and conclusions of the findings.

## 1.1 Research problem

Chinese lending to Africa has increased drastically over the last 20 years. Meanwhile the countries receiving the most lending are to a high extent suffering from resource curses. Examining how the lending received by these countries affects the dynamics and mechanisms of the resource curse is therefore to be considered of interest, as helping these countries escape the resource curse remains a top priority for many multinational organisations. If the lending can be shown to deepen the resource dependency and its associated effects, the lending can be evaluated in a more nuanced manner and the scientific community can contribute with verdicts on the effectiveness of the new Chinese development strategy.

## 1.2 Aim and research question

The resource curse is a frequently discussed and debated issue within politics and political science. Therefore the aim of this thesis is to examine the occurrence of resource curses in the context of Chinese lending to African countries, in order to understand how this loan giving affects African countries' and their economies' dependency on natural resource exports. The study can be considered an evaluation of loan giving as a means of foreign aid, with regards to how it affects economic and political development of recipient countries rich in natural resources. Reaching new conclusions and presenting new findings through merging data and previous research in these two fields, will make for a contribution to the

From this outset, the research question that this paper aims to answer is:

*Does Chinese lending to African countries dependent on natural resources deepen problems related to the resource curse?*

## 2.0 Literature review and theoretical framework

### 2.1 Resource curse

According to Michael L. Ross, the existence of a phenomenon described as the ‘Resource curse’ is supported by observations made by several political scientists, who have found significant evidence of its existence (Ross 2015, pp. 240). The description of the phenomenon has developed from the observation that economies heavily dependent on natural resources tend to have lower levels of economic growth, political stability and quality of institutions than ones without resource abundance. Three main effects have been linked to resource dependency within this scientific discourse; level of democratic rule, quality of institutions and the occurrence of civil war. However, the relationship is mainly true when the resource considered is petroleum, and wealth accumulated from other resources haven’t been shown to have significant effects on these three factors. (Ross 2015, pp. 243, 248, 250) This observation is however not consistent across the board, with resource abundant countries such as Norway proving that there is not a causal relationship between an economy being natural resource based and it having low levels of growth (Mehlum et. al. 2006, pp. 1).

The relationship between oil wealth and autocratic rule nonetheless remains true if defined in terms of oil leading to autocratic rulers staying in power longer, which explains why in states that are initially under democratic rule, such as Norway, oil wealth does not lead to autocratic rule (Cuaresma et. al 2010, pp. 528; Andersen & Aslaksen 2013, pp.105) On this note, the difference between *changes* in natural resource wealth and *levels* of natural resource wealth needs to be distinguished. There is for example substantial evidence that high *levels* of oil wealth correlates with higher durability in autocratic regimes, but the findings regarding *changes* in levels of oil wealth are not as clear (Ross 2015, pp. 246-247). Therefore, this study aims to focus solely on *levels* of resource wealth and not account for *changes* in oil wealth. The wealth accumulated from extraction of oil resources is strongly tied to how accessible the rents, meaning the difference between the market price for a commodity and its extraction costs (Scherzer & Sinner 2006), from the oil sector are for the ruling regime. Amundsen (2014, pp. 170-171) describes the difference between “grabber friendly” and “producer friendly” institutions, which refers to the institutions being prone to corruption or not. In resource-cursed countries, institutions are normally grabber friendly and therefore allow the ruling regime to extract extensive capital and use the institutions to their advantage and to remain in power. This is a key factor or mechanism of the resource

curse. One of the reasons for why a regime's access to rents is so important, is that it allows them to have low levels of taxation while still maintaining high public spending. This is called the *rentier effect* and the notion is that low tax-levels decrease a ruler's accountability toward the people, which allows for autocratic rulers to remain in power longer in countries with resource intensive economies.

## 2.2 Guiding theory

The goal of this study is to examine the effects of Chinese loans on the mechanisms affiliated with the phenomenon "*resource curse*". The theoretic framework surrounding this phenomenon will be guiding for the study, in deciding what aspects and factors to examine and draw conclusions from.

## 3.0 Methodology and material

### 3.1 Research design

In order to fully comprehend the nature, mechanisms and implications of a problem within political science, it is reasonable to believe that the problem needs to be described in more general terms, to then be examined in depth, within the chosen context. From this outset a mixed methods approach has been chosen for this study, in which the quantitative part of the study seeks to shed light on general patterns and trends related to Chinese lending to African countries, in other words a broader perspective. In order to gain a deep understanding of the mechanisms at play and the implications they have, an intensive case study is a relevant research method (Halperin & Heath 2017, pp. 214-215). This case study will focus on Angola.

The methodological approach used by Monica Duffy Toft in her 2007 paper "*Getting Religion?: The Puzzling Case of Islam and Civil War*" has been guiding in the research design of this study, with regards to the utilisation of both quantitative and qualitative methods. The article examines whether Islam as a religion is involved in more civil wars than other religions by looking at general trends in civil wars between 1940 and 2000, and goes on to examine what mechanisms are causing the overrepresentation in a one-country case study of Sudan. Toft (2007) tests three hypotheses in the paper, partially tested quantitatively against the dataset and partially through an in depth case study of Sudan. This approach is also frequently used when studying specifically the resource

curse. As Ross (2015, pp. 250) points out it is common to combine cross-national quantitative overviews with in depth, theoretically anchored case studies of more qualitative character. Therefore, using a mixed methods approach has been deemed a sensible research design for this paper, consisting of a general quantitative analysis followed by a case study of a deviant case, Angola. In this the study will take on the character of being both *intensive* and *extensive*, to use Teorell and Svensson's (2007, pp. 266-267) terminology. The conclusions drawn from observations in the cross-national data will serve as a foundation for the case study, and also provide the study with greater possibilities of generalising the conclusions, to ensure external validity (Halperin & Heath 2017, pp. 149).

The following relationship is going to be subject of examination in this paper:



To fulfil the demands on intersubjectivity in this paper, it should also be noted that conducting a study with a mixed methods approach has its weaknesses. For example, it requires a broader approach taking both general trends and specific mechanisms into account . Naturally, this takes more time and given the circumstances of writing a bachelor's thesis, time is not an abundant resource which may render justified objections to the choice of research design for this study; is this approach too ambitious? (Teorell & Svensson 2007, pp. 273-274) However, earlier research in this field has, as previously stated, more often than not used similar approaches, and there are therefore a lot of findings to build upon, as well as methodological shortcuts to be made, without damaging the credibility of the study. In addition, shifting between extensive and intensive approaches has a value in itself, as the two approaches shed light on different aspects of a problem (Ibid, pp. 274).

### **3.1.1 Quantitative study**

The ambition of the quantitative part of this study is however not to claim a causal relationship between the receiving of loans and the presence of the resource curse, since this would call for a much more intensive quantitative study. Additionally, whether causality can fully be claimed on the basis of this type of quantitative





mechanisms that have been linked to stabilisation of autocratic regimes in previous research and looking at how influx of funds through lending affects these mechanisms has been chosen as the methodological approach within the case study.

Barbara Geddes (2003) points out two main criteria for how to select a relevant case to study, which are that the case is relevant in the context of the given theory *and* that the case needs to be different from the cases that the theory was originally constructed around, in order to claim contribution to the scientific discourse. With these criteria in mind, Angola has been chosen for the case since it is a country commonly associated with the resource curse theory, but the context this study will examine it within, makes it clear that new conclusions can be deduced regarding the mechanisms of the resource curse phenomenon. In addition to this, Angola has been chosen in the capacity of a deviant case, as the country has received far more lending than any of its African neighbours with funding from Chinese banks accumulating to over \$42 billion from 254 loans since the year 2000 (Acker & Brautigam 2021, pp. 2). With this information, Angola is to be considered a deviant case, a case that is 'exceptional' for one reason or another, to use Halperin and Heath's (2017, pp. 216) terminology. In the case of Angola, it stands out from other resource-cursed countries as it has received such extensive lending through Chinese loans. For this reason it is plausible to think that by examining how the lending affects the resource curse in Angola, new conclusions can be drawn about what mechanisms come into play, as the extremity of the case could make the mechanisms stand out more (Ibid, pp. 216).

### **3.2 Scope**

Although the resource curse phenomenon has been observed within three main areas; level of democratic rule, institutional quality and occurrence of civil war (Ross 2015, pp. 240), this paper aims to examine the effect of resource wealth on democracy and institutions, and not civil war. This choice has been made partially with regards to lack of resources, mainly time, and the risk would be that the quality of the result would suffer if the scope would be too wide. But also with regards to the case of Angola, a country that came out of a long civil war, ending just before the Chinese lending to Africa took off.

### 3.3 Operationalisations

**Chinese loans to Africa** is of course a central concept that needs further operationalisation. Thankfully, the data used over Chinese lending to Africa is gathered by the *China Africa Research Initiative* (CARI) at Johns Hopkins University, who have naturally already made an operationalisation of the concept in order to collect the data. The loans that meet the requirements are issued by a range of actors; The Chinese Ministry of Commerce, the two Chinese policy banks Export-Import Bank of China (Eximbank) and China Development Bank (CDB), Chinese commercial banks, Chinese state-owned enterprises and the central bank of China (Brautigam & Hwang 2020, pp. 6). Notable here is that Eximbank and CDB are the main financiers, with over 80% of the total lending between 2000 and 2019 coming from these two banks according to numbers from CARI (Acker & Brautigam 2020). This provides a fair picture of which actors finance the loans, but equally important is to distinguish what “to Africa” implies. The loans in the dataset are solely loans given to the following; African governments, African state-owned banks, African state-owned enterprises, African regional banks and other companies registered in Africa (Brautigam & Hwang 2020, pp. 8).

**Natural resource dependency** is a broad term that needs to be specified. In its essence, being dependent on natural resources means that the rents or revenues from the exports of the resource make up a significant portion of the country’s GDP or total export. With this definition, dependency is always going to be measured in relative terms, which is sensible as it would be impossible to view economic dependency in binary terms. It is rather a question of being *more* or *less* dependent on a commodity or product. With this reasoning in mind, the measurements chosen for natural resource dependency in this study are presented relative to GDP or total exports. The three main datasets that have been utilised are gathered from the World Bank and measure *Total Natural Resource Rents as percentage of GDP*, *Fuel exports as percentage of merchandise exports* and *Oil rents as percentage of GDP*. These provide comparable data but more importantly represent three different levels of abstraction with regards to the concept of natural resource dependency. The first measures natural resource rents, not specifying what types of natural resources, the second narrows the scope and renders a view of fuel exports to exclude other commodities, and the third dataset provides a significantly more narrow view of the dependency on oil exports only.

### 3.4 Relevance

For large institutions such as the UNDP, the World Bank and G20 that lead an intensive development agenda, within which counteracting world poverty is an important goal, combating the resource curse has been considered a vital goal (Ross 2015, pp. 240). Although critics may point at lacking evidence for causality between resource wealth and adverse development, the resource curse has enough evidence behind it to make alleviating it a vital step in promoting global development for these institutions. Therefore the resource curse as an obstacle for development can be considered a relevant object to study. Furthermore, placing the resource curse as a phenomenon in the context of Chinese lending and China's strive for global influence, adds to the relevance of studying this problem. The world is at a crossroads in global politics where China has been on the rise for many years and is growing both as an economic but also a political superpower. Looking into how the Chinese strategies within the 'One belt one road' initiative affect problems related to the resource curse can give an insight into what direction Africa is headed economically and politically, but also how China pursues its global political and economic goals. In short; if a connection can be observed between the rate of loans received from China and increased dependency on natural resource exports in African countries, the strategy used by China can be evaluated differently.

### 3.5 Data material

The *China Africa Research Initiative* (CARI) at Johns Hopkins University School of Advanced International Studies is one of the main sources of data in this study, providing large and comprehensive datasets of Chinese lending to Africa, which of course is an instrumental asset in being able to conduct the regressions. Within CARI many articles have been published that set the context for these loans, what effects they have and what drive the increased loan giving. The World Bank is the main source of data over different aspects of export dependency, logistics measurements and natural resource exports. These measures, together with the loan data from CARI, lay the foundation for the quantitative section of this study.

In order to understand the different dimensions of the *resource curse*, an intensive literature review is necessary and in this Michael L. Ross' review article "What Have We Learned about the Resource Curse?" from 2014 has been the main guiding work from which other sources and frequent authors within the field have been found.

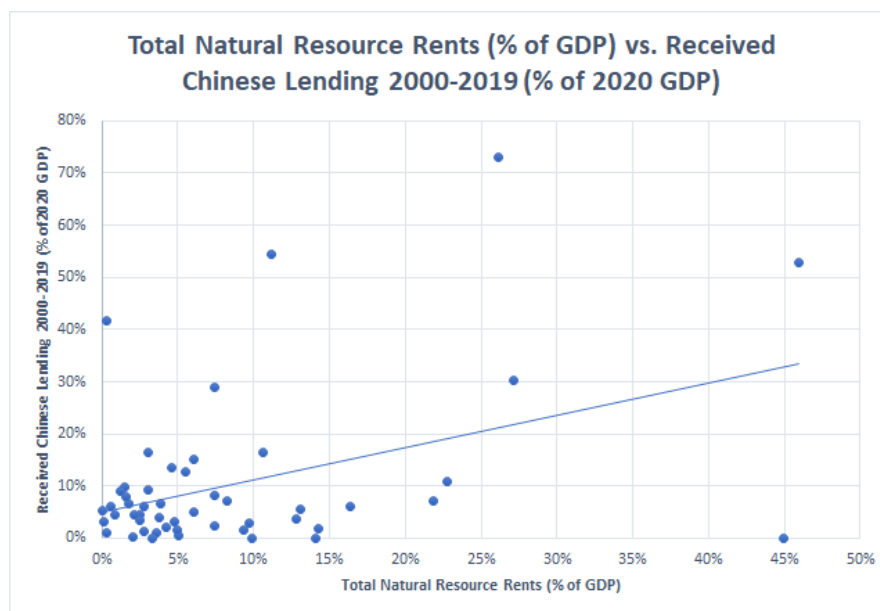
## 4.0 Analysis

### 4.1 Chinese lending and export dependency in Africa

In this section the results from the quantitative overview of how Chinese lending in Africa relates to export dependency will be presented. The choice of variables stems from a willingness to see if a higher rate of loans to countries correlates with stronger dependency on exports of natural resources. This could be an indicator that Chinese loans either precede the deepening of a resource curse, or that the lending is targeted at countries that are dependent on exports of natural resources, or even suffer from a resource curse. Therefore, examining whether these two concepts correlate provides a broad overview of where these loans are targeted, which makes for a good outset for the following in depth case study.

#### 4.1.1 Natural resource rents and received lending

**Chart 1:** Total Natural Resource Rents (% of GDP) vs. Received Chinese Lending 2000-2019 (% of 2020 GDP)

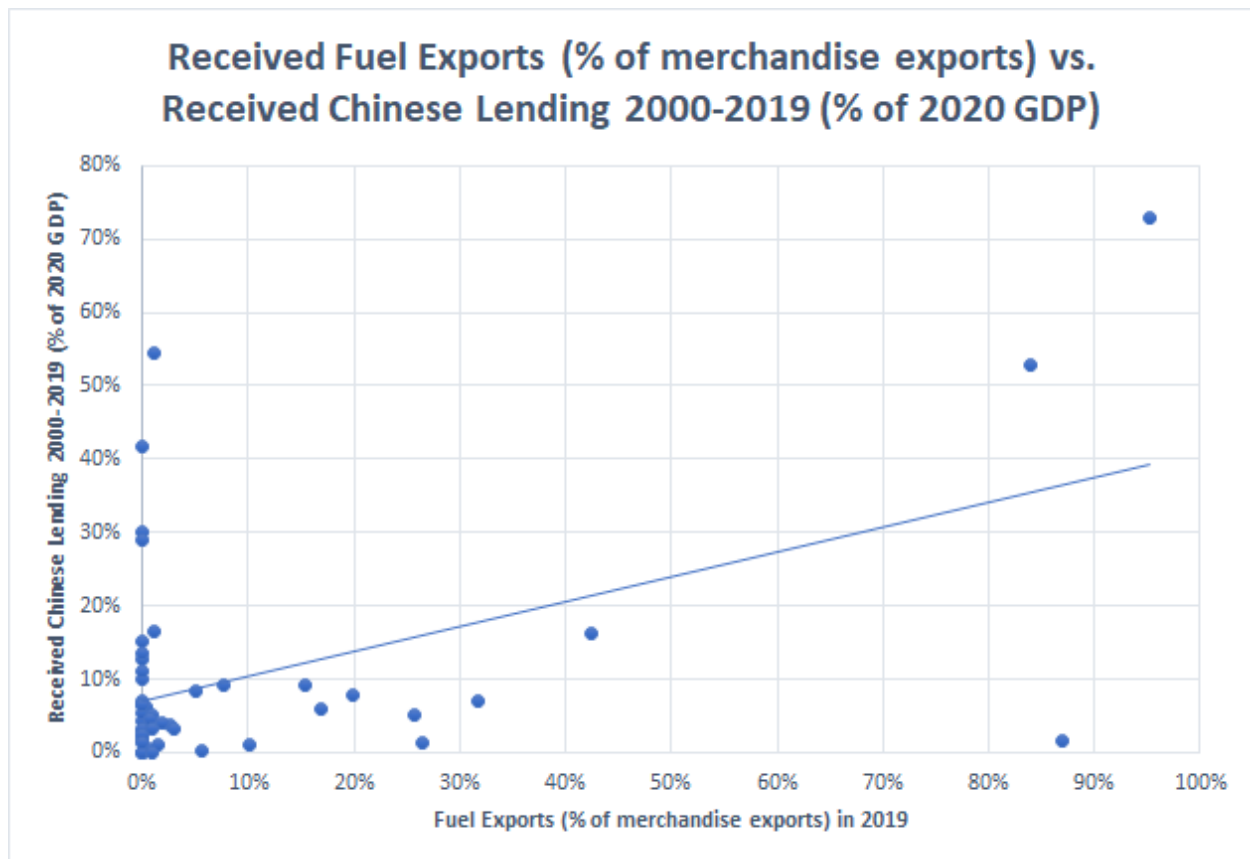


The pattern can be observed having increased spread among the variables as the value of the x-variable, natural resource rents (% of GDP), increases indicating that there most likely are underlying variables that affect the relationship. This is of course negative with regards to the possibility of stating that a correlation between the x and y variables is observable. However, the objective of these regressions is not to confirm causality or claim

correlation, but to provide an overview of whether higher degrees of lending from China can be linked to the deepening of mechanisms associated with the resource curse. The beta value for this regression is 0.616, which points to a rather strong correlation. However, the R-square value is merely 0.168, confirming the initial graphic observation that there are most likely underlying variables that affect dependent variable.

#### 4.1.2 Fuel exports and received lending

**Chart 2:** Fuel Exports (% of merchandise exports) vs. Received Chinese Lending 2000-2019 (% of 2020 GDP)



In this ordinary least squares regression the result is more clear, with less signs of potential underlying variables affecting the dependent variable, 'Received Chinese lending'. Compared to *Chart 1*, the beta value of this regression is 0,376, which is lower, indicating a weaker correlation between fuel exports and received Chinese lending. Despite this, the R-square value is 0,348 meaning that the predictability of the dependent variable's based outcome on the independent variable is better. Neither of these regressions show strong links between resource dependence and received lending. However, the aim of this study is to look at how the intensity of the resource curse in African countries is affected by Chinese lending. From this outset, it is reasonable to also look

at how countries' oil wealth affects the lending received as oil is the natural resource that has been most commonly linked to the occurrence of resource curses in poorer countries (Ross 2015, pp. 242-244).

### 4.1.3 Oil dependent economies and received lending

With regards to the resource curse as a phenomenon, and not just dependency on exports of natural resources in general, some commodities have been observed having a larger and more significant effect on the consequences associated with the resource curse. Among these consequences, the stabilisation of incumbent autocratic regimes has been linked to high levels of oil rents (Ross 2015, pp. 243-245), which has also been found to be the case among African countries specifically (Ongba 2009). Since there is significant evidence that high levels of oil revenue, specifically, correlates with problems associated with the resource curse, it is of interest to this study to explore whether Chinese lending is directed at countries rich in, or dependent on, oil to a higher degree than the states who are not. If states rich in oil receive more lending from Chinese banks, it could indicate that the funds from the loans have an effect on the amount of oil extracted and the effectiveness of the extraction in these countries which is to be considered one of the driving forces of the resource curse.

To examine whether countries dependent on oil exports receive more lending from Chinese banks, a threshold for oil rents as a percentage of GDP has been set above which a country is categorised as an *oil country*, and below which the country is considered a *non-oil country*. The threshold has been set at 10%, meaning that if a country has oil rents that surpass 10% of the country's GDP, it is categorised as an *oil country*.

**Table 1. Oil-dependent economies in Africa (in terms of oil rent as percentage of GDP in 2020)**

Country Name	Oil rents (% of GDP 2020)	Above 10% threshold?	Country Name	Oil rents (% of GDP 2020)	Above 10% threshold?
Algeria	10,19	Yes	Malawi	0,00	No
Angola	24,03	Yes	Mali	0,00	No
Benin	0,07	No	Mauritania	0,00	No
Botswana	0,00	No	Mauritius	0,00	No
Burkina Faso	0,00	No	Morocco	0,00	No
Burundi	0,00	No	Mozambique	0,33	No
Cameroon	1,73	No	Namibia	0,00	No
Central African Republic	0,00	No	Niger	0,73	No
Chad	11,33	Yes	Nigeria	4,41	No
Comoros	0,00	No	Rwanda	0,00	No
Congo, Dem. Rep.	0,50	No	Senegal	0,00	No
Congo, Rep.	31,91	Yes	Seychelles	0,00	No
Djibouti	0,00	No	Sierra Leone	0,00	No
Egypt	2,12	No	Somalia	0,00	No
Equatorial Guinea	15,60	Yes	South Africa	0,00	No
Ethiopia	0,00	No	Sudan	3,22	No
Gabon	14,32	Yes	Swaziland	0,00	No
Ghana	3,08	No	Tanzania	0,00	No
Guinea	0,00	No	The Gambia	0,00	No
Guinea-Bissau	0,00	No	Togo	0,00	No
Kenya	0,02	No	Tunisia	0,99	No
Lesotho	0,00	No	Uganda	0,00	No
Liberia	0,00	No	Zambia	0,00	No
Libya	21,14	Yes	Zimbabwe	0,00	No
Madagascar	0,06	No			

Figures: World Bank a. *Oil rents (% of GDP)*. The World Bank Group. [Electronic] <https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>  
Retrieved: 2022-04-27.

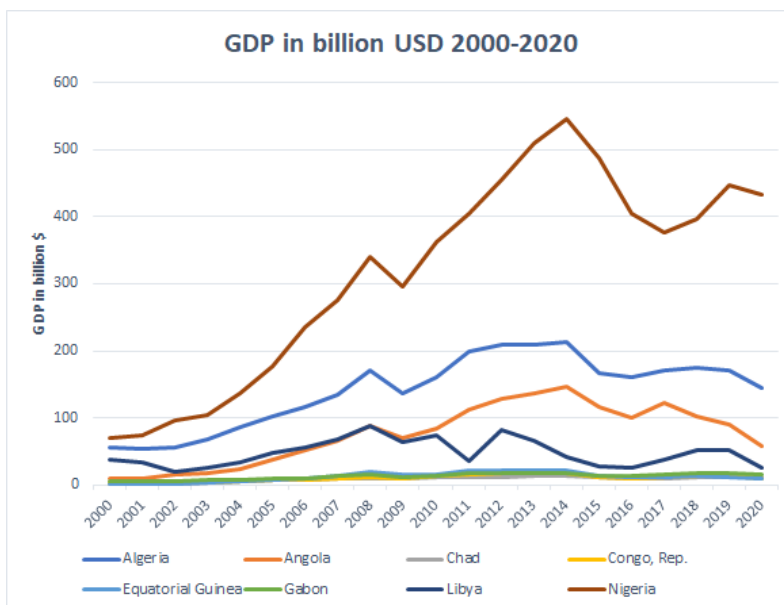
The threshold has been set at 10% as there is a relatively big gap between the countries with oil rents as 0-5% of GDP, to the group that has oil rents above 10% of GDP. Previous studies have made similar categorisations, which indicates that it is a reasonable approach, i.e. Ross (2001, pp. 326). With this definition of what constitutes an *oil country* from the threshold of oil rents above 10% of GDP, seven countries meet the requirements; Algeria, Angola, Chad, Republic of the Congo, Equatorial Guinea, Gabon and Libya. A concern that rises with this result, is the absence of Nigeria in the category of *oil countries*, since the country is the top producer of oil in Africa with production of roughly 1,5 million barrels of crude oil on average per day in 2021 (U.S. Energy Information Administration, 2022).

However, as stated previously, the oil rents (% of GDP) measure is of course affected by changes in GDP, which explains the dramatic decrease in oil rents relative to GDP that the country has seen since 2011. The GDP has increased from around 300 billion USD in 2009 to over 400 billion USD in 2020, and over the last twenty years the GDP of Nigeria has increased far more than the other countries in the category. It is also observable that oil rents as a percentage of GDP in Nigeria seem to have decreased as the GDP has gone up, indicating that it does not have to do with a decrease in oil production or revenue. To summarise, oil rents do not constitute as big of a



part of the Nigerian economy as it did just ten years ago, and from this outset, it is reasonable to exclude Nigeria from the category of *oil countries*, given the definition set in this study.

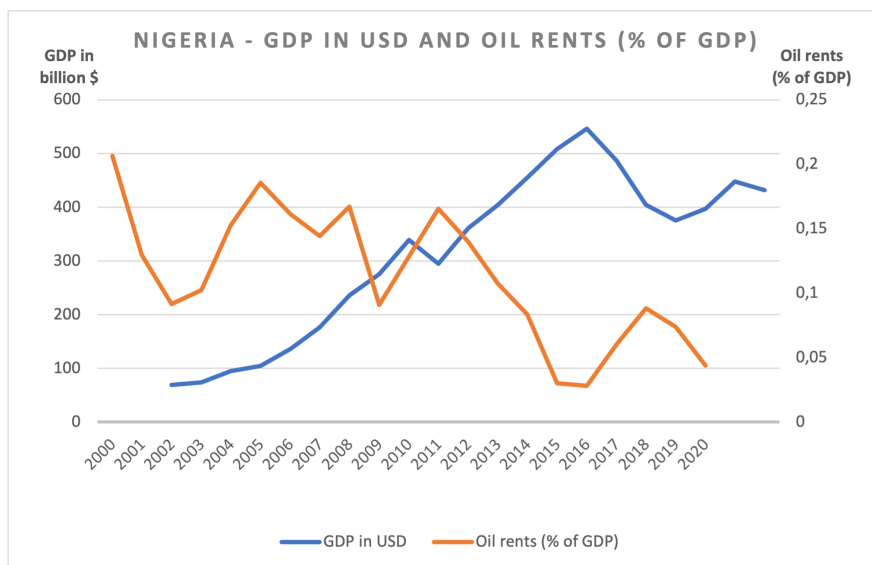
**Chart 3:** GDP of *oil countries* and Nigeria between 2000 and 2020.



**Figures:** World Bank b. *GDP (current US\$)*. The World Bank Group [Electronic]  
<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

Retrieved: 2022-05-10

**Chart 4:** GDP and oil rents (% of GDP) in Nigeria between 2000 and 2020.



**Figures (oil rents):** World Bank a. *Oil rents (% of GDP)*. The World Bank Group. [Electronic]  
<https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>

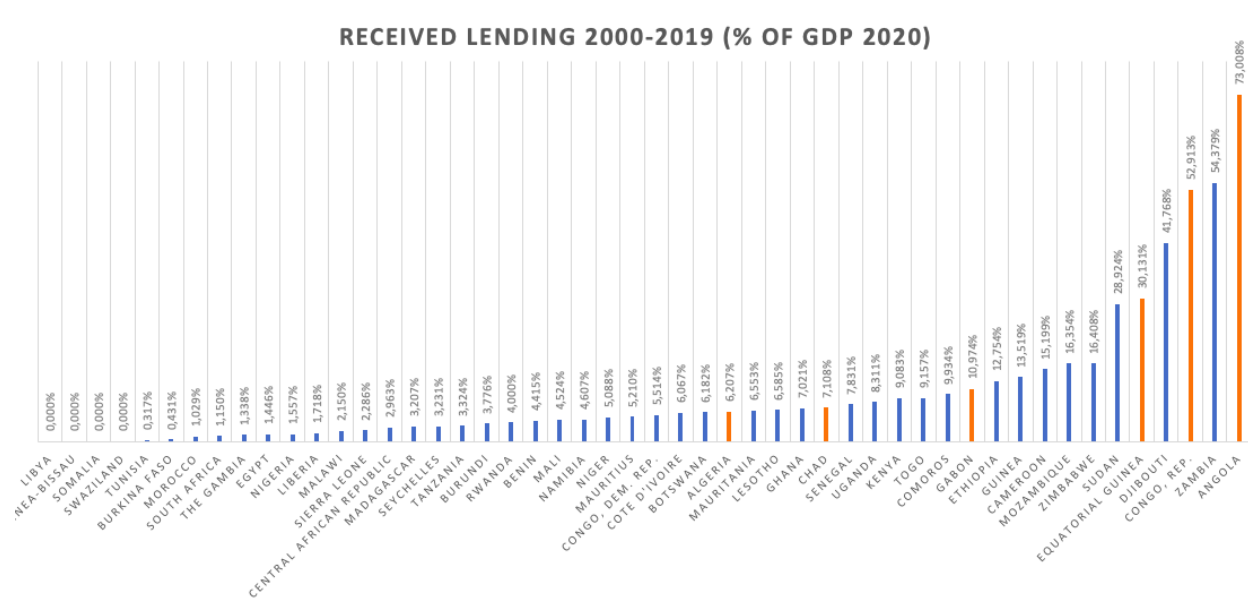
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**Figures (GDP):** World Bank b. *GDP (current US\$)*. The World Bank Group [Electronic]  
<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

Retrieved: 2022-05-10

Now the question is if these countries receive more loans from Chinese banks than the non-oil countries. For this, the loan data over received loans among African countries between 2000 and 2019 from SAIS-CARI:s CLA Database can be utilised. This data is however in absolute figures, and in order to make the figures of different countries comparable, they have been adjusted to reflect the lending received as a percentage of 2020 GDP, with official GDP data from the World Bank. The following results can be observed (where the bars of oil countries are shown in orange):

**Chart 5:** Received Chinese lending (% of GDP) by country between 2000 and 2019



**Figures (loan data):** China Africa Research Initiative and Boston University Global Development Policy Center, 2021. *Chinese loans to African Governments. April 2021*. Chinese Loans to Africa Database, Version 2.0.

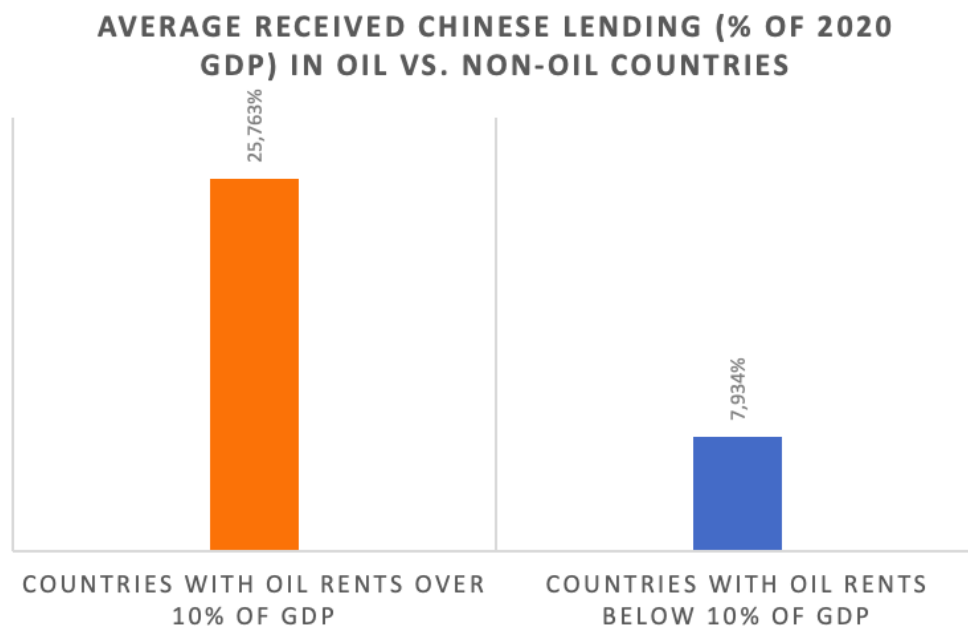
Retrieved 2022-04-05 from [chinaafricaloandata.bu.edu/](http://chinaafricaloandata.bu.edu/).

**Figures (GDP data):** World Bank b. *GDP (current US\$)*. The World Bank Group [Electronic]  
<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

Retrieved: 2022-05-10

It is clear that the seven oil countries receive a quite significant portion of the loans, relative to the size of their economies. In order to make a clear comparison of how the levels of received Chinese lending differs between oil and non-oil countries, the mean of received lending as a percentage of 2020 GDP has been calculated for the countries in the respective categories. Below the average received Chinese lending between 2000-2019 as percentage of 2020 GDP can be observed:

**Chart 6:** Average received Chinese lending as percentage of 2020 GDP in oil vs. non-oil countries



The result indicates that countries with oil rents that correspond to a larger portion of their GDP have received lending from Chinese banks between 2000-2019 that is roughly equivalent to 26% of their GDP as of 2020. Meanwhile, the countries with oil rents corresponding to less than 10% of their GDP have received lending roughly equivalent to 8% of their GDP as of 2020. Through a t-value test the statistical significance of the difference in mean received lending in oil and non-oil countries respectively can be confirmed. The test gives a 95% confidence interval which leads us to conclude that the result is statistically significant.

This finding is interesting as the categorisation and measures utilised makes the numbers comparable between the countries in the dataset by recalculating them in relative numbers. It is clear that *oil countries* in relative terms receive significantly larger amounts of money from Chinese banks through loans. A potential problem with this measure is the inclusion of Angola in the dataset, as it constitutes a relatively extreme outlier in China's Africa lending, which has been pointed out to be a problem by for example Acker and Brautigam (2021, pp. 2). The authors conclude that excluding data on Angola generally makes for better understanding of the trends in the data. Therefore it is reasonable to control for how the data would look if Angola was to be excluded. In that case the mean received Chinese lending as percentage of GDP among oil countries would amount to 17,415%, which concludes that oil countries, even without Angolas outlier data in the category, receive higher amounts of lending than non-oil countries.

## **4.2 The resource curse and Chinese lending in Angola**

### **4.2.1 Angola's resource curse**

One of the main effects of a resource curse is that autocratic leaders remain in power over longer periods of time (Ross 2015, pp. 244-246; Cuaresma et. al 2010, pp. 528; Andersen & Aslaksen 2013, pp.105). This is generally thought to be caused by incumbent rulers being able to reduce taxes and still spend large amounts on public goods and patronage which reduces democratic pressures from the public (Ross 2015, pp. 246; Ross 2004, pp. 247-248). In 2021, Angola received a score of 3.37 on a scale from 1 to 10 in the Economist Intelligence Unit's (EIU) democracy index, putting it in the category of authoritarian regimes, which has been a constant since 2006 when the index was first presented. Furthermore, Angola scored only 1.33 in "Electoral process and pluralism" in 2021, indicating severe lack of competitiveness in the political system. (EIU, 2021) The current regime has also been in power since the end of the Angolan civil war in 2002, and political stability has been maintained since then (World Bank e.). This supports the theoretical claims within the resource curse research that countries wealthy in oil see more stable autocratic rulers (Smith 2004, pp. 242-243). It also indicates that the Angolan regime has been successful in fending off potential political challengers, which is commonly associated with authoritarian regimes wealthy in oil (Ross 2015, pp. 246).

Another important factor to look at when examining whether a country is suffering from a resource curse or not, is the quality of institutions (Ibid., pp. 248-249) For example, Mehlum et. al. (2006, pp. 3-4, 16) find that states with lower quality institutions are affected more negatively, in terms of lower economic growth, by resource abundance. The authors categorise states as having institutions that are “grabber friendly”, meaning that the institutions use their capacity to appropriate as much of the rents as possible, or “producer friendly”, where entrepreneurs are attracted into production, increasing growth. The state of Angola’s institutions indicates that they are to be categorised as “grabber friendly”. Since 2006 the stability of democratic institutions in Angola has consistently been ranked at 3.0 or below on a scale from 1 to 10, in the Bertelsmann Stiftung Transformation Index (Bertelsmann Stiftung, 2022). Amundsen (2014, pp. 173-176) also states that the Angolan institutions, primarily the state-owned oil company Sonangol, are clearly grabber friendly.

#### **4.2.2 Effects of Chinese lending on resource curse-factors**

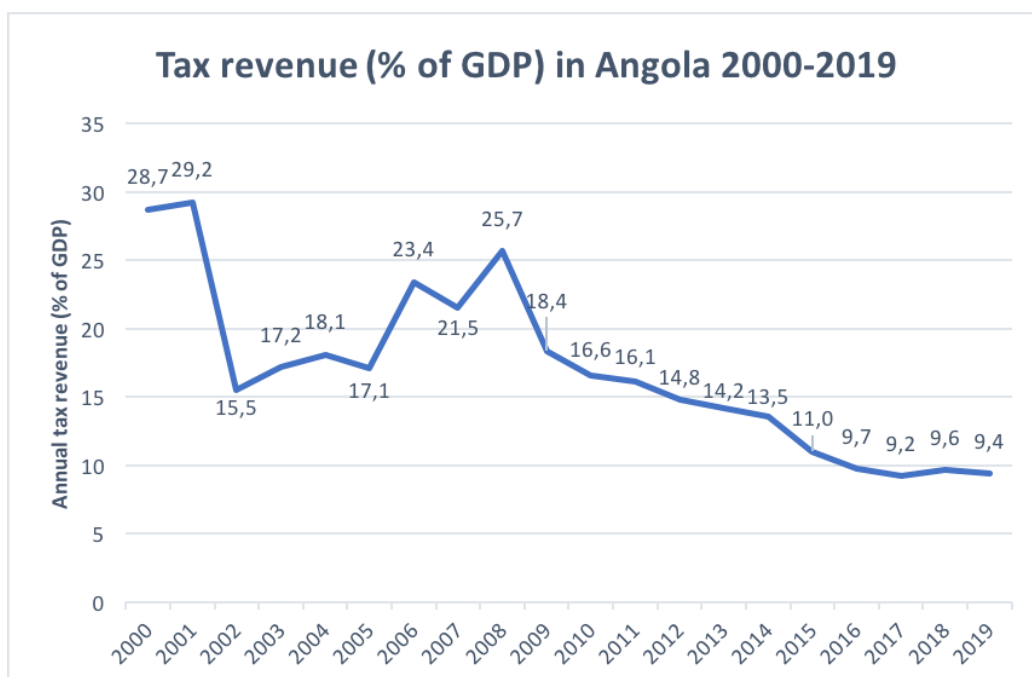
Until 2016, almost all loans to Angola from Chinese financiers were oil-backed, and half of the funds were invested in infrastructure, and the remainder were mainly commercial loans to the state-owned Angolan oil company Sonangol (Brautigam et. al. 2016, pp. 1). As described previously it is of importance for the prosperity of an autocratic ruler with extensive oil wealth to have access to the oil rents as this makes more funds accessible for the regime (Ross 2015, pp. 245). In turn, these funds can be used to outspend political opposition and buy votes, making elections that seem fair and square on paper, unfair in practice. It is clear that incumbents *will* use the state’s fiscal power to maintain a strong political position and remain in power, it is not a question of *if* this will happen. (Greene 2010, pp. 828) In the case of Angola, the state-owned oil company ‘Sonangol’ is the main tool for ensuring these types of fiscal advantages over political opponents. The company serves as a rentier tool for the ruling regime, protecting its interests and ensuring its survival, in part by being very “grabber friendly”, meaning prone to corruption. (Amundsen 2014, pp. 184)

Now, how does Chinese lending affect this? Of the roughly US\$ 9 billion of lending directed at the mining sector in Africa between 2000 and 2014, 84% were loans to Sonangol alone (Brautigam et. al. 2016, pp. 2). These loans add up to a total of US\$ 7,5 billion, and were followed by a recapitalisation loan to Sonangol of US\$ 10 billion in 2016 (Boston University Global Development Policy Center, 2022). This recapitalisation loan allowed Sonangol and the Angolan government to refinance Sonangol’s debt to the Chinese Development Bank. More importantly however, a majority of the lending to Angola has been issued on oil-backed contracts and this

recapitalisation enabled Sonangol and the Angolan government to benefit from increased oil prices since the initial loan contracts were issued (AidData, 2016). In practice, the Chinese state-owned bank CDB has not only funded the activity and increased the efficiency of the most important fiscal tool of the Angolan authoritarian regime, CDB has also allowed for refinancing of loans to further maximise Sonangol’s revenue and ensure its prosperity.

Furthermore, a mechanism closely tied to resource curses is the *rentier effect*, which was briefly mentioned earlier in this section. The rentier effect comes from the possibility to reduce taxes while simultaneously maintaining high public spending when abundant oil revenues can be used to cover up the absent tax revenues (Ross 2015, pp. 246). By reducing taxation, leaders can escape accountability to a greater extent as the people are more accepting of the regime’s policies when their own money is not at stake (McGuirk 2013, pp. 309). Apart from the extensive loans to Sonangol during the 2010-2014 period, Chinese financiers have also committed US\$ 6.1 billion to Angolan infrastructure projects since 2000 (Boston University Global Development Policy Center, 2022). Amidst the relative constant decline of tax revenues in Angola, Chinese lenders have contributed to the maintaining of the rentier effect by contributing to an important field of public spending; infrastructure, which is to be categorised as a “public good”, as Ross (2015, pp. 246) terms it.

**Chart 7.** Tax revenue as percentage of GDP in Angola between 2000 and 2019



**Figures:** World Bank f. *GDP growth (annual %)*. The World Bank Group [Electronic]  
<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>

Retrieved: 2022-05-15

## 5.0 Conclusion

The main results of this study are that countries rich in oil, measured in relative terms, have received far more lending from Chinese banks than countries that are not rich in oil. Oil is also the commodity most strongly associated with the resource curse, which leads to the conclusion that Chinese lending is, deliberately or not, directed at resource cursed countries to a greater extent. Now, it is hard, not to say impossible, to get to the bottom of whether this is rooted in a conscious choice by the Chinese state to fund projects in countries with autocratic rulers, relatively weak institutions and lagging economic growth. Finding evidence for such a strategy would require examining internal decision making processes in the Chinese Communist Party, which is most likely not going to happen.

Furthermore, the case study of Angola has shown that the extensive Chinese lending to the country most likely has contributed to a deepened resource curse through financing the development of Sonangol, the regime's most effective and important rentier tool. The company has been deemed the single most important factor when considering why the Angolan regime has stayed in power for several decades (Amundsen 2014). This leads to the conclusion that assisting the regime in developing this tool with such extensive financing must be considered directly deepening the resource curse as the regime stays in power and the oil extraction industry plays an even more vital role in maintaining this status quo. This combined with the broad set of infrastructure investments from Chinese lenders in Angola can be said to likely have a very strong effect on the regimes ability to continuously reduce taxation and thereby reducing accountability to the people. Based on the stressed importance for authoritarian regimes to access oil rents and fiscal advantages to remain in power observed by for example Amundsen (2014, pp. 184) and Greene (2010, pp. 828), the effect of extensive lending to the Angolan regime's most powerful fiscal tool, the state-owned oil company Sonangol, can be assumed to be a stronger regime and with that also a deepened resource curse for Angola's political and economic system.

However, settling for a conclusion like this, formulated in vague terms and reluctant to take a stand for what *seems* to be true, is equivalent to subscribing to the saying “better safe than sorry”. Deborah Brautigam (2020) challenges this standpoint, which is often taken by academics, arguing for taking a stand, despite ambiguities, in order to bridge the gap between academic findings and the “real world” policy advisors. It is apparent that this is mainly addressed to senior academics, and perhaps not a recommendation to bring into a bachelor’s thesis. Although, with this reasoning in mind it seems sensible to discuss what implications this study indicates that the Chinese lending to Africa *could* have.

To clarify, Brautigam (2020) makes a good case for Chinese lending and the surrounding policy not deliberately indebting African countries for their own benefit. What this study finds is however not contradictory to the conclusions drawn by Brautigam. The conclusion is *not* that China has the goal of indebting other nations, but rather directing the lending, which could be deliberate or not, at resource-cursed countries. This could be caused by the fact that promoting trade overseas with countries rich in natural resources, especially oil, is more beneficial for Chinese development. Targeting lending at countries rich in oil also happens to mean targeting resource-cursed countries, which may not be an intended outcome. Whether this is deliberate or not, it seems to be a fact and the implications of where the lending is directed can have consequences for these countries’ further development.

To conclude and relate to the initial research question; *Does Chinese lending to African countries dependent on natural resources deepen problems related to the resource curse?* Based on the findings in this study, it is reasonable to claim that the lending from Chinese financiers have had potentially deepening effects on the resource curse in Angola. Mainly because of the extensive lending to Sonangol but also by contributing to efforts, i.e. in infrastructure, that could otherwise have required financing through increased taxes, which would have rendered accountability for the regime. The alternative would be to not invest in projects such as those in infrastructure, but that would also risk raising discontent among the population. In any case, there are indicators that Chinese lending since 2000 has had a deepening effect on the resource curse in Angola, but what about other countries? Generalising these findings is of course difficult, as they rely primarily on findings that are exclusive for Angola, i.e. the extensive funding of Sonangol’s activities. However, as the quantitative section of this paper could show, African states with high oil rents receive significantly more lending than those with low oil rents. This does not imply that the same effects observable in Angola are true for the entire group of oil



countries, but it is possible to say that extensive lending is directed at these countries, and this could indicate that similar deepening effects on the resource curse are observable in other oil-rich countries as well. Another potential problem with the generalisability of the findings is that Angola constitutes an outlier as the country that has received the most lending by far of all African countries. Therefore, there is not enough evidence to claim that the lending deepens the resource curse in oil dependent countries in general, but it can be regarded as an indicator that so might be the case.

## 6.0 Recommendations for further research

In its initial stages, the thought of examining the Chinese lending to Africa in contexts where it was welcomed by political leaders, to see what positive impacts could be observed in the recipient countries. This type of study would need a more actor-centric research design and could take inspiration from the critical discourse surrounding the *debt trap* concept, where Deborah Brautigam (2020) and Eyck Freymann (2020) provide relevant literature on the subject. Brautigam (2020, pp. 6) sheds light on the, in the West, common perception that Chinese overseas lending through the Belt and Road Initiative and shows that Chinese investments are welcomed by many Africans, that see it as a promising opportunity to finance projects in a more dynamic way, compared to foreign aid in its traditional form. The concept has been criticised for being a simplification of reality, for example when it comes to the claim that China has a hidden agenda to force countries' into debt and use it to their advantage. From this outset, it would be interesting to examine the positive economic effects of the loans as a more modern way of providing underdeveloped countries with financial aid, as a contrast to traditional western bilateral aid.

Furthermore, conducting a study that aims to score countries based on how intense their resource curse is, would be a welcomed contribution to this field of study. This could be done by setting up extensive criteria and operationalisation of what constitutes a resource curse, and measuring how intensively these respective aspects of the resource curse are affecting the countries' political and economic development. For comparison, there are reliable and useful measurements and rankings on for example democracy with democracy indexes from the Economist Intelligence Unit, the Varieties of Democracy Institute at Gothenburg University and the likes. The same goes for freedom of press indexes from actors such as Reporters Without Borders. Constructing a "resource curse index" is certainly an ambitious project, but would nevertheless make for a strong contribution

to the research and would make the phenomenon easier to grasp and discuss for non-academic actors such as politicians. It is important for the academic world to bridge the gap between the professors in ivory towers and the real world (Brautigam 2020, pp. 12), which is something an index like this would help in doing.

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**Malmö Nation**

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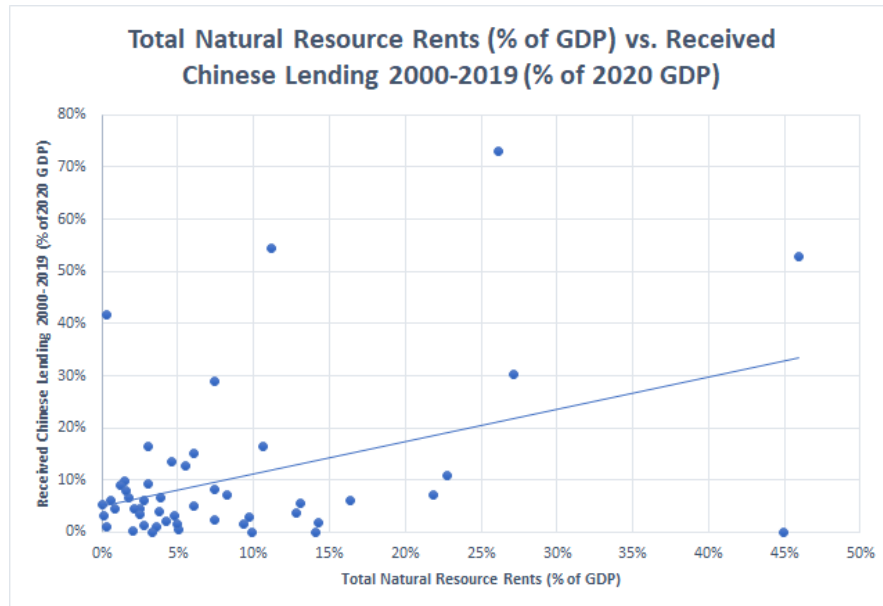
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## 8.0 Appendix

**Chart 1:** Total Natural Resource Rents (% of GDP) vs. Received Chinese Lending 2000-2019 (% of 2020 GDP)



### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Total natural resources rents (% of GDP) 2019 <sup>b</sup>	.	Enter

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,410 <sup>a</sup>	,168	,151	14,018946%

a. Predictors: (Constant), Total natural resources rents (% of GDP) 2019

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1907,716	1	1907,716	9,707	,003 <sup>b</sup>
	Residual	9433,481	48	196,531		
	Total	11341,196	49			

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP

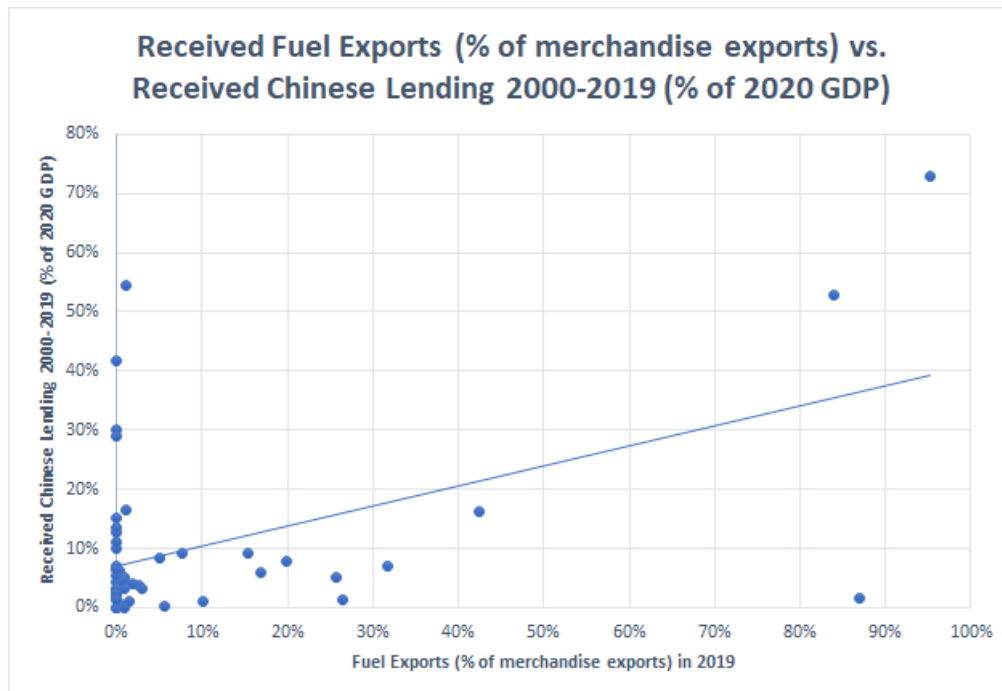
b. Predictors: (Constant), Total natural resources rents (% of GDP) 2019

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,146	2,601		1,978	,054
	Total natural resources rents (% of GDP) 2019	,616	,198	,410	3,116	,003

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP

**Chart 2: Fuel Exports (% of merchandise exports) vs. Received Chinese Lending 2000-2019 (% of 2020 GDP)**





### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Fuel exports (% of merchandise exports) 2019 <sup>b</sup>	.	Enter

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,590 <sup>a</sup>	,348	,328	13,357126%

a. Predictors: (Constant), Fuel exports (% of merchandise exports) 2019

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3135,955	1	3135,955	17,577	,000 <sup>b</sup>
	Residual	5887,623	33	178,413		
	Total	9023,578	34			

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP

b. Predictors: (Constant), Fuel exports (% of merchandise exports) 2019

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,811	2,582		1,863	,071
	Fuel exports (% of merchandise exports) 2019	,376	,090	,590	4,192	,000

a. Dependent Variable: Received lending 2000-2019 as % of 2020 GDP