

**Chinese infrastructure investments in Nigeria - prospects and challenges in
terms of gains**

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Introduction

Plenty of analyses, interpretations and predictions have been written on China-Africa relations in recent years. A few aspects, in particular, aroused the public's interest - China's new role as a global power in the international arena and what it means for Africa. Benefits for Africa that come from the partnership is the foundation of many already existing works on this issue. However, more and more new analyses are still needed today. Firstly because the China-Africa partnership is a unique, always evolving phenomenon; therefore, as a process, it should be continuously observed for a more accurate analysis. Secondly, because the relation is multidimensional and can be analysed from various angles. The lack of comparative data is the reason for some early works on this subject to be vague in analyse, treating the relationship as a monolithic, nonrecurring transaction.

Furthermore, especially in non-African works, we can read about China-Africa relations as the only rank of cooperation, ignoring the country-to-country agreements. Even though the Chinese and African leaders communicate at the FOCAC meetings, where the strategy of collaboration is determined from the continental point of view, specific decisions are being made by individual countries. Therefore, the amount and profile of Chinese influence will be different in each state, and those regional and local analyses are still lacking in the discourse. I would like my thesis to be a modest contribution to filling the niche. I will present the findings on Chinese investments in Nigerian railway development and analyse them in terms of the relative and absolute gains theory to answer the research question: can Nigeria benefit from Chinese transportation infrastructure investments while China benefits as well?

In my work, I will be discussing specifically the recent Chinese influence on transportation in Nigeria, mostly through investments in railways. I will present it in a frame of China-Africa relations with the history and specifics of China-Nigeria relations included. To explain the partnership on railway development, it will be essential to present the condition of Nigerian transportation and its struggles. I will also discuss the significance of transportation infrastructure in general. For a better understanding of conclusions, I will also explain the relative and absolute gains theory. As I mentioned, there already are plenty of works discussing different aspects of China-Africa relations. Therefore, I will include the main points emerging from the existing analyses with my comment on it. It is significant for my framework to present the debate on China-Africa relations as it contains general arguments on the advantages and disadvantages of the partnership for Africa. I will address those in my analysis. The literature review will also contain phrases and language used in the public debate that was crucial in shaping the relationship. In the final chapters, the data and the discussion about it will be analysed from the perspective of relative and absolute gains.

Literature review

As mentioned in the Introduction, there is an ongoing debate about China-Africa relations and its possible outcomes. With the development of the relation itself, the debate evolves too. This is why I was able to gather a few works on China-Nigeria relations and the Chinese activity in this country. In this section, the arguments from a few authors on China-Africa relations will be introduced.

I would like to begin with the 2009 book by Martin Jacques *When China Rules the World*. Although the work describes Chinese emerge as a new world power, it is an important position in the China-Africa relations discussion. Many arguments raised in the discussion have their roots in this power shift. Not only was Africa an essential component of the Chinese raise but it is now beneficent of what its partner managed to build in recent decades. *When China Rules the World* is a monumental

work describing the path which the country followed to achieve today's status. The main line of the book is an attempt to grasp the elements in Chinese history, culture and mentality that divides it from other countries, especially the Western ones. The author suspects that China will still be growing with unparalleled speed and soon excel all the remaining world powers. Chinese capabilities will also let it become the new guardian or a caretaker of the less fortunate regions in the place of the US or Europe. *China's success suggests that the Chinese model of the state is destined to exercise a powerful global influence, especially in the developing world, and thereby transform the terms of future economic debate. The collapse of the Anglo-American model in the wake of the credit crunch will make the Chinese model even more pertinent to many countries.*¹ Jacques' assumptions from over a decade ago perfectly describe the world's approach towards sudden Chinese promotion on the international arena. Two aspects I would like to mention are the attempts to understand how the world will change in the era of strong non-Western influence and also the role of the globally non-prominent economies in the process. Apart from Jacques' book, many of the works created in the early stages of Chinese rise to power, have had strong opinions on those two aspects. Question on Chinese role in the new world model has been asked in the 2006 article from *Asian Perspective* by Michal Meidan *China's Africa Policy: Business Now, Politics Later*. As the author summed up herself; *The question that this article addresses is China's interest in and goals for its ties with Africa. Is China trying to consolidate a new world order; based on different moral values, conflicting with the current world order; or is China still a pragmatic actor, exploiting African resources in order to satisfy its growing demand for raw materials?*² The main aspects the author addresses in those terms are the Taiwan case and vastly understood South-South cooperation. The first one describes how efficiently China was able to use the African support to change global political and economic affinities from its foe - Taiwan, towards itself. By doing so, China influenced the international arena and secured itself a strong position on it. That leads to the second point of the article - the South-South cooperation slogan, which is a symbol of, according to Meidan, China becoming a leader of the "Third World". The article also suggests that Africa is a tool in Chinese rivalry with the USA. By sponsoring lavish projects, including infrastructural ones, China is buying African countries into its team. However, the author does not make unmistakable assessments, underlining there are a lot of possible benefits for Africa from the partnership with China and the relation is too young to predict its future. Division on the West and the East is present in many works on China-Africa relations. The Chinese way of cooperation is usually compared with Western standards. Even in the toned *When China Rules the World*, the author suggests that the East (understood as China) has something the West does not and with this element is now winning in a bloodless war of ideas. In this discourse, Africa figures as a tool and prey of Chinese ambition. We can see that in *Le jaune et le noir. Enquete historique*, a book from 2016 by Tidiane N'Diaye, who heavily criticised the China-Africa relations structure. According to the author, China uses its almost infinite wealth to transform African countries into a factory and outlet. N'Diaye describes how Chinese become present in all the possible sectors destroying the foreign and domestic competitors and as a result addicting the continent to the partnership. The author also mentions concerns about the social sustainability of Chinese support. Primarily, that Chinese companies leading the construction process hire Chinese instead of Africans, contributing to the high unemployment. Another significant allegation made by the author is that the infrastructure investments, praised by many observers, come with strings attached to other sectors. Apart from the output of the natural resource, African countries, in general, are apparently forced to concessions towards China. This leads

¹ Jacques Martin, *When China Rules the World*, Penguin Books, 2009, pp. 185

² Meidan Michal, *China's Africa Policy: Business Now, Politics Later*, *Asian Perspective* Vol. 30, No. 4, Special Issue on "Rising China's Foreign Relations" (2006), pp. 69-93, pp. 72

to uncontrolled Chinese immigration and increasing numbers of Chinese small businesses that compete with the domestic ones. While the cited book raises concerns about Chinese general presence and engagement in any African affairs, there are works that focus on specific areas of risk. *Can China's Engagement Make a Difference to African Development* by Machiko Nissanke and Marie Söderberg from 2011 points out the risks of the China-Africa relations structure. Primarily in terms of possible debt insolvency caused by dissociable infrastructure projects. The authors mind that China is, after all, a business partner, who invests in projects that in the long term will benefit itself and not necessarily Africa. The scale and sectors of influence are not accidental as China aims the resource-rich countries with trade possibilities, Nigeria being a prime example of that description. The authors ask a justified question on how is the infrastructure tailored for Chinese resources are supposed to support the overall development of the country that need various industry sectors. As the authors explain it (...) *due attention should be given to the question whether or not infrastructure built under the "resources for infrastructure" modality could serve as a trigger to accelerate the process of economy-wide diversification rather than just as a mere facility to move resources from an extraction point to a shipment point for exports.*³

There are also a few authors I would like to mention who signalize positive aspects of China-Africa relations. One of the best-known publication on the subject is *China in Africa* from 2007 by Chris Alden. It is a comprehensive analysis of various aspects of China-Africa partnership in historical context and comments on contemporary Chinese policy. Alden recognizes the growth of the Chinese economy and political influence, however, unlike Jacques, concentrates solely on implications for Africa. *China in Africa* was a significant source for my work, a starting point for my research, due to its multidimensional approach to the China-Africa relations. Another important component of Alden's publication is the analysis of phrases assigned to China-Africa relations and their implication in reality. Some of them are non-intervene policy or win-win relationship, which I will elaborate on in upcoming chapters. Even though the author signalizes alarming results of the cooperation, like the disappearing textile production sector in Nigeria, due to extensive import of cheap goods from China, or the market of small enterprises being occupied by Chinese immigrants, the overall partnership is being evaluated as a positive change. Alden believes those negative aspects have been created due to lack of regulations, typical to the developing economy, such as in Nigerian. Alden represents the side that justifies the negative aspects of the partnership by the imperfection of law or lack of standards, not by malicious intentions. The author also includes positive statements on cooperation with China by prominent African politicians, like in this fragment *The positive reaction from African governments to China's expanding presence on the continent is a testimony to the effectiveness of this Chinese foreign policy approach. The admiration expressed by African presidents, government bureaucrats, business leaders, traders and journalists upon seeing the marvels of the New China for themselves produced a public euphoria rarely experienced in politics. As a top official in Ethiopia's Ministry of Foreign Affairs gushed: 'Never in modern history has a nation successfully made such a determined and massive effort as China has in achieving progress within such a short span of time. Ethiopia has been following this remarkable achievement with great interest and admiration.*⁴ However, many other quotations of African politicians and scholars, that are easy to find in the media, are contrary to the cited official's enchantment. Authors may include those that validate their view but should not be treated by a reader as an official statement of the continent.

³ Nissanke Machiko, Söderberg Marie, *Can China's Engagement Make a Difference to African Development*, UI papers, 2011, pp. 32

⁴ Alden Chris, *China in Africa*, African Arguments, 2007, pp. 35

On the aspect of China-Nigeria relation and Chinese investments in infrastructure, a complex study has been provided in a World Bank report *Building Bridges China's Growing Role as Infrastructure Financier for Sub-Saharan Africa* by four authors (Vivien Foster, William Butterfield, Chuan Chen, Nataliya Pushak) from 2009. The report includes the analysis of the financing of the construction projects and benefits for the local markets of Sub-Saharan Africa. Authors emphasise the contemporary complementation of China's and, among others, Nigeria's needs. Suggesting that the cooperation of those two parties is natural and justified solely by the market. In Nigeria, the underfunding of transportation infrastructure is the second biggest bottleneck for industry development, while China needs an outlet for its overproduction. The authors also foretell that the competition for the Western donors will force an improvement in the FDI and aid sector concerning Africa. It may also be a learning opportunity for consciously choosing the best solutions for the local leaders. As we can read in the conclusions *The advent of China and other non-OECD players as major financiers presents itself as a hopeful trend for Africa, given the magnitude of its infrastructure deficit. The aid provided by these emerging financiers is unprecedented in scale and in its focus on large-scale infrastructure projects. With new actors and new modalities, there is a learning process ahead for borrowers and financiers alike. The key challenge for African governments will be how to make the best strategic use of all external sources of infrastructure funding, including those of emerging financiers.*⁵

While looking for literature for my thesis, I have been trying to pick the works by its possible contribution to my analysis, not by the author's conclusions or views on China-Africa relations. I have not gone through all the significant material from recent years. At the beginning of my research, I had an assumption that the academical world is divided into the opposing and praising sides, however, after analysing my own sources, I changed my mind. The large majority of authors examined, describe the China-Africa relations in a well-balanced way. The personal opinion is only slightly more positive or negative from the neutral centre. The authors describe various benefits Africa may gain from a partnership with China, but they also mention the challenges that this new relation creates. What is once again worth mentioning, Nigeria will not be a recipient of those in an identical way as any other African country. In the upcoming chapters, I will try to analyse which from the benefits and threats may be attached to the transportation development supported by China. It would not be possible without describing the strengths and weaknesses of the country in terms of development and position in Chinese partners' hierarchy. I will present the details of the research methods in the methodology section.

Methodology

In my thesis, I will try to provide an answer for the following research question: can Nigeria benefit from Chinese transportation investments while China benefits from them as well? Nigerian benefits are the subject of the issue, while Chinese benefits are the adjunctive factor. It means the focus of my research will be directed towards Nigeria in reference to China. The aspect in which the benefits will be measured is the transportation and more precisely, the influence of transportation development on other sectors - the transportation's support of industry and positive benefit of citizens' everyday life. By addressing the fact of bilateral benefits, I would like to place my thesis in the discussion about possible, yet still theoretical dangers for African countries of becoming a Chinese partner. Does the fact that China benefits from the investments mean that Nigeria benefits less or

⁵ Foster Vivien, Butterfield William, Chen Chuan, Pushak Nataliya, *Building Bridges China's Growing Role as Infrastructure Financier for Sub-Saharan Africa*, The World Bank, 2009, pp. 74

becomes a tool for Chinese plans? As I presented in the Literature Review section, many authors are concerned about the power gap between the partners and that China will use its advantages against its partners. This aspect of the discussion and lack of answers from the available data influenced my theoretical approach. I have decided to apply the theory of relative and absolute gains to the dilemma. It is a theory known in International Relations studies that analyse the correlation between two partners' benefits and chances for cooperation or betrayal. My work will include a detailed explanation of the gains theory as well as its limitations. Afterwards, I will proceed to the transportation infrastructure part, in which I will describe the condition of the Nigerian transportation system, with a focus on roads and railways. Later on, when I will mostly be referring to the railway. However, in the infrastructure part, I wanted to include the condition of roads since those two components are interlocked in many ways and as I will explain, regulate the transportation system together.

For a better understanding of the influence that the transportation condition has on the country, I will include a Why Infrastructure Matters section. There I will provide the explanation based mostly on *Infrastructure and Poverty Reduction - What is the Connection?* Paper by Ernesto M. Pernia and Ifzal Ali for Asian Development Bank. This introduction will turn out helpful to follow the points in the latter sections. Moving on to the first chapter, I will begin with a short introduction to China-Nigeria relations history. Then I will present how the countries cooperate today, what are the platforms of communication and standards of services exchange. In the chapter, the most significant Chinese transportation infrastructure investments will be included. The second chapter will be dedicated to the critique of projects realised in Nigeria by China or with Chinese financial support. In the first chapter, I will include the primary sources collected or estimated by non-governmental organisations and banks as well as the secondary sources. The third chapter will contain my attempt to insert the analysed material in the gains theory models. In the conclusions, I will sum up my work and provide an answer to the research question based on the former analyse.

My thesis has its limitations. Due to the unlucky timing of my research, I wasn't able to reach every source I planned or considered valuable. I believe the works I managed to gather will provide the necessary insight. What's more, the primary sources are not always available for public view. The exact cost of some projects or even a list of all the projects supported by China are hard to obtain. It would be helpful to present data on the actual influence of the significant transportation investments; however, in the majority of cases, it is too soon to estimate the benefits or losses.

Finally, I would like to define a few phrases I will be using in my work. The word "benefit" I will be applying both to economic and social gain. It means any positive change or a positive solution to a problem in any of those sectors. Infrastructure is a vague term that may be applied to various facilities. Therefore, I will often use the term "transportation infrastructure", which means any support that allows people and goods to move. I will also be using the word "transportation" as a reference to the act of transporting, not a mechanism enabling the action. Lastly, my work will focus on railway investments, sometimes in addition to roads. However, in Nigeria, transportation also occurs by water routes and by aviation. I will merely mention those, and while referring to transportation or transportation infrastructure, I will have railway and roads in mind.

Infrastructure in Nigeria

My primary analysis of the Chinese investments in Nigeria transportation infrastructure will mostly apply to the railway, however, to discuss this particular branch, it is necessary to first describe

it in context of the country's entire transportation sector. Therefore, I will include the history of Nigerian transportation, main features, contemporary condition and influence on the country's functioning. Qualities of the transportation infrastructure will be presented mostly from the domestic point of view. This section will include primary sources gathered from data banks and governmental institutions reports. Secondary sources, in the form of comments to the data, will be used as well. In the next section, I will elaborate on why efficient transportation infrastructure matters and use Nigerian transportation as an example.

Development of the transportation structure known in Nigeria today, began in the 20th century, during the colonial period. The British needed a more efficient way to transport goods from the North to the coastal South.⁶ Railway and paved roads began to substitute the traditional, although much slower water transportation. With independence, Nigeria owned the most extensive transportation network in Western Africa and one of the best on the continent.⁷ In the next few decades, the Nigerian government focused on the development of the roads, with a negative impact on other branches of transportation infrastructure. Between 1962 and 2000, an average of 66,1% of the transportation budget was invested in roads. Within this period, the railway obtained only 12,5% of the sources.⁸ Another factor adding to the contemporary situation is the management of funds. The subject responsible for railway maintenance, The Nigerian Railway Corporation (NRC) has been accused of corruption and neglect.⁹ Today, Nigeria still owns one of the largest transportation networks in Africa, however, it is far from efficient.

The contemporary transportation system in Nigeria is based on roads. However significant, their conditions and accessibility vary in different parts of a country. Only 26% of rural citizens have access to the all-weather roads within 2 kilometres from their place of living.¹⁰ Even though Nigeria has the largest road network in Western Africa, the majority of them are in a poor state due to years of neglect. Only 15% (29 000 km) of the roads have been constructed in the past 55 years. The existing ones have not been adequately maintained and therefore became unsafe or unpassable, especially during the rainy season. Out of about 195 000 km of roads in Nigeria, only 60 000 km are paved.¹¹ Nevertheless, it is estimated that around 90% of transportation, for both passengers and cargo, takes place in this sector.¹² Profesor Onokala hypothesises it is not a favourable situation. Roads are not adapted to the heavyweight of cargo trucks, especially if their activity is constant. Highways and federal roads are therefore more vulnerable to damages. This not only causes more accidents and slows down the transportation process, but also generates enormous costs for the government. As Onokala stated: *In fact, roads are overused and misused in Nigeria while the waterways have a lot of capacity that is not being utilized. Railways and pipelines were heavily used in the past but at present they are sparingly used while the airways are heavily used but still need a lot of improvement and*

⁶ Chen Yunnan, *China's Role in Nigerian Railway Development and Implications for Security and Development*, United States Institute of Peace, 2018, pp. 2

⁷ Foster Vivien, Pushak Nataliya, *Nigeria's Infrastructure: A Continental Perspective*, Africa's Infrastructure country report, 2011, pp. 14

⁸ Kayode Oyesiku, Babatunde Adegbelemi, Abiodun Folawewo, *An empirical analysis of transport infrastructure investment and economic growth in Nigeria*, Social Sciences. Vol. 2, No. 6, 2013, pp. 179-188

⁹ *Nigerian railway, a tale of failed contracts, dashed hopes*, 2016, Punch

¹⁰ Vivien Foster, Pushak Nataliya, *Nigeria's Infrastructure: A Continental Perspective*, Africa's Infrastructure country report, 2011, pp. 12, Table 2

¹¹ Federal Ministry of Works, *Compendium report Road Infrastructure and Related Development in Nigeria*, 2013

¹² The Second Data Collection Survey on Mass Rapid Transit in the Federal Republic of Nigeria, 2014, pp. s2

expansion. Therefore, the roads are overused and also wrongly used.¹³ Professor mentions water routes as a possible substitute for road transportation in Nigeria. However, water routes are not as fast as trains in mainland transportation of goods. They are better suited to move people on short distances and also as a tourist attraction. Therefore the development of water routes would be a smart idea in the cities which are traffic-choked. One of such towns is Lagos, the largest Nigerian city, one of the biggest in Africa¹⁴, infamous for its traffic. Therefore in recent years, a few local businesses started to emerge, offering water-taxi services. As the founders say, the time spent on the water route is shorter and precise. In a few years, it could ground its position in the city's transportation system, as faster and more reliable than public transportation or even a private vehicle. However, it seems that lightening the city roads by adding a new means of transportation, does not fully solve the problem of its overload. Part of the problem is generated outside of the cities. It is not only lengthening work on external bypass routes for cargo trucks and passers-by, but also the already mentioned railway neglect.

Nigeria owns the largest railroad network in Western Africa. Potentially one of the best in Africa. However, for many years now, the Nigerian railway does not play its role efficiently. Up until 2012 Nigeria had 3505 km of gauge lines, from which only one line, the Central Line from Ajaokuta to Warri, was standard gauge (1 435 mm).¹⁵ The backbone of Nigerian transportation is the two railroad lines constructed between 1912-1926 connecting South with North. The Lagos-Kano, known as the Western Line and Port Harcourt-Maiduguri, the Eastern Line. Both tracks, together with the following extensions, were initially constructed as the narrow gauge railway. This kind of gauge is still used both in developed and developing countries. Nowadays, however, it is most useful in specific circumstances, for example in mountain terrains or to reach sparsely populated areas. It is no longer efficient on long distances where the highest speed and safety are desired. High-speed trains, able to go over 200 km/h became a significant improvement of the developed countries long-distance transportation. Unfortunately, this kind of technology cannot be implemented on unmaintained narrow gauge rail. The condition of the country's main lines allowed the trains to go with a maximum speed of 50 km/h, which means the locomotives owned by the NRC are only using 50% of their potential.¹⁶ Nigerian railway has not been adequately maintained or upgraded for decades. The reason for that, often given by experts and press is corruption and wrong management of the Nigerian Railway Corporation, the subject responsible for Nigerian rail. Another aspect of the Nigerian rail network is the lack of connections between the East and West of the country. Plans of the three new lines that would fill the blank emerged recently, and the implementation is still ongoing.

A few general problems emerge from the description. It is lack of efficiency, lack of safety, poor quality and uneven accessibility. Every sector of Nigerian transportation struggles with significant underdevelopment. The potential inherited from the colonial era has either been neglected or misplanned. Naturally, upgrading entire sectors of transportation infrastructure is costly. At the same time, transportation does not generate profit by itself, but rather enables other industries to do so. Therefore, the most advanced transportation system may not be a priority for a newly independent, developing country. However, nowadays, Nigeria aspires to become one of the twenty most prominent economies in the world. Without adequately functioning transportation, both national and local, the goal cannot be reached. In recent years, the Nigerian public sector started joining forces

¹³ Onokala Patience Chinyelu, *Transportation development in Nigeria: The Journey So Far and the Way Forward*, lecture, 2002, pp. 4

¹⁴ The Second Data Collection Survey on Mass Rapid Transit in the Federal Republic of Nigeria, 2014, pp. s2

¹⁵ *ibid.*, pp. s3

¹⁶ Dina. A.O., Raji, B.A., *Analysis of train speed performance on Nigeria Railway Corporation Lagos District Narrow Gauge Track*, Ethiopian Journal of Environmental Studies & Management 9(Suppl. 2): 967 – 976, 2016, pp. 974

with private investors, including foreign companies. Among them are the most significant Chinese companies supporting Nigeria in upgrading the most important arteries and constructing new ones. The most significant projects will be described in Chapter 1.3.

Why transportation infrastructure matters

Development of infrastructure, including transportation, is crucial for the growth of the developing countries. According to *Lack of Infrastructure (...): The lack of infrastructure is hindering the economic growth in many developing countries. Infrastructure investment has the effects of contributing to increase the productivity and it is expected to contribute to future economic growth in developing countries where infrastructure is still insufficient. Therefore, infrastructure development is one of the most integral parts of the public policies in developing countries. Supporting infrastructure development in developing countries by advanced countries is extremely important field. This can be inferred from the fact that many international organizations such as World Bank and OECD are actively promoting the improvement of infrastructure by providing various support programs to developing countries.*¹⁷ Nevertheless, it may seem that for a country with plenty of underdeveloped areas to invest in infrastructure is to not address the burning problems like poor healthcare, education or unemployment. It may be surprising at first to read about the Chinese approach that prioritizes African infrastructure development over other investments. Oftentimes the commentators of any new large investments in Africa point out the unprofitability of transportation infrastructure. However crucial it is for developing countries to keep investing in social facilities, lack of basic needs cannot be addressed separately, without addressing the problem of poor infrastructure.

Transportation infrastructure works as veins of the country. Connects people with goods, utilities, services and ideas. It is one of the basic equipment needed for a country to function. Investment in upgrading transportation is not a waste of funds, especially in low-income countries, that need to boost its economy. Transportation also contributes to the citizens' wellbeing. A term defined by Yelena Popova as the general quality of living in a particular country. A dynamic indicator of personal fulfilment. According to Popova, transportation is the enabling element for the so-called social infrastructure (healthcare, education, culture). *The notion of infrastructure takes into account two huge categories: social infrastructure and economic or production infrastructure. The social infrastructure comprises such subsystems as healthcare and education, culture, tourism, etc., while the economic infrastructure consists of transport and transportation system, telecommunication, electrical grid, water supply system, bridges, roads etc. This division is relatively symbolic. The social infrastructure has significant impact on the economic one, and the economic infrastructure presupposes the level of development of the social infrastructure.*¹⁸ Transportation infrastructure is interconnected with all the other industries crucial for the economy and personal standard of living. Beneath, the influence on particular areas will be described.

Locally, in the undeveloped areas, roads and bridges are essential in building a reliant community and provide access to basic facilities such as markets, schools, hospitals, government premises. Lack of transportation infrastructure results in isolation from the community. It is especially dangerous during natural disasters, like a flood, but also in times of political or economical instability that makes it even harder for many households to reach the market. Even in a period of prosperity, it

¹⁷ Gaal Hassan Osman, Afrah Nol Abdulle, *Lack of Infrastructure: The Impact on Economic Development as a case of Benadir region and Hir-shabelle, Somalia*, IISTE, 2017, pp. 52

¹⁸ Popova Yelena, *Relations between Wellbeing and Transport Infrastructure of the Country*, Procedia Engineering, Volume 178, 2017, Pages 579-588, pp. 580

extends the time of every activity, lowering the productivity of people. Less transportation infrastructure not only isolates people from the market, but also deprives the market of locally produced goods. It is particularly difficult for small farmers who must sell their products at a certain time. That means greater need and costs of import, smaller income for producers and lack of progress possibilities. It is an especially unsafe situation for the poorest and highly-dependent on the external conditions. In Nigeria, this group would be small farmers.¹⁹ A family-owned piece of land is often the major source of income for the household, combined with occasional retail.²⁰ Without a proper connection with a diverse market, the exemplary family cannot obtain up-to-date tools, nor fertilizers. The work remains long and inefficient, often requiring the help of children. Lack of protection from harmful environmental influence makes the family's survival even more dependent on the ever-deteriorating climate. On the other hand, because of the lack of prospects that the big market gives, the family has no interest in extending its farm's production beyond its own needs. Hence, there are no possibilities for extra income, hence no means for work improvements. Isolation caused by lack of transport infrastructure shuts the poorest in the circle of underdevelopment, constant risk of hunger, lack of education and possibilities. Many experts point out the power and ICT infrastructure as the biggest chance for the poor to join the global market. However true it is, micro-producers, like Nigerian small farmers, will not gain from those improvements without the physical transport infrastructure being provided first. Without traditional means of reaching the market, the production won't rise nor get more advanced.

Another major challenge for people from infrastructurally underdeveloped areas is access to education. The much needed social facilities, like schools, must be constructed together with proper transportation infrastructure for people to reach it.²¹ Children that cannot reach the school building will not receive an education. Those who must overcome obstacles on the way will be less productive in class and have less time for other activities. As I mentioned, in the poor families children are often helping with chores to a greater extent than their wealthier peers. Some of them are expected to work from a young age to secure a family's food supplies. Extended time and effort needed to send a child to school results in early dropouts or even illiteracy. Even with established roads for local children to reach school, the majority of village roads in Nigeria are not paved. That makes them less efficient to use, especially by vehicle. During floods, frequent in Sub-Saharan climate, unpaved, local roads become unreachable.

As in the countryside, the lack of proper infrastructure secludes people from the market, it is the opposite in the cities. The country's hubs of industry, trade and services attract traffic from the entire region to top up the internal traffic of residents. Permanently blocked roads cause the city to function on its minimal potential, decreasing all facilities productivity and harming the economy. The largest component of the problem is the heavy trucks forced to deliver goods using the city roads and travellers that only pass by the city. According to the authors of *Costs of Infrastructure Deficiencies* (...), improper infrastructure harms the cycle of enterprises' development. Lack of efficient transportation harms especially the small companies that need to be easily reachable. As it is written in source: *It is prohibitively expensive for small firms to operate in outlying areas where infrastructure services are poor. As the small new firms at the centre grow and become more independent, they tend to move out-ward for more space in low-rent areas. The findings from our*

¹⁹ Howard Julie, Simmons Emmy, Flowers Kimberly, *Nigeria As A Target Country: Challenges and Opportunities in a Country Facing Significant Instability and Risk*, CSIS, 2019

²⁰ Small Family Farms Country Factsheet, Nigeria, FAO, 2018

²¹ Gaal Hassan Osman, Afrah Nol Abdulle, *Lack of Infrastructure: The Impact on Economic Development as a case of Benadir region and Hir-shabelle, Somalia*, pp. 49

*survey imply that large cities with poor infrastructure cannot offer the incubator function for small new firms. Most African cities with poor infrastructure fall into this category.*²² In some cases, the solution may be to widen the city roads for the residents' convenience. However, the traffic caused by external factors may only be defused by providing additional infrastructure and means of transportation around the city. Beltways are essential for the proper functioning of the biggest cities so travellers can save time by not even entering the city on their way, while not causing additional traffic for the residents. It is also useful to have a network of smaller, country roads to complement the main ones. As for the cargo transportation traffic, the most efficient but also costly solution is to update the railway network. Not only creating new lines but also upgrading the existing ones will enable the companies to ship their cargo this way, rather than by road. One of the examples may be the rail connection between Nairobi and Mombasa, in Kenya. The already existing railroad on that line was so inefficient, it could take up to two days for cargo to be delivered from the country's capital to the main port. The contractors were, therefore, using the roads until the railroad got renovated. Now the same line takes the goods by train in eight hours and is also a safer alternative.

From a global perspective, transportation infrastructure is inestimable as a mean of the country's proper operation and economic relations with foreign partners. It affects the efficiency of other industries - reduces the hidden costs of production, generates new jobs around the communication hubs, stimulates constructions and demand on the construction-linked manufactured goods. In the previous paragraphs, I explained the importance of connectivity between local communities and markets. Large, cross-country infrastructure investments have the power to do that on a global scale. For the best results, the country as big as Nigeria should develop a network of unobstructed highways adjusted to serve both passenger cars and heavy trucks. Equally important is a well-maintained railway. Trains have a bigger capacity, potentially moving cargo faster and statistically safer than cars. Not only is the railway able to boost the internal trade and market diversity, but also lower the cost of products (by lowering the cost of production). It makes the domestic products more available and the companies are able to compete with cheap foreign goods. Transportation possibilities open up the country for foreign investments too, by providing the means of reaching people with the product or service.²³ It is also worth mentioning, that the borders in Africa were in many cases created arbitrarily by foreign powers, without consideration of future consequences. Therefore it is crucial for the continent to build a global, efficient connection network to transport people and cargo between the countries and towards the shore. The landlocked countries would gain a large trade-boosting possibility, while the non-landlocked countries could expand their infrastructure around it (ports, warehouses, services).

Infrastructure in general, but the railway branch, in particular, creates new jobs directly and indirectly. Apparent direct jobs are, for example, at the sides, during the construction stage, and later, as train drivers, engineers or hosts. However, there are other various jobs that railways create. Clerks and customer service specialists are needed to operate the stations. Usually, there are also small shops and cafes even at the minor stations that need staff. The major ones may even resemble shopping malls, with international-brand shops, restaurants, services and cinemas, where the transportation facility is only a part of the complex building. Those hubs create hundreds of additional, low-requirements jobs, attract investors and support the overall development of the city. Transportation development also boosts tourism, especially for lesser-known places. Tourism generates jobs and profit in its own sectors but also positively influences the ones' mentioned above.

²² Lee Kyu Sik, Anas Alex, Oh Gi-Taik, *Costs of Infrastructure Deficiencies for Manufacturing in Nigerian, Indonesian and Thai Cities*, Urban Studies, Vol. 36, No. 12 (November 1999), pp. 2135-2149, pp. 2139

²³ Dasgupta Partha, *Economics: A very short introduction*, Oxford University Press, 2007, pp. 85-86

Therefore it is crucial for developing countries like Nigeria to invest in transportation infrastructure. However, developing countries have many burning issues that need to be addressed first. Infrastructure often remains underfunded, slowly decreasing the country's productivity. In such cases, support from abroad is the only chance to avert the process of deterioration.

Relative and absolute gains

The theory of relative and absolute gains is part of a discourse between realists (neorealists) and liberals (neoliberals) about the patterns of choices that a unit (country) makes in order to gain and secure profit among other units (countries).²⁴ In the simplest model illustrating the concept, profit can be gained either by cooperation or defection. In this model two prisoners (A and B) must decide if they are going to work together or against each other to leave prison. There are four possible outcomes: they cooperate and both of them leave, either A or B breaks a deal and is the only one leaving, or they both break a deal and none of them leave.²⁵ Models based on this one, but referring to international relations, usually presents two countries (A and B) and a trade deal. Different models may illustrate either bilateral trade in opposition to embargo or to use of force. All the models, however, indicate that there is only one outcome beneficial for both sides, while the other three leave at least one of the partners with no gain. The models, however, as well as the basic theory, have been heavily criticized by scholars for its over simplicity. The models do not differentiate the characteristics of the countries nor their military or economic strength. Furthermore, the countries make decisions about cooperation without considering external factors. Concept of two political units having relations in a vacuum is getting more and more outdated in the world where every country is part of some global, supranational unit. Therefore, the theory is still being discussed and developed and the academic critique is as much insight as the objects of criticism.

According to realism, countries function in anarchy.²⁶ There is no higher instance that all parties would obey or a mechanism that would stop one country from attacking another. Therefore, no country can be completely trusted and defecting is always worth considering. Liberalism does not reject this vision, however, puts much bigger weight on the influence of international organizations, that minimize the negative consequences of anarchy and enables cooperation. The amount of influence the organizations like European Union, United Nations or NATO have on their members and their international position, is one of the biggest arguments in the gains theory. Although, there is more. As I mentioned, the models don't include the features of each country, but also concerns about the partner. According to Rousseau, the approach towards cooperation and outcomes for oneself and the partner, changes depending on a subjective feeling about the partner.²⁷ The research conducted by him in 2002 are in general willing to cooperate with various partners, however, not eager to secure every partners' gains on the same rules. The real-life situation is more complex than the models can present. Therefore it is important to apply the gains theory individually to each situation and analyze in a wider context.

As I briefly described in the first paragraph of the section, the gains theory explains how the decisive units may behave while facing an opportunity to benefit from cooperation with a similar unit.

²⁴ Powell Robert, *Absolute and Relative Gains in International Relations Theory*, The American Political Science Review, Vol. 85, No. 4 (Dec., 1991), pp. 1303-1320, pp. 1303

²⁵ Rousseau David L., *Motivations for Choice: The Salience of Relative Gains in International Politics*, The Journal of Conflict Resolution, Vol. 46, No. 3 (Jun., 2002), pp. 394-426, pp. 396

²⁶ Rousseau David L., *Motivations for Choice: The Salience of Relative Gains in International Politics*, pp. 395

²⁷ *ibid.*, pp. 419-420

In the prison dilemma model (which may also be adapted to a different situation) one must decide if they let the partner benefit as well. Deciding on cooperation (C) puts the unit at risk of spending energy and resources on a false relation but also brings opportunity of a benefit. Deciding on defecting (D) does not generate profit for the unit but may cause losses on the partner's side and removes the threat of being used. Therefore, both parties deciding on cooperation (CC) will generate a profit for both parties, deciding on defection (DD) will cause an impasse with no one benefiting and no one being deceived. If one of the partners decides to cooperate and the other one to defect (CD, DC), the defecting one will benefit largely while the cooperating one will lose largely. The partner's loss/lack of benefit with the unit's parallel gain is called the relative gain and is the outcome desired by realists. The gain without the partner's loss or mutual gain is called the absolute gain and is praised by liberals. Relative gains seem more reasonable in the prisoner dilemma-like models, in which countries cooperate one-on-one. However, absolute gains or its elements are more common in today's situation in the international arena. The decisions in political strategies are made by people and influenced by various factors. Therefore, clear situations in which a country aims for only one type of gains in every situation is rare. It is nevertheless important to analyse the possibilities of each partner in terms of absolute and relative gains. According to Powell, the probability of using power against the partner rises contrarily to the cost of using it.²⁸ However, it is also important to define power in contemporary times. The traditional theory of relative gains means usage of power in military terms. This solution is practised less and less nowadays. World War II and Cold War experience, the rise of powerful international organizations and the role of globalization in the economy increase the direct and indirect cost of military interference like never before. Usage of power in economic terms, however, became much more popular. It is, for example, trade sanctions, aid limitation, exclusion from the market, an embargo on a particular product. Although, the economic decisions are usually motivated by a political commotion. The economy then, rather than military power, is a tool to obtain one's political will.

Another aspect of the relative gains theory that requires clarification is the element of trust and assumed low costs of the DD, CD, DC outcomes due to lack of context. As I mentioned, not only two units do not function in a vacuum, but also, there are less and less situations in which two completely independent units make a deal solely between each other. With the increasing importance of the international units, every country is influenced, protected or restricted by the benefits it derives from its organization. Every deal, but to some degree also the country's reactions must be compliant with the international law and internal law of each international organization. Context of cooperation is also significant.

In the face of reservations and doubts with which the international arena welcomed Chinese engagement in Africa, I would like to discuss various aspects of gains that are being obtained by both sides (in my work China and Nigeria). Then evaluate how a beneficiary may those be from the perspective of relative and absolute gains theory. I would like to conclude the work with a comment on my findings in reference to previous papers on similar topics.

Chapter 1 China-Nigeria investment relation

I have already presented the theoretical framework - the gains theory that will be used in the final analyse, short description of Nigeria transportation infrastructure and efficient transportation's significance. This chapter will enter the last element needed to answer the research question - China

²⁸ Powell Robert, *Absolute and Relative Gains in International Relations Theory*, pp. 1304

and its relations with Nigeria. The first subsection will depict the history of China-Nigeria relations, the perspective will be more global and political. The second subsection will explain how China and Nigeria operate today, with a focus on communication platforms and investments.

1.1. China-Nigeria relations, short history

Nigerian relations with China began to emerge in the 1950's, as part of newly established China-Africa relations.²⁹ Globally, it was the time of changes. Former European powers, devastated by World War II, had no choice but to let their colonies proclaim independence. China, although never a colony itself, has experienced occupation from foreign powers. Independent Africa posed a possibility for both opposing philosophies of the Cold War, to gain new, strategic allies. Revolutionary China reacted to this change on an international arena by inviting African countries to a partnership with Asia. Conference in Bandung, Indonesia, was the first step to establish future cooperation. For both parties it was a political and economic opportunity, although in different aspects. For China, to influence reforming countries with communist ideas, gain more allies against Taiwan and obtain resources essential for industrial development. 1955 was the beginning of the Great Leap Forward, the program created to become the new world's power in steel production. Therefore, China needed new sources of resource income. For Africa, on the other hand, alliance with China would bring a diversity in the traditional, forced relations with the West. China offered Africa a non-interference policy, contradictory to Western guidance.

However, in 1955, Nigeria was yet preparing to be granted independence. It did not take part in the Bandung Conference and the individual relations of the two countries remained cool after Nigerian independence. Nigeria remained close with Great Britain during the 60's³⁰ - country from a Western block and former China's oppressor. The relation changed after the Biafra crisis, during which Great Britain did not show enough support to Nigeria against separatists. Anti-colonialist feelings were reborn in Nigeria. Soon after that, in 1971, PRC achieved its goal of replacing Taiwan as the representative of China in the UN. Nigeria and China established formal relations the same year.³¹ A year later, the two countries signed a bilateral trade deal. According to Mthembu-Salter, Nigerian administration of that time was unstable and there was no clear policy towards China. the first visit of the Nigerian head of state took place in 1974, described by Mthembu-Salter: *Gowon visited China in September 1974, the first Nigerian head of state to do so, but to little consequence, since he was ousted from power ten months later by Brigadier (late General) Murtala Ramat Muhammed. Muhammed was assassinated in 1976, and Olusegun Obasanjo, then the armed forces chief of staff, took over as head of state. (...) The 1980s and 1990s were a difficult time for Nigeria. Obasanjo left power in 1979, and Shehu Shagari won the ensuing election and became president, lasting until 1983, when he was deposed by Major-General Muhammadu Buhari. Buhari ruled for two years until he too was toppled, this time by Major-General Ibrahim Babangida. Babangida held power until 1993, when, following a disputed election, defence minister Sani Abacha seized power.*³² During that challenging time, controversies around China's acts towards Africa started to emerge. President Obasanjo noticed an imbalance in China-Nigeria trade³³. Attempts to rebalance it did not

²⁹ Meidan Michal, *China's Africa Policy: Business Now, Politics Later*, pp. 72

³⁰ Odeh Lemuel, *Dynamics of China-Nigeria Economic Relations Since 1971*, Historical Society of Nigeria, Journal of the Historical Society of Nigeria, 2014, Vol. 23 (2014), pp. 150-162, pp. 153

³¹ Mthembu-Salter Gregory, *Elephants, ants and Superpowers: Nigeria's Relations with China*, SAIIA, 2009, pp. 6

³² *ibid.*

³³ *ibid.*

succeed. Globally, China got engaged in the Angolan civil war by supporting one of the conflict sides. The decision has not been received positively on the continent. It is worth noting, that those times were marked by unrest in every region of the world. Two powerful blocks of the cold war were fighting for any strategic bridgeheads. The results of two world wars, colonialism, communist revolution, were heating up the transforming world. China, as an aspiring returning power and bringer of the revolution, was taking part in this mechanism in accordance with the global atmosphere. Although, what was problematic was China's proclaimed politics towards Africa. Its main philosophy was based on non-interference relations, partnership joined by anti-colonialism and a "third world" cooperation, today known as the South-South cooperation. China was presenting itself as equal with Africa in terms of historical struggles and colonial past. The discourse used to highlight that both parties suffered from the Western powers, which slowed down the development so nowadays China and Africa should be supporting each other in development and defend each other against colonialism. In those terms, Chinese engagement in more and more conflicts was not received well. Another aspect of this junction between discourse and reality was the Deng' reforms launched in 1978, two years after the death of Mao Zedong. The new politics proposed by Deng Xiaoping included reopening the country for the outside world, trade, investment, cooperation with anyone no matter the ideological preferences or past. The CCP also deprecated the Cultural Revolution and included many solutions characteristic to capitalist economies. The reforms have been implemented with great success and let China take off quickly. With the growing economy and international cooperation, China could not call itself a "third world country" anymore. On the one hand, as a partner, China became much more attractive for the African countries. On the other, the theoretical linkage between the sides became weaker. Although those controversies and its still low status in the international arena, China became a more attractive partner for Nigeria, which needed diverse relationships. The sanctions imposed on Nigeria between 1993-97 was another possibility for China to offer support and deepen the relationship. In exchange, China gained large access to Nigerian (but also other African countries') primal resources. Part of those resources returned to Africa by trade as manufactured goods. According to Odeh, this period of China-Africa relations became a foundation for the harsh Western criticism of China; *This process made scholars inquisitive about the real intentions of the Chinese, with some claiming that the activities of the Chinese was synonymous to the experience of African states during the era of legitimate trade with Europeans in the nineteenth century. As that era corresponded with Europe's imperialism, some concluded that the activities of the Chinese signaled nothing more than a phase towards a new wave of Chinese imperialism.*³⁴

Another significant shift in China-Nigeria relations happened in 2000 and with the establishment of Forum on China-Africa Relations (FOCAC). This structured platform of communication supported the future form of the relation. Market-wise, it helped individual countries to gain more deals and to cooperate with neighbours on joined projects from China. Nigerian economic cooperation with China rose significantly in the early 2000s. Success in Nigeria-China relations of that time is credited to the presidency of Obasanjo (1999-2007). Under Obasanjo's leadership, Nigeria embraced its characteristic policy of "oil for infrastructure".³⁵ The infrastructure projects conducted by Chinese in Nigeria were paid with oil blocks and oil deals. The tactic, however, was disestablished by the next president Yar'Adua in 2007. Since 2010, the relationship was developing even further as president Jonathan was hoping for Chinese support in reaching the goals of Nigeria's Vision 2020.³⁶

³⁴ Odeh Lemuel, *Dynamics of China-Nigeria Economic Relations Since 1971*, pp. 152

³⁵ Mthembu-Salter Gregory, *Elephants, ants and Superpowers: Nigeria's Relations with China*, pp. 7

³⁶ *Jonathan makes 'significant' trip to China*, Mordi Frederick, 2013, for africanbusinessmagazine.com

The timeline shows the steps and significant events in the forming of China-Africa relations. First conclusion emerging from this section is that the relation is not very recent, although the close economic partnership is. The bilateral relations were established in 1971, even though it could have happened a decade earlier. In the later years, Chinese administration was always open to tighten the relationship but Nigeria was the decisive partner. The early investment and trade deals were often dropped or renegotiated by new Nigerian administrations. Therefore, the second conclusion would be, that even with a huge power-gap dividing the partners, China did not use economic or political violence against Nigeria. On the contrary, the weaker partner was given autonomy to decide for itself.

1.2. China-Nigeria economic relations

In the previous subsection I described stages in which the China-Nigeria relations were forming. This one will be devoted to the economic relations between the partners. What are the methods and numbers in trade and investments? The focus will once again be directed to transportation infrastructure investments.

As mentioned in the previous section, China-Nigeria relations had a slow impetus. Partly because of Nigeria's close economic relations with the West and internal instability, partly because China did not have much to offer during the communist era. However, in 1964, during the visit to Africa, prime minister Zhou Enlai announced the unique Chinese aid strategy - The Eight Principles.³⁷ The program is known mostly from its first point - no conditions attached. In practice, that means China is willing to support any country in need without political or social demands. Unlike the Western partners, won't condition the aid on human rights situation or political standards in the country. Naturally, this strategy has advantages and disadvantages for both sides. For countries struggling with the mentioned issues, fast financial shot, may relieve the administration from particular sectors. Economy-propelling investments may also contribute to greater stability of a country and higher standard of life. On the other hand, conditions force the administrations to work on the issues they would otherwise be unwilling to fix. By refusing to use the conditions, China exposes itself for criticism. In comparison with the West, China may seem as a partner who wants to benefit from lack of standards and instability. From another point of view, China would be the one trusting its partners and giving them a chance to solve the internal problems in their own way and time. Naturally, China of the 60s was in no position to condition other countries' in terms of human rights or political system. The Eight Principles, still functioning today, convinced many countries, including Nigeria, to try a partnership with China. The most significant breakthrough in China-Nigeria relationship happened in the early 90's with sanctions imposed on Nigeria by Great Britain and the USA. In that time Nigeria turned to China. The decision was driven by economic reasons, not particularly political or ideological linkage. The partnership of 93-97 quickly backed up by president Obasanjo pro-Chinese policy and the establishment of FOCAC enabled the relationship to become much closer. Nigeria became one of the African recipients of Chinese aid, loans and investments. Today, Nigerian partnership with China is one of the largest among all the African countries. It is important for the later analysis to explain details of this cooperation. Exact amounts of Chinese aid to its partners in Africa can only be estimated. For many years of Chinese development supportive role, the details of engagement have not been published. Chinese aid-concerning definitions also differ from other donors'. The general mechanisms of Chinese aid, however, is quite well-known.

³⁷ Eight principles for Economic Aid and Technical Assistance to Other Countries - available on [oecd.org](https://www.oecd.org/dac/stats/chinas-development-co-operation.htm)
<https://www.oecd.org/dac/stats/chinas-development-co-operation.htm>

First foreign aids granted by China to Africa served a diplomatic purpose more than a development one. China was looking for new allies and supporting African countries with impressive construction projects was a great way to start a bind connection. Until today, the Tan-Zam railway, financed and constructed with Chinese support, remains a symbol of Chinese engagement in Africa.³⁸ It is a large infrastructural investment, with development possibilities that would not emerge without China's support. A representation of the future Chinese projects' profile. Vast majority of Chinese foreign aid is directed towards infrastructure. In Africa, it is usually over 60%.³⁹ Within the infrastructure sector there is another division in energy and transportation. The aid is being transferred mostly by loans but also direct investments, debt reliefs, humanitarian aid or technology and knowledge transfers. Even though private Chinese enterprises are present in Africa, the largest investments are conducted by the biggest companies with joined private and public shares. Important element of the system is Chinese banks. Especially China Exim Bank which was established to fund Chinese foreign projects and therefore specializes in loans granted for those purposes to Chinese companies.⁴⁰ The strategic organ of the investment process is the Ministry of Commerce (MOFCOM). Its task is to prepare expertise and strategies on investments in the Chinese regions of interest. The recommendations must then be accepted by the Ministry of Finance which decides whether to include them in the budget. Those funds are later distributed as an aid. Finally, one of the Chinese companies is being chosen to conduct aid implementation in a foreign country. Chinese companies often cooperate with local ones and hire local workers (there are controversies about that). Chinese investments often come as a set of aid. For example, instead of revitalizing one piece of railway, the company would also construct the stations and entire infrastructure around it. As an exchange, except for money, China can count on future favourable conditions in triad or shares in the funded enterprise.

Nigeria became a recipient of Chinese aid on a big scale during the regime of General Abacha (1993-1998). Except for establishing the Chamber of Commerce in 1994, China Civil Engineering Construction Corporation gained a protocol for a railway construction in 1997. Nevertheless, it was during the next presidency of Obasanjo (1999-2007) that China-Nigeria economic relations really rose. The year 1999 interlocked with China's "going out" policy. Chinese cooperation with foreign partners intensified. As for Africa, the most critical aspect of this policy was the establishment of FOCAC in 2000.

1.3. Chinese infrastructure investments in Nigeria

In recent years, China has been exceptionally active in the railway sector. Nigerian rail communication network is still considered the best in Western Africa but also neglected and inefficient. After independence there were no modernization works and the railway facilities fell into disrepair. The reason against modernization and proper maintenance was financial. Consecutive administrations have been delaying the issue. The tracks and trains were becoming less efficient and the proper funds were never coming.

In 2006 president Obasanjo inaugurated a project for Nigerian railway modernization.⁴¹ Since the beginning, the plan was interlocked with China. The \$8,3bn contract awarded to China Civil

³⁸ Nissanke Machiko, Söderberg Marie, *Can China's Engagement Make a Difference to African Development*, pp. 10

³⁹ Chinese Investment Tracker, aei.org <https://www.aei.org/china-global-investment-tracker/>

⁴⁰ Foster Vivien, Butterfield William, Chen Chuan, Pushak Nataliya, *Building Bridges China's Growing Role as Infrastructure Financier for Sub-Saharan Africa*, pp. 52

⁴¹ Chen Yunnan, *China's Role in Nigerian Railway Development and Implications for Security and Development*, pp. 2

Engineering Construction Company (CCECC), was supposed to be funded from China Exim Bank.⁴² The plan assumed revitalization of the existing lines and creation of the new ones. The network would then be connecting all the Nigerian states, develop the connectivity of the capital and modernize the Western line. The largest works were projected to be done on the Lagos-Kano (Western) line. The new, standard gauge tracks were planned to be built parallel to the old ones, constructed by British in the 20th century. The new tracks would then replace the old one. A few new branches were also supposed to be added. The line would reach the Niger border on the North but also gain a connection with the capital - Abuja. The modernization project was also answering the need for more connections between the East and West. By now, the rail tracks were directed in the majority from North to South due to the economic needs of the British Empire. However, as a country developing various branches of industry, Nigeria should have more differentiated connections. Investment into a new Lagos-Calabar line would be a major contribution to the issue. The line would go along the Nigerian coast and connect to major ports - Lagos and Port Harcourt. In this section a few routes and Chinese involvement in them will be mentioned. Lagos-Kano, Lagos-Calabar, Abuja-Kaduna and Ajaokuta-Warri. Those have been chosen by their significance, cost and attention given by the media. Chinese companies or banks have been involved in the construction process of them all.

The transportation investments connected with Lagos are the two most ambitious ones. Lagos, as the most important port and metropolis of the country is also a large communication and transportation centre. Developing connections with this city has its significance for the entire country, not just Lagos. Modernization of the inefficient Lagos-Kano tracks and creating new connections is important for the country's economy. As mentioned, the Lagos-Kano line and its extensions have been built as a narrow gauge, much too slow for the main transportation line of a large country. Transportation of domestic export cargo is one aspect, but the line is also planned to serve as part of an international route that would connect Lagos with Nigeria's neighbours. Even though the name suggests the line finishes at those two cities, the extensions go further North, up to the Niger's border and West to Benin. Connecting Nigeria with neighbouring countries with a standard gauge rail would be one of the steps in the project of connecting Africa by transportation infrastructure. A plan often mentioned by African Union as crucial for Africa's faster development and cooperation. Other inter-country standard gauge rail projects are being implemented in East Africa for example by the Tanzania-Zambia line or planned extensions of the standard gauge rail in Kenya. In North Africa, a project to build a high-speed standard gauge railway connecting Morocco, Algeria and Tunisia was proposed by Algerian National Railway Transport company in 2015 but not taken under consideration by those countries' authorities. However, in 2019 the idea was repeated, this time by the secretariat of Arab Maghreb Union, which announced it is looking for investors for the project. In Western Africa, the revitalized Lagos-Kano rail would be the first standard gauge line with global possibilities. Together with the development of the ports and coastal connections, the complete modernization of Lagos-Kano line could consolidate Nigeria's position in the region, as a trade and communication hub, especially for the landlocked neighbours. The project originally proposed by Obasanjo in 2006 was named after the Lagos-Kano revitalization, putting this single line in the centre of attention. It is the most important transportation project in Nigeria right now.

Once again, due to lack of funds, the works on the Lagos-Kano line has been slowed down. The works have been divided into six sections determined by stations. Each around 150 km. The entire route would have at least 1124 km, with possible further extensions and connections with the Eastern Line (Port Harcourt-Mandaguari) and various connections with the capital. The first section of

⁴² *ibid.* pp. 2-3

Lagos-Kano line which is the Abuja-Kaduna extension was finished in 2014. In 2017, construction of the second section which is Lagos-Ibadan began. The segment alone is projected to cost \$1.5bn and is financed by Nigeria and China, constructed by CCECC.⁴³

The Abuja-Kaduna extension is significant in many terms. The first segment of the Standard Gauge Railway Modernization Projects connected the capital Abuja with Kaduna. The Abuja-Kaduna line also connects the capital with the Lagos-Kano line by a modern, standard gauge track. Abuja is gaining more connections recently. The project of connecting the capital with the Itakpe-Warri line was announced this year. Itakpe-Warri is the first Nigerian standard gauge railway. Originally, in 1987, it was planned to transport iron from Itakpe to the Warri port. Contemporary, it may serve other purposes as well. The Itakpe-Warri section was finished this year by a Chinese company that was working on it since 2017. After it is connected with Abuja, it may become part of the Lagos-Kano extension, tightening the modernized railway network.

Another large segment of railway modernization is supposed to take place at the coast. The Lagos-Calabar line is planned to be built in phases, just like the Lagos-Kano line. The first phase, which is currently said to be Warri-Port Harcourt will connect the two primary lines in the country, the Lagos-Kano and Port Harcourt-Maiduguri. After the entire line is finished, the Nigerian coast will gain a modern, high-speed connection between all its ports and possibly with the coastal neighbours. The construction of the line has been commissioned to a Chinese company and the aid for the first phase negotiated at China Exim Bank was \$11bn.

The projects to revitalize the Eastern line - Port Harcourt-Maiduguri are only in the draft phase. The administration wonders if it is reasonable to take another loan for a full modernization of another track or should it wait.⁴⁴ A slight revitalization of the narrow gauge without replacing it with a standard gauge has been proposed due to lack of funds. However, with the majority of tracks becoming a standard gauge, it could be reasonable to wait with the works on the Eastern line and modernize it the same way as the other lines.

Chinese companies have also been commissioned to construct the light rail lines in Lagos and Abuja.⁴⁵ The first segments of the lines are supposed to be finished in upcoming years. Those will be one of the first light rails in Western Africa. The presence of additional forms of transportation that avoids overcrowded roads could be another facilitation relieving the cities.

Chapter 2. Critique on China-Nigeria investments

In the previous chapter, the history of China-Nigeria relationship, Chinese aid strategy and the most significant transportation investments have been described. The unexpected acceleration in China's activity in Africa caught the world's attention. This chapter will present the opinions aroused around the relationship, especially around the costly investments.

The works on China-Nigeria relations have been created in big amounts especially in the last two decades. Authors⁴⁶ in general agree that the modernization of transportation infrastructure is beneficial to the overall development of the country. Positively influences the wellbeing of people,

⁴³ Chen Yunnan, *China's Role in Nigerian Railway Development and Implications for Security and Development*, pp. 2-3

⁴⁴ *Transport ministry seeks approval to rehabilitate Port Harcourt to Maiduguri railway*, 2020, the Guardian

⁴⁵ *Top ongoing mega projects in Nigeria*, Anyango Anita, 2020, for constructionreviewonline.com

⁴⁶ Babatunde, Afees, Olasunkanmi, *Infrastructure and economic growth in Nigeria: A multivariate approach*, Research Journal of Business Management and Accounting Vol. 1(3), pp. 030 - 039, October 2012

Pushak, Foster, 2011, *Nigeria's Infrastructure: A Continental Perspective*

Chen Yunnan, *China's Role in Nigerian Railway Development and Implications for Security and Development*

promotes employment, education and internal unity, supports industry and trade, generates jobs and attracts foreign investments. However, the standards of China-Nigeria relations and the Chinese “no strings attached” policy remains a contentious issue.

One of the biggest issues emerging from works on China-Nigeria relations is Nigerian security. In terms of economy, loans from the China Exim Bank are often criticised. According to critics, the low-concession loans are too high and are being given too easily, without prospects of paying them back. Some works suggest a large debt is a threat for the future development direction.⁴⁷ If the loan remains unpaid, China would gain an upper-hand in future deals or force the debt taker to give back the loan in natural resources or shares in the industry. Many comments come from the press, as changes in projects happen dynamically and the media are able to react fast. There are suggestions that investments in infrastructure will bring profit in the long run, but it will be softened among various industries and won't generate hard profit for the government to pay back the loan.⁴⁸ What's more, the modernized tracks will require regular maintenance to keep them operational. Apart from the benefits the standard gauge may bring to the society, it will remain a financial burden for the administration.

Partnership with China means not only the large infrastructure projects, but also trade and small, private investments. However both markets are open for each other, the Chinese one has much larger possibilities to begin an activity on the Nigerian one, than the other way around. The negative trade and investment index for Nigeria⁴⁹, has been noticed already by the Obasanjo administration. As mentioned in the previous sections, transportation infrastructure attracts investments - domestic and foreign. A lot of criticism has been dedicated to the issue of small Chinese businesses pushing the local ones off the market. The same accusation has been directed towards import of cheap Chinese goods replacing the local production.⁵⁰

Another security issue are the internal conflicts and organized crime in Nigeria. Many acts of violence take place in regions rich in natural resources. Chen Yunnan, among others, warns that Chinese presence may increase the destabilization of those regions.⁵¹

Chapter 3. Benefits and threats in terms of relative and absolute gains.

3.1. China-Nigeria relations on a model

If one created the simplest model based on the prisoner dilemma to analyse outcomes of the Chinese transportation infrastructure investments in Nigeria, this is how it could look like. China and Nigeria are the two players. Following the rules of the model, they can either cooperate or decline cooperation which gives four possible outcomes. Starting from here, I would like to theorize about the consequences of each choice and how possible they are. As I mentioned in the Gains Section, models like this are oversimplified and don't consider environmental factors. Therefore, I will apply the current partnership details on the model to make it more realistic. After describing the model, the outcomes will be analysed in terms of relative and absolute gains. What those terms mean for China-Nigeria relations and the infrastructure investments.

⁴⁷ Adunbi Omolade, Stein Howard, *The Political Economy of China's Investment in Nigeria: Prometheus or Leviathan?*, in *China-Africa and an Economic Transformation* by Oxford University Press, 2019

⁴⁸ *Nigeria is falling into China's debt trap*, 2020, nairametrics.com

⁴⁹ National Bureau of Statistics <https://nigerianstat.gov.ng/tradestat>

⁵⁰ Mthembu-Salter Gregory, *Elephants, ants and Superpowers: Nigeria's Relations with China*, pp. 8, 10-11

⁵¹ Chen Yunnan, *China's Role in Nigerian Railway Development and Implications for Security and Development*, pp. 6

The first possible outcome on the model would be mutual cooperation (CC). It is a situation we observe today between China and Nigeria, however, for the two parties slightly different things. As already discussed, China invests large sums in Nigerian development, mostly infrastructure including transportation. To finance the projects, China grants its partner with loans from its domestic Exim Bank. Large Chinese corporations are responsible for the construction and management, they hire Nigerians, but also bring their own employees. Besides from development aid, there are also small private investors from China, opening businesses in Nigeria for their own profit.⁵² China trades with Nigeria but the index of exchange is favorable to China. Nigeria has no tools to conduct the same activities in China. At least not at the same level. Nigeria's cooperation relies on being a receiver of investments, loans, aid. Nigerians can invest in China but the possibilities for a common citizen are much lower than their Chinese counterpart. Trade, however, is Nigeria's strong point. Natural resources, with oil in the lead, are what China desperately needs from Africa. Chinese officials often describe this situation as a "win-win" - both parties gain profits from the partnership and there is no exploitation. Whatever it is a similarly profitable relation for both partners and under what conditions will be discussed in the next section. Contemporary, both China and Nigeria are open for cooperation and accept what it looks like. To continue the (CC) outcome in the same manner would mean no changes in the partnership.

The second possible outcome on the prisoner dilemma model is cooperation-decline (CD). It happens when one of the partners is willing to begin or continue the cooperation, makes plans and preparation in this manner, while the other partner refuses or breaks the deals. This outcome happened between China and Nigeria during the presidency of Yar'adua (2007-2010). The deals for railway modernization concluded by the predecessor, Obasanjo, have been broken by Yar'adua's administration. According to the president, the Chinese offer was too expensive and disadvantageous to Nigeria at that time. On the one hand, all the railway modernization projects have been delayed for over five years, but on the other, the later administrations were able to renegotiate the contracts and works are currently in progress. As the model assumes, the partner who chooses to cooperate but meets a declination from the other side - loses. For sure, China hoped to work on this project as soon as it was possible and for the highest payment possible. It did not happen, but the project itself was not lost forever in this case. The model also assumes, the side who breaks the deal while the partner is ready to cooperate - wins. It is doubtful if Nigeria won with China in this round. It avoided a disfavorable deal (according to president's Yar'adua's administration), but also suspended the railway modernization project. Until the negotiations with China were resumed, no other investor undertook this project.

The opposite situation, of China breaking the deal while Nigeria took preparations in terms of a large project is unknown. Historically, China was seeking the possibilities to get closer with Nigeria and even excel the offers that any Western partner could propose. Currently, China is engaged in various projects in Nigeria. Not only the modernization of the rail I described previously, but other development projects in sectors of energy, ICT, agriculture, education, among others. Nigerian market in terms of number of customers is the biggest in Africa. Natural resources are abundant; not only oil, but also coal or iron, coffee, palm oil, timber. Finally, Nigeria has a political value to China. A significant decline from China is unlikely in upcoming years. Therefore, it is even less likely to see the fourth outcome, the mutual decline (DD).

The next section, an analyse in terms of relative and absolute gains theory will focus on the contemporary outcome and a possible one, which are (CC) and (CD).

⁵² *The closest look yet at Chinese economic engagement in Africa*, Jayaram Kartik, Kassiri Omid, Sun Irene, 2017, for McKinsey&Company

3.2. Relative and absolute profits from Chinese transportation infrastructure in Nigeria

This section will be a theoretical analysis.

I would like to begin with the term “win-win partnership” that supposedly China has with Nigeria. Why do some commentators claim the relation is indeed profitable to both parties, while others accuse China of exploitation? It depends on how one defines gains, or more precisely, gains in partnership. If one inclined more towards the realist view on international cooperation, they will more likely agree with the exploitation narration. Similarly, one who inclines towards the liberal views will see more “win-win” indicators. Realists value relative gains, which assume the gain is creditable when it exceeds the gain of the partner or comes at the partner’s expense. The definition of relative gains downgrades absolute gains as gains in general. Absolute gains assume the gain is creditable even when the partner gains as well. By implementing both views on China-Nigeria relations, to know whether the relation is “win-win” or “win-lose”, one can get contradictory answers.

By using the theory of relative gains, a gap in the amount of money invested by both sides is visible. China invests billions of dollars in Nigerian development. Therefore, Nigeria gains modernized railroads and possibilities to accelerate economic and social growth. However, it is also left with a debt to China it will, according to sources, probably be struggling to pay off. Therefore, Nigeria will be further addicted to Chinese market, banks and political will. At the same time, the unpaid Nigerian loan does not excessively strain the multi-trillion Chinese economy. Even though it may be a financial loss for China, the debt will burden Nigeria much more. Relatively, China gains, Nigeria loses. Workers for the construction sides and to operate the finished facility are hired domestically, but mostly for the lower positions. Management jobs are often given to Chinese hired by the contracted company in China. The reason for this provided by the Chinese side is that Nigerians must be taught how to operate the machines or manage a team, lead the works. On the one hand it may be useful for the company to have its own experts during work, but a lot depends on how many experts are hired in the motherland, for how long and for which tasks. This issue may seem irrelevant for the overall case, but it may show the amount of privilege a company enjoys in a host country and revise some obligations announced publicly. Except for constructing the facilities, China marks its impact in technology and knowledge transfer to its developing partners. Trusting domestic experts, which Nigeria has, could be one way to meet one’s own obligation. Letting the higher cadre gain experience by large projects like Lagos-Kano line modernization would be more beneficial to Nigeria than paying foreign experts constantly. The employment aspect is different in every case and hard to unambiguously judge. Nevertheless, the existence of this aspect is worth noting. The last aspect is conforming the Nigerian development projects to Chinese trade and mining needs. Chinese interest in Africa has never been accidental. The amount of friendly countries provides political support on the international arena. Abundance of natural resources provides propulsion for Chinese economy. China is aware that the developing countries will struggle to pay off the debts. During the Obasanjo presidency, the strategy of “oil for infrastructure” was the solution for Nigerian financial deficiency. Chinese loans usually have no concessions or even get annulled by the administration. Instead of paying directly, countries like Nigeria may agree to make a Chinese company one of the shareholders in the oil-yielding sector. Nigeria may open up for more private investments, increase trade index or agree to buy particular goods from China instead of other producers. Globally, Nigeria may be more likely to support China on the international arena. Internally, it may modify the tax policy in favour of China. Those are just a few additional options of paying the debt, which in the long run, may turn out to be much higher than expected.

The situation described above may also be presented in terms of absolute gains, which do not focus on competition between countries. To begin once again with the investments itself, both parties may profit from them. Chinese companies by getting paid, gaining experience and renome. Chinese government by gaining position as a supporter of development. Nigerian economy will gain a tool to accelerate growth, citizens' wellbeing will increase. The loan will remain the same, but it doesn't mean Nigeria is unable to pay it off. A lot depends on the next steps administration will take in terms of transportation maintenance, industry support, trade and diplomacy. For a country with great aspirations, to become one of the 20 economic superpowers⁵³, to be given a completely modernized and expanded railway is a huge chance. Even if further concessions towards China will be necessary, still, the modern railway will stay in Nigeria. Naturally it will require maintenance, but it may be easier to financially support a functioning and efficient railway than its opposition. Some believe that being obliged to China comprises a threat to national security. However, China-Nigeria relations do not exist in a vacuum. Both parties are obliged by international organizations. And their interest will also be secured this way. Deepening the cooperation of the African Union is a good sign for Nigeria. China wants to secure its interest in various African countries. Those countries solidarity in contacts with China can be a deterring factor from trying to economically harm one of the members. Various advantageous offers from China also comprise an argument in negotiations with other partners. In terms of absolute gains, China receives profits but Nigeria is not dissipative either.

The analysis shows there are different ways of looking at gain in a partnership. In case of contemporary China-Nigeria relations, China turns out to be the safe partner while Nigeria should develop a consistent strategy to make sure its interests will not be harmed. It doesn't mean that as a weaker partner, Nigeria is or will be exploited by China. Naturally, China runs its own errands, but Nigeria may gain from the situation as well. Whether the relation will turn out to be mutually beneficial depends a lot on Nigeria's initiative. The way the Nigerian administration executes the situation, may be a test to the country's stability, political maturity and competencies. Hopefully it came at the right time.

Conclusions

The question - "Can Nigeria benefit from the Chinese transportation infrastructure investments, while China benefits as well?" have been answered in my thesis with a use of the relative and absolute gains theory. The conflicting views on the aspect of gains provided quite contradicting answers. Both views confirm the gains for Nigeria are real in the relation with China. However, the theory of relative gains minimise them in favour of large Chinese gains. Relative gains look for possible threats and losses in a relationship. Therefore, the power gap between the partners is more visible and possible ways out from a harmful situation - nonexistent. Absolute gains focus on global order guarded by international organizations and norms. According to this theory, breaking them may cost much more than a temporary profit from aggression. To see the profit coming from the transportation infrastructure investments depends on the aspect one focuses on. The data show that taking an excessive loan to modernize the entire railway sector is risky. Depending on the further policy it may accelerate the economy or deteriorate and leave the country only with a debt. It is not surprising or repulsing that China wants to gain a profit from its investment. What Nigeria will gain depends mostly on its own skills and competencies.

⁵³ The Second Data Collection Survey on Mass Rapid Transit in the Federal Republic of Nigeria, 2014, pp. s2

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I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

