

The Analysis and Prospect of China's Aid Influence on Nigeria from the Perspective of Structural Power

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Abstract. International aids to the under developed countries have long been an essential part of international cooperation and global governance. As the representative African country, Nigeria has been aided by the United States, the EU, the UN as well as China for decades, receiving assistance and building cooperation with other countries from security, finance, production to knowledge. Against the deep interdependence situation in today's international situation, the lack of a comprehensive analysis of Nigeria's power and evaluation of assistances shall be filled soon. This study collected data and information about the existing assistances and cooperation between Nigeria and China, expected to evaluate the effect of assistance and the change of Nigeria's national power with the perspective of structural power, in order to provide suggestions and set light on future international aids.

Keywords: International aids; Nigeria; China; Structural power.

1. Introduction

Against today's international situation, aiding and supporting developing countries, especially the least developed countries to reduce poverty and improve regional people's livelihood plays a constructive role in promoting international development cooperation. Considering the recent major public health event, how to provide effective aid to meet the individual needs of less developed region to eliminate poverty and ensure livelihood has become an urgent issue. Throughout the history of China's rejuvenation, while strengthening its own strength, China has also provided aid to African countries. As the major recipient of aid, the development and modernization among African countries are also credit to the aids from the United States and the European Union. Whereas, compared with the traditional "vertical mode" of aid from the EU and the US, China's "horizontal mode" may help the recipient countries develop more comprehensively [1].

Located in the southeast of West Africa, Nigeria is the largest economy and the most populous country here. Entitled with the rich mineral resources, a large population base and a broad market, Nigeria has a huge development potential. Meanwhile, it also shares lots of representative problems in the development process with lots of less developed countries, which makes the aid from China particularly meaningful and worthy of referencing. Since the beginning of the 21st century, China's aid to Nigeria has generally deepened and expanded to various fields, ranging from trade, investment, science and technology, humanities and so on. The main question this paper wants to answer is: How has China's aid to Nigeria affected the comprehensive national power of it? From the perspective of aid influence, comparing the traditional donor, EU, what are the advantages and disadvantages of China's aid?

Hitherto, existing studies in this field are mainly focus on the separate politics and the corresponding effects in a decentralized manner without scientifically integrating, or focus on establishing economic models to analysis the impact of economic and trade investment on the whole African region without giving special attention to certain countries. The lack of comprehensive analysis weakens the accurate evaluation of aids on improving national power of the recipient

countries, while the study preference of economic and trade cooperation shadows the needs of harmonious development of recipient countries.

Therefore, this study is expected to re-consider this topic from a more comprehensive perspective. As a mature theory in the field of international political economy, the structural power theory mentioned by Susan Strange is suitable here. As the power that forms and determines various global political and economic structures, as well as the power that constructs the framework of state-to-state relations and state-to-people relations, it is of great feasibility for the analysis of Sino-Nigeria aid. From the perspective of structural power, this paper will analysis the above topic from four aspects: security, production, finance and knowledge, and to effectively explore the progress and the trend of the shift from producton-led to knowledge-led aid. Through answering the former questions, this paper is expected to offer an objective evaluation of China's aid to Nigeria and provide constructive suggestions to further aid to African countries.

2. Literature Review

Through the verification of the mechanism of “foreign aid-infrastructure-economic growth”, according to some researchers, raising local infrastructure levels accounts for around 55.30 percent of China's overall impact on growth of recipient countries' economic, demonstrating how effectively Chinese help may boost those nations' economies [2]. Other studies pointed out that the traditional “vertical mode” of aid is hard to break the poverty trap of the less developed regions, while the “horizontal mode” of aid could create more job opportunities for residents and promoted the industrialization process of low-and-middle-income countries, generating the endogenous impetus for economic growth, significantly increasing the job positions in recipient countries. Meanwhile, the aid from China played a significant role in suppressing ethnic conflicts and resolving further conflicts in recipient regions, improving the domestic security situation and restraining the occurrence of internal armed conflicts significantly, which contributed to reduce poverty in a long term [3]. Additionally, China's foreign aid also focused on the construction of social and public infrastructure in recipient regions, including education, medical care and human resources. In the early 21st century, China helped Africa establish the Africa Union Conference Center and sent more than 2,000 technical talents, which exerted a profound impact on the economic development and cultural construction in African countries [4].

In terms of medical treatment, China also provided a large amount of economic and human support to African countries to support their fights against Ebola, fully mobilizing the local medical resources in Africa and enhancing the soft power of local medicine to a larger extent. During the ravage of COVID-19, African countries expressed support to China from both material aid and spiritual lifting [5]. Moreover, some scholars have found that China's aid to Africa also has a significantly positive impact on the FDI of Chinese enterprises. With China's aid, the recipient countries can improve their governance capacity, and to a certain extent ensure the quality of their market supervision and the level of law ruling, creating a more ideal environment for further investment [6].

Like most aid to Africa, China's cooperation with Nigeria involved politics, trade, investment, medical treatment, science and technology, culture, education, health and other fields [7]. In 2006, China established its first overseas free trade zone in Lagos, Nigeria, providing about 300,000 jobs in Nigeria and encouraging local manufacturers to export to North America and Europe [8]. In the following years, the exchanges between China and Nigeria gradually decreased until Nigerian President Jonathan Goodluck took office and decided to revive the strategic cooperative partnership between China and Nigeria, and invited China to carry out infrastructure construction in Nigeria to enhance bilateral trade and relations [9]. Since China put forward the Belt and Road Initiative in 2013, Nigeria has actively responded to and participated in the construction of the Belt and Road Initiative, and the cooperation between China and Nigeria has been further deepened [10].

According to the available data, the main channels of cooperation between China and Nigeria are international trade and investment, supplemented by funds, technical aid and loans, as well as the

construction of global governance system and people-based connectivity. In addition, Chinese enterprises have also participated in the development of petroleum and metallurgical industry. In recent years, China's aid to Nigeria has mainly focus on investment in manufacturing, infrastructure and financial construction [10].

China's two economic and trade cooperation zones in Nigeria (Leki and Ogun) are thriving, with nearly one hundred enterprises under construction or operation, ranging from packaging, glass, ceramics, furniture, electrical appliances, wigs and hardware. In terms of infrastructure, China has helped Nigeria build several landmark projects in logistics, electricity, railways and ports. On the financial field, Nigeria was the first country in Africa to adopt the RMB as the reserve currency and signed the currency swap agreement with the People's Bank of China in 2018 [10].

The overall situation in Nigeria is stable, but there are still some traditional and non-traditional security problems. For example, there are various conflicts between ethnic groups, religions and parties in Nigeria for a long time. Terrorist attacks continue to occur in some areas. Chinese government provided Nigeria with more weapons, equipment and military uniforms in recent years. The military cooperation between the two countries in fields of personnel training and technical support also benefited Nigeria a lot [11].

In addition to improving the modern civilization of the local people through urban and rural infrastructure construction and exporting China's excellent traditional culture to Nigeria, China also helped Nigeria with technological change and innovation. It is mainly achieved by helping to cultivate relevant professionals and establishing technological demonstration centers[10]. Meanwhile, some Nigerian scholars mentioned that the Nigerian government should optimize the business environment to attract more foreign capital into the domestic market and prevent violent conflicts to create a stable environment to make investors have a better expectation. Additionally, the Nigerian government should also strengthen anti-corruption work in all sectors to make FDI have a more positive impact on Nigeria's domestic development [12].

In general, although there are many academic studies in this field, most of them focus on the assistant policies separately but lack the comprehensive analysis with scientific perspective. Considering the complex interdependent international situation, the unitary evaluation of national power is out of time. As one of the important theories in IPE, structural power explains the specific operation of the four basic powers-security, production, finance and knowledge-in the international political and economic competition, and explores the interrelationship of the four basic power structures. The structural power has risen as the ideal method to be used to re-evaluate the national power of Nigeria and provide the basic for further analysis of China's aid. Therefore, this paper is expected to fill this research gap, building a model for evaluating national power against the new international situation and forming the foundation for further detailed quantified studies.

3. Research Method

This paper analysed the existing literature and data as well as conduct a comparative analysis. In accordance with the PRISMA Statement, screened the literatures to select relevant papers (see Fig. 1). Bibliographic databases were searched for relevant articles from 2007 to 2021 [13]. Only studies targeting Chinese aid to Nigeria or China-Africa relations that are strongly related to Nigeria were included in the review. Data were collected and verified for analysis by all three authors.

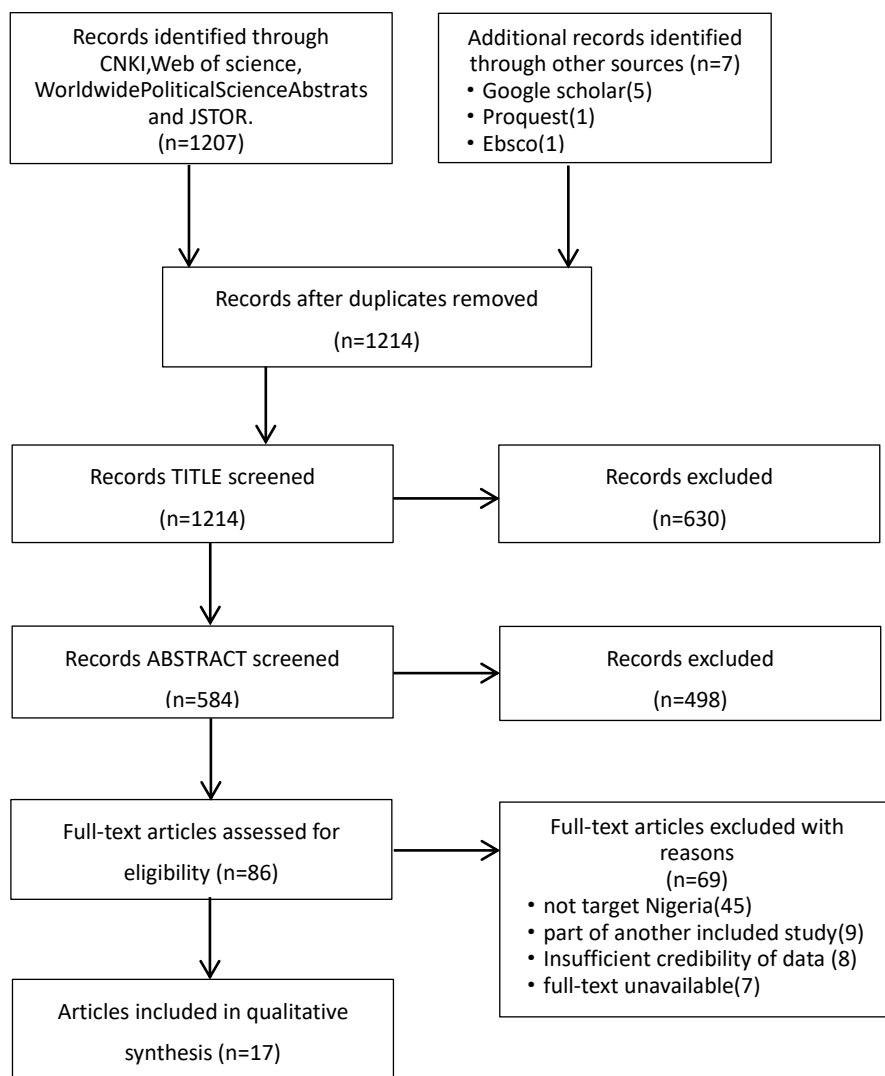


Fig 1. Flow diagram of study selection. Adapted from PRISMA flow diagram.

The data sources used are: website of the People's Republic of China's National Bureau of Statistics, Ministry of Commerce, and Ministry of Foreign Affairs, the website of the EU Council, the website of Aiddata, the website of Bureau of Stastics, National University Commission, World Bank, Agricultural Research Council of Nigeria, Energy Commission of Nigeria, Institute for Advanced Medical Research and Training, Forestry, Horticulture and Tree Crops Research Institutes, Institute of Human Virology Nigeria, Nigerian Institute of Medical Research, National Institute for Pharmaceutical Research and Development, National Counterterrorism Center of the United States.

4. The Chronological Review of Trade Relations Between Sino-Nigeria

In 2004, China Petroleum & Chemical Corporation (Sinopec) signed an E&P service contract with the Nigerian Petroleum Development Corporation (NPDC) for two blocks in the deep sea of Guinea. In 2004, Sinopec signed an E&P service contract with the Nigerian Petroleum Development Company for two blocks in deepwater Guinea. In the same year, Sinopec, and Nigeria stated collectively and signed a related agreement in which Sinopec agreed to invest \$500 million (then about RMB 4.1 billion) in offshore oil development in Nigeria and to import 70,000 bpd of crude oil from Nigeria starting in July 2005. In 2006, China National Petroleum Corporation (CNPC) spent \$2.3 billion to acquire 45% of the AKPO oil field in Nigeria, acquiring the district block and starting the process of cooperation between CNPC and Nigeria's oil industry. Table 1 shows the specific amount of the financial aid.

Table 1. Chinese Official Finance to Africa Dataset from 2000-2013 [14]

Unit: USD

Sector Name	count	Amount	Currency Ratio
Action Relating to Debt	54	2,902,621,549.00	2.31%
Banking and Financial Services	8	2,231,122,850.00	1.78%
Agriculture, Forestry and Fishing	80	5,254,164,800.00	4.18%
Business and Other Services	7	296,830,000.00	0.24%
Developmental Food Aid/Food Security Assistance	18	74,861,700.00	0.06%
Energy Generation and Supply	102	20,013,019,645.00	15.94%
Communications	86	5,317,539,978.00	4.23%
Government and Civil Society	157	2,912,412,989.00	2.32%
Health	169	2,311,103,278.00	1.84%
Industry, Mining, Construction	45	7,233,027,800.00	5.76%
Emergency Response	60	1,336,153,532.00	1.06%
Other Multisector	57	20,930,428,738.00	16.67%
Trade and Tourism	26	2,711,902,680.00	2.16%
Other Social infrastructure and services	72	1,339,211,869.00	1.07%
Transport and Storage	141	28,445,072,830.00	22.65%
Unallocated / Unspecified	275	16,173,400,549.00	12.88%
Education	95	1,047,322,540.00	0.83%
Water Supply and Sanitation	44	3,446,065,741.00	2.74%
General Budget Support	6	1,576,040,000.00	1.26%
Population Policies / Programmes and Reproductive Health	6	111,542.47	1.00%
Support to Non-governmental Organizations (NGOs) and Government Organizations	3	10,106,080.00	0.01%
General Environmental Protection	2	1,278,000.00	1.00%
Total	1513	125,563,798,690.47	100%

5. The Interaction among the Four Aspects of Nigerian Structural Powers

5.1. The Structural Power of Security

Susan Strange understood the security structure in political economy as a power structure formed by some people who can provide security for others. The people and forces will gain a kind of power as they providing security, for they can decide or limit others' action or their range of choice [15].

For a long time, sub-Saharan African countries have been faced with many security problems, such as political instability, frequent activities of terrorist organizations, chaotic social order and acute religious conflicts, which have seriously restricted the development of local politics, economy and cultural construction. Confronting the increasingly serious situation in these regions, Nigeria, Kenya and other African countries have stepped up counter-terrorism efforts. Troops from the EU and the US were also sent here to cooperate with local militaries.

However, due to the lack of joint counter-terrorism awareness among African countries, terrorist forces are able to flee around to avoid being attacked. Meanwhile, some aid countries directly deployed troops in Nigeria and other places to increase military involvement in Africa in the name of counter-terrorism, which maintained regional stability to a certain extent, but seriously weakened the Nigeria's ability of counter-terrosism and peacekeeping independently. These aids could maintain the regional stability in a short term, but make no difference on eradicating the terrorist threat.

As the major African country, Nigeria still lacks the ability to maintain the domestic stability independently and still has to depend on western countries and the UN to provide security, which

means the absence of security structural power. From the perspective of structural power, the lack of security structural power will also make Nigeria subject to the central countries in terms of production, finance and knowledge, further aggravating its own marginalization.

China has always actively responded to the UN counter-terrorism initiatives and provided troops and materials needed for peacekeeping operations to the UN Security Council. By 2021, China has stationed more than 80% of its peacekeepers in Africa, with a total of 30,000 personnel dispatched to Africa, serving in 17 UN peacekeeping missions. China has worked with the international community to ensure regional security, the primary prerequisite for the development of African countries. Additionally, China has never provided security aid in the method of directly stationing military forces. From the perspective of structural power, when a country's structural power of production, finance and knowledge is enhanced, the structural power of security will also be promoted. Therefore, although China seems not provide direct military aid to Nigeria, it has provided weapons, equipment and uniforms to support Nigeria's counter-terrorism and peacekeeping. The cooperation between China and Nigeria in personnel training and technical support are also benefit Nigeria a lot.

Meanwhile, scholars had concluded that the increase of state capability can suppress armed conflicts effectively [16]. Therefore, through economic, material aid, constructing of infrastructures, as well as the cultural exchanging, adding the peacekeeping forces and military forces from the UN and other countries, the ability of counter-terrorism and peacekeeping in Nigeria is expected to be promoted.

5.2. The Structural Power of Finance

Today, one of the major manifestations of economic globalization is the globalization of capital sources and finance. The rapid evolution of information technology has provided the technological support for the globalization of financial flows. According to Susan Strange, two inseparable aspects of the financial structure are defined: the first is how money is provided, the second is the way in which money is exchanged and the determination of exchange rates for different currencies [15]. With the shift from physical to digital currencies, the source of funds is no longer confined to the territorial boundaries of sovereign states and Chinese investors are able to provide financial support to those in need around the world through financial institutions, while receiving income payments to run their economies more efficiently. The formation of international financial centers and offshore financial markets has made it easier for multinational companies to access financial support from investors around the world in the context of international financial liberalization. The end of the Second World War ushered in a new phase of global development. The United States has taken the lead in terms of financial structural power. This provided an excellent opportunity for the formation of U.S. hegemony, and the U.S. seized the strategic opportunity of the restructuring of the international financial landscape to take a key step in shaping its hegemonic position. The combination of the demand for post-war reconstruction in Europe and Japan and the huge capital supply capacity of the United States provided an opportunity for the development of credit and finance in the United States. With the U.S. dollar as the core of the international financial system, the U.S. has been able to control the lifeline of the global economy and has further enhanced its financial soft power by utilizing international organizations such as the World Bank, the International Monetary Fund, and international monetary payment and settlement networks such as SWIFT as tools for exercising financial power. As China's trade with Nigeria has gradually increased in recent years, the RMB has begun to gradually replace the US dollar in driving Nigeria's financial market. According to the Central Bank of Nigeria (CBN), from January 1, 2011, Chinese exporters to Nigeria can quote directly in RMB and the RMB can be traded openly in the Nigerian foreign exchange market. The reason for including the yuan as a currency for foreign exchange transactions is that the yuan has become a major currency internationally, according to the Nigerian central bank Statements. The Central Bank of Nigeria believes that China is the fastest growing economy and trade relations between Nigeria and China, and between Africa and China, are strengthening. China has embraced this opportunity to deepen trade between the two sides, as trade in Nigerian and Chinese products has

increased from about \$1.2 billion in 2003 to US\$13.7 billion in 2019, according to the World Bank. Trade between Nigeria and the United States fell from US\$11.5 billion to US\$7.5 billion over the same period. In the same period, Chinese investment in Nigeria has grown from US\$24.4 million to US\$123.27 million. In 2020, Nigeria became one of China's top five investment destinations in Africa, following Kenya, the Democratic Republic of Congo, South Africa and Ethiopia. As a result, Nigeria's reserve of RMB will also enable the country to balance its balance of payments and secure its external payment capacity, allowing Nigeria's trade to have more options in terms of transaction currencies and to operate more efficiently. At the same time, it can also strengthen the country's internal strength, enhance the financial structural power, and have the ability to stabilize the exchange rate of the country by selling or buying foreign currency reserves in case of exchange rate fluctuations. Under the influence of Chinese aid, Nigeria has gradually increased its control over the stability of its currency and its ability to pay for international trade.

5.3. The Structural Power of Production

Political systems are built on production, which not only provides the means of subsistence for people but also ties them to particular power structures through defining production structures. The whole of the arrangements that decide what is produced, by whom, for whom, using what methods, and under what circumstances, according to Susan Strange, can be referred to as the structure of production [15]. In other words, MNCs have the fundamental power to organize their own production plans since they control the entire globalization of production chain, as Strange learns when he realizes that MNCs have the authority to alter the global production structure. In other words, transnational companies have gradually changed the production structure from one that was primarily tailored to serve the home market into one that may be tailored to serve the global market by following the pattern of historical process. Attracting MNCs' investment in the context of globalization is one of the most effective ways for developing countries to elevate their own economies. Chinese investment in Nigeria has been on the rise in the last decade and is mainly concentrated in the oil industry, services, manufacturing, and telecommunications. Taking the cooperation between China and Nigeria's oil industry as an example, according to Cao.L., there is a strong complementarity between China and Nigeria in the oil industry, Nigeria does not have the ability to extract oil independently, and China brings advanced industrial technology, sufficient capital, skilled technicians, mature industrial management, etc. to Nigeria [17]. With the borrowing and learning from foreign investment, Nigeria began to localize the development of the oil industry. Although Nigeria has to cooperate with multinational oil companies for oil and gas development in Nigeria under the constraints of oil industry talents, capital, technology and system, its main awareness of independent development of oil industry has been increasing. In 2010, China intended to acquire the oil field interest sold by the Shell of the Netherlands, but the gradual emphasis on localized industry in Nigeria led to the field being repurchased by a Nigerian company. Under the influence of Chinese foreign investment, Nigeria has gradually improved its industrial capacity and awareness of its own energy development, effectively intervening in the trading of oil production rights. This is thus an increase in the structural power of Nigerian production. In terms of railroad construction, China's aid in building Nigeria's railroads has also enabled Nigeria to improve in a variety of aspects of the country. First of all, the construction of railroads has largely contributed to solving the employment problem of the people in Nigeria. During the construction of the Abuja-Kaduna (Aka) Railway, the ratio of local employees to Chinese employees was 10:1, creating a total of 150,000 jobs. This has helped to train various talents in railroad for Nepalese people. Secondly, the advanced railroads have improved the safety and social stability of the country's transportation, as statistics show that the old railroad system caused a total of 970 railroad accidents between 1997 and 2005, while the newly produced railroad system has efficient transportation capacity and avoids accidents. The efficient transportation capacity has enabled the country to expand its population flow, with many sparsely populated towns becoming more flourished due to the construction of the railroad and has also connected resource-rich areas to seaports, reducing the cost of transporting products and increasing

the country's competitiveness in international trade. Overall, it seems that with China's investment and support, the country is gradually improving its hard and soft power in production. The construction of railroads has helped create abundant jobs in the country, boosting economic development and enhancing international competitiveness. China has largely strengthened the country's power in terms of structural power of production.

5.4. The Structural Power of Knowledge

With the continuous improvement of the global average level of science and technology, the competition among countries has gradually changed from the primary competition for land and resources to the development of comparative industrial production to chemical products, petroleum and electricity, and then to the competition for advanced technological advantages [15].

Among the four components of structural power, the importance of knowledge structural power is constantly highlighted. The country's ability to cope with natural disasters and diseases depends not only on its infrastructure, but also on its mastery of cutting-edge knowledge in academic fields, such as natural sciences and biomedicine. Meanwhile, the structural power of knowledge is also reflected in whether the country has the power to define the content and the value of knowledge. Additionally, the average educated level of citizens and the ability of accessing information and mastering technologies are also mean a lot to the national structural power of knowledge.

According to the statistics of the National Commission of Nigeria, the current master's programs of Nigerian universities are concentrated in the fields of finance, business and organizational management but lack the ability to train talents in basic subjects such as biology, chemistry and physics. In addition, the ability of training talents in humanities and social sciences is generally weak too.

In 2008, one Confucius Institute was set up at the University of Lagos and one at the University of Azikwe. Since 1964, China has provided government scholarships to Nepal. By 2019, a total of 1,305 scholarship students had been received. In 2020, there were 6,971 Nepali students studying in China, 740 of whom were on government scholarships. Since 2010, 20 Chinese college students or graduate students have gone to Baru University and other universities in Nigeria to study the Hausa language or conduct research on African issues. At present, Soochow Universities and the University of Lagos have been selected as partners in the "20+20 Cooperation Program between Chinese and African Universities" of the Ministry of Education of China.

In addition to basic education, China has also helped Nigeria cultivate talents in agricultural development, industrial development and other fields. Since 2012, China has trained 7,456 African agricultural students in China. China also has trained more than 50,000 local people and built 23 agricultural demonstration centers through programs, including more than one hundred agricultural experts and expert teams.

By 2021, In addition to negotiating 72 multilateral and bilateral agricultural cooperation agreements with 20 African nations and regional organizations, China has developed agricultural cooperation mechanisms with 23 African nations and regional organizations. In 2019, China and Africa hosted the first Forum on China-Africa Agricultural Cooperation, establishing the China-AU Committee on Agricultural Cooperation and launching the preparation of the China-AU Committee on the cooperation of the agricultural modernization. By the end of 2020, China had invested in more than 200 non-agricultural enterprises, involving 35 African countries, with an investment stock of US 1.1\$ billions. The investment scope covered planting, breeding and agricultural product processing industries, making more than 350 kinds of African agricultural products and food products can be traded with China.

Additionally, China has also concentrated on assisting African nations to advance their medical specialty and trained 20 million specialist doctors for those nations. Up to now, China has developed matching cooperation arrangements with 45 African hospitals in 40 African countries and assisted 18 African nations in the establishment of 20 specialized centers encompassing cardiology, intensive care medicine, trauma, and endoscopy.

At present, the proportion of local personnel in senior management in Nigeria's major local scientific Research institutions is gradually increasing. In Nigeria's Institute for Advanced Medical Research and Training, the proportion of Nigerian researchers has reached 94%. In the Forestry, Horticulture and Tree Crops Research Institutes, the proportion of local researchers is 100%. At the Institute of Human Virology Nigeria, Nigerians account for 92% of all research staff.

Chinese companies have also participated in a number of submarine cable projects connecting Africa with Europe, Asia and the Americas. Cooperating with mainstream operators in Africa, China has helped them basically achieved full coverage of telecom services here. Additionally, China has also built more than half of Africa's wireless stations and high-speed mobile broadband networks, laid more than 200,000 kilometers of optical fiber, helped 6 million households get broadband Internet access, and served more than 900 million African people. According to the World Bank, Internet penetration in Nigeria is rising gradually, from 21% in 2014 to 36%, and is expected to increase further in the future.

5.5. The Interaction of Four Structural Powers

From the perspective of structural power, the power of a certain country is not absolute, but should be considered in the specific global political and economic structure. Security, production, finance and knowledge are interrelated to construct the structural power framework of the whole country [15]. Through the above analysis of the four aspects of China's aid to Nigeria, it is not difficult to find that as a new donor, China's structural power improvement in the four aspects is of great significance to Nigeria and other African countries.

In the field of security, China has actively cooperated with the United Nations and other international organizations to combat terrorist forces in Africa and maintain regional security and stability. At the same time, China has also started to provide personnel training and material aid to Nigeria and other countries to enhance their independent counter-terrorism and peacekeeping capabilities, reducing their dependence on Europe, the United States and other countries. The improvement of Nigeria's security structural power, in turn, ensures its autonomy in the field of production development and foreign trade, improves the credibility of its government, and maintains regional security and stability in the long run.

Moreover, China's aid to Nigeria's local processing industry, petroleum industry, service industry and manufacturing industry in the form of FDI and the direct financial aid has also greatly improved Nigeria's production capacity, improved its export capacity, providing more talent training opportunities and jobs for Nigeria, expanding its domestic consumer market. With those aid, Nigeria will further participate in the global trade chain and enhance its own discourse power, as well as improve the international influence. Meanwhile, China's investment in Nigeria has made a large amount of RMB pour into the Nigerian market, further deepening the trade cooperation with China and helping Nigeria get rid of its original single dependence on Europe and the United States and other countries generally. The diversification of foreign exchange reserves and the expansion of independent trade options have further enhanced Nigeria's financial structural power.

In the field of knowledge, many Chinese scientific research institutions and universities actively cooperated with Nigeria and other African countries, setting up Confucius Institutes there for cultural exchanges. It is significant on breaking the unilateral influence of European and American countries on Nigeria's cultural and knowledge development, introducing more diversified cultures and ideas to Nigeria and contributing to the cultivation of its own cultural independence. Meanwhile, when Nigeria's regional security is guaranteed, the financial environment and production environment will also be improved. With higher livelihood and more opportunities of personal development, the brain drain in Nigeria will be expected to slow down, and a positive cycle of development in security, finance, production and knowledge will be realized to enhance Nigeria's comprehensive national strength.

6. Comparison with EU Aid

The European Union, as another major aid donor to Africa, has also provided significant aid to Africa or Nigeria in many ways over time. Compared to China, European aid to Africa has a much longer history and, for reasons of colonial history, a more complex and deeper relationship with Africa. The EU's aid policy towards Africa has been structured by the Lomé, Cotonou and Post-Cotonou Agreements. For more than a decade from 1975 to 1989, the EU signed four Lomé Agreements with recipient countries, during which time the EU provided a total of around €40 billion in economic aid to recipient countries. In 2000, to replace the expired Lomé Agreements and in line with the UN Millennium Development Goals, the EU signed the Cotonou Agreement with 77 developing countries or territories and pledged to provide them with a total of more than €13.5 billion in economic development aid by 2007. In the 21st century, the EU's engagement with Africa has been defined and foreseen through a series of documents, strategies and agreements (See Table 2).

Table 2. EU Policies towards Africa (including Nigeria) [18]

Time	Name of the policy	Districts covered	Main areas of aid
2000	<i>The Cotonou Agreement</i>	77 countries in Africa, the Caribbean, the Pacific, including 48 countries in sub-Saharan Africa	Development, economic trade, political dialogue
2007	<i>Africa-EU Joint Strategy</i>	Mainland of Africa	Security, human rights, regional integration, trade, development
2011	<i>EU Strategy for Security and Development in the Sahel</i>	Nigeria, Mali, Mauritania, Niger, Chad and other countries of the Sahel region	Prevention of radicalisation, migration and population movements, border management, combating human smuggling and cross-border crime
2014	<i>The EU Gulf of Guinea Strategy</i>	6,000 km of Gulf of Guinea coastline from Senegal to Angola	Security, Development, Governance

As can be seen through the policies in the table, the EU's aid to countries such as Nigeria has been multifaceted since the beginning of the 21st century. Politically, EU aid policies to Africa have strengthened development in the areas of peace and security, human rights, democracy, fundamental freedoms, rule of law and good governance. Economically, African countries are the most favoured recipients of EU foreign aid among the many recipient countries around the world, receiving aid for a long time and on a wide scale. Through the European Development Fund (EDF), the EU provided Nigeria with £50 million between 2002 and 2007, £580 million was allocated to Nigeria between 2008 and 2013. It can be seen that the EU has not been stingy in its financial aid. The EU has updated its foreign aid policy towards Africa over the past ten years, not only by bolstering the African Emergency Endowment, which is essential for many African countries, but also by assisting the The Us' antiterrorism initiative in the Horn of Africa and enhancing its trade-related aid strategy with African nations.

The EU has also carried out several aid micro-projects in the Niger Delta in Nigeria, known as MPPs, which aim to halve the number of people living in poverty in the recipient areas by 2015. Specifically, the EU has been intervening in the development of rural communities in the Niger Delta for over a decade, working on a global campaign to eradicate poverty in third world countries. During this period, the EU launched and implemented three phases of micro-project programmes, MPP3 (2000-2004), MPP6 (2004-2008) and MPP9 (2008-2012), spending more than US\$210 million on nine states in the region between 2000 and 2012.

On 13 February 2022, during a meeting with Nigerian Vice-President Yemi Osinbajo, the Executive Vice-President of the European Commission announced that the EU will launch the €150

billion (US\$169.67 billion) Global Gateway Africa-Europe Investment Package over the next seven years. It will help finance digital transformation of the continent, renewable energy, biodiversity, agriculture and food production, climate change initiatives, education, mobility and more. As part of the package, the EU plans to invest at least €820 million (US\$927.5 million) in Nigeria's digital transformation over the next two years through a €160 million (US\$180.9 million) grant and a €660 million (US\$746.6 million) loan. The programme aims to help strengthen secure connectivity, promote the digitisation of public services, support entrepreneurship and develop digital skills, and create a people-centred democratic governance framework for technological development.

In terms of the four basic dimensions of structural power, combined with the above aid measures, in terms of security, EU aid to Nigeria has indeed helped to address many issues that endanger regional stability, for example by assisting UN peacekeepers in Africa, strengthening regional and national partnerships for peace and security, or helping local governments to combat cross-border crime, etc.; in terms of finance, the euro is one of Nigeria's reserve currency, and the EU has also provided Nigeria with significant lines of credit; as far as production is concerned, a series of EU aid measures have indeed boosted local productivity and created a certain number of jobs; In terms of knowledge, the EU is also helping to educate Nigerian talent, for example by sponsoring young Nigerians to attend higher education in Europe.

However, the years of grant-based aid from Europe and the US to Africa seem to have fallen into a paradox that foreign aid has led to an increase in poverty rates in the recipient regions rather than a decrease. Zambian economist Dambisa Moyo, in her book *Dead Aid*, states that "we live in an aid-wrapped environment and over time we think that receiving aid is the only thing we can do" [19]. Years of financial aid have created an inertia of dependency as Africa only accepts and takes, and they don't know how to develop their own countries. More many countries are deprived of their agency in aid, to some extent destroying the country's industries and markets. While this may not have been the original intention of the donor, long-term aid must be partly responsible for this situation. Balls Andrew states the hard facts behind the foreign aid industry and tries to discourage African countries and African policy makers from placing too much trust in the foreign aid system in his paper 'Aid does not enhance growth in Africa' [20]. Therefore, EU aid has not helped Nigeria to build its structural power in the four areas, at least it seems so now.

The answer to the above paradox can perhaps be derived from a comparison with China.

Financial aid alone can solve temporary poverty, but it cannot eradicate it at the root. China's aid in Nigeria, on the other hand, was initially focused on building projects that addressed basic needs, such as the development of electricity and water resources. Later on, it began to focus on the construction of transport facilities, such as the construction of the Rail Link signed in 2015, because transport is the most direct and useful way to change the backwardness of a region, as railways/roads can connect two regions, as well as ports and cities, making population interaction and economic development faster and more convenient. In addition, China's most successful experience would be the construction of industrial parks in Africa. In Nigeria there are many industrial parks flourishing such as the Ogunshan Industrial Park and Ningbo Industrial Park. Because the legitimacy of government power in African countries is not strong, and the uniformity between regions is not strong, it is difficult to implement some reform measures or policies in the whole country at once, while the construction of industrial parks can reduce the talents and resources needed for development, focus on training talents and developing specific industries in a region, so that pilot areas can be formed and successful experience can be gained for the whole country to implement, without too many interference factors. This approach also gives local enterprises an opportunity to upgrade their own products and services. This approach also gives local enterprises the opportunity to move up to higher value-added processing industries, rather than staying at the raw material production stage.

7. Future Prospects

7.1. Where China's Aid Can Improve

The outlook for Chinese aid to Nigeria is generally positive. As the largest developing country, China had in some respects shared the same poverty and development plight as African countries, so Africa is also banking on learning from the Chinese experience. China needs markets, and Africa needs opportunities. At the same time, Comparing with EU, China's aid philosophy is better suited to Africa's development.

Chinese aid has covered 54 countries in Africa without any dead ends, with Swaziland receiving aid from Taiwan Province. Through the above study, what room there is for China's aid to Nigeria to be enhanced and developed, and how Nigeria can better achieve its growth in structural power, which requires us to discover our own strengths in comparison with other aid donors, make up for shortcomings, and build on our strengths to avoid shortcomings.

(1) Strengthen cooperation with other aid donors. For example, the EU is cooperating with the US.

(2) Sign more written agreements to strengthen the written provisions of aid and form our own system of aid norms.

(3) Establish more specific aid programmes, such as the EU's "package".

7.2. Significance of This Study for International Aid to African Countries

The kind of foreign aid this paper is seeking should be able to change the world system to some extent, moving the 'peripheral' countries towards the 'centre'. But this movement cannot be achieved simply by financial aid. There is a Chinese saying that "it is better to give a man a fishing rod than to give him a fish". The aim of our aid to the recipient country should be to enable it to grow into a country with the capacity to develop independently and to integrate successfully into the international market, rather than to make it more and more dependent on the donor country. The former would also be more conducive to the development of a more promising win-win partnership between the two countries in the future.

8. Conclusion

Chinese aid would indeed have a positive impact on Nigeria in four areas: security, finance, production and knowledge, helping Nigeria to shape its own structural power, enhance its national capacity and improve its position on the international stage. At the same time, China should learn from the EU's aid policy, strengthen cooperation with other aid donors and sign more written agreements to standardise and systematise aid.

Shortcomings of this paper: Because of the impact of Covid-19 pandemic, the updating of data on relevant Nigerian websites is untimely, and openness of the databases are limited for mainland of China, which have led to a limited amount of data collection and specification in this paper. In future studies, this research could be expanded to use more data and build more advanced statistical models to analyze the economic impact of aid.

References

- [1] Xinying Wang, A comparative study of EU and Chinese aid policies towards Africa. *Asia and Africa*, 2011(01)
- [2] Bing Yan, Xindi Xie, Bo Wen. Chinese Foreign Aid and Recipient Countries' Economic Growth: The Intermediation Effect of Infrastructure. *World Economic Research*,2021(02):3-18+134.
- [3] Gongyan Yang, Xiaoxuan Liu, Hongzhong Liu. Study on the poverty reduction effect of Chinese foreign aid in low and middle-income countries. *Asia-Pacific Economy*,2021(04):120-129.
- [4] Xiqin Hu. Study on the Economic Growth Effect of China's Aid to Africa in the New Century. Sichuan University, 2021.

- [5] Chuanhua Wu. China-Africa Community of Destiny: Historical Status, Exemplary Role and World Significance. *West Asia Africa*, 2020(02):12-21.
- [6] Churen Sun, Ru He, Yaying Liu. Aid to Africa and outward direct investment by Chinese enterprises. *China Industrial Economics*, 2021(03):99-117.
- [7] Ogunkola, E. O., Bankole, A. S., & Adewuyi, A. (2008). China-Nigeria. Economic relations. AERC Scoping Studies on China-Africa Relations. AERC, Nairobi. February.
- [8] Gold, Kafilah Lola, et al. "CHINA-NIGERIA ECONOMIC COOPERATION: A REVIEW.", 2022.
- [9] Egbula, M., & Zheng, Q. (2011). China and Nigeria: a powerful South-South alliance. *West. African Challenges*, 5, 1-20.
- [10] Economic and Commercial Counselor's Office of the Chinese Embassy in Nigeria, 50 years of fruitful Sino-Nigerian economic and trade cooperation. *China Foreign Trade*, 2021(03):16-17.
- [11] Capt Nesiana Omat Saye, China's security cooperation policy with Nigeria: challenges and prospects. *China and Africa*. 2013, (01)
- [12] Omogbemi, Solomon K. "The Influence of China's Foreign Direct Investment on the Economic and Political Framework of Africa (A Case Study of Nigeria)." *Studia Universitatis Babes-Bolyai. Studia Europaea*, vol. 66, no. 2, 2021, pp. 93-118.
- [13] Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., & A., Moher, D., (2009). The PRISMA Statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *British Medical Journal*, 339, b2700. doi:10.1136/bmj. b2700
- [14] AidData's Chinese Official Finance to Africa Dataset, 2000-2013, Version 1.2. (2015, September), from <https://www.aiddata.org/data/aiddatas-chinese-official-finance-to-africa-dataset-2000-2013-version-1-2> Retrieved December 19, 2022
- [15] Susan Strange. *States and Markets: An Introduction to International Political Economy*. Yang Yuguang. Beijing: Economic Science Press, 1990.
- [16] Pinto, Pablo M., and Boliang Zhu. "Brewing Violence: Foreign Investment and Civil Conflict." *The Journal of Conflict Resolution*, vol. 66, no. 6, 2022, pp. 1010-1036.
- [17] Cao, L. Study on Cooperation between China and Nigeria's Oil Industry, Zhejiang Normal University, 2021.
- [18] EU Policies towards Africa (including Nigeria), EU Council, from <http://www.consilium.eu>, Retrieved December 19, 2022.
- [19] Dambisa Moyo, *Dead Aid*. Farrar, Straus and Giroux. 2010.
- [20] Balls, Andrew, Aid will not lift Growth in Africa, warns IMF, *Financial Times*, January 6 th, 2005.