

**MESTRADO EM**  
**DESENVOLVIMENTO E COOPERAÇÃO INTERNACIONAL**

**TRABALHO FINAL DE MESTRADO**  
DISSERTAÇÃO

**CHINA'S AID TO AFRICAN OIL-PRODUCING COUNTRIES: IS THERE  
ANY LINK?**

**YATONG WANG**

**10 - 2018**

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**ORIENTAÇÃO:**

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## **Abstract**

Official development aid of emerging donors, namely non-traditional DAC countries, has attracted a wide concern. Taking into consideration former studies which have analyzed different motives of traditional and emerging donors' development assistance and the controversy on Chinese ODA, this work chooses specifically one area, the oil resources, and studies one representative emerging donor, China, in order to find out if its aid flows to African oil-producing countries are stimulated by their oil resources. The study works on data of Chinese ODA from 2000 to 2014 and of crude petroleum imports during the same period of time, with regard to 6 main African oil-producing countries. Using bivariate correlation test and linear regression test, no correlation or causality between these variables is observed. Hence, the test result demonstrates that the oil resources condition doesn't have a significance influence to Chinese development assistance to African countries.

**Key-words:** Official development aid, China, oil resources.

## Resumo

Os doadores emergentes de ajuda pública ao desenvolvimento, designadamente países membros non-tradicionais do Comitê de Ajuda ao Desenvolvimento, têm atraído um amplo interesse. Tendo em consideração os estudos anteriores que analisaram os motivos diferentes dos doadores tradicionais e emergentes, e a controvérsia sobre a APD da China, o meu trabalho escolhe uma área específica, o petróleo como objeto, e investiga o doador emergente representativo, a China, a fim de verificar se a sua assistência para os países produtores de petróleo bruto africanos é estimulada pelo petróleo daqueles países. O trabalho utiliza dados de APD e da importação de petróleo bruto de 2000-2014 da China em termos de 6 países produtores de petróleo africanos. Aplicando análise bivariada de correlação e análise de regressão linear, não se descobre correlação nem causalidade entre estes variáveis. Portanto, demonstra-se que o recurso de petróleo não tem influência significativa à ajuda ao desenvolvimento da China para os países africanos.

**Palavras-chave:** Ajuda pública ao desenvolvimento, a China, recurso de petróleo.



## Introduction

Along with the growing participation of non-traditional DAC countries on providing official development aid, South-South cooperation has aroused extensive concern and discussion. According to the report of Fourth High Level Forum of OECD (2011), the new partnership was established based on the “common principles, objects and differential commitments”. Since there’s no obligation for them to obey the regulations set by OECD, these emerging donors aren’t generally recognized. Compared with traditional donors, their actions are less transparent and the aid flows are given by various modalities. Many people worry about its nature and consider the aid as rogue, irresponsible, which could “undermine the improvements that have been made over the past several decades” (Walz et. al, 2010).

As a representative example among the emerging donors, Chinese official development aid’s performance and effect are under controversy. It became also an important topic to scholars and investigators of different institutions and organizations. Without periodic report about its action and a unified quantifying standard, the calculation of its amount turns out to be uncertain. There are more disputes on its motive, allocation and actual effects. Chinese development assistance is alleged to be “rogue aid” by some scholars and journalists and they believe the China’s aid flows are mainly guided by strategic interests, including raw materials, international politics etc., other than humanitarian needs of recipients (Naím, 2007; Wagenvoort, 2016). However, a growing number of works investigate different determinants of China’s ODA and the results are inconsistent with former arguments and opinions.

Taking into account all controversies, my study aims to analyze only one aspect of all main effective factors, namely the recipient countries’ oil resources. According to some statements, African countries receive an increasing amount of Chinese official assistance, because of their oil reserves and exploitation’s prospect. They believe that importation of oil resources took an important position in China’s development strategy and it motivates China’s assistance. On one hand, this work

uses China's petroleum imports data to explore this resource condition of African countries. By utilizing OEC Dataset, which reconciles data reported to the United Nations Statistics Division, the importance of each African recipient in terms of petroleum imports is represented. On the other hand, considering the uncertainty of Chinese total ODA to each country, a reliable database of ODA's quantity is also essential for the investigation. On the basis of Tracking Underreported Financial Flows (TUFF) Methodology, the AidData's Global Chinese Official Finance Dataset collects statistics of Chinese ODA to each African country during 2000-2014. After filtering and eliminating the null and invalid value, the study therefore utilizes statistics of petroleum imports and ODA flows of China with regard to six African countries with 270 observations.

On the aspect of structure, the work is divided into 5 sections. Chapter 1 presents principle motives of ODA of different donors, including traditional and emerging ones. Chapter 2 presents the background and brief history of Chinese ODA's development and the important role the country plays in respect of Africa. Chapter 3 mainly explains the methodology, database applied in this work and case study. The conclusion of work will be summarized in the last section.

# Chapter I

## Aid Motives of Traditional and Emerging Donors

Development aid is always been motivated by various factors. The developing countries in need put forward their requirements and donors consider carefully the recipients' condition, aid model, amount, transference channel and other elements, in order to make an appropriate decision. Generally speaking, global foreign assistance develops dynamically, presenting diverse characteristics in specific phases, owing to historical evolutions. Each country's aid decision and aid policy can be affected by many factors in economic, political, cultural, historical, geostrategic and humanitarian areas. Not only the self-interests of donors, but also the conditions of potential recipients like autocracy level, governance quality are under consideration. In this section, I'll enumerate the principle determinants of traditional donors, namely the DAC donors and the emerging donors, which have currently been involved in the official development aid stage.

### 1.1 Motives of traditional donors' foreign aid

Some former studies have investigated the principle determinants, in terms of aid flows, provided by traditional donors in Development Assistance Committee (DAC).

The study of Berthélemy (2002) takes traditional donors as targets. It covers 137 recipient countries, 22 DAC donors and aid flows over 20 years (1980-1999). It uses a panel study with three dimensions (recipient-year-donor), because of the huge database with nearly 60,000 observations. All determinants are divided into two groups: the "beneficiary needs and policy performance variables" which show the recipients' status, and donors' self-interests variables, which include variables on behalf of aid providers' interests and strategies. Beneficiary needs, namely the poverty level of recipients, are represented by income per capita and the policy performance consists of political rights, civil liberty, and economic and social policy's

quality. In part of self-interests of donors, trade relationship and historical-political ties are emphasized and analyzed. The main results are that, donors are prone to provide assistance to countries with positive social performance, especially after the cold war. At the same time, countries with good economic performance seemed to be rewarded by donors in 1990s. From the viewpoint of donors' self-interests, the aid flows' determinant turned from politics and historical factors to "pragmatic considerations about commercial interests".

However bilateral and multilateral assistance manifests different features. The study of Berthélemy (2006) takes into analysis both bilateral and multilateral aid's performance and motives. Based on assistance's statistics of 22 DAC-OECD countries and principal multilateral donors, from 1981 to 1999, the roles played by factors, including both donors' self-interests and recipients' needs and merits are evaluated. Commercial linkages and geopolitical relationship constitute donors' principle motives. With regard of recipients' part, beneficiary needs are measured by income per capita, and recipients' merits are reflected by quality of political governance, quality of policies and institutions. He found that comparing with motives related to developmental objectives, self-interests play a predominant role in bilateral aid, except Switzerland and a few Nordic donors. Commercial interests have a larger effect on aid decisions, than geopolitical motives. Multilateral aid, excluding European Commission (EC)'s assistance, strongly responds to recipients' needs. However, EC has a special performance, with little attention given to recipients' needs and merits, and a strong bias in favor of the African, Caribbean and Pacific Group of States (ACP).

Bandyopadhyay et al (2006) focus on the traits of recipients, namely the factors including economic and physical needs, civil/political rights, and government effectiveness, controlling donors' self-considerations. They use the data of three years, 1995, 2000 and 2003 in the post-Cold War era, in total 395 observations. The indicators standing for recipients' needs are GDP per capita and infant mortality. Civil liberties and political rights indexes are used to evaluate the level of human right. Moreover, the World Bank's governance indicators represent government

effectiveness of recipients. The investigation reaches to conclusions, which are not completely consistent with the former researches. The empirical result shows that aid of post-Cold War era generally responded negatively to GDP per capita and positively to infant mortality, rights, and government effectiveness. The increasing emphasis on aid effectiveness among aid donors' also strengthens the significance of their governance performance and institutions quality.

Dollar et. al (2004) survey the allocation of foreign aid and its selectivity, based on statistics of aid and variable indicators by 41 bilateral and multilateral donors/agencies from 1984 to 2002. This paper focuses on situations of recipient countries, includes two intuitive selectivity indexes, which are "policy selectivity" and "poverty selectivity". It aims to see if donors' assistance inclines to countries with sound institutions and policies, or countries with more urgency of money. They conclude that today about three-fourths of target donors/agencies have a positive relationship between their allocations and sound institutions and policies of recipients. The comparison with historical analysis results confirms the increasing importance of good governance in aid allocation. Meanwhile aid agencies that are very policy focused, are also very poverty focused, indicating that it is possible to target aid both to the countries where grave poverty and at the same time to countries with reasonably good governance.

## **1.2 Emerging donors and determinants of new donors' foreign aid decision.**

With emerging or "reemerging" of new donors and the development of South-South cooperation, we should also pay more attention to the performance of major new participants. The study of Walz et al (2010) shows the overall estimated official foreign aid value of non-traditional donors, which ranges from 8 to 31 percent of global gross ODA. It reveals that aid flows of some countries even reached the aim of 0.7% of gross national income, if calculated by the upper estimation. The emerging donors follow basically three distinct models. The new novice of DAC and members of OECD but not DAC, like the Czech Republic, Estonia, Hungary and Turkey,

generally follow the DAC guidelines. Arab donors follow one specific model. They have some of the oldest, most established, and most generous aid programs in the world and their foreign aid tends to predominately flow to other Arab countries. Different from the other two models, the Arab model remains primarily regional concentration. Common culture, religion and language factors motivate the aid flow. The last model, Southern Model is generalized based on assistance performance of other emerging donors, namely BRICS countries and Venezuela etc. Waltz et al point out that in this “horizontal cooperation”, the southern donors prefer to provide assistance to infrastructure projects and resource-rich countries have been popular targets.

The motives affecting aid flows are also divided in two aspects by many studies, recipients’ conditions and donors’ self-interests, and represented by similar variables.

In terms of emerging Central and Eastern European donors, their foreign aid policies share the same characteristics. Szent-Iványi (2010) examines the possible factors affecting Visegrád countries’ aid allocation on the basis of data from 2001 to 2008. The result shows that their foreign development assistance is not mainly influenced by poverty level or the government performance of the recipients. The major influential factors are geographic proximity and the former relations from the Communist Era. Instead of recipients’ needs and merits, they prefer to choose countries with more relation to their political, security and economic interests.

The work of Kiliç (2011) investigates the motives of Turkey, based on its foreign aid towards Central Asia in the post-Soviet Era by using data from 1992 to 2008. Also the author compares Turkey’s official development behavior with three parallel donors’, namely Japan, United States and Russia, in order to demonstrate specific characteristics of each donor and particularity of Turkey. Owing to the strategic significance of this region, during 1990s it became a worldwide center of interests. For United States, Russia and Japan, the influence of economic interest is obvious and the oil and gas reserves of potential recipients motivate the aid flowing into specific regions. No close relationship between foreign aid and the needs or merits of recipient countries has been found in the case of US, Russia and Japan. His findings have

discounted the role of humanitarian need, democracy, and human rights of recipient countries in aid policies' concern. However, a common factor in allocating ODA in Central Asia region is for security concern, namely "counter-terrorism, drug trafficking, human smuggling, and the prevention of refugees". Turkey's performance, comparing with the countries referred above is more consistent with the essence of development. Though it cannot be considered as totally altruistic, Turkey's aid aims to transit recipient countries "from totalitarian to more democratic regimes, from command economies to free-market economies, and from closed societies to more pluralistic societies" (Kiliç, 2011). It gives a considerable humanitarian concerns and helps the Post-Soviet Central Asian states to achieve social and economic independence, to integrate into international system, also seeking its own economic and politics interests.

In terms of countries following Southern Model, as a member of BRICS, Brazil's performance attracts attention and becomes a popular target of researches. Burges (2014) studies the Brazil's motives to implement development assistance projects. The paper concludes: "there is a genuine and deep concern with global poverty alleviation in Brazil, but this does not preclude Brazilian policy makers from using aid and development-related activities from advancing the national interest" (Burge, 2014). Brazil's self-serving economic and political interests remain to be a major motivator, which are cleverly expressed in a more inclusive way.

Another BRICS country, India has gained also a heavyweight. Its development cooperation history traces back to pre-independence interim government, before attaining dependence in 1947 (Forum for Indian Development Cooperation, 2016). As a developing country, Indian development cooperation policy is shaped by the "one world philosophy", development partnership rather than donor-recipient relationship, which is distinct to traditional donors guideline. Based on the data from 2008 to 2012 of AidData, Fuchs et al (2012) investigated two pairs of hypotheses of Indian aid allocation's motives to validate if India responds to economic needs of developing countries; if it prefers countries at a similar stage of development; and if the aid flows are led by the country's political and commercial self-interests etc. According to

empirical results, Indian development aid shows some need orientation but still motivated more by commercial interests. Countries at a similar developmental stage have a larger probability of entering India's aid program (without receiving larger aid amounts). Meanwhile, this "needy" donor cares more about its own needs instead of recipients' demands. Comparing with Scandinavian countries, United States, Japan, the three largest EU countries, South Korea and United Arab Emirates, the preference of countries geographically close is more obvious to Indian developmental assistance.

### **1.3 Controversy over Chinese ODA's motives**

In case of China, the performance of its official development assistance is controversial. So do the motives of ODA. Huang et al (2013) develop their investigation mainly from the viewpoint of self-interests of Chinese development assistance. The study illustrates the transformation of Chinese assistance's strategy. Before the Reform and Open-Up Policy, Chinese ODA was motivated principally by political factors, and aimed to help recipients that were struggling to establish national government, achieve independence and development of economy. After implementing Reform and Open-Up Policy, especially from mid-1990s, the concern moved gradually to economic construction and aid policy has been driven gradually by economic factors. The guideline transferred to "diplomacy serves economy". The article affirms that via cooperation projects, apart from increasing the local employment and tax income, and realizing development of recipient countries, Chinese companies take the positive measures to develop their business and carry out cooperative projects with local government and companies, stimulating exportation and expanding foreign markets.

Lengauer (2011) divides major factors into economic, political and ideological aspects. The economic strategy of ODA lies in its huge necessity of natural resources and commercial benefits. According to Lengauer, along with the astounding development of economy, the quantity of raw materials and energy required by production arouse rapidly. It's claimed that, by means of foreign assistance, China is



able to get the resources more easily. Meanwhile, opening up the export markets and setting up manufacturing plants abroad could be another major motives of China's development aid. In terms of political aspect, the objective of consolidating One-China Policy, and getting an increasing global influence are main considerations. Also the concerns of regional security and Uighur conflict affect China's decision. Besides that, it intends to spread its values and strength the soft power, increasing influence by its foreign aid in ideological area.

Chinese development assistance is alleged to be "rogue aid" and criticized by some scholars and journalists, as they believe the ODA of China is mainly guided by strategic interests other than humanitarian needs of recipients. They affirmed that Chinese aid is stimulated only by the self-interests including money, raw materials, ideological agenda and international politics, etc. (Naím, 2007; Wagenvoort, 2016). However there is a growing number of econometric works investigating different determinants of Chinese aid flows. The results show an inconsistency with the former statements of doubt. For example, Broich (2017) applied the OLS estimation with the purpose of verifying if China prefers to help countries with authoritarian system and the conclusion is that Chinese official development finance doesn't tend to help more authoritarian countries. He found out also the major influential factors should be: "whether a country recognizes the People's Republic of China (RPC) or Taiwan (Republic of China, ROC) and whether English is considered one of the three most common languages in the recipient country." Meanwhile, the behaviors of traditional donors are proved to have egoistic characteristics (Osei et al, 2004), not so altruistic as claimed.

#### **1.4 Conclusion**

The motives of official development aid are diversified and allocated in different areas. Each country or agency manifests different characteristics, which vary in different historical phases. Based on the studies referred above, we can summarize that no matter the aid is given by the traditional donors, namely DAC-OECD

countries, or by the emerging donors; no matter it is proceeded by bilateral or multilateral method, the donors evaluate always its economic, political and geostrategic interests and sometimes the ideological interest and security problem. On the other hand, the recipients' needs and merits are two essential traits, which affect the decision of donors. The donors are not pure altruistic nor pure egoistic. Generally speaking, the multilateral assistance agencies pay more attention to recipients' needs and they emphasize in achieving the recipient countries' development, eradicating poverty and improving people's life quality. Bilateral aids are prone to be stimulated by donors' self-interests. The donor countries which hold geopolitical and historical relationships with recipients seems to be more humanitarian, whose aid flows are driven by recipients' necessities.

China's situation may be more complicated. As concluded by Lengauer (2011), Chinese aid flows may be induced by factors in various aspects, including economic, political and ideological areas. But the controversy remains, about if the aid flows are particularly driven by the donor's self-interests, ignoring the recipients with actual needs or merits. The importance of natural resources is referred by many studies, but no consistency has been reached. This paper, therefore, will investigate this issue via indexes of Chinese ODA and oil resources' abundance of recipient countries to find out if oil resources play an important part in influencing Chinese assistance.

## **Chapter II**

### **Backgrounds and Brief History of Chinese ODA and Chinese ODA Relative to Africa**

During the foreign aid history of more than 60 years, China experienced various crucial reforms and transformations. In different historical periods, the aid policies and aid flows' characteristics manifest diverse features. There's no doubt that Africa plays an essential role in the evolution of Chinese foreign aid. In this section,

therefore, I'd like to present briefly the profile and history of Chinese ODA, and depict particularly the development of Chinese foreign aid to Africa, emphasizing the respective characteristics of aid flow in different phases and the role played by African countries.

## **2.1 Profile of China's foreign aid and its brief history**

Given an overall view, the history of Chinese official development aid began from 1950s, when North Korea and Vietnam started to receive its assistance. There are several ways to divide Chinese official development aid history. Dreher et al (2015) divide chronologically Chinese aid policy into five phases: 1955-1969, 1970-1978, 1979-1989, 1990-1995, and 1996-2006. Also on the basis of studies and China's White Paper of Foreign Aid, several events, which are crucial and accelerated the development of Chinese official development aid, serve as boundaries of phases. After the establishing of People's Republic of China, in the beginning of 1950s, China provided economic aid and technical assistance to few countries. After Asian-African Conference, which was held in 1955, the number of recipient countries increased gradually and the recipients located "exclusively in Africa, Arabian Peninsula and China's immediate neighborhood". In 1964, the Chinese government declared Eight Principles for Economic Aid and Technical Assistance to Other Countries. The core content of these eight principles consisted in equality, mutual benefit and no strings attached. The China's foreign aid policy was therefore formulated.

In 1971, China resumed the legal seat in United Nations' Security Council. The recovery of identity permitted the country to join into the multilateral aid projects of subordinate organizations of UN. From 1950 to 1978, China's foreign aid developed rapidly, with an increasing aid amount and expanding scale. The recipients number reached 66, 45 of them were African countries. The aid in this period manifested obvious political and security objectives. However, this significant growth caused also problems. One of them was the discordance of foreign assistance's scale and national strength. From 1953 to 1978, China's foreign aid took 3.11% of national

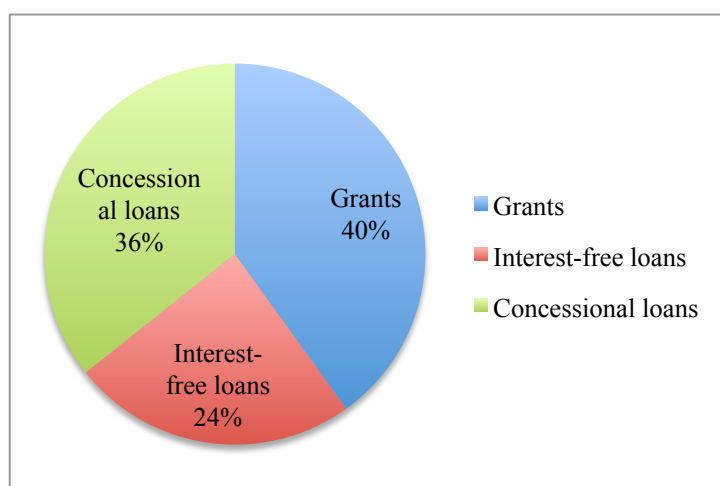
fiscal expenditure on average. During the years 1972-1974 the ratio surpassed 6%. The number is normally 1% to other donors (Hu, 2014).

In 1978, Deng Xiaoping took the leadership of the Communist Party and he put forward the Reform and Open-Up Policy, after which the market principles were introduced to and national economy was opened gradually to foreign investment and international trade. The policy was implemented in different economic sections, including ODA of China. The reform on development aid was initiated during the 90s with the emphasis on diversifying the channels and sources of assistance. In 1993, the “Foreign Aid Fund for Joint Ventures and Cooperative Projects” was set up, in order to stimulate cooperation on business and production between the Chinese SME and foreign enterprise receptors. In 1995, the concessional loans (medium and long-term low-interest loans) were introduced, which let Chinese foreign aid transit to a completely different phase (Dreher, et al, 2015). The reform widened the source of development aid and extended the approach to aid provision, because grants and interest-free loans were the primary instruments of China’s development aid in periods before (Brautigam, 2011). ODA of China maintains the rapid growth in 21<sup>st</sup> century. During 2004-2009, the average growth rate is 29,4%. In August 2010, Chinese government held the National Conference on Foreign Aid, which indicates development in a new stage (Information Office of the State Council, People’s Republic of China, 2011).

In terms of financial resources, Chinese foreign assistance consists of three types of aid flows: grants (aid gratis), interest-free loans and concessional loans. Grants are mainly distributed to construction of hospitals, schools and low-cost houses, and other medium and small projects for social welfare. In addition, grants are used in projects of human resources development cooperation, technical cooperation, and assistance in kind and emergency humanitarian aid. Interest-free loans aim to help recipient countries construct public facilities and improve people’s livelihood. In current years, interest-free loans are mainly provided to developing countries with relatively good economic conditions. Concessional loans are allocated generally in productive projects and large and medium-sized infrastructure projects, or in

providing complete plant, mechanical and electrical products, technical services and other materials, with the purpose of generating both economic and social benefits. The first two types of assistance are planned and counted into China's state finances. The Export-Import Bank of China is designated by Chinese government to distribute the concessional loans. According to statistics of China's White Paper on Foreign Aid 2011 and 2014, by the end of 2012, the total amount of aid flows reached 345.63 billion RMB, in which, grants accounted for 40% with 138.52 billion RMB, interest-free loans accounted for 24% of total aid value with 83.8 billion RMB, and concessional loans 36% with 123.31 billion RMB.

Figure 1 Distribution of Chinese Foreign Aid by Aid Types (until the end of 2012)



Source: Author's own calculation based on China's White Paper on Foreign Aid (2011 and 2014)

China provides foreign aid via eight forms, including “complete projects, goods and materials, technical cooperation, human resource development cooperation, medical teams sent abroad, emergency humanitarian aid, volunteer programs in foreign countries, and debt relief” (Information Office of the State Council, People's Republic of China, 2011). Both official documents emphasize the performance of China's aid in the following fields: agriculture, industry, economic infrastructure, public facilities, education, medical and health services and environment protection.

## **2.2 Chinese foreign aid to Africa and FOCAC**

From 1956, China initiated its foreign assistance oriented to African countries. The history can be generally divided into two phases, from 1950s to 1970s and from 1980s till now, in which China's aid policy, motives, and aid measures' characteristics display considerable differences.

In the former period, confronting a tough international environment, namely dilemma between capitalist regime group and the USSR, China underwent a hard time. In the same period, the national liberation movements in Africa were at the climax, in which conflict between colonist and nationalist powers was a remarkable sign of African politics. Fighting together with African companions for liberation and independence, China provided economic and technical assistance to support African countries' movements. During the visit to Africa, the prime minister Zhou Enlai put forward the Five Principles for Relationship Development with African and Arab Countries and Eight Principles for Economic Aid and Technical Assistance to Other Countries. The latter policy signified the establishment of China's official aid policy to African countries. During 1956-1977, the assistance amount to Africa reached 2.47 billion USD, taking up 58% of total China's foreign aid (Lu et al, 2007). Among all projects in agriculture, transportation, hydraulic and hydroelectric engineering, Tanzam Railway project is the typical and symbolic one. The construction initiated in 1970 and took 6 years with the length of 1860 kilometers. There was a high cost of labor and material resources, but it manifested China's sincerity and capacity.

After entering the 1980s, the international environment faced by China and African countries changed significantly. China implemented the Reform and Open-Up Policy, which started a new era. Foreign aid's emphasis was gradually prone to economic construction. The strategic notion of assistance, attitude to interests and development aims of this country differed. From the side of Africa, along with the independence of Namibia in 1990 and abolition of apartheid in South Africa in 1994, the historical and political tasks have been accomplished. In order to achieve a further growth, the economic and social development came to be the prior goal. Under

this background, both two sides are willing to deepen cooperation. The “Four Principles” of achieving equity and mutual benefits, pursuing practical results, adopting diverse methods and channels, realizing joint development, which promulgated in 1982, became the guiding ideology of Chinese foreign aid to Africa in the new era. During this period, various forums, summits and conferences were held. The establishment and celebration of Forums on China-Africa Cooperation was one of the examples.

Forum on China-Africa Cooperation (FOCAC) is an important organization on the basis of equality and mutual benefit and a mechanism of collective dialogue and development cooperation between China and African countries. China, 53 African countries and African Union Commission hold the membership. Facing the challenges of globalization and the demands of new international political and economic order, the First Ministerial Conference of FOCAC was held in Beijing, October of 2000, which marked its establishment. The purpose is to realize equal negotiation, enhance mutual understanding, expand consensus, strengthen friendship and stimulate cooperation between both sides. FOCAC aims to deepen the cooperation in achieving new strategic partnership and to consolidate the consensus and achievements made in the past. Its consultation mechanism consists in three levels: the Ministerial Conference held every three years, attended by ministers in charge of international economic cooperation and foreign affairs; the Senior Official Follow-up Meeting and Senior Official Preparatory Meeting for the Ministerial Conference held respectively in the previous year and a few days before the Ministerial Conference among director-general level officials of the competent departments; and meetings of African diplomats in China with the Chinese Follow-up Committee held at least twice a year. Also it was decided the Beijing Summit in 2006 to establish the regular political consultation mechanism between foreign ministers of the two sides.

China, 44 African countries and African Union Commission took part in the First Ministerial Conference. After the meeting, «Beijing Declaration of the Forum on China-Africa Cooperation» and «Programme for China-Africa Cooperation in Economic and Social Development» were promulgated. The documents emphasized

the compliance to purposes and principles of the UN Charter and the Charter of the Organization of African Unity (OAU), the Five Principles of Peaceful Coexistence and other universally recognized principles governing relations among states. The documents also alleged the respect of human rights, fundamental freedoms, world's diversity and the principle of seeking common ground while reserving differences. In terms of development assistance, Chinese government promised that aid would be continually supplied within South-South cooperation framework, based on the specific conditions of African countries, focusing on promoting local industry, exploiting local materials and developing human resources. China was willing to extend technical cooperation in the engineering and other infrastructural projects. Concerning the hazards of heavy debt burden, FOCAC appealed for commitments of main creditors and the maintenance of momentum on debt relief. China undertook to reduce or cancel debt of 10 billion RMB, which was owed by heavily indebted and least developed African countries in the following two year.

The Second Ministerial Conference took place in 2003 in Addis Ababa, capital of Ethiopia and published the «Addis Ababa Action Plan (2004-2006)» (FOCAC, 2009), which includes the follow-up actions of the Ministerial Conference Beijing 2000 and the plan of cooperation between two sides during 2004-2006. The progress of NEPAD (New Partnership for Africa's Development) was highly recognized and the cooperation in prior areas defined by NEPAD, such as infrastructure, prevention and treatment of infectious diseases, would be deepened within the framework of FOCAC. In respect of debt relief, China signed the protocols on debt relief and cancellation with 31 African least developed countries (LDC) and heavily indebted poor countries (HIPC) ahead of its committed schedule, which includes total 156 matured debts, amounting to 10.5 billion RMB. China also agreed to provide economic assistance to African countries “without attaching any political conditions” and increase grant assistance.

In the Beijing Summit and the Third Ministerial Conference in 2006, follow-up actions for 2007-2009 were planned between both sides. The cooperation in domains such as politics, economy, social development and international affairs was expected



to be enlarged and promoted. Some specific targets were set up by «Forum On China-Africa Cooperation Beijing Action Plan (2007-2009) » in agriculture, debt relief and development assistance, education, medical care and public health etc. (FOCAC, 2006). For example, Chinese government decided to expand the assistance scale to two times of it in 2006, promising a 3 billion USD concessional loans, 2 billion USD export buyer's credit and canceling interest free loans that had expired by the end of 2005 of HIPC's and LDCs.

Nearly all the promises were confirmed to be implemented by the document published in the Fourth Ministerial Conference, which was organized in Sharm El Sheikh, Egypt in 2009. The «Forum on China-Africa Cooperation Sharm El Sheikh Action Plan (2010-2012)» put forward more targets of China-Africa cooperation particularly in the social areas. The importance of human resources, education and cultural exchange, science and technology were given an utmost attention by China.

In the Fifth Ministerial Conference in Beijing, both sides were delighted to see that the cooperation continued to develop. They agreed to strengthen China-Africa dialogue mechanisms and promote the new type of China-Africa strategic partnership. As in 2015, the achievements of Millennium Development Goals' fulfillment needed to be presented, Beijing Action Plan (2013-2015) pointed out the significance of working together for implementing the targets established by UN High-Level Plenary Meeting on Millennium Development Goals (MDGs) and United Nations Conference on Sustainable Development (FOCAC, 2012). The two sides also appealed the international community to pay greater attention to sustainable development of African and other developing countries.

The Johannesburg Summit and the Sixth Ministerial Conference was held in 2015 in the capital of South Africa. During the conference, Chinese government published «China's Second Africa Policy Paper» which illustrates the establishment and development of China-Africa comprehensive strategic partnership and emphasizes the importance of consolidating the Sino-African community of shared future. «The Forum on China-Africa Cooperation Johannesburg Action Plan (2016-2018) » (FOCAC, 2015) highly appreciated the «Agenda 2063» put forward by

African Union Commission, which aims to construct a united, integrated and prosperous Africa. According to the Plan, the Chinese side would continue to scale up its assistance to African countries within its capacity. It would give priority to enhancing cooperation with African countries in areas bound up with people's livelihoods such as agriculture, health, infrastructure, education and human resources development etc. while increasing the effectiveness of assistance.

Recently in September 2-4, 2018, the Beijing Summit and the Seventh Ministerial Conference of the Forum on China-Africa Cooperation was held in Beijing. The «Forum on China-Africa Cooperation Beijing Action Plan (2019-2021)» and «Beijing Declaration-Toward an Even Stronger China-Africa Community with a Shared Future» were published during this event. The implementation of the ten cooperation plans and the follow-up actions of the Johannesburg Action Plan was highly recognized. The Beijing Action Plan (2019-2021) is aimed at expanding the cooperation in political, economic, social and cultural areas. Sub the provision of development cooperation, China promises to enhance assistance to African countries, particularly the least developed countries. It will extend \$15 billion USD of aid to Africa. For those heavily indebted and poor countries, landlocked developing countries and small island developing countries that have diplomatic relations with China, the debt in the form of interest-free Chinese government loans, which due to mature by the end of 2018 will be exempted. All the measures help deepening South-South cooperation and promote common interests.

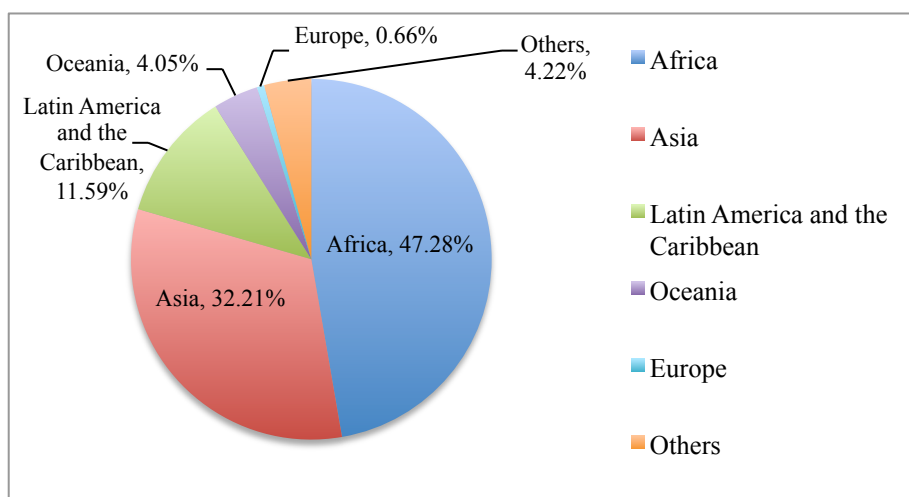
In terms of financial resources' characteristics, before 1980s grants and interest-free loans were two main types and proceeding complete projects was the basic form. From the beginning of 1980s, Chinese government started to take diverse and flexible methods in economic aid and technical assistance etc. As referred above, in 1995 reforms on foreign aid were launched, and the main points were: initiation of providing concessional loans, emphasis of assistance on productive projects, and combination of national treasury, bank funds and aid flows from enterprises, in terms of resources. Reduction or relief of former debts became a new measure in the second

phase. Meanwhile, projects on human resource development cooperation and humanitarian aid have been growing by a high speed.

### 2.3 Summary of Chinese foreign aid flow to Africa

Without any doubt, Africa is the main destination of Chinese foreign aid flow. Calculated by statistics of China's White Paper on Foreign Aid 2011 and 2014, (Information Office of the State Council, People's Republic of China, 2011 and 2014), until the end of 2012, Africa occupied the 47.28% of total assistance with about 163.4 billion RMB. The chart below shows the geographical distribution of Chinese aid flows, classified by different continents.

Figure 2 Geographical Distribution of Chinese Foreign Aid (until the end of 2012)



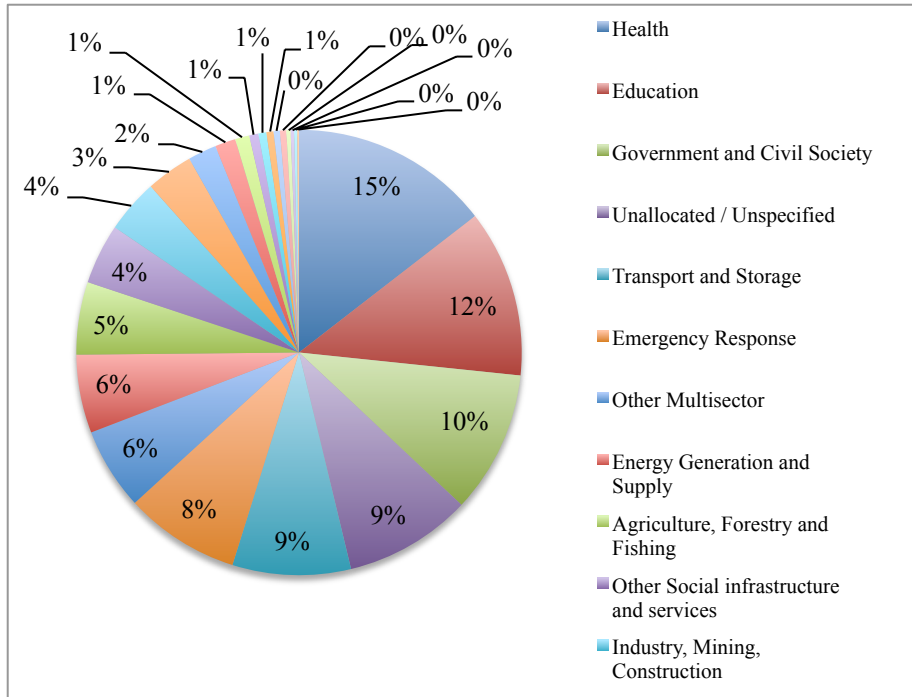
Source: Author's own calculation based on China's White Paper on Foreign Aid (2011 and 2014)

Owing to the inconsistency on definition and calculation, the statistics provided by China's official website and publications may be controversial. The statistics of Chinese official assistance are extracted from Global Chinese Official Finance Dataset Version 1.0. This database collected all the Chinese aid flows from 2000 to 2014. By using AidData's Tracking Underreported Financial Flows (TUFF) Methodology developed by Strange et. al (2017), data's quality can be assured.

Consulting the Global Chinese Official Finance Dataset, the profile of China's development aid to Africa can be summarized as below. Since among all the projects

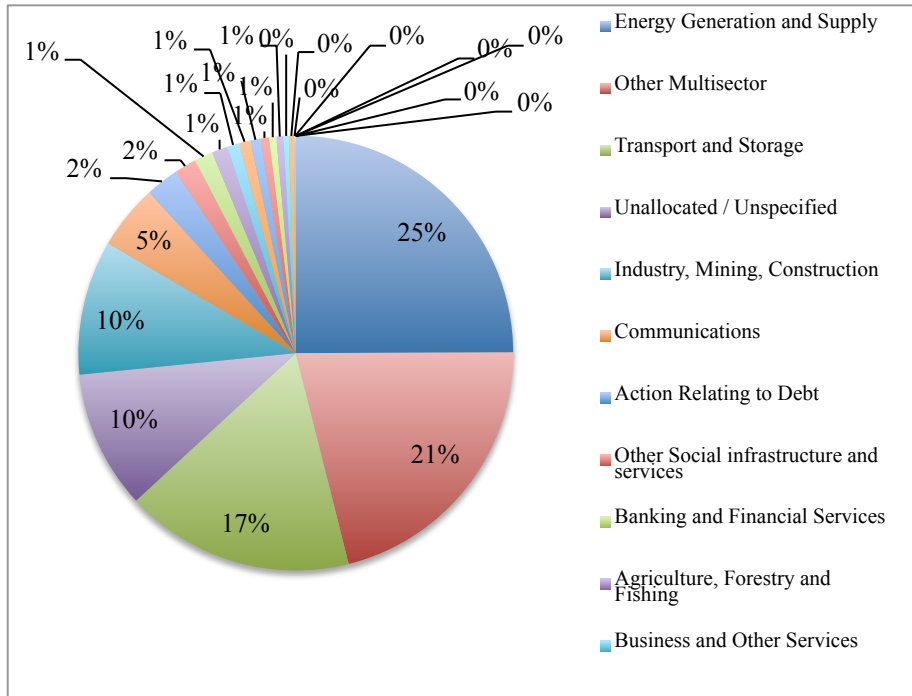
categorized by development intent, some flows are not recognized as ODA, based on the standards of official development aid defined by OECD (OECD, 2018). In view of the prudence and authenticity principles, data utilized by this paper are clearly defined by ODA-like by the database. After filtering out other projects not in accordance with definition, and remaining ones under “development” category and aid flows categorized as ODA-like, the number of development projects reached 4816, oriented to 52 African countries with total amount of 682.043 billion USD (estimated by USD value of 2014). The charts below show the sectorial distribution of aid based on project number and aid amount. Apart from the unallocated/ unspecified projects, in terms of sectorial distribution of foreign aid flows, most projects were allocated in social sectors, including areas of health (15%), education (12%), government and civil society (10%) etc. The economic sectors held a large proportion of the total assistance amount. The transport and storage sector took the first place with 25% of total flow, reaching 170.15 billion USD. The energy generation and supply took the second position with 17% of total amount and value of 116.22 billion USD. Ethiopia received the most amount of aid with 13.23 billion USD. Mali and Angola were at the second and third place, with 11.137 billion and 9.424 billion USD.

Figure 3 Sectional Distribution of Aid Flows Based on Project Number



Source: Author's own calculation based on AidData's Global Chinese Official Finance Dataset Version 1.0 (2017).

Figure 4 Sectional Distribution of Aid Flows Based on Aid Amount



Source: Author's own calculation based on AidData's Global Chinese Official Finance Dataset Version 1.0 (2017).

## Chapter III Case Study

Taking into account the long history of Sino-African relationship on foreign assistance and important role played by African countries, it's reasonable to select African recipients as object of investigate. This paper chooses one specific aspect, the status of oil resources, to test if Chinese ODA is stimulated by commercial interest on this energy source. This chapter will depict the methodology, data, indicators, and objects of study. Then it will manifest the whole process of study and in the end reach to the test result.

### 3.1 Methodology of study

This work uses quantitative research method. In order to test the commercial motive of Chinese official aid on energy resources, I execute the analysis based on the data of petroleum imports from African countries and the Chinese official development aid given to respective countries. Aiming to examine if a linear relationship exists between Chinese ODA and crude petroleum imports value, the paper uses bivariate correlation analysis. If the linear relationship exists indeed between ODA and crude petroleum imports, the linear regression analysis will be executed to find out if Chinese ODA flows change depending on the status of crude petroleum imports.

The indicators are selected owing to the reasons below. First of all, natural resources are always the point of discussion and critics by scholars and specialists. The relationship between indicators such as import value and percentage of natural resources from recipients and the ODA amount implies the significance represented by commercial interest of donor in this area. And among all the natural resources, petroleum is more essential for economic activities. Therefore the result of correlation is representative to explain the principle motives of aid donors.

In case of China, the cooperation on oil resources between China and African countries has a long history. The Sino-African petroleum business initiated from

1990s. After the First Ministerial Conference of FOCAC in 2000, the petroleum commerce was promoted a lot. From 1993 when China became the importer of petroleum, the oil dependency has been increasing year by year, from 7.6% in 1995 to 67.4% in 2017 (Yao, 2006; Hou, 2018). Meanwhile, Africa has been getting an increasing strategic position in petroleum area with its gigantic oil reserves and production. According to data of OEC, the crude petroleum imported from Africa in 2016 accounted for 19% of total crude petroleum, taking the second position among all continents.

On the other hand, the petroleum resource is also vital to Africa. Africa has a brilliant prospect of petroleum exploitation. The proved reserves increase steadily, from 75.3 thousand million barrels in 1997 to 126.5 in 2017 and it makes Africa the third biggest petroleum storage area, only after the Middle East and Central Asia. It is also the fourth biggest oil-producing area. Many of the African countries are petroleum exporters and their national economy depends a lot on petroleum exportation. According to statistics of World Development Indicators (The World Bank) from 1970 to 2016, the oil rents took more than 50 per cent of GDP to some African oil exporter countries.

Therefore, it's reasonable to choose oil resources to find out the link between Chinese official development aid and African oil-producing countries and to examine if oil is one of the motives, which stimulate Chinese foreign assistance.

### **3.2 Data and objects of study**

As referred, in order to analyze relationship between Chinese ODA and African countries' petroleum resource status, this work chooses the following indicators: Chinese official development aid value during 2000-2014, China's crude petroleum imports value from African oil-producing countries and percentage of China's crude petroleum imports out of its total imports during 2000-2014. The selected African recipient countries are Nigeria, Republic of Congo, Sudan, Angola, Equatorial Guinea and Gabon.

### 3.2.1 Chinese official development aid data

In the perspective of Chinese ODA amount, the statistics comes from Global Chinese Official Finance Dataset Version 1.0, collected and refined mainly by AidData. The dataset tracks the records of oversea Chinese official finance between 2000-2014, capturing 4,373 records totaling 354.4 billion USD. The data include both official development aid and other official financing.

The controversy of Chinese foreign aid amount has existed for a long time. Since China doesn't participate in existing reporting systems, it's difficult to collect exhaustive and accurate information about Chinese aid projects and total amount, without a widely acceptable method of classification and calculation. Therefore, the Global Chinese Official Finance Dataset is a good choice. By using an open source data collection methodology -- called Tracking Underreported Financial Flows (TUFF) (Strange, et al, 2017), the database classified the aid flows into different types, according to their nature and characteristics.

The methodology TUFF consists of three steps: project identification, source triangulation and quality control. Projects were searched and collected mainly from four resources: recipient countries' aid information management systems (AIMS); Chinese official websites; IMF staff reports; and Factiva database. The accuracy of those projects, along with the other details were uncovered and confirmed by searching the individual records by local and global search engines in the second step. In order to identify and solve potential pitfalls of open source information, in the third step, all the record went through Record-by-Record Review, Targeted Review, Deflation & Financial Review and Extended Review, so that potential errors, missing data, or incorrect categorizations can be identified and cancelled.

Considering China's special situation, the database enlarged the scope of official assistance to flows from institutions and entities including: government agencies (ministries and Chinese embassies); provincial governments; policy banks (China Development Bank and China Export-import Bank); state-owned commercial banks (the Bank of China, the Industrial and Commercial Bank of China, the Agricultural



Bank of China, and the Construction Bank of China); and state-owned companies. This paper uses only records defined as ODA-like flow, which means they have development intent and grant elements of each item can be measured and satisfy the definition of ODA flow.

### **3.2.2 China's petroleum imports data**

The data of China's petroleum imports comes from OEC (The Observatory of Economic Complexity) and its source is BACI - International Trade Database at the Product-Level, which covers more than 200 countries and 5,000 products. It reconciles data reported to the United Nations Statistics Division, collated via COMTRADE, following a specific methodology. Since in general, import values are reported CIF and exports FOB. In order to collate two different figures of the same flow to single one, a gravity-type equation is used to estimate CIF rates, which are removed while processing data. The import values and export values are therefore more reliable and single to facilitate the analysis (Gaulier et al, 2010).

From all indexes, the study utilizes China's crude petroleum imports value from petroleum producer and percentage of China's crude petroleum imports out of China's total imports to process the correlation. These two indexes show directly the importance of recipients to China in terms of petroleum.

### **3.2.3 Object countries of study**

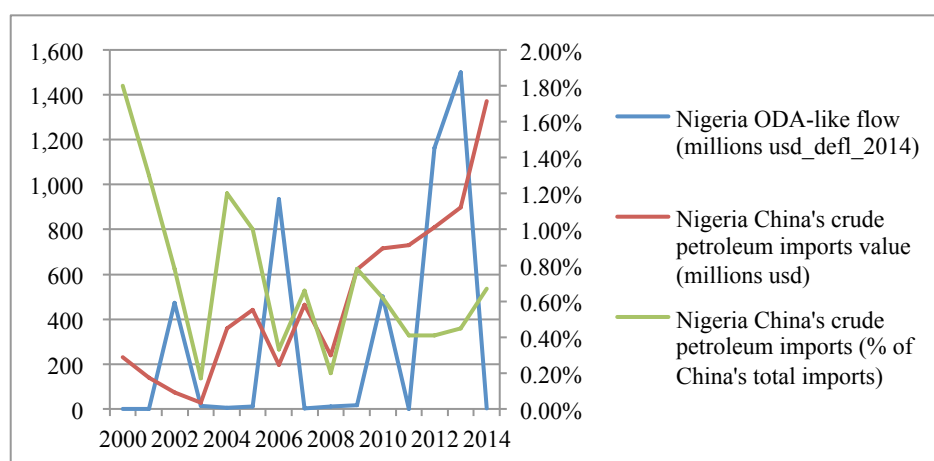
According to statistics of OEC, there's petroleum's imports information of China from 15 African oil-producing countries and some of the records are incomplete, because the oil trading history between those countries and China is quite short, like Ghana, Democratic Republic of Congo and South Sudan. After filtering and excluding countries with absent information, there are 6 final objects, namely Nigeria, Republic of Congo, Sudan, Angola, Equatorial Guinea and Gabon. Since Global Chinese Official Finance Dataset covers only the Chinese ODA amount from 2000 to 2014, the study therefore utilizes statistics of those 6 African countries, including

petroleum import indicators and ODA flows of China, from 2000 to 2014 with 270 observations.

### 3.3 Data analysis

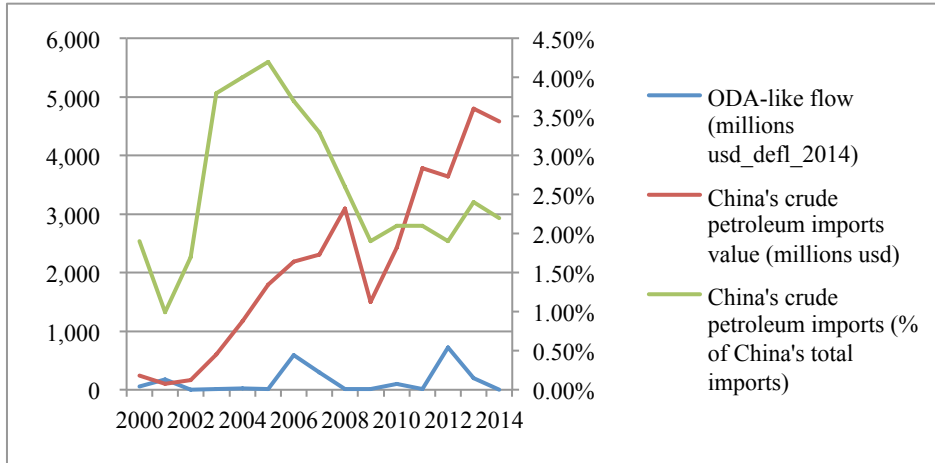
On account of methodology, indicators, objects presented above, the statistics of each country are collated and shown in the table attached in appendix. The following figures are elaborated based on it, from which we can have a brief view of trends of each indicator and the relationship between ODA and crude petroleum imports condition.

Figure 5 Nigeria: ODA-Like Flow From China And China’s Crude Petroleum Imports Data



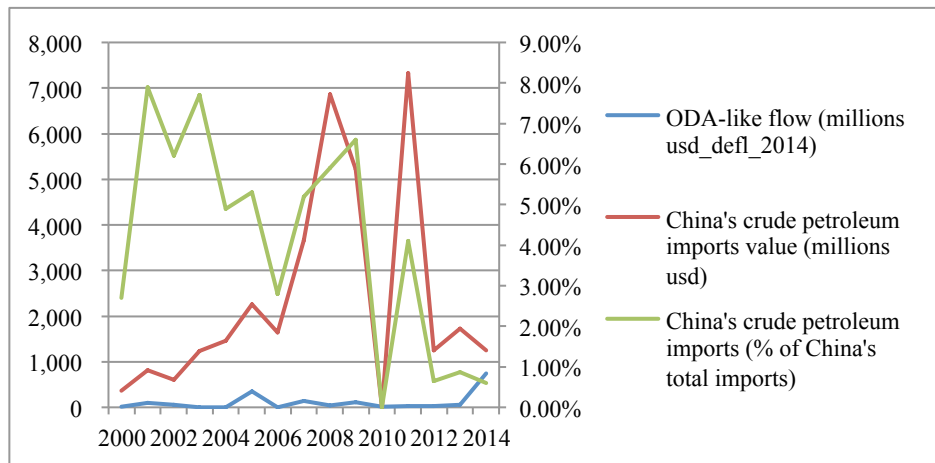
Source: Author’s own elaboration based on data of AidData’s Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database

Figure 6 The Republic of Congo: ODA-Like Flow From China And China’s Crude Petroleum Imports Data



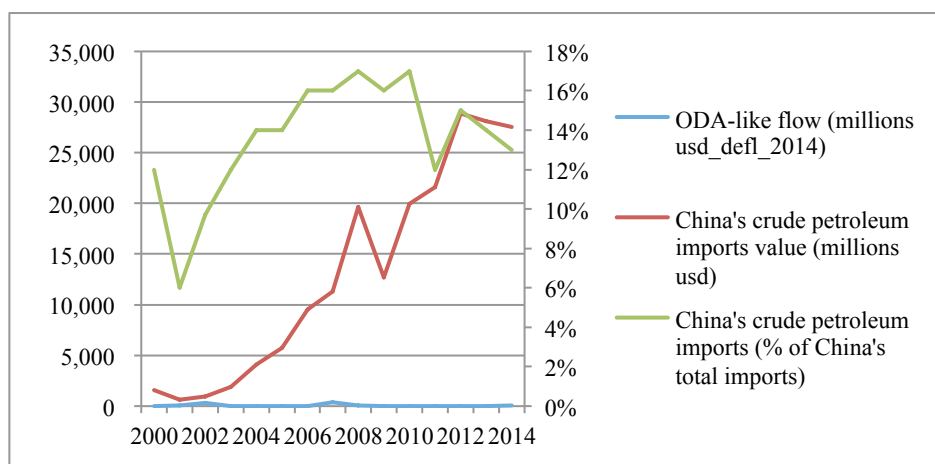
Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Figure 7 Sudan: ODA-Like Flow From China And China's Crude Petroleum Imports Data



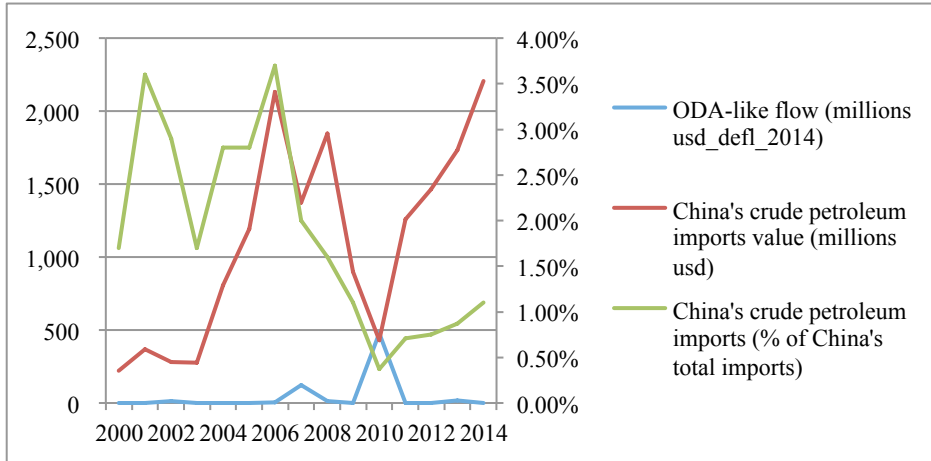
Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Figure 8 Angola: ODA-Like Flow From China And China's Crude Petroleum Imports Data



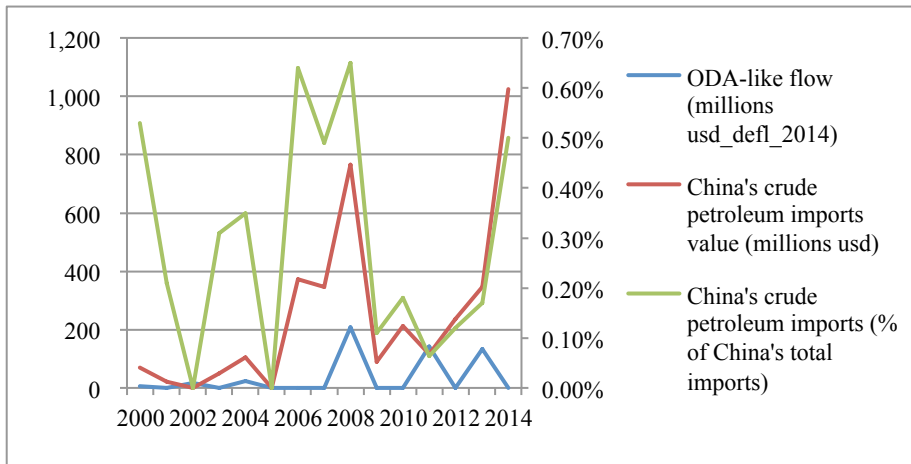
Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Figure 9 Equatorial Guinea: ODA-Like Flow From China And China's Crude Petroleum Imports Data



Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Figure 10 Gabon: ODA-Like Flow From China And China's Crude Petroleum Imports Data



Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Based on the line charts above, we can find that generally speaking, the crude petroleum imports amount increased a lot during the 14 years. Meanwhile, from the charts, no obvious correlation can be found between ODA flows received by each country and the crude petroleum exports value to China, neither between ODA and

the percentage occupied by export value. But in order to get the accurate results, the bivariate correlation analysis is necessary. The tables below show the results of bivariate correlation test.

Table 1 Correlation Test Result - Nigeria

		<b>Correlations</b>		
		ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions usd_defl_2014)	Pearson Correlation	1	.217	-.343
	Sig. (2-tailed)		.456	.230
	N	14	14	14
China's crude petroleum imports value (millions usd)	Pearson Correlation	.217	1	-.184
	Sig. (2-tailed)	.456		.513
	N	14	15	15
China's crude petroleum imports (% of China's total imports)	Pearson Correlation	-.343	-.184	1
	Sig. (2-tailed)	.230	.513	
	N	14	15	15

Source: Elaboration of SPSS based on AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Table 2 Correlation Test Result - The Republic of Congo

		<b>Correlations</b>		
		ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions	Pearson Correlation	1	.233	.006

usd_defl_2014)	Sig. (2-tailed)		.404	.982
	N	15	15	15
China's crude petroleum imports value (millions usd)	Pearson Correlation	.233	1	-.013
	Sig. (2-tailed)	.404		.964
China's crude petroleum imports (% of China's total imports)	N	15	15	15
	Pearson Correlation	.006	-.013	1
	Sig. (2-tailed)	.982	.964	
	N	15	15	15

Source: Output of SPSS based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Table 3 Correlation Test Result – Sudan

<b>Correlations</b>				
		ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions usd_defl_2014)	Pearson Correlation	1	-.074	-.206
	Sig. (2-tailed)		.793	.460
	N	15	15	15
	Pearson Correlation	-.074	1	.293
China's crude petroleum imports value (millions usd)	Sig. (2-tailed)	.793		.289
	N	15	15	15
China's crude petroleum imports (% of China's total imports)	Pearson Correlation	-.206	.293	1
	Sig. (2-tailed)	.460	.289	
	N	15	15	15

Source: Output of SPSS based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Table 4 Correlation Test Result – Angola

		<b>Correlations</b>		
		ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions usd_defl_2014)	Pearson Correlation	1	-.207	-.173
	Sig. (2-tailed)		.459	.538
	N	15	15	15
China's crude petroleum imports value (millions usd)	Pearson Correlation	-.207	1	.477
	Sig. (2-tailed)	.459		.072
	N	15	15	15
China's crude petroleum imports (% of China's total imports)	Pearson Correlation	-.173	.477	1
	Sig. (2-tailed)	.538	.072	
	N	15	15	15

Source: Output of SPSS based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Table 5 Correlation Test Result - Equatorial Guinea

		<b>Correlations</b>		
		ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions usd_defl_2014)	Pearson Correlation	1	-.226	-.365
	Sig. (2-tailed)		.417	.181
	N	15	15	15
China's crude petroleum imports value (millions usd)	Pearson Correlation	-.226	1	-.114
	Sig. (2-tailed)	.417		.685
	N	15	15	15

China's crude petroleum imports (% of China's total imports)	Pearson Correlation	-.365	-.114	1
	Sig. (2-tailed)	.181	.685	
	N	15	15	15

Source: Output of SPSS based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

Table 6 Correlation Test Result – Gabon

<b>Correlations</b>					
			ODA-like flow (millions usd_defl_2014)	China's crude petroleum imports value (millions usd)	China's crude petroleum imports (% of China's total imports)
ODA-like flow (millions usd_defl_2014)	Pearson Correlation		1	.331	.120
	Sig. (2-tailed)			.228	.669
	N		15	15	15
China's crude petroleum imports value (millions usd)	Pearson Correlation		.331	1	.615*
	Sig. (2-tailed)		.228		.015
	N		15	15	15
China's crude petroleum imports (% of China's total imports)	Pearson Correlation		.120	.615*	1
	Sig. (2-tailed)		.669	.015	
	N		15	15	15

Source: Output of SPSS based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.

The bivariate results indicate that the significance (two tailed) of indicators of all these countries greatly exceeds 0.05. Therefore, we can conclude from the correlation tests that, no relationship between ODA and crude petroleum imports is approved. Based on this result, it isn't even necessary to process the next step to explore if the trend of ODA depends on the increase or decrease of petroleum imports from African recipient countries. The result is consistent with the study of Dreher and Fuchs (2015).



The Dreher and Fuchs's paper shows that China doesn't provide, significantly more aid to countries that are abundant of natural resources, including fuel, ore and agricultural resources. This work analyzes only the petroleum's impact to Chinese ODA flows. Similarly, the results show no evidence that Chinese development assistance prefers African recipients with the abundance of oil resource. No obvious link is proved between Chinese ODA and African oil-producing countries.

## **Conclusion**

The fourth High Level Forum on Aid Effectiveness in Busan pointed out "we are united by a new partnership that is more broader and more inclusive than ever before"(OECD, 2011). The South-South cooperation has aroused a wide concern. Owing to the difference in nature, modalities and responsibilities applied by South-South cooperation with the traditional ones, the new participants' performance has been widely recognized. The aids' effectiveness and motives are challenged and some scholars and journalists claimed that the assistance of emerging donors is rogue because the aid flows are mainly stimulated and guided by self-interests and strategy of donors instead of real demands of recipients. However, many studies reveal diversified principle motives with regard to these emerging donors and that they cannot be considered as "rogue". Taking into account this controversy, this work chooses China, one of representatives of emerging donors, as the study object. It uses the data of China's ODA and of petroleum commerce between China and its African recipients, aiming to find out if oil resources condition of recipient countries can be considered as a principle motive of Chinese official development aid.

China initiated its foreign assistance from the beginning of 1950s. With reform and development during its history, it broadened the cooperation areas, diversified modalities and aid channels. The recipients' number expanded during the recent 60 years. Among them, African countries take a huge part. With seven Ministerial

Conferences of Forum on China-Africa Cooperation held among China and African countries, the cooperation deepened and the scale enlarged. Also according to the China's White Paper on Foreign Aid (2011 and 2014), until 2012, Africa received 47.28% of China's total aid. Meanwhile, Africa has an increasing abundance in oil resources. Taking into account the proximity in various areas, it's reasonable to choose statistics between China and African recipients to do the test.

This work utilizes the crude petroleum imports value from African oil-producing countries and its relative importance in total China's imports of oil as a proxy of China's commercial motive in aiding Africa. It also uses the bilateral flow of Chinese aid to those specific African countries. The data comes from OEC and Aiddata sets. Comparing the tendency of ODA and petroleum imports data, we'll find whether they display a consistency in trends. A second step is however necessary. In order to test the correlation between China's oil imports and its bilateral flow of aid to those specific African countries, we apply a regression analysis. By processing first bivariate correlation and regression analysis, the test results show no obvious relationship between Chinese official development assistance and the petroleum imports data. This means the oil resources cannot be considered as a significant motive that help the African oil-producing countries attract aid flows. Hence, some arguments that blame the oil resources purpose of Chinese ODA may not be reasonable.

Owing to the difference in various areas with the traditional donors' assistance, it's understandable that the emerging donors cause the query, doubt, criticism and other negative voice. The new participants have indeed many defects like the insufficiency of assistance techniques, non-transparency that expands the distance between the aid flows of emerging donors and the public, and these problems need to be solved gradually. However, I believe that, giving the patience and encouragement, the South-South cooperation will realize the self-improvement along with its development and its performance will get better and better.

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## Database

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2. OEC Data: China's crude petroleum imports statistics. Available at:  
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### Appendix 1 Statistics Collated of ODA and Crude Petroleum Imports

Country	Category	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Nigeria	ODA-like flow (millions usd_defl_2014)	0.00	0.00	472.65	13.53	4.66	9.65	935.64	0.93	9.93	16.96	502.45	0.00	1164.94	1499.72	1.63
	China's crude petroleum imports value (millions usd)	230.92	138.59	74.99	27.75	359.26	440.45	194.94	463.25	239.96	620.45	716.86	730.61	809.70	898.94	1371.24
	China's crude petroleum imports (% of China's total imports)	1.80%	1.30%	0.78%	0.17%	1.20%	1.00%	0.33%	0.66%	0.20%	0.78%	0.62%	0.41%	0.41%	0.45%	0.67%
Congo, Rep.	ODA-like flow (millions usd_defl_2014)	56.04	179.82	0.00	17.06	24.73	11.37	587.84	299.47	7.08	17.24	102.41	9.52	720.79	196.21	0.92



	China's crude petroleum imports value (millions usd)	247.08	101.81	161.41	607.59	1167.43	1798.24	2183.55	2313.87	3095.33	1502.15	2427.83	3789.85	3641.49	4803.17	4583.78
	China's crude petroleum imports (% of China's total imports)	1.90%	0.99%	1.70%	3.80%	4.00%	4.20%	3.70%	3.30%	2.60%	1.90%	2.10%	2.10%	1.90%	2.40%	2.20%
	ODA-like flow (millions usd_defl_2014)	7.08	93.98	57.92	0.00	6.19	352.01	2.31	137.87	36.01	113.51	9.29	22.68	30.20	50.90	750.00
Sudan	China's crude petroleum imports value (millions usd)	358.70	809.82	596.41	1238.06	1456.08	2265.95	1644.05	3663.59	6860.70	5220.60	0.00	7326.49	1248.95	1731.55	1243.58
	China's crude petroleum imports (% of China's total imports)	2.70%	7.90%	6.20%	7.70%	4.90%	5.30%	2.80%	5.20%	5.90%	6.60%	0.00%	4.10%	0.64%	0.87%	0.60%

Angola	ODA-like flow (millions usd_defl_2014)	0.00	88.13	331.80	24.90	0.00	14.19	0.37	390.34	39.71	0.00	11.15	0.34	16.78	32.82	84.26
	China's crude petroleum imports value (millions usd)	1584.35	618.89	937.63	1913.03	4109.31	5741.88	9523.15	11298.18	19629.50	12685.90	19933.62	21587.30	28864.88	28073.19	27525.73
	China's crude petroleum imports (% of China's total imports)	12.00%	6.00%	9.70%	12.00%	14.00%	14.00%	16.00%	16.00%	17.00%	16.00%	17.00%	12.00%	15.00%	14.00%	13.00%
Equatorial Guinea	ODA-like flow (millions usd_defl_2014)	0.00	0.00	14.13	0.00	0.00	0.00	4.60	122.28	11.71	0.00	478.11	0.00	0.00	18.87	0.00
	China's crude petroleum imports value (millions usd)	221.08	368.86	280.90	274.31	809.34	1193.22	2131.28	1375.21	1848.77	897.24	428.95	1261.25	1463.60	1733.43	2206.83
	China's crude petroleum imports (% of China's total imports)	1.70%	3.60%	2.90%	1.70%	2.80%	2.80%	3.70%	2.00%	1.60%	1.10%	0.37%	0.71%	0.75%	0.87%	1.10%

Gabon	ODA-like flow (millions_usd_defl_2014)	6.03	0.00	16.38	0.00	22.67	0.00	0.00	0.00	207.50	0.00	0.00	142.08	0.00	133.36	0.00
	China's crude petroleum imports value (millions usd)	69.29	22.04	0.00	49.14	103.96	0.00	373.01	346.95	765.18	89.57	212.33	114.75	237.34	345.73	1024.08
	China's crude petroleum imports (% of China's total imports)	0.53%	0.21%	0.00%	0.31%	0.35%	0.00%	0.64%	0.49%	0.65%	0.11%	0.18%	0.06%	0.12%	0.17%	0.50%

Source: Author's own elaboration based on data of AidData's Global Chinese Official Finance Dataset Version 1.0 (2017) and OEC Database.