Corso di Laurea Magistrale in Engineering Management

Tesi di Laurea Magistrale

Chinese Foreign Direct Investment in Africa

Determinants and Effects

Relatori:
Prof. Luigi Benfratello
Prof. Anna D'ambrosio

Candidato:
Fenglin Niu

April, 2019

Acknowledgments

Foremost, I would like to express my gratitude to my supervisor Prof. Luigi Benfratello whose guidance helped me in all the time of research and writing of this thesis. I really appreciate your patience, enthusiasm and the valuable advice you offered.

My sincere thanks also go to my assistant tutor Alida Sangrigoli for her timely and great support throughout this work. I would like to thank you for helping me to collect the data and sharing the related literature.

I also want to thank all my professors from the Engineering and Management department for their professionalism and their constant understanding and assistance towards foreign students.

Last but not least, I would like to thank each and every member of my family for their unconditional love which provided me with the necessary strength and confidence throughout these years.

Thank you all!

Abstract

Since the end of the 1990s, China-Africa economic and trade relations have developed rapidly under the impetus of the Chinese government's "going out" strategy. Over the past decade, Chinese investment in Africa has noticeably increased and the Forum on China-Africa Cooperation (FOCAC), established in 2000, has been used as a platform by Chinese President Xi Jinping to announce new commitments for deepening economic links with the African continent.

In September 2018, the Beijing Declaration: Toward an Even Stronger China-Africa Community with a Shared Future and the FOCAC Beijing Action Plan (2019-2021) were adopted at the two-phase roundtable meeting, which will provide more opportunities and spaces for China-Africa cooperation. In particular, President Xi pledged more than $60 billion in aid and financing, which attracts extensive attention worldwide.

Today, Africa has become an emerging destination for Chinese enterprises to invest abroad, more than 3,400 Chinese enterprises have settled in that continent with covering multiple industries. At the same time, due to the rapid growth rate of China's investment in Africa, it has also caused a lot of controversies, many media use “new colonialism” and "debt trap" to raise doubts, bring bad effects to the development of China's foreign direct investment (FDI) in Africa.

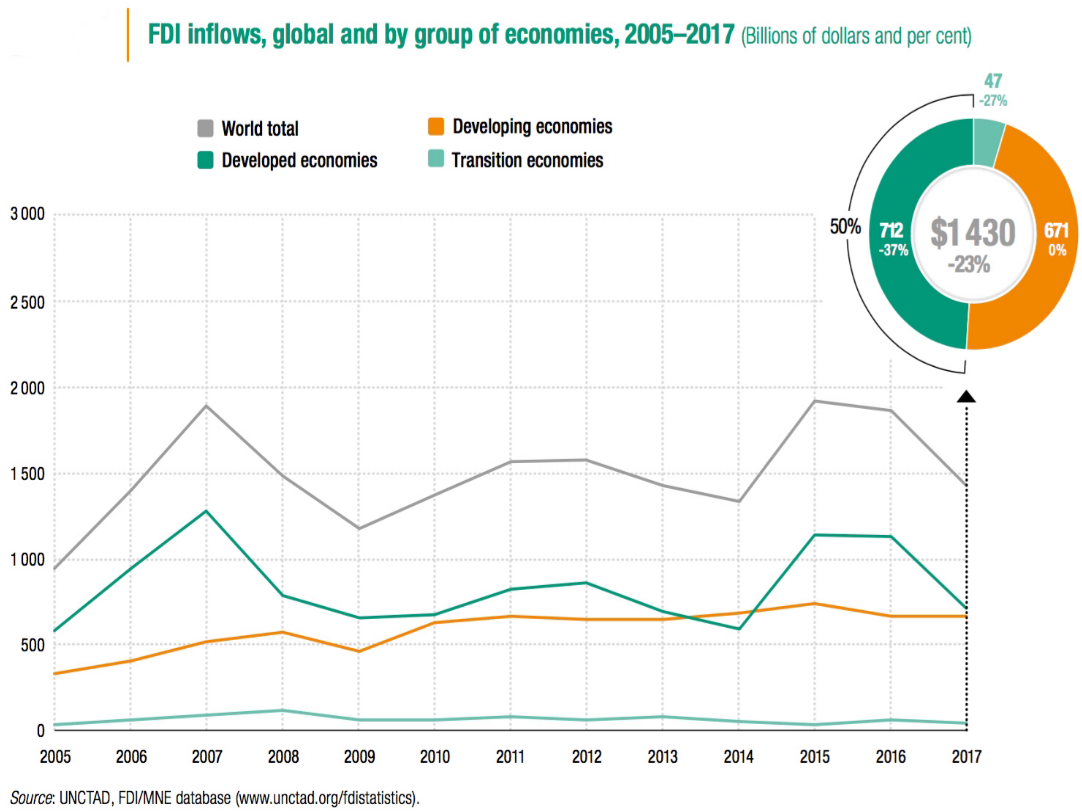
On the basis of briefly reviews the relevant theories about international direct investment, this paper is focused on summarizing the current situation from the perspectives of the overall development, industry selection, investor and investment style, demonstrate why China invest in Africa and the impacts of Chinese enterprises entering the African continent on the local economy and society. In addition, it also proposes corresponding countermeasures for the problems arising in the investment process.

Key words: Foreign Direct Investment; China; Africa

Table of contents

Chapter 1: Introduction

Foreign direct investment, as one of the main ways of international capital flow, has developed vigorously with its unique advantages of improving capital allocation and efficiency. It plays a substantial role in economic development, especially in developing countries, emerging economies, and countries in transition. According to the 2018 UNCTAD World Investment Report, developing economies accounted for a growing share of global FDI inflows in 2017, absorbing 47 percent of the total, compared with 36 percent in 2016. However, global foreign direct investment (FDI) flows fell by 23 percent in 2017, to $1.43 trillion from a revised $1.87 trillion in 2016 (Graph 1.1).



Graph 1.1 Source: UNCTAD, World Investment Report 2018

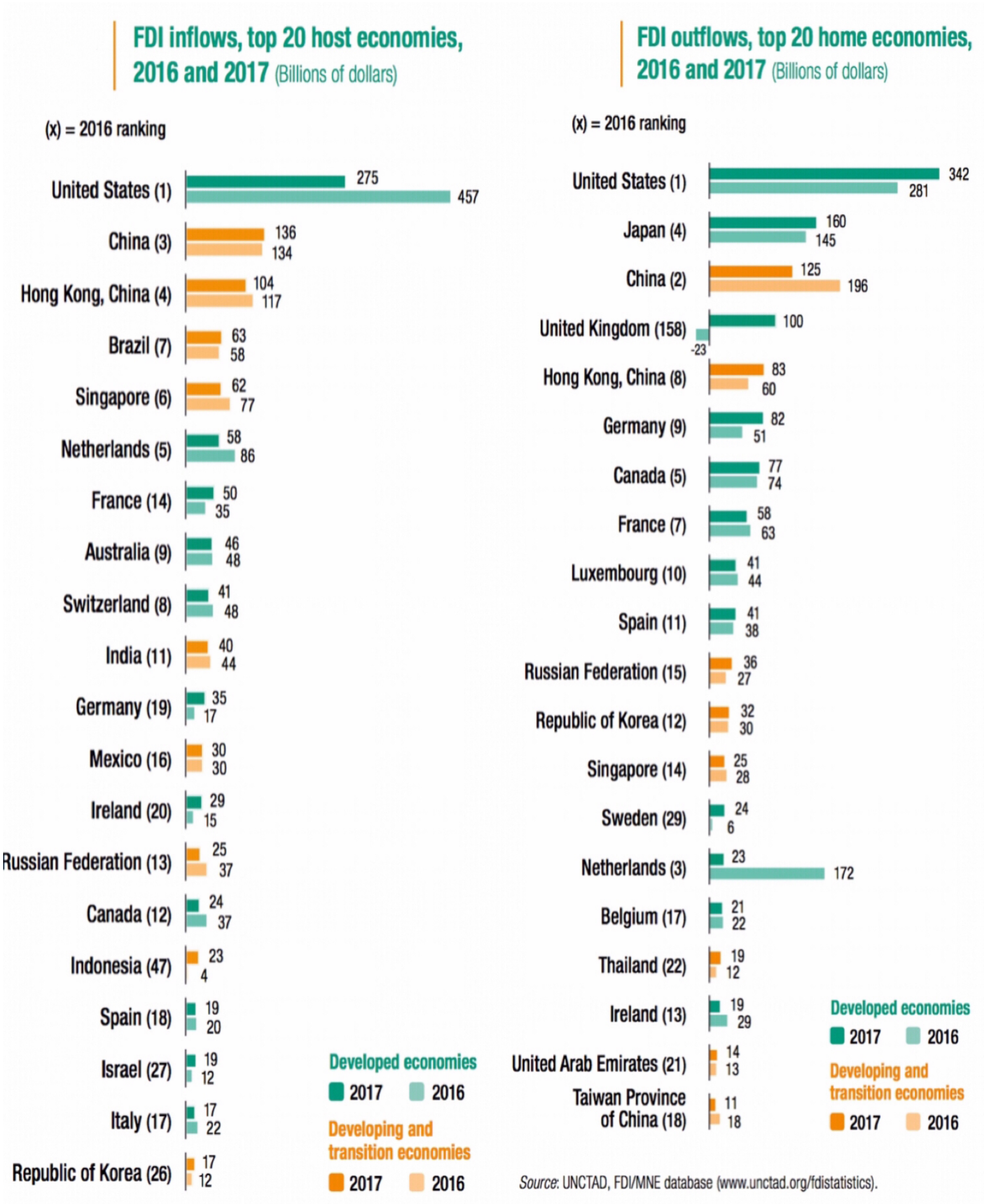
Africa has a large population and relatively backward development，that is why African countries are in dire need to stabilize and increase their FDI inflows in order to complement their domestic investment and resources. FDI could not only help fill the gaps in the saving-investment and foreign exchange but also indirectly generating enhanced output through the promotion of modern technology, skills transfer, therefore stimulating economic growth.
In recent years, the proportion of China's investment in Africa is gradually rising up, there have been many debates regarding the potential determinants and effects of China's activities in the host countries. In this sense, after a brief review of the development status, this paper will analysis of the determinants of China's FDI inflows in Africa - with a focus on the resources, market, industry structure, and examine the corresponding impacts.

1.1 Background of the study

The rise of China as an FDI source can be traced back to 1978, the communist party of China began economic reform and introduced market principles. An important reform in that time is the lifting of the ban on FDI since the founding of the People's Republic of China in 1949. Prior to this, China implemented strict regulations on foreign investment because of the frequent foreign invasions history. But in the beginning, only state-owned Chinese firms were permitted to invest abroad.
Last year (2018) is the 40th year of China's economic reform and opening up, there is no doubt that the Chinese economy has achieved remarkable development. With the further deepening of the globalization, more and more Chinese enterprises have gone abroad and explored the international market. Besides this, the focus of the Chinese government's macro-control has shifted from attracting foreign investment to encouraging overseas investment since the 1990s. It gradually introduced new policy and measure, which is

helpful to create a favorable environment for the Chinese enterprises and individuals to conduct foreign investment and economic cooperation.

Based on the data provided by “2017 Statistical Bulletin of China’s Outward Foreign Direct Investment” which was released by Chinese Ministry of Commerce (MOFCOM), in 2017, China's FDI reached US$158.29 billion, it was the second highest in history (only second to 2016), accounting for more than 10% of the world's total investment for two consecutive years. As we can see from the graph below (Graph 1.2), the volume of investment flows of China was the third largest in the world after the United States ($342.27 billion) and Japan ($160.45 billion), down one place from the previous year. It is clear to get a conclusion that the global influence of Chinese capital is growing stronger and stronger, however, compared with the foreign investment of developed countries such as America, China started late and lack of experience so there is plenty of room for improvement.

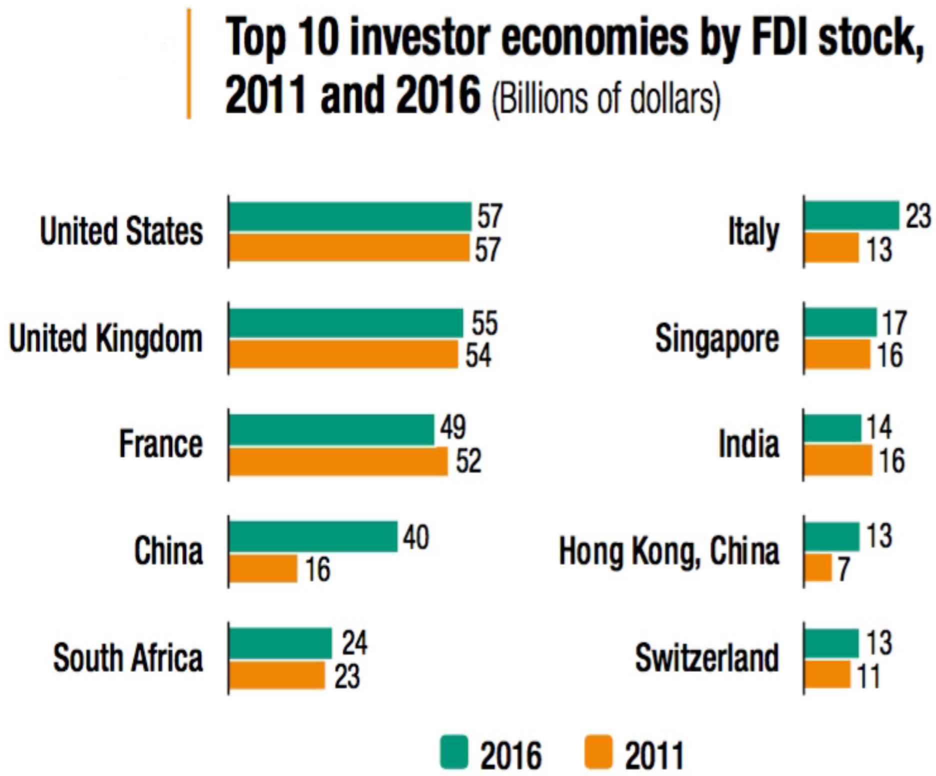


Graph 1.2 Source: UNCTAD, World Investment Report 2018

Africa is the second largest continent in the world with 1.2 billion people and it has abundant natural resources including iron, bauxite, silver, petroleum and so on. Because of this, it has attracted a lot of foreign investors. Additionally, many African countries have already done a lot of things to create a more business-friendly environment to promote local investment as well as FDI. For example, African states began signing bilateral investment treaties (BITs) in the 1960s. There has been a steady flow since then. Indeed, African states and regional economic communities have signed 972 international investment agreements (IIAs). A great majority contains ad hoc arbitration provisions under which investors can enforce investment protections. Nonetheless, problems such as unbalanced regional development, poor infrastructure and public security cast a shadow on FDI.

The Forum on China-Africa Cooperation (FOCAC) was formulated in 2000 to endorse Chinese investments and trade in their chosen African nations. It has expanded the amount of information exchange and reduced the transaction cost of cooperation by the institutionalized communication channels. This cooperation has seen a new boom since 2013 when the implementation of "the Belt and Road Initiative " provided fresh momentum for upgrading cooperation from trade in goods and project contracting to that in industrial capacity and capital investment. What deserves to be mentioned the most is President Xi put forward a massive plan in 2015 to carry out 10 major cooperation projects in Africa which contain industrialization, modern agriculture, infrastructure construction, green development, investment and trade facilitation, poverty reduction and people's welfare, public health, peace and security, people-to-people exchanges and finance.

As the figure 1.3 shows, China held the fourth largest FDI stock in Africa in 2016 at $40 billion, behind the US, the UK, and France. If including Hong Kong, China’s investment stock in Africa rises to $53 billion. However, Africa doesn’t seem to take the most of China’s overall global investments. Chinese FDI inflows in Africa, though increasing at a high rate, but it still remains low compared to their inflows in other regions. Moreover, there is a noticeable disproportional distribution among African countries.



Graph 1.3 Source: UNCTAD, World Investment Report 2018

1.2 Literature review

The expansion of globalization has deepened the links in economies, goods and services among countries, especially in the world market of capital. Moreover, the expansion of cross-border financial flows has been further accelerated by technological innovations in communications and data processing. Foreign direct investment (FDI), as one of its most obvious features, has always been a very interesting topic in the field of international development. FDI provides a method for creating direct, stable and long-lasting links among economic entities. It can serve as an important instigator for local enterprise development, and it may also help improve the competitive position of both the recipient and the investing economies.

1.2.1 What is FDI

A foreign direct investment (FDI) is an investment in the form of a controlling ownership in a business in one country by an entity based in another country. It is thus distinguished from a foreign portfolio investment by a notion of direct control. The Organization of Economic Cooperation and Development (OECD) defines control as owning 10% or more of the business. Businesses that make foreign direct investments are often called multinational corporations or multinational enterprises. A multinational enterprise may make a direct investment by creating a new foreign enterprise, which is called a greenfield investment, or by the acquisition of a foreign firm, either called an acquisition or brownfield investment.

1.2.2 Theoretical framework

There are many theoretical papers that examine foreign direct investments (FDI)'s issues, and main research on the motivations underlying FDI was developed by J. Dunning, S. Hymer and R.Vernon. Economists believe that FDI is an important element of economic development in all countries, especially in the developing ones.

1.2.2.1 Monopolistic Advantage Theory

Monopolistic advantage theory was first proposed by S. H. Hymer and is mainly to answer why multinational corporations are able to compete successfully with local enterprises and survive for a long time. Based on the hypothesis of market incompleteness and the theory of industrial organization, Hymer demonstrated that FDI occurs largely in oligopolistic industries. Firms in these industries must possess advantages not available to similar enterprises in the host country, which can be used to offset the extra cost brought by overseas investment and obtain excess profits. Key sources of monopolistic advantage include unique know-how, management and organization skills, proprietary knowledge, sale skills, and other intangible assets.

C. P. Kindleberger then expanded on this, listing possible compensation advantages such as trademarks, marketing techniques, financing channels, economies of scale, and so on. In addition, Kindleberger proposed that the existence of “exclusiveness of production factors” is also an important reason for a monopoly advantage, because the investment entity can produce products that cannot be produced by the host country.

1.2.2.2 Product Life Cycle Theory

The Product Life Cycle Theory was developed to explain the observed pattern of international trade and it illustrates that FDI is a natural stage in the life of a product.

According to Raymond Vernon, every product has its own lifespan and goes through 4 stages: introduction, growth, maturity, and decline, just as our own life cycles, where we start out as babies, then progress to teenagers, adults, and old age. Along with the technology development and changes in customers’ preference, at some point, the product will move into a different stage automatically until completely withdraw from the market.

Due to the differences in technology levels among countries, there are gaps and time differences in the marketing life of products. A company is often forced to invest in overseas production facilities to avoid losing a market. For example, a company that innovates a product, initially, because of proprietary knowledge, it chooses to produce at home and then exports it, thus enjoying its monopolistic advantage. Once the product going to the “growth” phase and becomes standardized, this firm may tend to invest in overseas factories to reduce the production costs and strive to remain its dominant position in the "new market".

1.2.2.3 The Eclectic Paradigm

The eclectic paradigm, also known as OLI Paradigm was developed by John Dunning, it is an attempt to create an overall framework to explain why multinational enterprises choose to engage in FDI rather than serve foreign markets through alternative modes such as licensing, management contracts, joint ventures or strategic alliances. (Lipsey R.G & A.K Chrystal, 2011)

“OLI” stands for Ownership, Location, and Internalization, three potential sources of advantage that may underlie a firm’s decision to become a multinational. Ownership Specific Advantage, also known as Monopolistic Advantage, it means a firm can develop a unique advantage through the ownership of tangible or intangible assets, such as the business scale of the enterprise, patent, technology, and know-how.

Internalization advantage emphasizes that the competitiveness of multinational enterprises does not come from the traditional monopoly advantage and pure technology possession, but from the internalization of technological advantage. Through internalization, it avoids the loss caused by the incompleteness of the external market. At the same time, the transaction is more convenient and easy to control, resources and production can be allocated through the unified management.

Location Specific Advantage refers to the superiority of the investment environment in the host country compared with the mother country of the enterprise, which including the investment policies, economic development level, market scale, infrastructure, resource endowment, labor force.

Dunning argues that "ownership specific advantage" or "internalization advantage" is only a necessary condition for an enterprise to invest abroad, not a sufficient condition. When an enterprise has one of them, it is not necessary to make a foreign direct investment, because enterprises can choose to increase domestic production to achieve scale effect and then export. When an enterprise has "location advantage" in a certain region, meanwhile, it also has "ownership advantage" and "internalization advantage", and then foreign investment becomes its optimal choice.

1.2.2.4 Kojima's theory of (Japanese) direct investment

Professor Kiyoshi Kojima of Hitotsubashi University is a distinguished Japanese economist and he proposed an extended "flying-geese" paradigm of industrial development according to Japan's foreign direct investment in the late 1960s.

The main idea of this theory is FDI and international trade are complementary, and FDI should be conducted successively from the "boundary industries" in which the country is already at or about to be in a comparative disadvantage. For the investment country, this boundary industry or activity is comparatively disadvantaged, on the contrary, it is potentially a comparatively advantaged industry in the host country. Meanwhile, such FDI can be easily integrated into the domestic national economy of host countries because the technological and managerial gap between host countries and source countries is usually small.

This theory is more in line with the foreign direct investment of developing countries and has a great reference and guiding significance.

1.3 Review of related potential determinants of FDI according to existing literature

This part provides an overview of various studies on the determinants of FDI which have been done over the years. We go through existing literature and attempt to investigate the determinants of the rapid growth of Chinese investment in Africa. According to the difference in location selection, Dunning (1993) divided the internationalization motives into four different categories, which is market seeking, resource seeking, efficiency seeking and strategic asset seeking. A multinational enterprise engages in FDI activity under the heading of market seeking, the main aim is to exploit a foreign market and find more customers. The resource seeker is looking for something that is not available at their home market or that can be obtained at a lower cost abroad. But the purpose of efficiency seeking is to rationalize their already existing operations in various locations and lower their costs, its benefits come from economies of scales and scope because the company can take advantage of different factor endowments in different countries. While for strategic asset seeker, they are focusing on developing strategic resources that are critical to their long-term strategies, such as patents, advanced management models and organizational skills. The first two are the main strategic motivations in the initial stage, while the latter is mainly in the higher stage.

Anyanwu J.C (2011) sought to answer, "what determines FDI inflows to Africa?" by estimating a panel of seven five-year non-overlapping windows for the period 1980- 2007. The result indicated that there was a positive relationship between market size, agglomeration, openness to trade, natural resource endowment and exploitation (especially for oil), government consumption expenditure and FDI inflows. In another study, Breivik A. L (2014) used panel data from 49 African countries and put Chinese FDI as a dependent variable to examine the determinants of Chinese FDI in Africa over the period 2003 to 2011. The result from this analysis suggests that Chinese FDI in Africa is attracted by GDP, or market size, and trade openness and natural resources. We could conclude that Chinese investment is not solely resource-driven but market seeking as well.

Moreover, a lot of empirical studies have been found that a business-friendly environment is important for attracting foreign investors. For example, domestic conflicts in the host country produce a poorer investment climate and higher risk hinders FDI inflows and shifts them to relatively stable countries. In the case of Africa, Naudé and Krugell (2007) found that political stability is favorable to FDI inflows to Africa. But only a few works are available on the effect of recipient countries' political stability on China's outward FDI, and their results are rather mixed.

1.4 Review of related impacts of FDI according to existing literature

Numerous studies have been carried out on the impact of inward FDI on the host country's economy and society. Some economic growth theories hold that FDI has a positive correlation with a country's economic growth since FDI itself is the integration of capital stock, new skills, managerial practices, and innovative technology, it can effectively reduce the scarcity of these factors in the host countries' economy. As a result, more and more developing countries are promoting economic growth through the absorption and utilization of FDI. However, some scholars believe that FDI inflows to the host countries will also produce "crowding out effect", environmental pollution, currency inflation, and other problems which will have a negative impact on the host country.

Considering China as an investing Country, existing empirical studies agree on the trade creating effect of China's FDI. Ma Lingyuan (2008) used panel data for the period 2003-2006 to examine the effects of China's outward FDI on international trade and he found a complementary relationship between China's outward FDI and imports and exports, proving a trade-creating effect (specifically a net export-creating effect). Weisbrod and Whalley (2011) used growth accounting techniques to assess the portion of the elevated growth of Sub-Saharan Africa three years prior to the 2008 financial crisis that can be attributed to Chinese FDI. In another study, Boakye-Gyasi and Li (2015) focused on the contribution of China's FDI to employment generation in the building and construction sector of Ghana. By using a robust regression model, they found that Chinese FDI flows affect employment through direct effects on the building and construction sector of Ghana. Hence, the study found that FDI has a positive and significant effect on employment growth.

However, others holding different views, they look more critically at China's behavior on the continent and see its parallels to the neo-colonial past (De Lorenzo, 2007). And according to Anshan (2007), with the flow of goods from China, conflict over labor practice and market strategies are turning out to be an important issue. The preference to hire Chinese nationals and long hours of work expected by Chinese managers is causing conflict with local labor laws and cultures.

Chapter 2: Historical development and present status of Chinese FDI in Africa

Currently, as the international situation undergoes profound and intricate changes, newly emerging and developing economies have become the major force pushing forward the world's economic development. Moreover, in tune with the changes in the international environment, China and African countries are, within the framework of the FOCAC, continuing to deepen the new type of China-Africa strategic partnership, vigorously advancing economic and trade cooperation, and actively exploring a common path that reflects both China's and Africa's realities. (China-Africa Economic and Trade Cooperation, 2013)

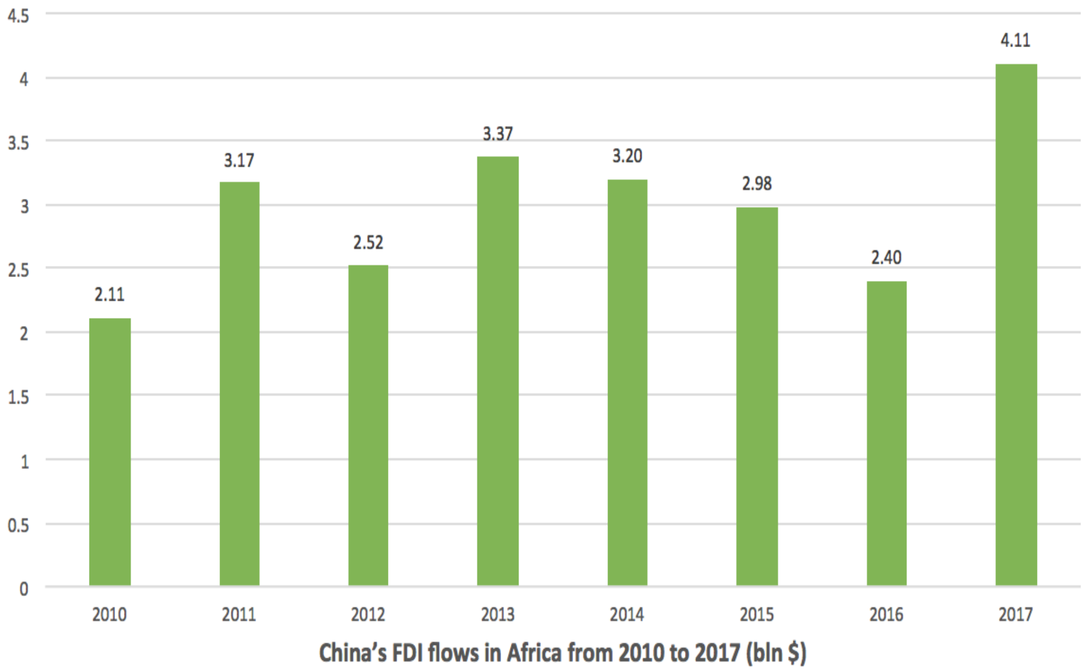
2.1 Review of the historical development

Before 1979, China's economic interaction with Africa was mostly political-based to help African countries to achieve national liberation and in consideration of the development of state-to-state relations. The relation of economic and trade was dominated by the obvious political nature of aid and investment in Africa. Such an interaction was mostly a pursuit of the "Third World Solidarity" purpose rather than economic effects. Following China's reform and opening up, China's policies towards Africa have also begun to adjust, a selected number of state-owned construction companies were allowed to operate in Africa through the bid for small-scale infrastructure projects. In 1983, the Chinese government put forward four principles for economic and technological cooperation with African countries, which is "equality and mutual benefit, emphasis on practical results, diversity in forms of interaction and

attainment of common progress". Since then, China's direct investment in Africa has also gradually started.
In 1995, China began to explore new ways of economic cooperation and actively promoted the diversification of foreign aid models and foreign aid funds. For instance, the Chinese government provided discount loans to recipient countries, encourage Chinese enterprises to operate projects in a joint- venture way with the recipient country's enterprises. China's interaction with Africa entered a new phase with the establishment of the FOCAC in 2000 and China's accession to the World Trade Organization in the following year. Besides this, it is worth mentioning that the China-Africa Development Fund (CAD Fund) was established in 2007, which is used to support Chinese enterprises to invest in Africa and explore the African market.
Nowadays, administrative controls on potential Chinese investors in Africa have been relaxed and China's direct investment in Africa has characteristics as diversification of the investment entities and investment industries. Chinese direct investment and lending to African countries has grown rapidly as well.
The Beijing Summit of the Forum on China Africa Cooperation has been convened in September 2018, with 53 out of 54 African countries represented. Chinese President Xi Jinping delivered a keynote speech at the summit, illustrating the priority areas of China's engagement with Africa in the coming three years. In his speech, Xi announced " Eight Actions " to succeed his 2015 "Ten Cooperation Plans" at the 2015 FOCAC Johannesburg Summit and renewed another financing commitment of $60 billion to Africa with distribution: $20 billion in credit lines, $15 billion in grants, interest-free loans and concessional loans, and $10 billion in investment financing. This support will come in the form of government assistance and investment. (Brookings. News, 2018)

2.2 Present status of Chinese FDI in Africa

The graph below shows the specific data on China's direct investment flows to Africa from 2010 to 2017, we can see a considerable increase has occurred from 2016 to 2017. This part will introduce the development status of China's FDI in Africa from three aspects: flows and stock, country distribution and industry distribution.



Graph 2.1 Source: Report on development of China's outward investment, Ministry of commerce of the people's republic of China

2.2.1 Flow VS Stock of FDI

The World Investment Report 2018 by UNCTAD showed that global FDI outflows reached \$1.43 trillion in the year 2017, with the year-end stock of \$30.84 trillion. Based on this report, China's outward FDI flows and stock in 2017 accounted for 11.1% and 5.9% of the global total respectively. China ranked the third among all countries (regions) in terms of outward FDI flows, decreased by 2.4

percentage points compared to the previous year. While from the perspective of FDI stock, China jumped from 6th in 2016 to the 2nd place, increased by 0.7 percentage points compared with the previous year.

In the case of Africa, China's outward FDI flows reached $4.1 billion in 2017 with a year-on-year increase of 70.8%, however, it only accounts for 2.6% of its total foreign direct investment flows. So we could conclude that although with the fast speed in growth, Africa still stands for a small share of China's Outward FDI and there is still a huge gap compared with other regions, such as Europe and Latin America, they take 11.7% and 8.9% respectively (as data provided in table 2.1).

Regional Distribution of China's Outward Foreign Direct Investment, 2017

(Billions of US Dollars)

Continent	Amount	Year-on Year Growth Rate (%)	Share (%)
Europe	18.5	72.7	11.7
Africa	4.1	70.8	2.6
Oceania	5.1	-1.9	3.2
Asia	110.0	-15.5	69.5
Latin America	14.1	-48.3	8.9
North America	6.5	-68.1	4.1
Total	**158.3**	**-19.3**	**100.0**

Table 2.1 Source: 2017 Statistical Bulletin of China's Outward Foreign Direct Investment

Meanwhile, by the end of 2017, China's outward FDI stock in developing economies had reached $1552.42 billion, accounting for 85.8% of the total. China's outward FDI stock in Africa reached $43.3 billion, accounting for 2.4% of the total, ranks fourth out of six regions. The concrete data of China's Outward FDI flows and stocks in African countries (from 2009 to 2017) is provided in appendices.

2.2.2 FDI by destination

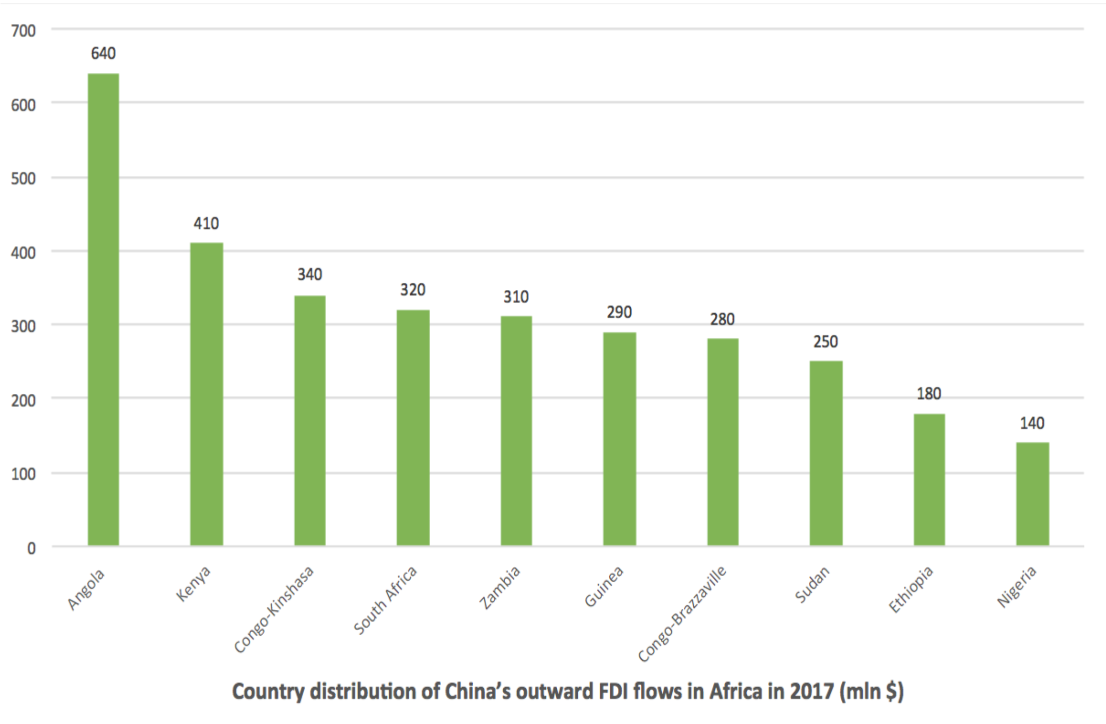
By the end of 2017, China had established 39.2 thousand overseas enterprises across 189 countries (regions), accounting to over 80% of the countries and regions in the world. And according to the data provided by The Chinese Ministry of Commerce published in its annual report, China established almost 3,400 overseas enterprises in Africa, accounting for 8.7% of the total. The coverage rates in Africa is 86.7 as showing in table 2.2, which is the ratio between the number of countries covered by China's FDI enterprises and the total number of countries in the region. These enterprises were mainly distributed in Zambia, Ethiopia, Nigeria, South Africa, Kenya, Tanzania, Ghana, Angola, Uganda, etc.

Geographical Distribution of China's FDI Enterprises, by the end of 2017

Continent	Number of Countries (Regions) by the End of 2017	Number of Countries (Regions) Covered by China's FDI Enterprises	Coverage Rate (%)
Asia	48	46	97.9
Europe	49	43	87.8
Africa	60	52	86.7
North America	4	3	75.0
Latin America	49	33	67.3
Oceania	24	12	50.0
Total	**234**	**189**	**81.1**

Table 2.2 Source: 2017 Statistical Bulletin of China's Outward Foreign Direct Investment

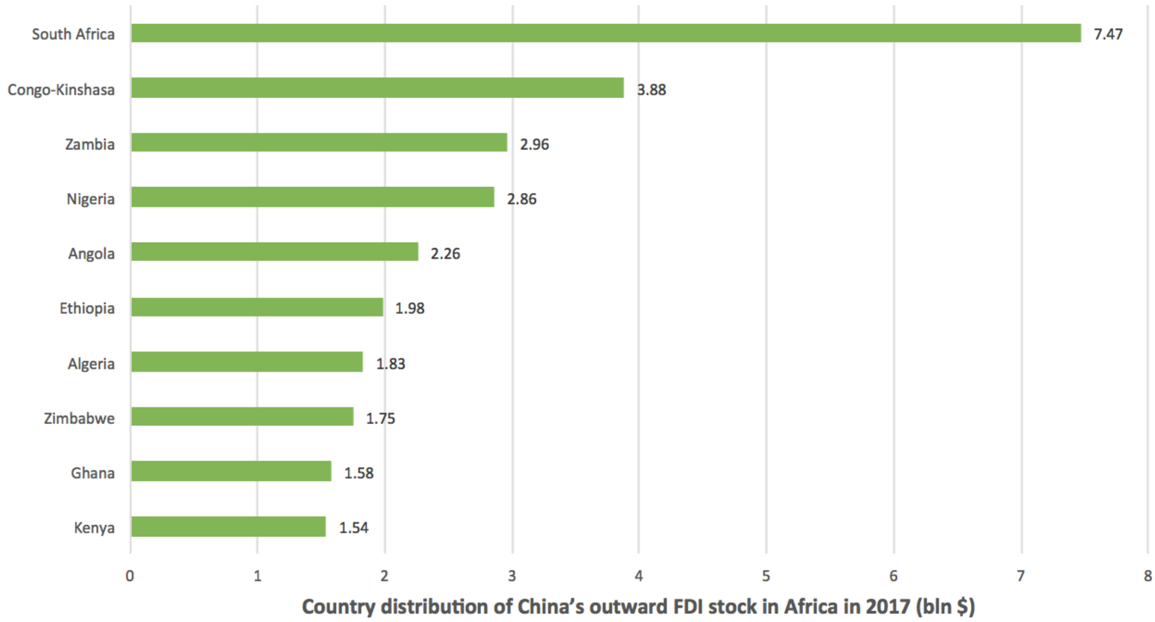
In terms of the FDI flows, it mainly went to Angola, Kenya, Congo (DRC), South Africa, Zambia, Guinea, Congo (Brazzaville), Sudan, Ethiopia, Nigeria, Tanzania, etc. Based on the data showing in the graph 2.2, we could see the top 10 recipient countries account for more than 75% of China's total FDI flows in Africa.
Recently, UN Habitat has published a new report, "The State of African Cities 2018", which mentioned an interesting finding is that in contrast to conventional FDI theory, Chinese investment in Africa tends to focus on countries with lower political stability so as to explore underinvested states, as well as to avoid competition with investors from advanced economies. Angola is a case in point, the amount of FDI flows into Angola ranked first among Africa region, and it is almost 4.6 times to that into Nigeria.



Graph 2.2 Source: Report on development of China's outward investment, Ministry of commerce of the people's republic of China

In the same time, the stock was mainly concentrated in South Africa, Congo (Kinshasa), Zambia, Nigeria, Angola, Ethiopia, Algeria, Zimbabwe, Ghana, Kenya, Tanzania, Sudan, Mauritius, etc. (Graph 2.3)

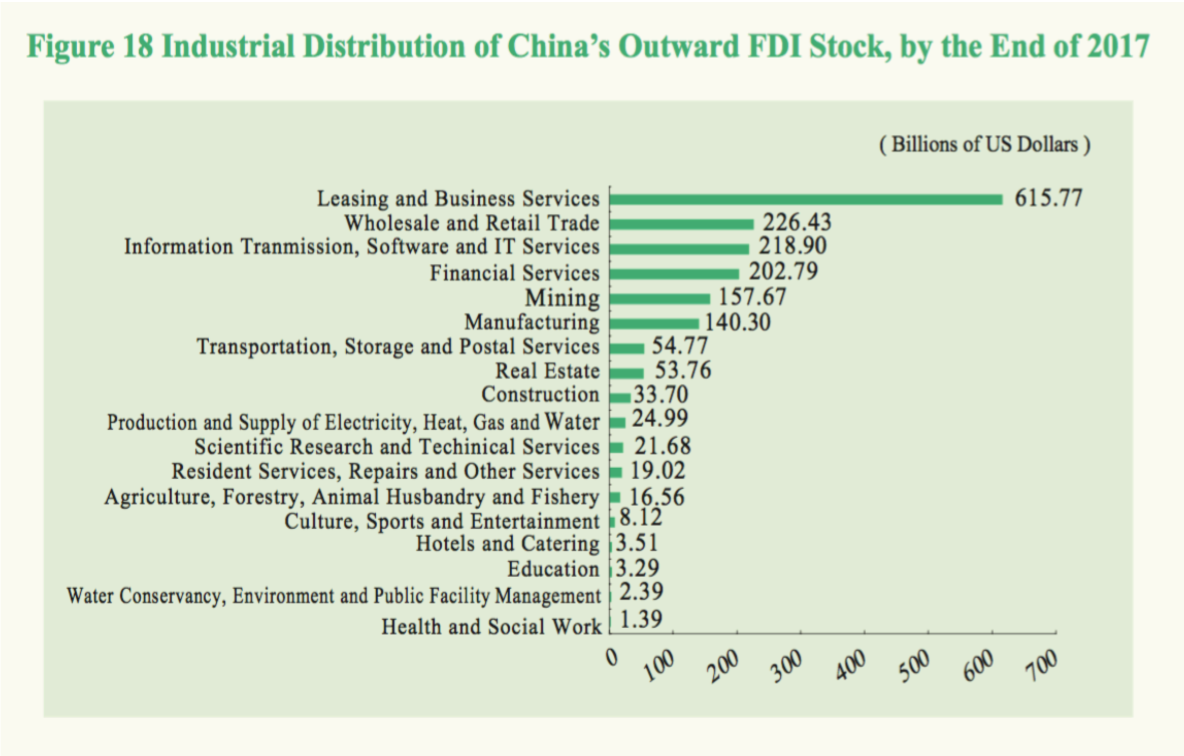
The FDI stock amount of South Africa is 7.47, which is almost 2 times as much as that of Congo (Kinshasa).



Graph 2.3 Source: Report on development of China's outward investment, Ministry of commerce of the people's republic of China

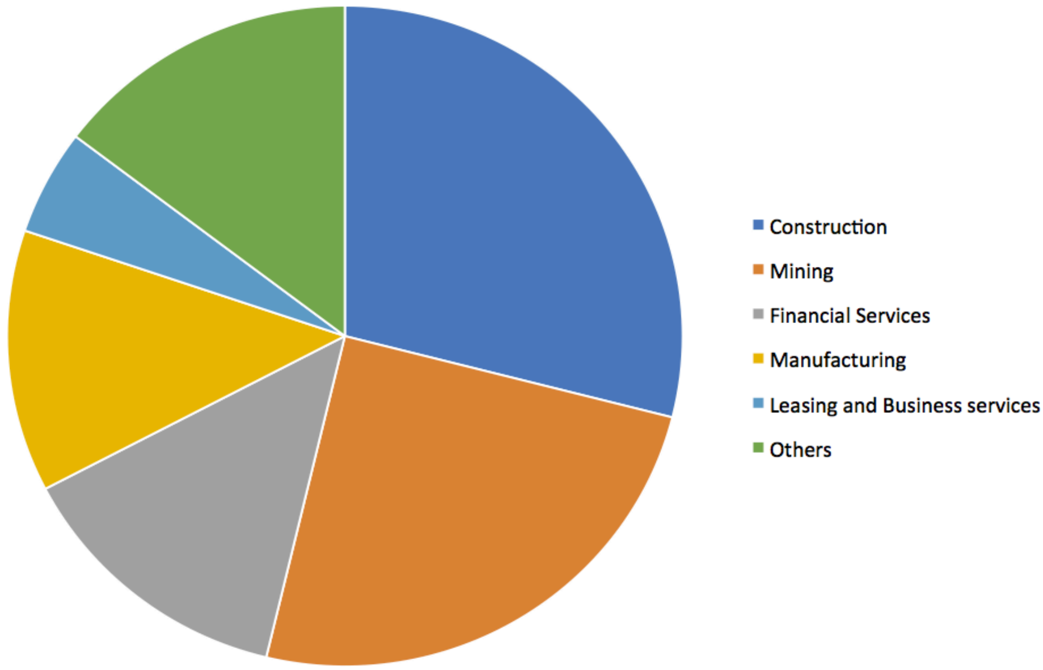
2.2.3 FDI by sector

China's investment in Africa has been under fire because some asserting that it is exploitative, merely for seeking resources, a lot of media reported it with the keywords "neo-colonialism" or "debt trap". Therefore, understanding which sectors China has invested in may help us to analyze the determinants of China's outward FDI. Observation of the bar graph below reveals that by the end of 2017, China's outward FDI stock had spread in many industries of the national economy. In particular, six industries received over a hundred billion dollars and the Leasing and Business Services sector remained the highest and received $615.77 billion, accounting for 34.1% of the total stock, the Wholesale and Retail Trade sector came to the 2nd, received $226.43 billion, accounting for 12.5% of the total. The Information Transmission, Software and IT Services sector ranked 3rd, received $218.9 billion, accounting for 12.1% of the total, and is the area with a high concentration from outward investment by Chinese natural persons.



Graph 2.4 Source: 2017 Statistical Bulletin of China's Outward Foreign Direct Investment

The pie graph 2.5 shows the top five industries of China's Outward FDI stock in Africa, which illustrates that the construction sector took the largest share (29.8%), and the mining sector ranked the second with 22.5%, the sector of financial services ranked the third with 14%, manufacturing and leasing and business services accounts for 13.2% and 5.3% respectively. The data lead us to the conclusion that China is gradually expanding its investment sector, but it still remains relatively concentrated.



Graph 2.5 Source: Report on development of China's outward investment, Ministry of commerce of the people's republic of China

Chapter 3: Determinants of FDI

Deborah Bruatigam (2009) proposed three strategic challenges China is facing, which is the need to find new export markets to fuel further expansion of domestic production; the need to find more resources abroad to match the resource demand brought by rapid economic growth; the need to for allying with other developing countries to counter-balance the dominant position of developed countries in international organizations. From this perspective, combined with the factors mentioned in the previous literature review, this chapter will focus on analyzing the determinants of China's investment in Africa from the view of resources, market, and industrial structure.

3.1 Resource view

Numerous empirical studies have recognized that natural resources endowment in the host countries is an important factor to attract Chinese FDI. Buckley et al (2007) and Cui Jiayu (2010) identified resource-seeking motivation as a determinant of China's Outward FDI. In another study, Liu Hong and Wang Duanyong (2010) believe that China's outward FDI is the continuation of the traditional economic growth pattern, which is over-depends on natural resources.

3.1.1 Physical resources

The rapid growth of the Chinese economy has led to an increasing demand for various natural resources. According to the data provided by British Petroleum, China was the largest growth market for energy for the 17th consecutive year, remains the world's largest

energy consumer. In 2017, China's energy consumption growing by over 3% in 2017, almost three times the rate seen over the past couple of years (BP Statistical Review of World Energy, 2018).
However, due to China's large population and uneven distribution of natural resources, it has been unable to meet this huge resource demand, which becomes a bottleneck hindering economic and social development. In order to alleviate the increasingly serious energy problems, Chinese enterprises, especially large state-owned energy companies, have sought energy resources as an important part when they invest abroad, this can be clearly seen from the industry selection of early China's FDI projects, for instance, from 2003 to 2007, Chinese outward FDI flows were attracted to countries with abundant natural resources and early projects pointed at minerals, petroleum, timber and etc.
Africa has the richest concentration of natural resources among the seven continents. This continent has approximately 30 percent of earth’s mineral resources. Additionally, Africa is rich in oil, copper, diamonds, bauxite, lithium, gold, hardwood forests and so on. Despite the wealth of natural resources, Africa still lags behind in development technology and capital, this has become an important reason for attracting international capital. As any other countries, China's investment in Africa is inevitably accompanied by a certain degree of resource seeking motivation. Africa's rich natural resources can solve the problem of China's resource shortage and ensure the supply of scarce production factors, at the same time, the capital brought by China contributes to the economic development of Africa.

3.1.2 Labor force

Population size is closely related to human resources and market potential. It is generally believed that the larger the population size, the richer the labor force and the greater the market potential. Based on the latest data from the United Nations, the current population of

Africa is more than 1.3 billion, and the median age is 19.4 years. Due to the huge young population and relatively low per capita wages, a large number of cheap human resources are provided for the labor market, which attracts countries around the world to transfer labor-intensive industries to African countries for production and operation, so as to reduce production costs and gain price advantages.

China has been the “world’s factory” for many years, given its low unit costs and huge labor force, China has attracted a large number of foreign companies to invest in, which is also an important reason for its rapid economic development. However, this relative price advantage has been weakened in recent years because of the rising of labor costs, energy prices, and taxes. Moreover, due to the effects of China’s 36-year one-child policy, its benefits of a demographic dividend are fading away.

Therefore, it has become an inevitable choice to move out the labor-intensive industries of China and relocated to some Africa countries in order to reduce the operating costs and extend the products' life cycle. For example, the shoe manufacturer Huajian has spent two billion U.S. dollars building a giant factory in Ethiopia and employs 8,000 Ethiopians, the shoes produced at this factory accounting for 65 percent of Ethiopia’s shoe exports. (Data from China Daily, 09/2018)

3.2 Market view

Market-seeking behaviors have been found to be one of the central ideas of China's outward investments both in developed and developing countries. It is undertaken by multinational companies to strengthen an existing market, which is a defensive strategy, or to develop and explore new markets, which is an offensive strategy. FDI tends to occur when a country imposes or threatens to impose tariff and non-tariff trade barriers to import. (Voss, 2011).

3.2.1 Market size

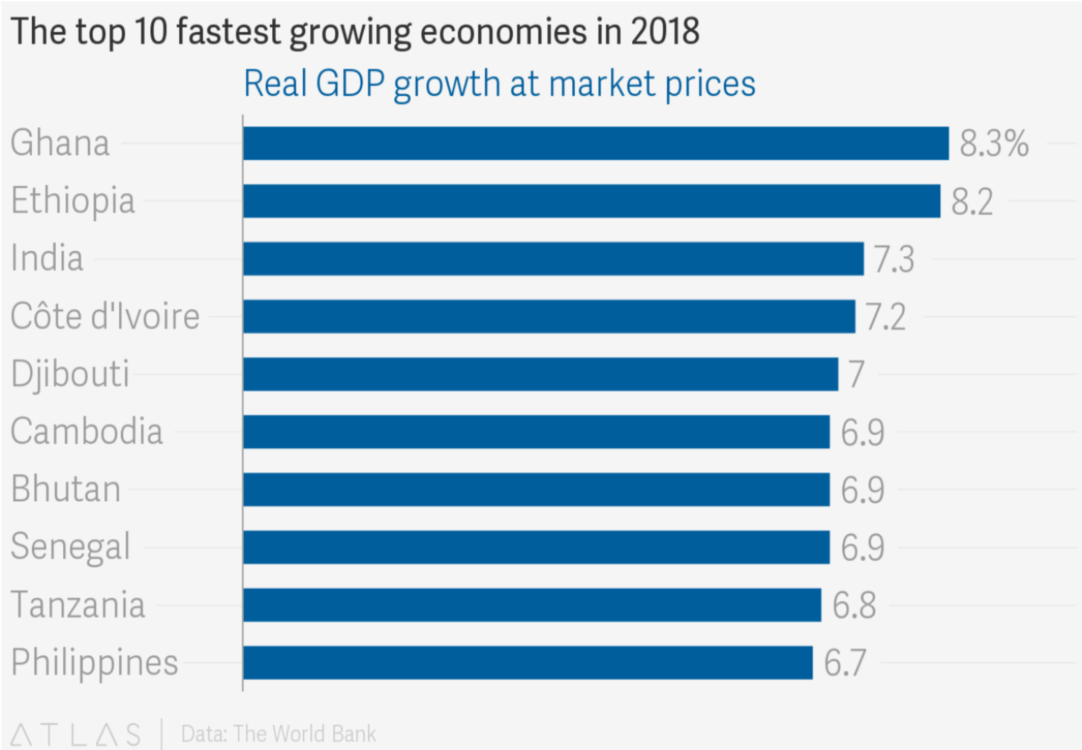
The Chinese government has always emphasized the "fully utilize both domestic and foreign markets and resources " in its reform and opening up policies, as market size increased, so do opportunities for the better utilization of resources and the exploitation of economies of scale or scope through FDI.

Africa has a huge market demand and consumer groups, but its economic development is relatively backward and the production capacity is limited. By setting up factories and investing in African countries, Chinese enterprises can produce products with large local demand and sell them on that spot, thus forming economies of scale and obtaining higher profits than producing in its home market. For some African countries with a higher economic development level, the investment is mainly because such countries have higher per capita income, so they are generally considered to have higher consumer demand and relatively reliable payment guarantee, which is more attractive to investors.

In addition, Chinese policymakers have been concerned about the problem of excess capacity since 2005. For example, China's steel production has expanded rapidly in the last decade. But its capacity for production has increased at an even higher rate than production, leading to growing excess steel capacity. OFDI projects can transfer some of China's excess domestic production capacity and contribute to sustainable economic development.

3.2.2 Market profitability

Since 2000, at least half of the world's fastest-growing economies have been in Africa. Many investors consider Africa as the " final frontier" of emerging markets since China and India continue to mature.



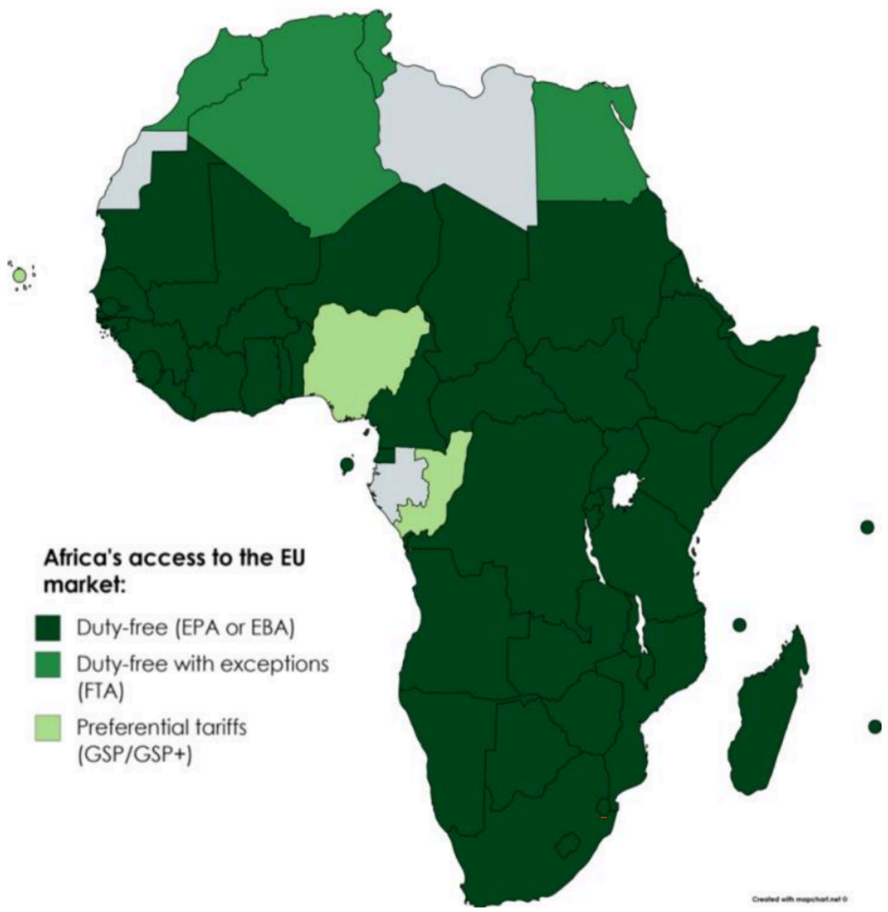
Graph 3.1 Source: The World Bank

Countries with rapidly growing economies present more opportunities for generating profits than those that are growing more slowly or not at all. Zhang Xiaofeng(2010) affirms that the host country's economic growth is a factor of China's investments in Africa since the data have shown that Chinese enterprises would be more attracted by countries with a steady growth of economic development.

Besides this, from the perspective of enterprise managers, it is always better to cut costs. As Dunning points out that labor costs are an important part of production costs. A lower labor cost is a favorable determinant of FDI inflow in a country, multinational enterprises could get higher profit by investing in locations with a lower labor cost compared to source countries. The average wage of African workers is lower and the rate of increase is slower than that of Chinese workers, which explains the transfer of many Chinese labor-intensive industries.

3.2.3 Policy support

Another reason for African countries to attract foreign direct investment is they have preferential policies for the two major global export markets, the United States and the European Union. For example, under the framework of the African Growth and Opportunity Act (AGOA) provided by the United States to Africa since 2000, it grants approximately 6,400 products from 40 African countries are eligible for tariff reduction and exemption. Moreover, thanks to the Economic Partnership Agreements (EPAs) or the Everything-But-Arms (EBA) scheme, 80% of African products exported enjoy the duty-free and quota-free access to the EU market, as showing in the graph below.

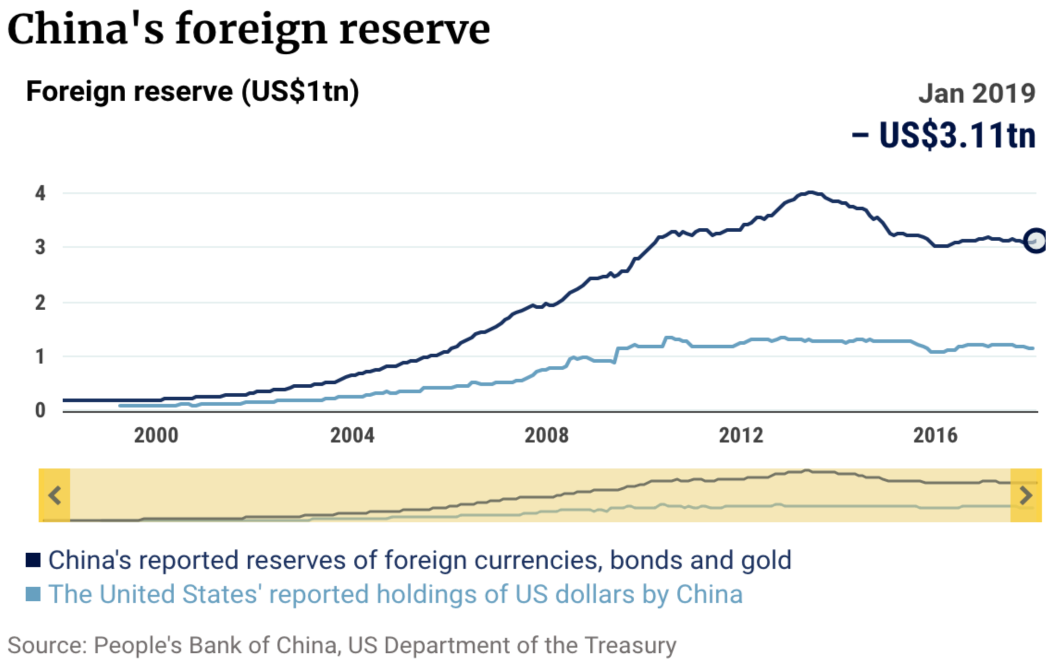


Graph 3.2 Source: European Commission

However, Chinese enterprises are faced with some obstacles in import and export trade, many countries impose anti-dumping duties against China, for instance, the Indian and the European administration have imposed the anti-dumping duties on Chinese stainless steel exports to protect their own manufacturing industry. However, anti-dumping regulations are found to cause foreign exporters to become foreign investors. After investigating Japanese foreign investment in the United States and European Union countries. Barrel and Pain (1999) demonstrated that anti-dumping promotes the development of FDI and companies responded to the anti-dumping problem by producing and selling in the host country. Chinese enterprises can avoid trade barriers to some extent by developing FDI projects in Africa and obtain the income generated by different trade policy.

3.2.4 China's huge foreign exchange reserves and the appreciation of RMB

As the largest accumulator of foreign exchange reserves, China's foreign exchange reserves are 2.5 times of Japan-the second largest. In general, sufficient foreign exchange reserves not only can resist the financial turmoil, but also conducive to expand internal trade, attract foreign investment, and maintain international credibility. However, holding larger than required reserves may mean higher exchange risks.

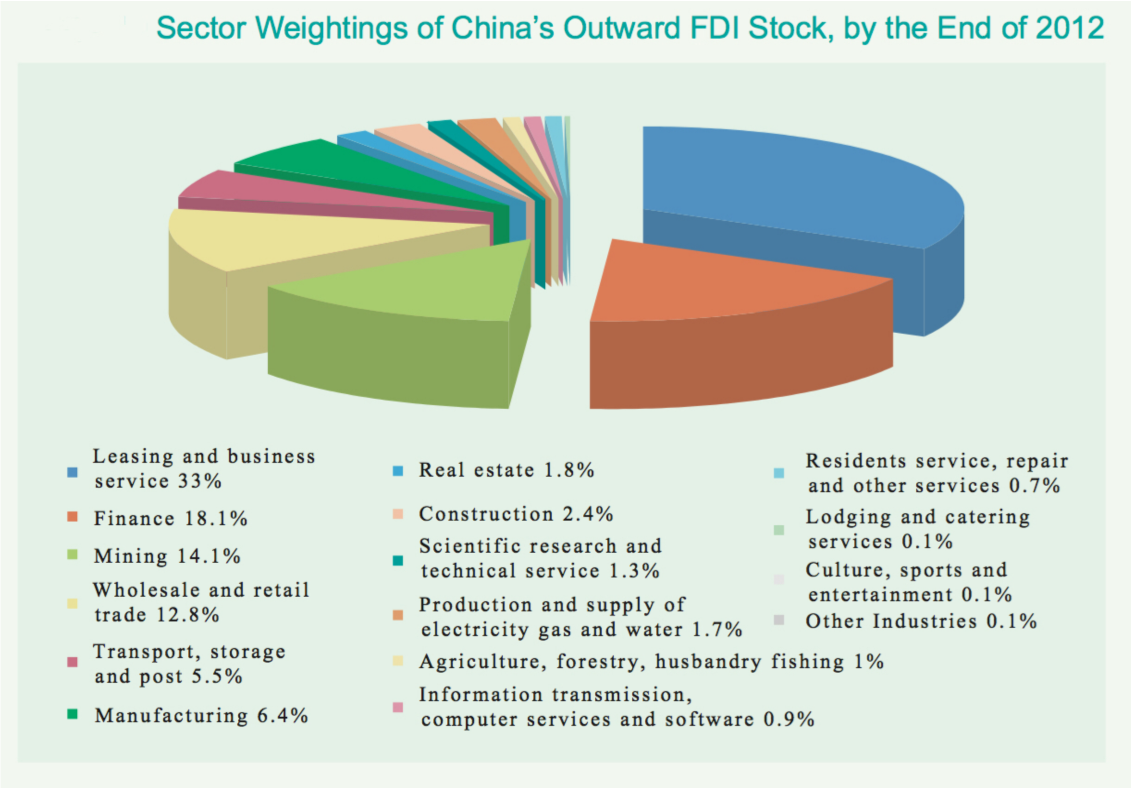


Graph 3.3 Source: People's Bank of China

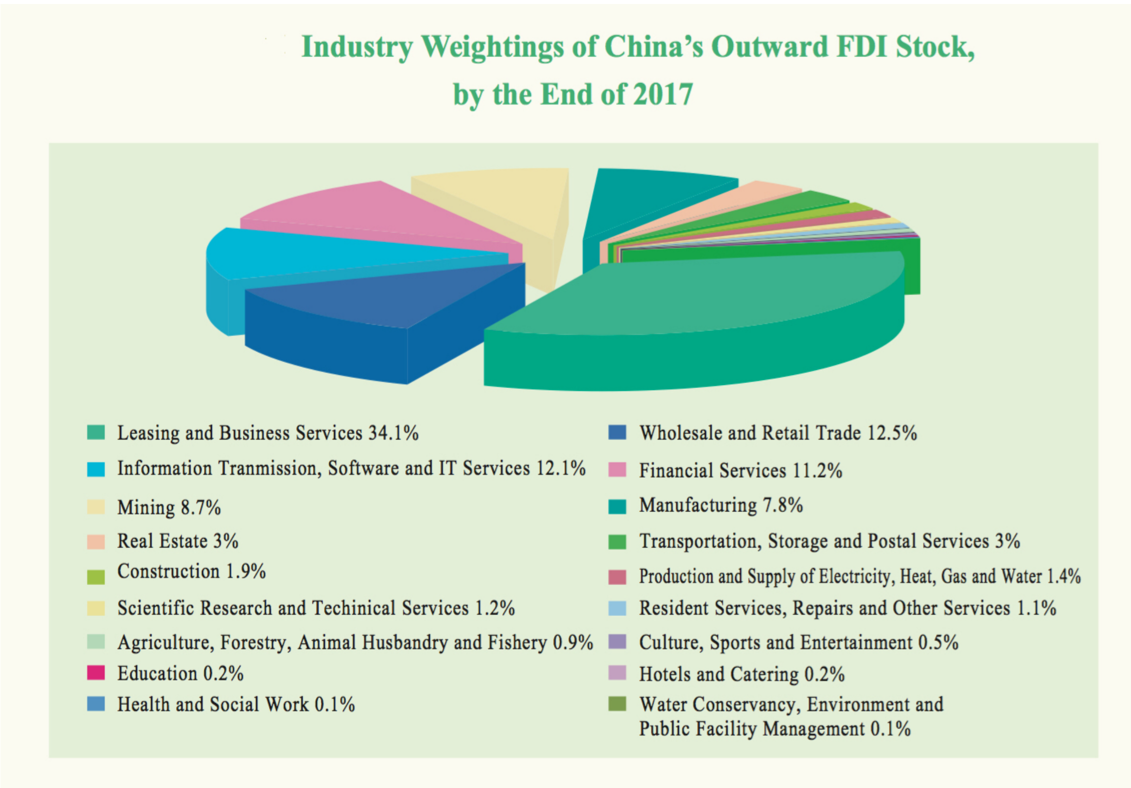
As shown in the graph above, China's foreign exchange reserves have grown rapidly over the past decade, but excessive reserves may stunt the growth of national wealth, such as the pressure of RMB appreciation, thereby affecting the competitiveness of the exports of Chinese commodities. With the increase in foreign exchange reserves, the RMB exchange rate has gradually risen from 1 US dollar to 8.7 yuan in 1994 to the current 1 US dollar against 6.72 yuan. Under the circumstances, the prices of Chinese export commodities are also increasing, Chinese export-oriented enterprises are losing their price advantage, many small and medium-sized manufacturing enterprises even go bankrupt. The Chinese government has been implementing tighter controls on its huge foreign exchange reserves and considering use part of its reserves for foreign investment in order to seek a more rational way in the allocation of overseas assets. Froot and Stein (1991) argue that currency appreciation increases the wealth of companies denominated in foreign currencies, reduces their relative capital costs, and allows them to invest more aggressively overseas. A good example is Japan's massive overseas investment in late 1980. This applies equally to China, the appreciation of RMB and the increasing purchasing power make the cost of assets in the host country become relatively low and it raises the probability to bid successfully for a foreign asset in the host country, which will promote more Chinese enterprises to invest overseas.

3.3 Industry Structure view

Zhang xiaofeng (2010) proposed that China's domestic demand for a transformative upgrading over its domestic industrial structure offers a driving force pushing China's FDI into Africa. In this sense, we could also get inspiration from the "expansion of marginal industries" model proposed by Kiyoshi Kojima. FDI should start from those domestic industries owning comparative advantages, so as to effectively upgrading the industrial structure of source countries, pushing the overall economic development.
By comparing Figure 3.4 with Figure 3.5, we can see the changes in the industrial distribution of China's outward FDI from 2012 to 2017. Although leasing and business services have remained at the top of the list with more than 30%, the development of other industries is more worthy of attention. For example, the sector of information transmission, software and IT services have witnessed rapid development, which increased from 0.9% in 2012 to 12.1% in 2017. Moreover, the proportion of the manufacturing industry is also increasing (from 6.4% to 7.8%), while the mining industry is decreasing (from 14.1 to 8.7%). From the data of these proportions, we can infer that China is gradually increasing its investment in the secondary and tertiary industries in order to achieve its goal of adjusting the domestic industrial structure.



Graph 3.4 Source: 2012 Statistical Bulletin of China's Outward Foreign Direct Investment



Graph 3.5 Source: 2017 Statistical Bulletin of China's Outward Foreign Direct Investment

Using the manufacturing industry as an example, Chinese enterprises possess comparative advantages of relatively advanced technologies and excellent product quality. The FDI from these mature industries is helpful for making room for China's domestic high-tech industries and upgrading of its domestic industrial structure. For the host country, these industries could be easily localized and meet their market demands. It is good for both sides.

Chapter 4: The impact of China’s FDI in Africa

Since the last decade, China’s rising financial portfolio and growing influence in the African region has caused widespread debate about its impacts on African countries' economic development and political system. Kaplinsky and Morris (2009) claim that the reason for the many unsettled debates with respect to China’s role in Africa or the motives behind Chinese capital provision is that most studies tend to presume a homogenous China and a homogenous Africa. In this regard, the main goal of this chapter is to evaluate the various impacts of China’s FDI inflows in Africa.

4.1 Positive part

Although foreign investment keeps pouring into Africa, its ability to attract FDI is relatively low compared with other continents and its share of total global FDI remains small. In the state of African cities 2018 report, it reveals that foreign direct investment is a key resource to expedite Africa's growth potential, as it promises not only financial resources but also new technologies, knowledge and expertise. Investment can promote productivity, employment and competitiveness. As the largest developing country, China's direct investment in Africa has some special characteristics comparing with the FDI from advanced economies, but it has also brought a positive influence to Africa's development.

4.1.1 Speeding up infrastructure construction

African countries take up 17 positions of the bottom 20 nations in the latest Global Competitiveness Index—a report published by the World Economic Forum. African economies are still too far from fulfilling the narrative of Africa's rise. Its weak infrastructure is a major obstacle to economic development and investment in Africa, such as run-down shipping ports, lack of transport and communication connectivity. Moreover, African economies generally suffer from a shortage of electrical power and a huge accumulated infrastructural deficit of an estimated USD900 billion (Kuo, 2015).

Infrastructure projects have the characteristics of a long construction period, high initial cost ， slow output benefit and etc. Therefore, many African countries are unable to carry out large-scale infrastructure construction due to lack of funds and technology. In recent years, China has become the largest source of funding for infrastructure projects in Africa. The value of loans from Chinese lenders to energy and infrastructure projects in Africa almost trebled between 2016 and 2017, from USD 3 billion to USD 8.8 billion. By the end of 2017, the construction industry ranks first in China's outward FDI stock in Africa, accounting for 35 percent of the total. China’s infrastructure projects in Africa have involved in 35 African countries and included many types, such as building roads, bridges, railways, airports and power stations and etc.

Besides this, China has developed one of the world’s largest and most competitive construction industries, and many of China’s construction companies are world leaders in the power sector or civil works. Therefore, China is capable of providing technical support and is experienced, because the infrastructure facilities China has built over the past 40 years since the reform and opening up has indeed contributed to its rapid economic growth. African countries can learn from China’s experiences to develop and improve their infrastructure system.

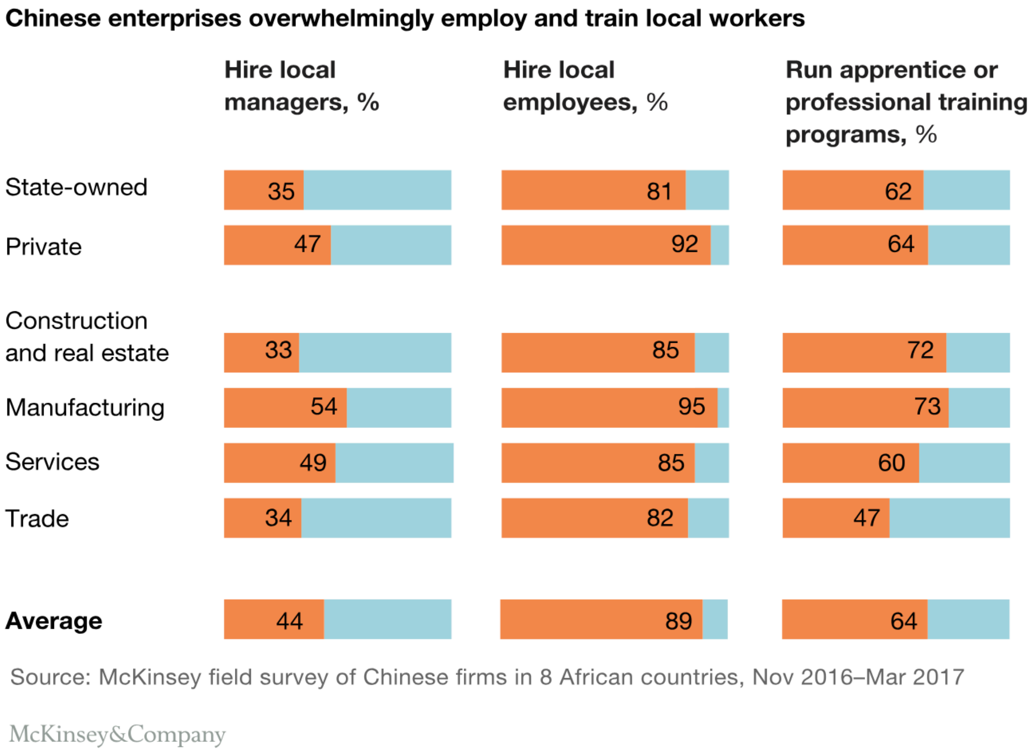
In general, the advent of China as the investor is a good development trend for Africa, as Taylor (2007) noted, China’s investment in Africa’s crumbling infrastructure is needed and welcomed by Africa.

It could help to alleviate Africa’s huge gap in physical infrastructure, improve its investment environment, and make this continent to be a more attractive destination for global FDI. Moreover, improve the construction of infrastructure helps to raise the living standard, which is needed for social stability.

4.1.2 Technology and skills transfer

Technology competitiveness has become a critical determinant for economic growth in this globalized world. FDI was more than a process by which assets are exchanged internationally, it was also a transfer of capital, but the transfer of a 'package' in which capital, management, and new technology were all combined (Hymer, 1976), it is well known that multinational corporations often invested considerable amounts of capital in research and development and they are the main provider of the advanced technologies. The implementation of FDI by transnational corporations in the host country contributes to heighten local technology level, which is an economic externality called technology spillover. Technology transfer by efficiency spillover that leads to an increase in total factor productivity of local firms and improved management practices in the utilization of resources, which in turn stimulates economic growth (Asiedu, 2006). Aside from technology transfer, many MNCs also establish R&D campaigns in host countries to localize their products and satisfy local customers' needs and preferences, by which they can maintain core competitive advantages and long term development.

There is a big gap between the technological level of Africa and that of developed countries, which may make the technology spillover effect weak. Technology brought by FDI from developing countries may be more applicable for African countries than developed countries. China is a developing country at a higher stage, Africa can learn a lot from China's booming economy about how science and technology can help to boost development. Many Chinese companies not only have cutting-edge technologies, advanced management concepts and system, but also pay more attention to staff training than local enterprises. Chinese firms are providing training to their local workers in many African countries, mostly through formal programs, on-the-job training and mentoring. As shown in the following figure, the average proportion of the training system is over 60% among Chinese enterprises.



Graph 4.1 Source: McKinsey field survey of Chinese firms in 8 African countreis

In the field of information and communication technology, the Chinese telecom giant Huawei has opened at least five training centers in different countries across the continent and claims that it annually provides skills training to 12,000 Africans, the hiring of local staff is also a hallmark of Huawei's business in Africa. For agricultural production technology, a China-based agricultural firm Hunan Agri has launched an agro-technology demonstration center near Antananarivo to coach local farmers how best to produce a new variety of rice. Employee training is one of the immediate means of skills transfer. After systematic training, when these employees with higher skills leave foreign companies and enter into local enterprises, technology transfer will inevitably occur, thus improving the management and innovation ability of enterprises in the host country.

4.1.3 Increase employment opportunities

Okun’s law reveals the relationship between unemployment and losses in a country’s production, it states that for every 1% increase in the unemployment rate, a country's GDP will be roughly an additional 2% lower than its potential GDP. One of the reasons why policy makers want to attract FDI is to create new jobs in the economies. Mickiewicz, Radosevic, and Varblane (2000) believe that FDI has the potential to generate employment through direct hiring of people for new plants, which means they improve aggregate domestic employment through types of jobs created, regional distribution of new employment, wage levels, income distribution, and skill transfer.

According to Ernst & Young’s (EY) latest Africa Attractiveness report, China is the top foreign job creator in Africa in 2017, accounts for 15% of the total job created from FDI (showing in Table 4.1), which highlights the positive impact of China in relieving the pressure of employment. A good example mentioned by this report is the Mombasa-Nairobi Standard Gauge Railway in Kenya with the China Road and Bridge Corporation as the prime contractor. This project employed 25,000 Kenyans, more than 16,000 of whom have been trained and 2,700 Kenyans have become qualified lab technicians, surveyors or mechanics. In addition, there is a growing number of small and medium-sized privately-owned enterprises are investing in Africa, these firms invest predominantly in the manufacturing and services industries, which are more labor-intensive and creating more jobs. For instance, some studies have shown that in Ethiopia, Ghana, Kenya, Nigeria, Tanzania and Zambia, more than half of the foreign investments in manufacturing originated from China and have resulted in significant employment growth in those countries.

FDI projects by source country (2017)

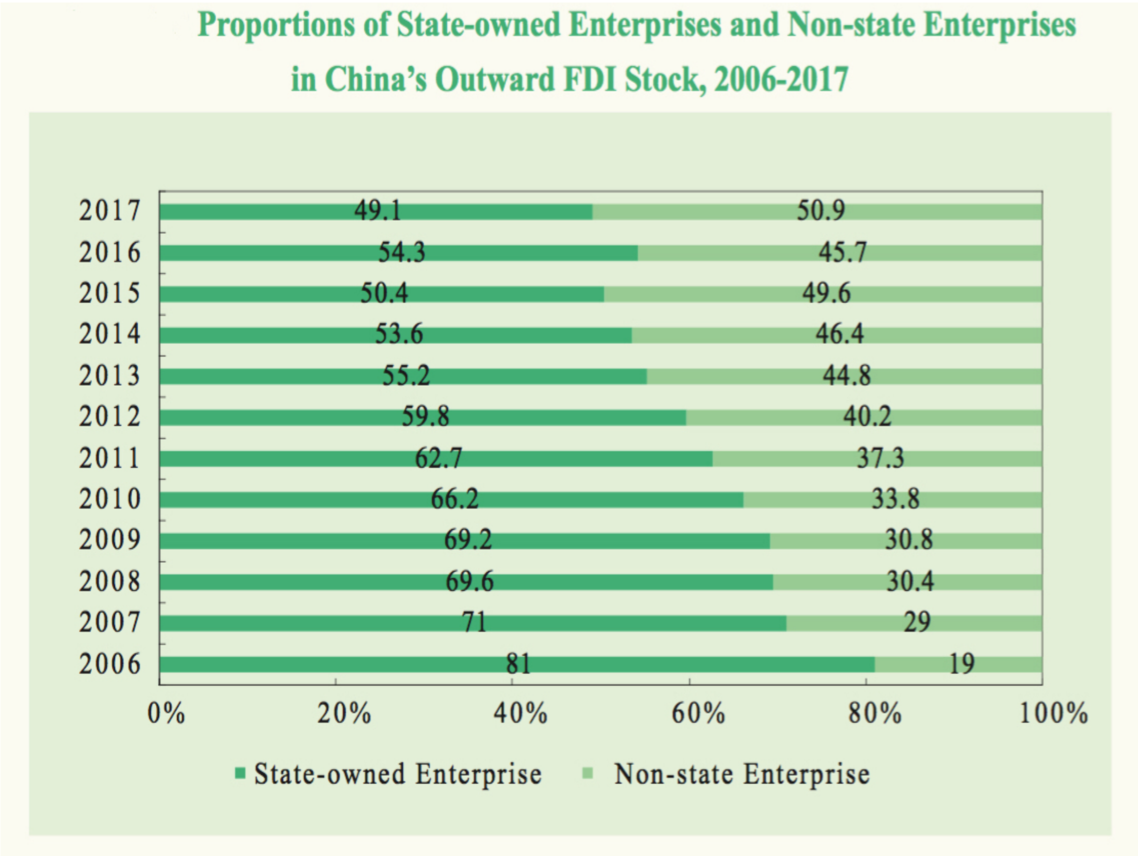
Country	FDI Projects				Jobs created from FDI	
	Change in Rank vs. 2016	2017	Proportionate share	Year-on-year change	Proportionate share	Jobs per project-'000S
US	-	130	18%	43%	12%	105
UK	+2	72	10%	76%	5%	76
France	-1	61	9%	-25%	13%	244
China	-1	54	8%	-18%	15%	309
Germany	+5	39	5%	105%	5%	138
Switzerland	+1	30	4%	11%	3%	111
South Africa	-1	29	4%	0%	1%	54
Netherlands	+8	22	3%	175%	2%	88
UAE	-4	19	3%	-46%	1%	74
Italy	-1	17	2%	-15%	2%	140

Source: IBM database, 2017; fDi Markets.

Table 4.1 Source: IBM database, 2017; FDI Markets

4.1.4 Source of capital and investment

For most African countries, the shortage of capital, low domestic saving rate, and severe government deficits are the main factors hindering economic development. FDI as earlier explained in the growth theories is a potential source of capital and can help in closing the gap between domestic savings and investment requirements. In particular, as can be seen from the data provided in the figure below (Graph 4.2), China's foreign investment is dominated by state-owned enterprises, these companies possible pay more attention to establishing long-term development relations with local governments and enterprises rather than pursuing short-term profits, which may be guided by Chinese central government political and diplomatic considerations. This can be used to explain a feature that Chinese capital tends to choose under-investment and relatively unstable African countries, which contradicts the risk-averse arguments proposed by conventional FDI theory. The influx of Chinese capital has brought hope to some African countries that are underemphasized by developed economies, and the Chinese government provides massive low-interest or interest-free loans, thus the financing cost would be lower.



Graph 4.2 Source: 2017 Statistical Bulletin of China's Outward Foreign Direct Investment

4.2 Negative part

Although a variety of studies consider FDI contributes to economic growth and social development, there are still other scholars think more critically at foreign investments' negative impact on the host countries, which may be related to the commerce and social areas.

4.2.1 Fierce competition

With a large number of Chinese enterprises entering the energy, mineral, textile and other industrial sectors in Africa, FDI crowds in domestic investment and lead to a more intensive competition. Backer and Sleuwaegen (2003) suggest that "import competition and foreign direct investment discourage entry and stimulate exit of domestic entrepreneurs".

On the one hand, for the competition among enterprises in internal and external markets, local producers are unable to compete with Chinese companies, because Chinese manufacturers have the comparative advantages at market price, production cost and technology, as a result, some similar enterprises with weak competitiveness go bankrupt and exit the market. On the other hand, even though some data has shown that China has been the top job creator in Africa for several consecutive years, the question remains as some Chinese enterprises are more willing to hire imported labor from China rather than using the local persons. Some have argued that Chinese FDI into Africa is indeed accompanied by labour imports. There are several practical reasons for causing this phenomenon, for example, Chinese workers usually have gone through an intensive training program, they are well organized and with higher skill-level, which is more beneficial for the organization and management of corporate. In addition, there are language barriers, not get into the local very well and so on. In short, the preference to hire Chinese workers is causing conflict with local labor and has increased competition in the job market, so critics charge that Chinese companies are disregarding the local workforce and they crowd out the employment. South African trade unions claim that textile and clothing (T&C) imports from China have closed more than 800 companies in their country and left 60,000 workers unemployed (Alden, 2007).

4.2.2 Labor dispute

China's growing activities in Africa have raised controversies in the global society, especially in labor relation. Some Chinese enterprises do not strictly respect on labor and local law in the course of their operations, such as the long hour of work, poor working condition, lack of protective gear, and use casual workers with no contract, which is injurious to the interest of African workers. In addition, the difference in language, culture, religion, and values also lead to a misunderstanding between Chinese employers and local employees. Many media have reported Chinese companies' labor dilemma in Kenya, frequent strikes by workers and trade unions are one of the biggest headaches for Chinese companies. At first, the workers were keen to work overtime for the extra money, however, after several months of long hours with few days off, fatigue began to set in and workers became increasingly dissatisfied, resulting in mass strikes. In an interview, one labor deputy said, " this highlights a difference between Chinese and local expectations and different work ethics. Companies must strike a balance between "labor protection" and "labor productivity". People are not machines."

4.2.3 Environmental degradation

A large volume of FDI is concentrated in natural resource sectors of developing and less developed countries. Most of these countries have a less strict or non-existent regulatory regime. Sometimes countries deliberately attempt to exempt or loosen their regulatory requirements to attract FDI. However, while these countries can benefit from positive effects of investment, the negative effects of FDI on host country's ecosystems and environment might bring disaster in the long run (Gray, 2002).

The environmental laws and standards in most African countries are far below accepted international norms owing to inadequate environmental legislation, slow policy implementation, and insufficient financial and human capacity. Accordingly, some foreign investors including Chinese firms pay little attention to environmental protection, although the investment in Africa is concentrated in mining, oil, timber sectors that generally carry high environmental risks. Someone believes that Chinese operators have no interest in sustainable development, instead, they are interested in making profits. Moreover, since the Chinese government has undertaken a number of measures to curb pollution, Chinese enterprises may relocate their highest polluting facilities to Africa or elsewhere. For instance, the China National Petroleum Corporation (CNPC) is the largest oil producer in South Sudan, but the development of oil fields required seismic surveying and led to hundreds of kilometers of bulldozed tracks, destroying farmland and increasing deforestation, which is obviously bad for the environment.

Chapter 5: Conclusion and recommendations

This paper firstly makes a theoretical analysis of the development process and the current status of China's direct investment in Africa. Secondly, according to the existing literature and the relevant FDI theories, it primarily seeks to investigate the determinants of China's FDI inflows and deducts the positive and negative influences on the host countries.

This chapter summarizes the main contents of the report, draws the final conclusion and proposes suggestions based on the findings.

5.1 Summary

There is certainly no doubt that China has obtained remarkable economic benefit with its Opening Up and Going Global policies. In recent years, under the macro guidance of strengthening overseas investment and other policies support, more and more Chinese enterprises are actively exploiting the international market. Meanwhile, Africa, with its advantages such as cheap labor and abundant natural resources, presents huge opportunities for expanding profits and has become a leading destination for China's outbound investment.

By looking at the data provided in the previous chapters, we can conclude that China's investment in Africa has grown rapidly in the last decade, but it still only takes a small share of China's total outward FDI, lags far behind other continents. In regard to the destination of FDI, the country distribution of Chinese investment is relatively concentrated, the top 10 countries that received the inflows of investment, accounted for more than 75% of the total FDI flows. But contrary to the common stereotypes, China is not only focusing on the places with abundant natural resources but also pays attention to some countries with poor investment climate. For example, in 2017, Angola ranked the first place of China's outward FDI flows into Africa, as everyone knows, this country has been plagued by civil wars for decades. Besides this, the proportion of the secondary and the tertiary industry is gradually increasing, which represents the investment sector is diversified.

Based on these features and correlative literature, we evaluate the potential determinants of Chinese enterprises invest in Africa from the perspective of resource, market and industry structure. African countries have a natural resources endowment, huge labor force, and market potential which showing the positive correlations with attracting foreign investors. Moreover, due to the labor cost are going up in China and anti-dumping cases or other policy limitation, Chinese companies choose to invest in Africa is a way to break the development bottleneck and overcome the survival pressure. The FOCAC political and economic cooperation platform has provided favorable conditions, as well as encourages Chinese entrepreneurs to "go Africa" and provides numerous business opportunities.

The next step was an examination of the effect of China's FDI inflows in Africa. The influx of FDI meet the host countries' urgent need for capital and financial support, for example, China provides low rate loans provided by Export-Import bank of China (EIBC) and China development bank. In addition, by improving the infrastructure, transferring advanced technologies and skills, creating employment opportunities, China's occurrence as an FDI source country in Africa have a positive impact on economic growth, break away from poverty, improve people's lives, optimize the investment environment, and climb up the global value chain. From the further point of view, China, itself also as a developing country, has so much been in common with the African countries, the host countries can learn from China's experience over the 40 years in developing economies and making better use of FDI.

But many questions and concerns have been raised to the "crowding-out" effect of FDI. Because of the gap in technology level and production scale, Chinese products are cheaper and with better quality when comparing it with the products produced by similar enterprises in the host country. Some local enterprises go bankrupt and exit the market, so we could conclude that foreign investments intensify market competition, discourage the entry of domestic enterprises. The situation in the job market is not so good as well, someone argues that China's investment is accompanied by labor service export, worse still, many local workers are unable to compete with the Chinese workers due to the lower level of skills. Moreover, a lot of local workers accused that Chinese enterprises do not respect the contract terms and time for works, which has clearly hurt their legitimate interest. In the end, we mentioned that although various countries have paid more attention to environmental protection in recent years, the effect is still not good due to weak implementation and government corruption. Although some foreign investment projects contribute to the development of the local economy, they could be potentially bad for the environment, such as tannery industries and timber industry.

By investing in Africa, China can acquire abundant natural resources to satisfy its development needs and it could help to solve the excess production capacity. It is pursuing its own self-interests and seeking for long-term development as any other countries do, and the tangible benefits also exist for all stakeholders. In spite of some shortcomings of China's FDI in Africa, the overwhelming majority of the analysis points out a more beneficial outcome for African countries.

5.2 Future recommendations

FDI is an essential tool to help African countries fill domestic investment gaps and heighten local economies. In the same time, the global FDI landscape is becoming increasingly dynamic and competitive, to attract a larger share of FDI and solidify its position on the global investment map requires considerable effort from many stakeholders. (EY attractiveness Africa, 2018)

Recommendation to host countries:

- **Policy and system**

Most countries have weaknesses in taxation and business regulation, land regulation, work and residence permits, industrial and trade licensing, competition policy and foreign exchange control. (UNCTAD report) A sizable proportion of the concerns about Chinese enterprises investing in Africa come from the host countries' inadequate institutional framework and poor enforcement capacity. Therefore, it is imperative that these countries make a greater effort to carry out good institutions and promote political stability, curb corruption, strengthen the regulation and monitoring, in order to build business-friendly environment and attract more foreign investment.

- **Degree of openness**

FDI can be attracted to a country with a more liberalized economic policy. Openness is generally identified as a significant determinant of FDI flows. African countries should deepen their openness to foreign investment. Some restrictions on trade and investment have a negative impact on attracting FDI, such as taxes on international trade, exchange controls, and trade barriers. Policymakers need to complement appropriate macroeconomic and sectorial policies to reducing the cost of trade and also increases the ease of cross border trading activities.

Recommendation to FDI source country:

- **Expend investment in agriculture**

Agriculture remains the dominant sector in Africa, more than 60% of the population living in rural areas. However, its agricultural productivity still remains far from developed world standards, such as the lack of artificial irrigation aid, high-yield seeds, fertilizers, pesticides. So it is particularly significant to develop the agriculture sector and increase grain output, which is also helpful for alleviating starvation and poverty. China is a big agricultural country endowed with rich agricultural resources, has a long history of farming, especially, the policy of reform and opening up brings along a quickened pace in agricultural reform and development. Currently, China ranks first in the world in terms of the production of cereals, cotton, fruit, and etc. It has gained much experience in agricultural production and has advanced agricultural biotechnologies, so we recommend that Chinese investors should make the best of China's comparative advantages and consider investing in these areas.

- **Undertake social responsibility**

Chinese enterprises need to realize that investing in abroad is not only about creating their own economic benefits but also fulfilling social responsibility. Failure to do so will tarnish the image of Chinese companies in the global marketplace and erode the trust of the African government and the general public, actively undertake social responsibilities will maintain long-term growth and prosperity.

Chinese companies should enhance their self-discipline, such as rationally develop and utilize resources, environment protection, abide by local laws and restrictions, consciously resist vicious competition and so on. Under the framework of the China-Africa win-win partnership, working with local people and contribute to the positive development of the African region.

Reference:

1. Asiedu, E. (2006): Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. United Nations University. 63-77
2. Mickiewicz, T., Radosevic, S., Varblane, U. (2000): The Value of Diversity: Foreign Direct Investment and Employment in Central Europe During Economic Recovery.
3. Voss, H. (2011): The determinants of Chinese outward direct investment. Cheltenham, UK: Edward Elgar Publishing Limited.
4. Naudé, W. A. & Krugell, W. F. (2007): Investigating geography and institutions as determinants of foreign direct investment in Africa using panel data. *Applied Economics*, 39, 1223–1233.
5. Anyanwu J.C (2011): Determinants of Foreign Direct Investment Inflows to Africa, 1980-2007; African Development Bank Group Working Paper Series Number 136, September 2011.
6. Breivik A. L (2014): Determinants of Chinese FDI in Africa: An econometric analysis; Bergen; University of Bergen.
7. Brautigam Deborah (2009): The Dragon's Gift: The Real Story of China in Africa. Oxford: Oxford University Press.
8. Liu Hong. & Wang Duanyong (2010): China's Outward FDI of 2008~2009: The Status Quo and Characteristics. International Economics and trade research, 26:12,63-68.
9. Cui Jiayu (2010): The determinants of China's outward FDI. Journal of Business Economics, 9: 12-14
10. ZHANG Xiaofeng (2010): Analysis of the Motives of China's Outward FDI Flow into Africa: A Case Study of North African Countries. Journal of Shanghai Normal University (Philosophy& Social Sciences Edition), 39:5, 97-103
11. Froot KA, Stein JC (1991): Exchange rates and foreign direct investment: an imperfect capital markets approach. Q J Econ 1991;106:1191 – 217 [November].

12. Barrell. R. and Pain. N (1999): Trade restraints and Japanese direct investment flows', European Economic Review, 43, 1, 29-45
13. Kaplinsky, Raphael and Morris, Mike (2009): Chinese FDI in Sub-Saharan Africa: engaging with large dragons. European Journal of Development Research, 21(4), 551-569
14. UNCTAD (2018): World Investment Report. Investment and New industrial policies.
15. Ernst & Young's (EY) (2018): Truing tides. EY Attractiveness Program-Africa.
16. UN-HABITAT (2018): The State of African Cities. The geography of African investment.
17. British Petroleum(BP) (2018): BP Statistical Review of World Energy, 67th edition.
18. Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, State Administration of Foreign Exchange (2018): 2017 Statistical Bulletin of China's Outward Foreign Direct Investment.
19. Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, State Administration of Foreign Exchange (2013): 2012 Statistical Bulletin of China's Outward Foreign Direct Investment.
20. Ministry of Commerce of the People's Republic of China (2018): Report on Development of China's Outward Investment.
21. Ma Lingyuan (2008): The Effects of FDI on International Trade: the Evidence from China. Journal of Zhongnan University of Economics and Law, 170:5, 37-42.
22. Weisbrod, A. and Whalley, J. (2011). The Contribution of Chinese Fdi to Africa's Pre Crisis Growth Surge. NBER Working Paper Series, Working Paper 17544.
23. Boakye-Gyasi, K. and Li, Yao (2015). The Impact of Chinese FDI On Employment Generation In The Building And Construction Sector of Ghana. Eurasian Journal of Social Sciences, 3(2), 1-15
24. De Lorenzo, M. (2007). African Perspective on China. American

Enterprise Institute for Public Policy Research, Wed. October 3, 2007.

25. Anshan, L. (2007): China and Africa: Policy and Challenges. China Security, 3(3), 69-93.
26. Steven Kuo (2015): China's Investment in Africa- The African Perspective.https://www.forbes.com/sites/riskmap/2015/07/08/chinas-investment-in-africa-the-african-perspective/#4fecc634459e

Appendices:

Annex Table 1 China's outward FDI flows by country and region, 2009-2017

(millions of USD)

Country/Region	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	**56,528.99**	**68,811.31**	**74,654.04**	**87,803.53**	**107,843.71**	**123,119.86**	**145,667.15**	**196,149.43**	**158,288.30**
Africa	**1,438.87**	**2,111.99**	**3,173.14**	**2,516.66**	**3,370.64**	**3,201.93**	**2,977.92**	**2,398.73**	**4,105.00**
Algeria	228.76	186.00	114.34	245.88	191.30	665.71	210.57	-99.89	-140.53
Angola	8.31	101.11	72.72	392.08	224.05	-448.57	57.74	164.49	637.55
Benin	0.09	1.76	0.75	5.06	8.44	7.44	14.76	9.97	1.33
Botswana	18.44	43.85	21.86	21.10	10.19	52.95	86.08	106.20	-22.20
Burkina Faso	--	--	--	--	4.34	4.45	--	0.20	--
Burundi	0.69	--	--	1.50	1.09	3.45	2.06	2.39	-0.58
Cameroon	0.82	14.88	1.87	17.65	57.20	29.74	24.67	114.23	87.99
Cape Verde	--	-0.46	--	--	0.13	0.10	--	0.05	--
Central African	--	25.81	2.48	--	1.30	182.24	0.30	0.40	0.42
Chad	51.21	2.13	-12.48	80.68	120.95	83.12	-17.12	-62.26	-23.05
Comoros	--	-0.01	--	0.50	--	--	--	--	--
Congo	28.07	34.38	6.81	98.80	109.94	238.60	150.08	49.13	284.17
Congo,DR	227.16	236.19	75.18	344.17	121.27	157.56	213.71	-78.92	340.24
Cote d'Ivoire	1.51	-5.02	0.87	3.61	-4.79	24.26	60.24	56.53	112.69
Djibouti	3.40	4.23	5.66	--	2.00	9.53	20.33	62.24	104.64
Egypt	133.86	51.65	66.45	119.41	23.22	162.87	80.81	119.83	92.76
Equatorial Guinea	20.88	22.08	12.47	138.84	22.41	33.13	-13.04	-24.91	71.11
Eritrea	0.23	2.94	3.30	1.96	0.90	1.29	9.91	68.42	-0.13
Ethiopia	74.29	58.53	72.30	121.56	102.46	119.59	175.29	282.14	181.08
Gabon	11.88	23.44	1.93	30.69	32.10	25.56	48.79	32.43	55.42
Gambia	--	--	--	--	--	0.05	--	2.28	2.32
Ghana	49.35	55.98	40.07	208.49	122.51	72.90	283.22	490.61	44.20
Guinea	26.98	9.74	24.55	64.44	100.13	67.70	-25.72	36.67	6.23
Guinea-Bissau	--	--	--	--	--	1.72	2.24	0.61	286.56
Kenya	28.12	101.22	68.17	78.73	230.54	278.39	281.81	29.67	410.10
Lesotho	0.10	0.56	0.03	0.21	--	0.46	0.08	--	--
Liberia	1.12	29.89	21.09	12.00	30.34	40.11	98.18	11.14	39.82
Libyan Arab Jamahiriya	-38.55	-10.50	47.88	-6.68	0.45	0.13	-41.06	-17.05	-176.40
Madagascar	42.56	33.58	23.10	8.43	15.51	36.76	33.84	-6.55	71.20
Malawi	--	9.86	1.20	10.33	8.25	3.40	0.05	2.40	43.07
Mali	7.99	3.05	47.58	44.42	108.01	23.39	-34.01	12.95	14.34
Mauritania	6.53	5.77	19.69	30.87	15.27	-7.33	2.16	108.79	38.07
Mauritius	14.12	22.01	419.46	57.83	61.07	49.43	154.77	72.33	33.27
Morocco	16.42	1.75	9.11	1.05	7.74	11.44	26.03	10.16	59.86
Mozambique	15.85	0.28	20.26	230.52	131.89	102.51	68.43	44.25	117.47
Namibia	11.62	5.51	5.04	25.12	7.05	8.02	17.85	21.68	20.09
Niger	39.87	196.25	51.63	-195.94	116.54	-44.61	23.69	-23.56	50.84
Nigeria	171.86	184.89	197.42	333.05	209.13	199.77	50.58	108.50	137.95
Republic of South Sudan	--	--	0.05	7.80	11.49	-6.82	13.08	2.03	12.21
Rwanda	8.62	12.72	9.69	5.02	-5.94	14.94	4.06	-9.19	9.88
Sao Tome and Principe	--	0.02	--	0.07	--	--	--	--	--
Senegal	11.04	18.96	0.19	4.47	10.44	7.06	-7.94	19.85	65.41
Seychelles	0.36	12.28	4.34	53.40	17.69	7.56	49.58	50.41	27.05
Sierra Leone	0.90	--	10.75	7.69	40.03	4.92	8.07	-1.80	16.27
South Africa	41.59	411.17	-14.17	-814.91	-89.19	42.09	233.17	843.22	317.36
Sudan	19.30	30.96	911.86	-1.69	140.91	174.07	31.71	-689.94	254.87
Tanzania	21.58	25.72	53.12	119.70	150.64	166.61	226.32	94.57	132.46
Togo	8.91	11.77	9.04	20.59	23.59	6.99	-1.73	2.38	11.43
Tunisia	-1.30	-0.29	3.76	-0.65	7.06	0.71	5.64	-3.22	-0.82
Uganda	1.29	26.50	9.91	9.79	60.60	60.50	205.34	121.51	79.04
Zambia	111.80	75.05	291.78	291.55	292.86	424.85	96.55	218.41	305.80
Zimbabwe	11.24	33.80	440.03	287.47	517.53	101.18	46.75	42.95	-107.88

Annex Table 2 China's outward FDI Stock by country and region, 2009-2017

(millions of USD)

Country/Region	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	**245,755.38**	**317,210.59**	**424,780.67**	**531,940.58**	**660,478.40**	**882,642.42**	**1,097,864.59**	**1,357,390.45**	**1,809,036.52**
Africa	**9,332.27**	**13,042.12**	**16,244.32**	**21,729.71**	**26,185.77**	**32,350.06**	**34,694.40**	**39,877.47**	**43,296.50**
Algeria*	751.26	937.26	1,059.45	1,305.33	1,497.21	2,451.57	2,531.55	2,552.48	1,833.66
Angola	195.54	351.77	400.59	1,245.10	1,634.74	1,214.04	1,268.29	1,633.21	2,260.16
Benin	54.01	39.33	40.03	47.60	49.91	69.17	87.31	102.51	104.37
Botswana*	119.25	178.52	200.38	220.15	230.90	262.13	321.08	437.50	296.87
Burkina Faso	--	--	--	--	4.34	8.78	--	0.20	0.20
Burundi	4.64	6.51	7.20	8.70	9.79	13.24	12.37	12.42	10.29
Cameroon	25.05	59.61	61.54	79.50	148.40	177.84	207.34	366.74	424.36
Cape Verde	5.04	4.58	4.58	11.60	15.23	15.18	15.18	15.23	14.63
Central African*	16.71	46.54	51.02	51.02	60.38	57.08	46.22	35.61	16.12
Chad	76.57	80.00	108.12	194.12	321.26	404.61	422.72	396.64	412.25
Comoros	4.05	4.04	4.04	4.54	4.54	4.54	4.53	4.53	4.53
Congo	115.17	135.88	142.40	504.90	695.43	988.76	1,088.67	782.91	1,126.06
Congo,DR	397.43	630.92	709.26	970.49	1,091.76	2,168.67	3,239.35	3,514.98	3,884.11
Cote d'Ivoire	37.65	32.99	34.67	40.04	35.00	64.29	126.78	179.66	303.68
Djibouti	7.03	12.47	18.13	17.99	30.55	40.08	60.46	125.40	232.86
Egypt*	285.07	336.72	403.17	459.19	511.13	657.11	663.15	888.91	834.84
Equatorial Guinea	61.50	86.25	98.68	404.64	260.85	208.20	231.63	236.59	395.97
Eritrea*	9.60	12.54	14.31	103.78	104.55	106.71	119.41	378.45	216.55
Ethiopia*	283.44	368.06	426.79	606.55	771.84	914.62	1,130.13	2,000.65	1,975.56
Gabon	100.05	125.34	127.10	128.47	168.48	180.41	244.42	256.83	385.35
Gambia	1.19	1.19	1.19	1.19	1.19	1.24	1.24	3.84	5.36
Ghana*	185.04	202.00	270.15	505.27	834.84	1,056.69	1,274.49	1,958.27	1,575.36
Guinea	129.32	136.41	168.43	234.67	338.58	419.07	382.72	417.74	76.39
Guinea-Bissau	27.00	27.00	27.00	27.00	27.00	66.82	69.06	70.16	675.45
Kenya	120.36	221.58	308.83	402.73	635.90	853.71	1,099.04	1,102.70	1,543.45
Lesotho	8.32	8.88	8.91	9.13	9.13	11.07	11.15	6.63	6.53
Liberia	56.39	81.67	114.74	154.37	196.10	229.65	288.99	297.30	319.63
Libyan	42.69	32.19	67.78	65.19	108.82	108.94	105.77	211.12	366.75
Madagascar*	196.22	229.87	253.63	274.55	286.10	352.61	347.70	297.63	766.30
Mali	44.72	47.77	160.06	211.43	316.67	342.86	307.33	320.01	394.86
Mauritania	31.29	45.88	74.71	106.15	108.28	100.95	105.83	193.36	235.85
Mauritius*	242.84	283.29	605.94	700.80	849.59	579.71	1,096.58	1,176.20	960.87
Morocco	48.78	55.85	89.48	95.22	102.96	114.44	156.29	162.70	318.21
Mozambique	74.96	75.24	98.07	336.91	508.09	653.86	724.52	782.26	872.91
Namibia	46.18	47.11	60.21	94.53	349.45	981.84	380.44	453.57	480.47
Niger	184.20	379.36	429.57	125.33	241.87	198.08	565.44	525.30	665.65
Nigeria	1,025.96	1,210.85	1,415.61	1,949.87	2,146.07	2,323.01	2,376.76	2,541.68	2,861.53
Republic of South Sudan	--	--	0.05	10.90	26.47	19.26	35.98	37.03	47.68
Rwanda	28.80	41.63	58.52	63.54	73.33	110.72	123.57	89.36	99.25
Sao Tome and Principe	--	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38
Senegal	26.07	45.03	45.20	102.22	83.25	130.01	126.02	149.59	214.30
Seychelles*	7.00	19.36	23.80	77.19	103.47	114.40	160.11	246.65	231.27
Sierra Leone*	51.23	41.48	52.23	57.71	108.36	147.74	196.30	188.82	184.22
South Africa*	2,306.86	4,152.98	4,059.73	4,775.07	4,400.40	5,954.02	4,722.97	6,500.84	7,472.77
Sudan	563.89	613.36	1,525.64	1,236.60	1,507.04	1,747.12	1,809.36	1,104.34	1,201.56
Tanzania	281.79	307.51	407.07	540.80	716.46	885.18	1,138.87	1,191.99	1,280.30
Togo*	33.02	58.11	67.15	98.38	123.09	135.81	128.82	118.57	112.85
Tunisia*	2.27	2.53	6.29	5.69	13.86	14.56	20.84	16.30	15.08
Uganda*	58.56	113.68	126.21	141.10	383.76	464.10	722.15	1,006.47	575.94
Zambia	843.97	943.73	1,199.84	1,998.11	2,164.32	2,271.99	2,338.02	2,687.16	2,963.44
Zimbabwe	99.75	134.54	576.44	874.67	1,520.83	1,695.58	1,798.92	1,839.00	1,748.34