# Key Determinants of China's Outward FDI to Africa

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## Abstract

China's FDI in Africa is closely linked to trade and development assistance. Thus, it is an appropriate time to untangle key factors that determine the China's investment to Africa. FDI has increased over the past decade in tandem with increased Sino-African trade, although China's FDI to Africa remains marginal in terms of China's total outward FDI flows According to the Chinese Ministry of Commerce, China's FDI in Africa has increased by 46% per year over the last decade. During the first half of 2009, Chinese FDI flows into Africa increased by 81% compared to the same period in 2008, reaching over US\$0.5 billion. However, it is difficult to be certain about the level of China's FDI outflows, as estimates from different sources vary widely and Chinese investments are often channeled through off-shore entities registered in places such as Hong Kong, Cayman Island and others. China has served as a development model for Africa and an alternative source of trade and finance from Africa's traditional development partners. Undeniably, the impact of China on African economies has been diverse, depending in part on the sectorial composition of each country's production. Overall, China's increased engagement with Africa could generate important gains for African economies. The aim of this paper is to analyze the various key determinants of China's outward FDI for a sample of selected African economies and a panel data analysis has been used in the study. The time frame for analysis is a 7-year period, 2005-2011 and 43 African countries are involved in this study, based on data availability. The Hausman test specification, recommended the use of fixed effects model. An empirical analysis reveals that China's outward FDI to Africa responds positively to openness, resource seeking and market opportunities ties. For example, China's OFDI tends to go to countries with a good market size as measured by host country GDP and GDP growth, China's export to a host country and export of goods and services percentage of host country GDP. Their per capita GDP had no impact on FDI flows. Surprisingly, the political stability and absence of violence/terrorism factors are found to "have no tie" with Chinese outward foreign direct investment.

Keywords: African host countries, China, Outward FDI, Key determinants

## 1. Introduction

The African continent is historically underinvested and underserved by international investors. "Chinese capital offers a valuable alternative source of financing to develop the African economy. Arguably, China has played a positive role in improving infrastructures, increasing productivity, boosting exports, and raising the living standards of millions of Africans"<sup>3</sup>. Sometimes China is credited for diversifying economic activity and creating jobs in manufacturing, mining, processing, trade and construction. Although China's activities in Africa have received attention from policy makers and academicians.

With its ballooning trade surplus and stockpile of international reserves, China is emerging as a global capital provider. China does not only provide capital to the industrialized world via, say, its US\$844 billion investment in the US treasury bills as of June 2010<sup>4</sup>, it is also a major investor in the developing world; particularly in areas including Africa that are traditionally considered to be risky and not usually favored by western investors.

Chinese investment in Africa has become a salient issue in the political economy discourse. China's engagement on the continent has triggered concerns which have mainly been raised by China's main competitor on the continent - the United States. Like the U.S., China seeks Africa's natural resources but it does not need – or want - to hide behind the veil of the promotion of human rights and democracy. China trades with Africa without any conditions; this approach stands at the core of 'Chinafrique'<sup>5</sup>. Also the European Union is getting skeptical, and it

<sup>4</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Yin-Wong Cheung, Jakob de Haan, Xingwang Qian, and Shu Yu "China's Outward Direct Investment in Africa" Review of International Economics, 20(2), 201–220, 2012 DOI:10.1111/j.1467-9396.2012.01017.x

<sup>&</sup>lt;sup>5</sup> Shakembo Kamanga Clémentine, Ambassador of the Democratic Republic of Congo to Germany,

criticizes China for using 'development assistance' as a means allowing it to penetrate Africa with its FDI and economic interests.<sup>6</sup>

Generally speaking, Chinese outward investment in Africa involves various business areas including trade, turnkey projects, resources exploration and extraction, processing, manufacturing, transport and communications, finance and, consultation and hotels, etc.<sup>7</sup> The investment map below (Figure 1) highlights the China's investment offers in Africa since 2010, Data on the sectorial distribution of the outward investment in Africa is not readily available hence not included in this study. Thus, it is beyond the scope of this study to make any meaningful analysis of the trends and patterns of outward FDI since 2005

The geographical composition of China's global investments has evolved over time. China's investments in Africa have gone up quite substantially both in absolute terms and as a share of its total outward FDI with the increase in 2005 and decline in the mid-2007 and 2008 before picking up again (figure 2). Probably the decline was due to the global financial crisis, which affected not only China's investments abroad but also other giant countries economy in the world. To emphasize how serious Chinese investments are special to Africa, China also plan to establish five special economic zones-SEZs in Africa, zones where the Chinese government will create the enabling environment into which Chinese companies can follow (figure 3)

In fact, Africa has become the third largest recipient of China's ODI in recent years (Besada et al., 2008) How much has China invested in Africa? "According to the 2013 China's Ministry of Commerce, "China's investment in Africa has increased a staggering 30-fold since 2005 (Figure 3), with 2,000 Chinese firms now present in 50 African countries". More precise numbers that from MOFCOM state that 2372 investments have gone through the required approvals for Africa, as of March 2013. Some firms have multiple projects. On the other hand, it probably does not include a number of small enterprises that fly under the radar including all the Chinese shops<sup>8</sup>. Probably, the true number of "firms" might be undoubtedly higher.

Indeed, the 2007 United Nations report (UNCTAD, 2007) pointed out that China is one of the major capital providers for developing countries including Africa. Between 2005 and 2011, China's OFDI flow to Africa rose almost 8 times, US\$0.39 billion to US\$ 3.2 billion<sup>9</sup> (table 1)

The GrowingProminence of China on the World Stage: Exploring Political, Economic and Cultural Relations of China and Global Stakeholders, presentation held on 18<sup>th</sup> September 2011 in Berlin

<sup>&</sup>lt;sup>6</sup> Dragsbaek Schmidt Johannes, China's Soft Diplomacy in an Emerging Multipolar World,

lecture held on 18<sup>th</sup> September 2011 in Berlin

<sup>&</sup>lt;sup>7</sup> Cai, Kevin G. 1999. Outward foreign direct investment: A novel dimension of China's integration into the regional and global economy. China Quarterly 160:856–80

<sup>&</sup>lt;sup>8</sup> Many scholars have long criticized that the Chinese data on foreign direct investment (FDI) to Africa does not reflect the reality, I also find this as the two sources from figure 2 and figure 3 highlights different China's OFDI on the same year, although the official data is openly published (unlike aid, which remains very secretive). And, since 2002, the Chinese Ministry of Commerce has reported outward FDI using the standard OECD/IMF definitions of FDI. Yet because of exchange controls, and because so much FDI goes through tax havens (like Hong Kong, the British Virgin Islands, and the Cayman Islands) it is nearly impossible to track the ultimate destination. And the leap from \$392 million to \$2520 million in figure 3 is not "a staggering 30 fold" increase, but a factor of 6 -Calculated using data from "MOFCOM" (2005-2011)

<sup>&</sup>lt;sup>9</sup>: Calculated using data from "MOFCOM" (2005-2011)



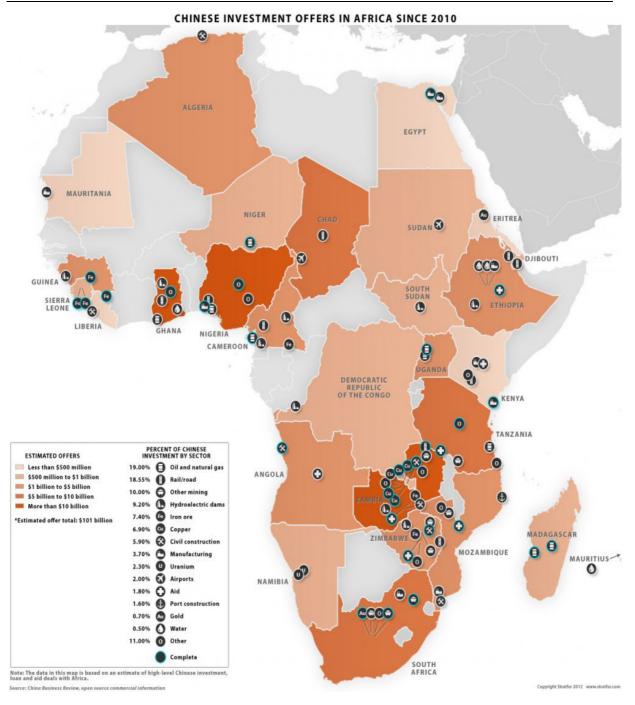
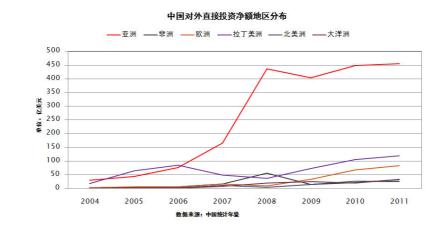
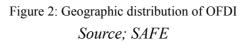


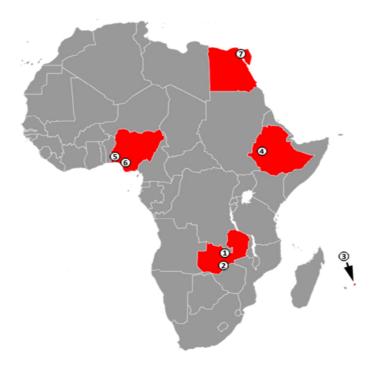
Figure 1: Chinese Investment offer in Africa since 2010

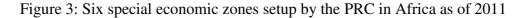
Source: China Business Review, Open Source Commercial Information

Figure 2: China Geographic distribution of OFDI globally.









Source; http://en.wikipedia.org/wiki/File:Chinese Industrial Zones in Africa 2011.png

1: Chambishi, Zambia - copper and copper related industries.

2: Lusaka, Zambia - garments, food, appliances, tobacco and electronics. Is classified as a subzone of the Chambishi zone. Completed in 2009.

3: Jinfei, Mauritius - manufacturing (textiles, garments, machinery, high-tech), trade, tourism and finance.

4: Oriental, Ethiopia - electrical machinery, construction materials, steel and metallurgy.

5: Ogun, Nigeria, - construction materials, ceramics, ironware, furniture, wood processing, medicine, and computers.

6: Lekki, Nigeria - transportation equipment, textiles, home appliances, telecommunications, and light

#### industry.

7: Suez, Egypt - petroleum equipment, electrical appliance, textile and automobile manufacturers. Table 1: China's OFDI Flows to Africa (US\$ million)

Year	2005	2006	2007	2008	2009	2010	2011	2012
Amount	392	520	1574	5491	1439	2112	3173	2520

Source: MOFCOM.

However, the substantial increase of China's ODI in Africa in the last few years has led to some debate. While some commentators laud China's growing engagement in Africa; others question the motives underlying these investment activities and their implications for Africa's political and economic development. For instance, worries have been raised that Chinese investment could crowd out the African manufacturing industry, causing unemployment<sup>10</sup>. Such a hollowing effect could adversely affect Africa's medium and long term development prospects and its ability to service debts (Brookes, 2007; Kaplinsky and Morris, 2008). The number of high-quality jobs created by Chinese investment is perceived to be quite limited since Chinese firms tend to bring along their own workers (Adisu et al., 2010; Trofimov, 2007). Some other concerns include the possible negative impact of China's OFDI on the environment, governance, and political reforms in Africa (Brookes, 2007; Wang, 2007). Some African sectors suffer from reduced production and employment owing to competition from China, both domestically and in third markets. Ademola (et al. 2009) cites several examples of countries with industries that are threatened by Chinese imports, leading to numerous factory closings<sup>11</sup>.

Moreover, there are distributional impacts within African economies: consumers have greater access to laborintensive goods, firms may enjoy lower input costs, while some firms will see demand for their production decline. The impact on poverty may also be mixed: the poor may benefit from increased access to low-cost consumer goods, although with the exception of Uganda, Ghana, Tanzania and Ethiopia, basic consumer products imported from China account for less than 10% of total imports. Poor agricultural laborers working in the production of tradable commodities could see a rise in wages and/or employment, while poor urban workers producing consumer goods may see a decline. Yet, the benefits and motives that China's OFDI brings to Africa may be enormous (International Monetary Fund, 2010; UNECA, 2010; UNCTAD, 2010b) publications (Broadman, 2007; Goldstein et al., 2006; Li, 2007; Wang, 2007),

China's investments to Africa are highly welcomed and supported by African leaders who earn legitimacy through Chinese partnerships. They work together with the Chinese to provide Africa with key structural infrastructure include roads, railways, ports, hydroelectric dams, and refineries fundamentals which will help Africa avoid the "resource curse". Success in this endeavor means avoiding the exploitation of their natural wealth and the beginning of fundamental social and economic transformations on the continent.<sup>12</sup>

For the purpose of the theoretical justifications and to answer the key research question of this study; *what key determinants drive Chinese OFDI to Africa*? The hypothesis of key determinants of Chinese OFDI to Africa are grouped under market seeking, resource seeking, macroeconomic conditions, political risk, transaction costs and spatial costs. Most of the variables on this study are adopted from the work of Buckley.P.J, et al (2007).

There are few formal econometric analyses of determinants that drive China's OFDI to Africa which highlights in depth focusing on Africa continent as one economic unit. Most of previous studies tends to treat regional economics like ECOWAS, SSA, North Africa, African-Arabic countries, countries riches in natural resources and special economy like Egypt and South Africa, the later it share some special economic characteristics as it

<sup>&</sup>lt;sup>10</sup>A study on the crowding-out effect of Chinese exports highlights the link between rising Chinese textile exports and declining African exports (Giovannetti and Sanfilippo, 2009). On the whole, in the sectors where China and Africa compete, increased Chinese exports translate into reduced African production.

<sup>&</sup>lt;sup>11</sup> For example, in the textile industry, South Africa apparently lost between 23 000 and 85 000 jobs. Ghana also had to close down businesses. Furthermore, competition in this sector accounts for declining trade between African countries, with nations such as South Africa, Cameroon, Kenya and Madagascar losing market share in neighboring countries due to the penetration of Chinese apparel. For some countries, the effects of China trade are mixed. For example, Benin, Burkina Faso and Mali, which are cotton exporters, have gained from the rising price of this commodity, but have seen higher prices on their oil imports (Zafar, 2007).

<sup>&</sup>lt;sup>12</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_ref-MRE.2C\_p0-3\_6

belongs to BRICS<sup>13</sup>. Again, some studies fail to drive hypothesis based on Africa economic environments which might differ with other developing and developed economies. In this study, I bridge the gap by investing the key determinants propelling the China's OFDI to Africa and some light is shed on their implications. A set of China's ODI data approved by Chinese authorities (SAFE) are considered. The officially approved host country-specific ODI data are only available from 43 African countries and covers 2005 to 2011.

However, for analytical purposes it would be more objective to move away from Africa as a monolithic picture, as opposed to a complex mosaic which the continent is. From large middle income countries, to frontier markets, fragile states, small island states, landlocked ones, natural resource rich, I could go on. This kind of taxonomy is what would, I believe this paper provides an insight of this economic monolithic picture and will help to shape a more econometric assessment of factors underlying China's OFDI in general of the selected African countries including all the five regions of Africa as a whole under the period of study.

The remainder of the paper is organized as follows. Chapter 2 briefly describes literature review, the evolution of China–Africa relations and hypotheses. Chapter 3 presents the model, data and methodology, empirical findings and discussions, while chapter 4 offers some concluding remarks and policy recommendations.

# 2. Literature review

Despite the increasing interest in China's ODI behavior, there are only a few formal econometric analyses including Cheng and Ma (2009), Cheung and Qian (2009b), Kolstad and Wiig (2012), UNCTAD (2007), and Wang and Bio-Tchané (2008). These studies examined China's ODI in general and do not focus on its involvement in Africa. The paucity of quality Chinese ODI data is perhaps a major hurdle for formal econometric analyses.

Much of the research on the determinants of investment is based on the neoclassical theory of optimal capital accumulation pioneered by Jorgenson (1963, 1971). In this framework, a firm's desired capital stock is determined by factor prices and technology, assuming profit maximization, perfect competition and neoclassical production functions. This theory was a deliberate alternative to views expressed initially by Keynes (1936) and Kalecki (1937) that fixed capital investment depends on firms' expectations of demand relative to existing capacity and on their ability to generate investment funds (Fazzari and Athey, 1987:481; Fazzari and Mott, 1986:171).

Jenkins and Thomas (2002) pointed out that; the indicators which have been found most frequently to be correlated with increased FDI in Africa in cross-country empirical analyses are: economic openness, especially to international trade; the quality of institutions and physical infrastructure in the host economy; and economic growth and stability. Investor surveys in Africa have tended to emphasize economic instability and institutional weaknesses as the main barriers to increased levels of FDI.

Yin-Wong et al (2012) studied China's Outward Direct Investment in Africa, they examined the empirical determinants of China's outward direct investment (ODI) in using an officially approved ODI data set and a relatively new IMF format ODI data set. China's ODI is found responding to the canonical economic determinants that include the market seeking motive, the risk factor, and the resources seeking motive. It is also affected by the intensity of trade ties and the presence of China's contracted projects. A host country's natural resources have an impact on China's decision on how much to invest in a country rather than on whether to invest in a country or not.in their study, they conclude that; China's drive for natural resources is mainly a recent phenomenon and probably became prominent after the "Going Global" policy adopted in 2002.

Asiedu (2002) on her work explored whether factors that affect Foreign Direct Investment (FDI) in developing countries affect countries in sub-Saharan Africa (SSA) differently. The results indicated that: (a) a higher return on investment and better infrastructure have a positive impact on FDI to non-SSA countries, but have no significant impact on FDI to SSA; (b) openness to trade promotes FDI to SSA and non-SSA countries; however, the marginal benefit from increased openness is less for SSA. These results imply that Africa is different suggesting that policies that have been successful in other regions may not be equally successful in Africa.

Osakwe and Dupasquier (2006) stressed the need for more trade and investment relations between Africa and Asia, they examined the performance, promotion, and prospects for foreign direct investment (FDI) in Africa.

<sup>&</sup>lt;sup>13</sup> BRICS is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa which are all developing or newly industrialized countries, but they are distinguished by their large, fast-growing economies and significant influence on regional and global affairs The grouping was originally known as "BRIC" before the inclusion of South Africa in 2010. The BRICS members all five are G-20 members.

Factors such as political and macroeconomic instability, low growth, weak infrastructure, poor governance, inhospitable regulatory environments, and ill-conceived investment promotion strategies, are identified as responsible for the poor FDI record of the region. Consequently, argues that concerted efforts are needed at the national, regional, and international levels in order to attract significant investment flows to Africa and improve the prospects for sustained growth and development.

Onyeiwu and Shrestha (2004) argues that despite economic and institutional reform in Africa during the past decade, the flow of Foreign Direct Investment (FDI) to the region continues to be disappointing and uneven. In their study they use the fixed and random effects models to explore whether the stylized determinants of FDI affect FDI flows to Africa in conventional ways. Based on a panel dataset for 29 African countries over the period 1975 to 1999, their paper identifies the following factors as significant for FDI flows to Africa: economic growth, inflation, openness of the economy, international reserves, and natural resource availability. Contrary to conventional wisdom, political rights and infrastructures were found to be unimportant for FDI flows to Africa. The significance of a variable for FDI flows to Africa was found to be dependent on whether country and time specific effects are fixed or stochastic

Schneider and Frey (1985), Edwards (1990), Loree and Guisinger (1995), Hanson (1996), Jaspersen et al. (2000) and Aseidu (2002) studied the role of political instability following the works from In fact political stability, especially for the case of African states, they found that political risk is a significant factor in the location decision of Multinational Corporations (MNCs). Political instability and the frequent occurrences of disorder 'create an unfavorable business climate which seriously erodes the risk-averse foreign investors' confidence in the local investment climate and thereby repels FDI away

Nakamura and Oyama (1998) studied the macroeconomic determinants of FDI from Japan and the United States into East Asian countries, and the linkage between FDI and trade, and other macroeconomic variables. This paper did not focus on African countries but I find it is a good paper to adopt and follow for my current study as it has similarities on model and methodology with other paper focusing on Africa. The analysis of Nakamura and Oyama focuses on the structural differences among East Asian counties and classifies them based on statistical tests of fixed effects models using panel data. This examination helps to clarify how Japanese and American multinational firms position their production bases in East Asian countries within their world marketing strategies. In order to avoid the problem of simultaneity among variables, they examine simultaneous equation models to confirm the validity of panel regression results. In their study they find that East Asian countries can be classified into four groups depending on FDI from Japan and other elasticity's to macroeconomic variables, and this grouping almost coincides with their economic development stages. Moreover, they confirm that FDI from Japan into all the groups are strongly affected by changes in real bilateral exchange rates, but this is not always the case for FDI from the United States. Among different country groups, FDI into group 1 (Taiwan and Korea) responds positively to the Japanese capacity utilization, indicating their industries' integration with the Japanese economy. Group 3 (Indonesia and the Philippines) shows that Japanese FDI is buoyed up by the yen's appreciation against the U.S. dollar. FDI into group 4 (China and Malaysia) and, to a lesser extent, group 2 (Singapore and Thailand) is oriented more toward capturing local markets compared to the other groups. They also find that Japanese FDI has strong trade expansion effects, which is rarely seen for U.S. FDI.

Jenkins and Thomas (2002) on their paper FDI in Southern Africa, characteristics and implications for economic growth and poverty alleviation pointed that the Multinational enterprises FDI decisions may base FDI decisions on one or more of the following factors: a secure and cheaper source of regularly required inputs; the desire to defend or expand markets or service existing clients in a particular foreign region; the wish to rationalize production into a network of the most efficient production bases supplying the largest possible worldwide market; and other strategic considerations with respect to the firm's international position. These findings can be summarized as providing two distinct motives for FDI: market access and production costs. The former derives from the gain of being close to consumers, and tends to be associated with distribution outlets and/or production purely for the local market. The second arises from the benefits of being able to base production in low-cost locations, and tends to be correlated with export orientation. Although these determinants apply generally to multinational investment, there are features particularly important to Africa which should be taken into account.

## 2.1 China-Africa Economic Relationship

The China Africa relation came to the fore in 2006 when 48 African leaders attended a joint forum in Beijing, but the history of mutual links is markedly older than that. Since the start of the new millennium, China has supplemented development assistance with trade and investment which should, nevertheless, please the

proponents of 'trade not aid'<sup>14</sup>.

Both China and Africa proclaim a new, mutually beneficial economic, political, and regional Alliance. There are traces of Chinese activity in Africa dating back as far back in the early dynasties (700AD to 1800) as the Tang Dynasty, the Song Dynasty, the Yuan Dynasties and the Ming Dynasty under Zheng He and his fleet of more than 300 ships made seven separate voyages to areas around the Indian Ocean, and landed on the coast of Eastern Africa.<sup>15</sup> Zhu Siben from Yuan Dynasty traveled along Africa's western coasts, drawing a more precise map of Africa's triangular shape. Chinese porcelain has been found along the coasts of Egypt in North Africa. Chinese coins, dated 9th century,<sup>16</sup> have been discovered in Kenya, Zanzibar, and Somalia. The modern Chinese version is that the European mercantilism in the Age of Discovery aggressively ended Sino-African relations.<sup>1718</sup> This point of view enforces the rhetoric of the blood brother relations of China and Africa.

A new era of Chinese trade began in the industrial era (1800-1949). European colonization of Africa and the abolition of slavery in France caused major workforce shortages in European colonies. Europe looked for a way to fill the gap with low-cost workers from abroad, namely India and China. Beginning in the 1880s, tens of thousands of Chinese Coolies were sent overseas to work in the mines, railroads, and plantations of the colonial powers.<sup>19</sup> The exploitation of inland resources, such as copper mines, also led to the presence of relatively large, isolated Chinese populations in landlocked countries such Zambia<sup>20</sup>. Jean Ping, the minister of Foreign Affairs of Gabon and became a successful businessman in Gabon, he once presided the UN Assembly, was born from an African mother and a Chinese father in Gabon, a country where almost no Chinese were present.<sup>21</sup>

After the formation of the People's Republic of China following the Communist party victory in 1949, some Chinese fled, eventually landing in Africa.<sup>22</sup> By the 1950s, Chinese communities in excess of 100,000 existed in South Africa, Madagascar, and Mauritius.<sup>23</sup>.The newly formed People's Republic of China actively began supporting the decolonization movements in Africa and the Pacific. This era is especially important in the "Sino-African friendship" movement and the diplomatic opening between the two parts as both the PRC and many of the decolonized African nations shared a "victim background", the perception that they were both taken advantage of by imperialistic nations such as Japan and European states.<sup>24</sup> At the 1955 *Bandung conference*, China showed an interest in becoming the leader of the "third world". Zhou Enlai made an extensive African tour between 1963 and 1964, to strengthen Sino-African friendship. Hundreds of Chinese medics were sent to Africa and infrastructural projects were planned. The iconic 1860 km Tanzania and Zambia railroad (TAZARA), built by 50.000 Chinese workers, was completed in 1976.

As China awakened from its decades-old period of semi-isolation, the country was boosted by internal reforms, growing Taiwanese and foreign investments, and the dramatic expansion of its workforce. China once more turned toward Africa, now looking to the continent both a source of key resources and as a market for its low-cost consumer goods, this period emerges from 1980s to the present.

China's recent investment in Africa is generally perceived to follow the state-driven strategy of giving infrastructure and taking natural resources. Foster et al. (2008), for example, listed some Chinese-financed infrastructure projects in Africa that were paid for by natural resources between 2001 and 2007. Nonetheless, it is worth noting that China's infrastructure assistance is nothing new. Even in the 1970s, infrastructure building was a common form of assistance China offered to Africa.

The China Africa economic tie has experienced a "great leap forward" after the first Tri-annual Forum on China-Africa Cooperation (FOCAC) a Ministerial Conference that was held in Beijing, China, in 2000; see the Forum

<sup>&</sup>lt;sup>14</sup> Economic development is a very complicated and cross-disciplinary problem that should not be constrained to trade. Nonetheless the fact that China has been offering "no-strings" aid policy (in form of trade) can be dangerous for it hinders institutional change and indirectly leads to the support of totalitarian regimes. Moreover, China has naturally never stopped non-trade influence in Africa, which can be clearly demonstrated by the number of Confucius Institutes there. By 2009, the Chinese have established 20 institutes and three classrooms. Many of them are situated in the countries where China has had investment interests, such as Nigeria, South Africa, or Sudan (Confucius Institute Online 2012).

<sup>&</sup>lt;sup>15</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-LCA.2C\_p105-109-8

<sup>&</sup>lt;sup>16</sup>ibid

<sup>&</sup>lt;sup>17</sup>ibid

<sup>&</sup>lt;sup>18</sup> ibid

<sup>&</sup>lt;sup>19</sup>ibid

<sup>&</sup>lt;sup>20</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-109-110-15

<sup>&</sup>lt;sup>21</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-LCA.2C\_p87-88-11

<sup>&</sup>lt;sup>22</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-12

<sup>&</sup>lt;sup>23</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-13

<sup>&</sup>lt;sup>24</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-109-110-15

official website http://www.focac.org/eng/ and the news release http://www.mfa.gov.cn/eng/wjdt/2649/ t15775.htm.The general theme of the Forum was economic cooperation between China and Africa. In 2006, China issued a comprehensive policy statement China's African Policy (http://www.focac.org/eng/zfgx/dfzc/t481748.htm), which elucidates the principles and scope of its policy in Africa. It emphasizes China's usual non-interference policy and the Five Principles of Peaceful Coexistence. Since then, China has provided (additional) preferential loans and credits.

In sum, the economic relation between China and Africa was initially dictated by ideology and political issues. Subsequently, it shifted course and tilted towards economic considerations and development needs in China and Africa. China's engagement in Africa is not a sudden and recent event. In fact, China has engaged with Africa since the 1950s. The eye-catching event is the fast and large expansion of economic ties that has occurred in the past few years. It is happening so quickly that the rest of the world is scrambling to deal with the fact that for Africa China is now a major economic partner that provides capital, debt relief, and a large exports market. Undeniably, A reason noted by, The 1995 official Go Global (走出去 Zǒu chūqū) declaration and the 2001 Chinese entry into the WTO paved the way for private citizens in China to increasingly connect with, import from, and export to the budding Sino-African markets.

## 2.2 The key determinants of Chinese outward FDI to Africa: hypotheses

The key determinants of FDI derived from outward investments theory and hypothesize on their ability to influence the distribution of Chinese ODI to Africa are reviewed below.

## Market Size

Host market characteristics, such as market size, are generally recognized as a significant determinant of OFDI flows: as markets increase in size, so do opportunities for the efficient utilization of resources and the exploitation of economies of scale and scope via FDI (UNCTAD, 1998). Numerous studies (surveyed by Chakrabarti, 2001) show that FDI flow and market size are associated positively. Recent work points to the rise of offensive market seeking motives driving Chinese MNEs (Taylor, 2002; Zhang, 2003; Deng, 2004; Buckley et al., 2006) and posits that this activity may increasingly be directed towards large markets. Theory suggests that market-oriented, horizontal FDI will be associated positively with growth in demand. The market growth hypothesis holds that rapidly growing economies present more opportunities for generating profits than those that are growing more slowly or not at all (Lim, 1983). This also holds true for African countries economy. I therefore derive the following three hypotheses:

Hypothesis la: Chinese ODI to Africa is associated positively with absolute host market size.

Hypothesis 1b: Chinese ODI to Africa is associated positively with host market size per capita.

Hypothesis 1c: Chinese outward FDI to Africa is associated positively with host market growth.

## Geographic distance from China

Internalization theory predicts that market-seeking firms are more likely to serve geographically proximate countries through exports and more distant markets via FDI (Buckley and Casson, 1981). This suggests a substitution of OFDI for other modes as distance increases. However, my dependent variable is in the form of the annual flow of Chinese FDI alone (i.e., not in the form of a ratio with exports). As I predict the flow of FDI to be greatest to nearby within selected African countries, so I would expect to capture a negative effect of distance on the flow of FDI (Loungani et al., 2002). A physical distance variable is therefore needed to complement our spatial costs variable, to isolate its effect. I incorporate distance as a control. Thus:

**Hypothesis 2:** Chinese outward FDI to Africa is associated negatively with geographic distance from China; the capital city of china and host countries are considered.

## Exports of goods and services (% of GDP)

Exports of goods and services represent the value of all goods and other market services provided to the rest of the world, expressed as percentages of the country GDP. It is also termed as trade openness which is a standard hypothesis for FDI inflow (Hufbauer et al. 1994). In the literature, the ratio of export of goods and services to GDP is often used as a measure of openness of a country and is also often interpreted as a measure of trade restrictions. This proxy is also important for foreign direct investors who are motivated by the export market. Empirical evidences (Jun and Singh, 1996) exist to back up the hypothesis that higher levels of exports lead to higher FDI inflows. I therefore include this in the regression to examine the impact of openness on FDI. Thus,

**Hypothesis 3:** Chinese outward FDI to Africa is associated positively with the host country export of goods and services percentage of its GDP

#### Host Inflation rate

Volatile and unpredictable inflation rates in a host country discourage market-seeking FDI by creating uncertainty and by making long-term corporate planning problematic, especially in respect of price-setting and profit expectations. High rates of inflation may also lead to domestic currency devaluation, which in turn reduces the real value of earnings in local currency for market-seeking inward-investing firms. High inflation rates tend to check the export performance of domestic and foreign investors and thereby discourage export-oriented FDI by increasing the prices of locally sourced inputs, making it harder to maintain a cost advantage in third markets. I therefore expect a negative relationship between Chinese ODI and host country inflation. Thus:

Hypothesis 4: Chinese outward FDI to Africa is associated negatively with host country inflation rates.

#### Natural resource endowment

The Chinese government has used O FDI to ensure the supply of domestically scarce factor inputs as the Chinese economy has grown (Ye, 1992; Zhan, 1995). Key sectors include minerals, petroleum, timber, fishery and agricultural products (Cai, 1999; Wu and Sia, 2002). Purchases of 45percent stakes in Nigeria's OML 130deepwater oilfield worth US\$2.3billion on 9 January 2006 by CNOOC Ltd worth, this was CNOOC's first venture into Africa and the single largest Chinese investment made on the continent at the time and a few months later, SINOPEC beat off global competitors to lay claim to oil rich offshore deep-water prospecting blocks in Angola in deals worth US\$2.4 billion are examples (ERA; China in Africa, a strategic overview report, October 2009) Internalization theory asserts the importance of equity based control in the exploitation of scarce natural resources, and so a positive association between the natural resources endowment of countries and Chinese OFDI is expected (Buckley and Casson, 1976). For the purpose of this study, natural resources endowment is measured in terms of ores and metals exports (% of merchandise exports) Thus:

**Hypothesis 5**: Chinese outward FDI to Africa is associated positively with host country endowments of natural resources.

## Political and Governance risks

The incentive to invest could be adversely affected by the presence of risk factors. Traditionally, many African countries are considered very risky, both economically and politically. This explains why Africa receives a relatively small portion of capital from western investors. Internalization theory predicts that in countries experiencing high political or governance risk, market-oriented firms will tend to substitute arm's length servicing modes (exporting or licensing) for directly owned local production, and that resource-oriented firms are discouraged from committing substantial sunk costs in the form of FDI projects (Buckley and Casson, 1981, 1999). Thus high political and governance risks is generally associated with low values of FDI inflow, ceteris paribus (Chakrabarti, 2001). The use of a risk index on its own would beg the question of the return on investment. If higher risk host countries also offer higher returns, then FDI will still flow to them, and an increasing relationship between risk and FDI will be observed. In this study, the role of returns is approximated (as it is in many studies on country risks) by market-related variables, so I can argue that returns of a marketrelated nature have been controlled for. Similarly, the scope for returns on Chinese investment in natural resources (the most likely motive for investment in risky countries of Africa) is controlled for by the natural resources variable. Because the measure of political and governance risks, I use assigns higher values of percentile rank to greater political stability, the same with corruption control, a higher score implies political stability and higher corruption control, hence is expected to attract FDI flows. The general theory of FDI would predict a positive relationship between the dependent and independent variables in terms of political and governance risks I therefore derive the following two hypotheses:

**Hypothesis 6a**: Chinese OFDI is associated positively with rising levels of host country political and governance risk in terms of corruption control.

**Hypothesis 6b:** Chinese OFDI is associated positively with rising levels of host country and governance risk in terms of Political stability and absence of violence/terrorism

## Exports

Exports from China proxy the intensity of trade relations between home and host country by capturing the market seeking motive of Chinese firms. During the early 2001s to present, much Chinese OFDI to Africa took place to provide a local support function for domestic Chinese exporters and to help them increase their hard

currency earnings (Wu and Sia, 2002). Typically, such investments were small scale, with local subsidiaries providing information, international trade, transportation and financial services to their Chinese principals and other Chinese firms (Ye, 1992; Zhan, 1995). In some cases, these were vanguard operations for later and more substantial investment. Thus:

Hypothesis 7: Chinese outward FDI is associated positively with China's exports to the host country

Table 2: The ke	ev determinants	of Chinese	OFDI to Africa
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Hypotheses and number	Proxy	Expected sign	Theoretical justification	Main or control variable	Data source
OCFDI (dependent variable)	Annual outflow of Chinese FDI to a host country	+			State Administration for Foreign Exchange
Host market characteristics(I): Absolute market size(H1a)	InGDPG: Host country GDP(constant 2005 US\$)	+	Market seeking	Main	World Bank Development Indicator (2013)
Host market characteristics(II): Absolute market size(H1b)	InGDPP: Host country GDP per capita(constant 2005 US\$)	+	Market seeking	Alternative main(I)	World Bank Development Indicator (2013)
Host market characteristics(III): Absolute market size(H1c)	InGDPG: Annual percentage increase in GDP(constant 2005 US\$)	+	Market seeking	Alternative main(II)	World Bank Development Indicator (2013)
Geographic distance from china(H2)	InDIS: Geographic distance between host and home country(capital) in km	-	Spatial costs	Control	Timeanddate.com
Trade openness (H3)	InEXPG: Export of goods and service(%GDP)	+	Openness	Main	World Bank Development Indicator (2013)
Host country inflation rate(H4)	InINF:Hostcountryannualinflation;consumerpricesrate (annual %)	_	Macroecono mic condition	Control	World Bank Development Indicator (2013)
Natural resource endowment(H5)	InORE: the ratio of ore and metal to merchandise export of host country	+	Resource seeking	Main	World Bank Development Indicator (2013)
GovernanceandPolitical risk (H6)risk I (H6a)	InCC: Corruption Control: Percentile Rank	+	Transaction costs	Main	World Bank Development Indicator (2013)



Governance an Political risk (H6) risk II (H6b)	I InPOTI: Political Stability and Absence of Violence/Terroris m: Percentile Rank	+	Transaction costs	Alternative main	World Bank Development Indicator (2013)
Export(7)	lnEXP: China's exports to the host country(all products)	+	Market seeking	Control	Trade map/Investment map (2013)

Note: All monetary values are in constant (2005) US\$ prices.

 Table 3: Panel data estimates; Fixed effects (43 countries x 7 years (2005-2011)

Dependent	Variable:	LOCFD =	(log of OFCDI)	
Dependent	variable.	LOCID -		

	(FE)	(RE)
VARIABLES	lnOCFDII	lnOCFDII
	0.400.64	0.100
lnHGDP	0.499**	0.196
	(0.147)	(0.196)
lnGDPG	0.434*	0.505**
	(0.212)	(0.249)
lnDIS	-1.907	-2.031*
	(1.069)	(1.172)
lnEXPG	0.796*	0.882***
	(0.338)	(0.234)
lnINF	-0.291	-0.287
	(0.152)	(0.190)
lnORE	0.168**	0.173***
	(0.0488)	(0.0506)
lnCC	0.175	0.261
	(0.123)	(0.195)
lnPOTI	-0.507**	-0.462**
	(0.144)	(0.181)
lnEXP	0.185	0.566***
	(0.120)	(0.189)
Constant	17.53	19.93
	(10.86)	(12.42)
Observations	172	172
R-squared	0.341	
Number of years	7	7

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### 3. Research Model

The discussion suggests the following log model, the model was developed from the works of Peter J. Buckley et al. To suit the purpose of the study, the model is modified. It should be pointed out that the selection of explanatory variables was constrained by data availability from host African countries.

$$lnOCFDI_{it} = \alpha + \beta_1 lnHGDP_{it} + \beta_2 lnGDPG_{it} + \beta_3 lnDIS_{it} + \beta_4 lnEXPG_{it} + \beta_5 lnINF_{it} + \beta_6 lnORE_{it} + \beta_7 lnCC_{it} + \beta_8 lnOREit + \beta_9 lnEXP_{it}$$

Where, i and j are the respective host African countries and t indicates the time. Furthermore,  $\epsilon_{is}$  the error term assumed to be normally distributed with zero mean and constant variance for all observations. The data are transformed into natural logarithms as we expect non-linearities in the relationships on the basis of theory and previous empirical work. The F- test results indicate no general problems with the model. (i.e., if this number is < 0.05 then your model is ok. This is a test (F) to see whether all the coefficients in the model are different than zero.)25

## 3.1 Data and Methodology

The dependent variable is the total amount of foreign exchange approved by Statistical Bulletin of China's Outward of Foreign Direct Investment during the project investment process 2005-2011. Out of 54 African countries, forty three African countries are host to Chinese OFDI in the data set, of which11 countries were dropped due to the incompleteness and missing of data, the data allows to view the investment decision process on why a decision is taken whether to invest (what key factors determine investment) in a host country and not a decision on how much to invest in the country concerned.

In an attempt to determine the key determinants of Chinese OFDI to Africa, in this study the panel data techniques has been employed. The use of panel data techniques allows me to determine the temporal evolution of groups of countries rather than analyzing the temporal behavior of each of them. This technique takes into account the individual heterogeneity, allows a larger number of data points and improves the efficiency of the estimates. There was no need to run for Correlation Matrix of residuals test or cross-sectional dependence/contemporaneous correlation using Breusch-Pagan LM test of independence to check whether there are general problem with the data since the study covers a period of 7 years which is considered as a micro panels<sup>26</sup>

Panel data may have group effects, time effects, or both. These effects are either fixed effect (FE) or random effect (RE). A fixed effect model assumes differences in intercepts across groups or time periods and the model would be better when estimating the flows of trade between an ex ante predetermined selection of countries (Eita and Jordaan, 2007). Whereas a random effect model explores differences in error variances and the model can be more appropriate when estimating the flows of trade between a randomly drawn samples of trading partners from a large population. However, heteroskedasticity, heterogeneity and autocorrelation are the main problems with panel data. Since this study deals with the OFDI flows of trade between China and 43 African countries, the fixed effect could be a more appropriate model than the random effect specification. Furthermore, the study also applies the Hausman test to check whether the fixed effect furnished the better model than the random effect since the results shows significant at the value 0.0035 (i.e., If this is < 0.05 (i.e. significant) use fixed effects)<sup>27</sup> then fixed effect is more appropriate for the study. The Hausman specification test compares the fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model (Hausman 1978). If correlated (H0 is rejected), a random effect model produces biased estimators, violating one of the Gauss-Markov assumptions; so a fixed effect model is preferred. Hausman's essential result is that the covariance of an efficient estimator with its difference from an inefficient estimator is zero (Greene 2003). Again, the set of the panel data used for estimation has no time-invariant characteristics; substantively, a fixed-effects model fits for this study with no expected biasness. For the purpose of producing a desired results, I

<sup>&</sup>lt;sup>25</sup> Panel Data Analysis Fixed & Random Effects (using Stata 10.x) (ver. 4.1) Oscar Torres-Reyna Data Consultant otorres@princeton.edu;http://dss.princeton.edu/training/ pg.21<sup>26</sup> According to Baltagi, cross-sectional dependence is a problem in macro panels with long time series (over 20-30 years).

This is not much of a problem in micro panels (few years and large number of cases) <sup>27</sup> Panel Data Analysis Fixed & Random Effects (using Stata 10.x) (ver. 4.1) Oscar Torres-Reyna Data Consultant

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run the final estimation under clusters-rhobust in order to control for both heteroskedasticity and autocorrelation.

#### 3.2 Results and discussion

In preliminary regressions using STATA, one of the three alternative measures of host market size (growth in GDP) and the source market size (China's GDP) never attained significance and were omitted because of collinearity, therefore not included in the final specification, which is reported in Table 3 column 1 for FE. Column 2 is for RE regression, is included for the purpose of comparing the results. The empirical results obtained from the FE and the RE equations are almost similar with slight differences in some variables. However, as cited above, Hausman Test value indicates in favor of the FE and therefore only the results from FE are discussed in details.

Below, I discuss the results of the FE model for the main and control variables (column 1, Table 3). The finding shows that host market characteristics (measured by absolute size of economy, lnHGDP and lnGDPG) are significant and positively signed. Exports of goods and services percentage of GDP (lnEXPG) and natural resource endowments in terms of ores and metals exports percentage of merchandise exports (lnORE) are all significant and correctly signed. Political Stability and Absence of Violence/Terrorism and (lnPOTI) is also highly significant with unexpected sign. However geographic distance from china (lnDIS) and china exports to the host country (lnEXP) are all significant and correctly signed in RE regression results. Host inflation rate (lnINF) and control of corruption (lnCC) were not statistically significant.

These findings support Hypotheses la and 1c, 3, 5, and 6b. We find no support for hypotheses 4 or 6a. As I pointed earlier, geographic distance from china (InDIS) and china exports to the host country (InEXP) are found to be statistically insignificant under FE but significant with a sign as predicted in hypothesis 2 and 7 respectively under RE. (Table 3, column 2) Thus; these four variables they did not show any strong correlations with the dependent variable under FE regressions, hence are not included in detailed discussion of the results. We now discuss each of these main findings in more detail.

The absolute host market size variable is retained to capture the market-seeking motive (Hypothesis la and 1c) and to act as a control (for market returns) in the estimation of the relationship between Chinese ODI and host country risk.

Absolute host market size (lnHGDP) has a positive influence on Chinese FDI outflows, with a 1% rise in the variable increasing Chinese ODI by 0.5%. This indicates that market seeking was a key motive for Chinese ODI in the period under study (Hypothesis la). This is also coincident with the host country market size measured in GDP growth (lnGDPG) has a positive influence on Chinese ODI by 0.43% with the increase of 1% of the variable with expected and corrected signed under the period of study. The result supports (hypothesis lc). These results also are in line with the literature review and previous findings done by Buckley et al (2002), Yin Wong et al (2002), Jenkins and Thomas (2002) and Asiedu (2002) who tested the determinants of Chinese OFDI based on the continent. Thus lnHGDP and lnGDPG are significant determinant of Chinese OFDI within the African countries: that is, Chinese investors preferentially seek out both larger and small markets within the African countries. The effects of market seeking is in accordance with the usual theoretical predictions - the higher the market potential and the stronger the trade relation, the larger will be the investment flow.

The host country openness in terms export of goods and services percentage of GDP (InEXPG) is in accordance with the usual trade factors theoretical predictions, InEXPG is found to be significant with positive coefficient and expected signs (hypothesis 3). About 1% increase of EXPG variables correlates with about 1% increase in China's OFDI flow during the period under study. As expected, InEXPG positively affects Chinese OFDI, which is the conventional finding that FDI follows exports. It also supports the market-seeking motive at this point. This finding concurs with the view that one of the key motivations of Chinese to investment has been to promote domestic exports and it explains the concept that China's fast growing exports industries and considered as the world's manufacturer goes hand by hand with to find some new markets beyond the developing world like Africa.

Is China's investment in Africa mainly driven by natural resources conditions? The result based on "Table 3 column 1 and column 2" offers a qualified confirmation of the usual perception that China's OFDI has a focus on countries that have natural resources endowment including oil and gas, among other economic factor. The natural resource endowments in terms of ores and metals exports percentage of merchandise exports (InORE) is highly significant with the expected sign (hypothesis 5). It follows that the China's OFDI to Africa is associated with the natural resource seeking motive. Another way to interpret the results is that, over the period of study,

China has been playing catch-up and makes minerals, oil and gas procurement one of the factors for determining investment in Africa. The regression results unambiguously suggest that an African country's natural resources endowment attracts China's capital. The finding is in line with conventional wisdom as one-third of China's oil supplies comes from the African continent, mainly from Angola.<sup>28</sup> And in 2006, the bulk of FDI flows involved the mining sector was 40.74%.<sup>29</sup>

A major finding is that the coefficient on the index of political and governance risk in terms of Political stability and absence of violence/terrorism (InPOTI) indicates negative relationship between host country political and governance risks level and Chinese OFDI. I find that a 1% increase (decrease) in the host country risk index (i.e., a decrease in risk) is associated with a decrease (increase) in Chinese OFDI of 0.5%. Thus we find no evidence to support Hypothesis 6b. This runs counter to the normal findings for this variable, and requires discussion as it contrasts with the general theory and results found among industrialized countries economy (i.e., Schneider and Frey (1985), Edwards (1990), Loree and Guisinger (1995), Hanson (1996), Jaspersen et al. (2000) and Aseidu (2002) studied the role of political instability following the works from In fact political stability, especially for the case of African states, they found that political risk is a significant factor in the location decision of Multinational Corporations (MNCs). Political instability and the frequent occurrences of disorder 'create an unfavorable business climate which seriously erodes the risk-averse foreign investors' confidence in the local investment climate and thereby repels FDI away)" In line with advanced theory, history and characteristics of Chinese firms; Chinese foreign investors seem not to perceive risk in the same way as industrialized country firms. There are a number of reasons why Chinese firms may not behave in the conventional manner. First, Chinese state- owned firms may not be profit-maximizers, or may be maximizing subject to government-led institutional influences. Second, Most of African countries are developing economies and the bulk of Chinese OFDI is in developing countries and these are precisely the countries that, as a group, record higher levels of political and governance risk. The empirical findings affirm the notion that seeking natural resources is a motivation behind China's overseas investment in Africa, much of this investment may have been promoted by political affiliations and connections between China and the African host country government concerned. The bargaining position of the Chinese government and Chinese firms may have been further strengthened vis-d-vis governments in those host countries that attract only modest amounts of investment from the industrialized nations. Third, China's political and ideological heritage in the modern era may have led to Chinese OFDI being preferentially directed to fellow ideologically similar countries at which most of African countries they are adapting the china-style of economic growth, many of which also record higher levels of political risk. Fourth, home country embeddedness (i.e., in the current context, the knowledge of operating in an emerging country environment characterized by tight, centralized economic planning) may have provided Chinese firms with ownership advantages that enable them to mitigate the risk associated with operating in equivalent environments abroad. Fifth, Chinese firms may also be prepared to invest in countries generally avoided by industrialized country firms for ethical (e.g., human rights) reasons, with Nigeria, Sudan ,Libya and Congo being an example. Sixth, It should finally pointed that different culture and the relative inexperience of some Chinese firms concerning the establishment and management of large-scale operations abroad may have led to FDI projects being undertaken with insufficient due diligence and attention to associated risks (Wong and Chan, 2003; Ma and Andrews-Speed, 2006). The finding for risk also highlights potential shortcomings in familiar measures of political and governance risks, which are typically calculated from the point of view of industrialized country firms (World Bank, 2013). Such indices/percentile may need to be recalculated to better capture the perceptions of firms from emerging economies like China.

The size of the openness of the host country (export percentages of GDP), host market characteristics (host country GDP and GDP growth), resources seeking (natural resources endowment), and transaction cost (political stability and absence of violence/terrorism) though to a large extent as witnessed by the size of their respective coefficients, played a positive role while host country distance and china's export to a host country are significant under FE. Host country inflation rate and country's corruption are all economic significant but statistical insignificant. The results are consistent with a slightly different with other empirical works in the field.

#### 4. Conclusion remarks and Policy recommendations

The empirical key determinants of China's investment activity in a selected African countries are studied. It is

<sup>&</sup>lt;sup>28</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_relations#cite\_note-33

<sup>&</sup>lt;sup>29</sup> Renard, Mary-Francoise (2011), China's Trade and FDI in Africa, Series N° 126,pg 20 African Development Bank, Tunis, Tunisia.

found that China's investment in Africa responds positively to openness and resource seeking and market opportunities ties. For example, China's OFDI tends to go to countries with a good market size as measured by host country GDP and GDP growth, China's export to a host country and export of goods and services percentage of host country GDP.

The responses to one of the political and governance risk factors are mixed. The political stability and absence of violence/terrorism factors are found to "have no tie" with Chinese outward foreign direct investment. The responses to spatial costs, political risk in terms of corruption control and macroeconomic condition factors are found to be insignificant, probably the collected data under FE regression do not explain the relationship with the china's OFDI to Africa

The results show that China's investment in Africa responds to the usual economic forces considered in OFDI literature and it is pouring their investments in every possible sectors of economics regardless of macroeconomic conditions, spatial costs and some political and governance risk factors. This can be evidenced in countries like Angola, Nigeria, Libya and Somalia which are perceived as political risk countries (by Western standards) but they receive high amount of China's OFDI compared to a country like Botswana with a higher score in political and governance risk The phenomenon might be in sharp with the long history of western investors' involvement in Africa's resource-extractive industries with Chinese characteristics/ standard. An alternative way to interpret the empirical results is that; under the investigated key determinants China is catching up with other foreign investors in Africa and spreading its investment wings on its own style and standard.

Depending on previous studies along with this study, there is evidence that African countries that have a natural resources endowment and good trade tie or sound macroeconomics condition with China are likely to attract more China's OFDI. African countries partnering with China today are signing with a future world superpower. In Africa, this Chinese alliance provides strong psychological consequences. It provides economic hope and shows African elites an example of success which they may take as exemplars of their own future. Writer Harry Broadman commented that if Chinese investments in key sectors of infrastructure, telecommunication, manufacturing, foods, and textiles radically alter the African continent, the main change will have taken place in African minds.<sup>30</sup>

Arguably, while the analyses here offer some insight into the key determinants affecting China's OFDI to the selected African countries, further research using different set of data and methodologies focusing on a certain economic zones in Africa is warranted to broaden understanding of the nature and the implications of the China–Africa outward direct investment interactions. It is these kinds of phenomena that future research will need to address in order to provide insight into how and what push the influx of China investment to the continent. This might provide further evidence regarding the causal of the flow of such investments.

Specifically, China's non-interference policy, which separates business from politics, has led critics to accuse China of going after economic benefits at the expense of democracy and human rights. Further analyses and evaluations of the effects of China's investment on the host country's economic and political developments are warranted. As China is increasing its investment in the African continent, these analyses are not especially specific relevant for only African resource-rich host countries with poor institution quality and weak governance instead it accounts insight of the whole continent as a single economic unit.

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<sup>&</sup>lt;sup>30</sup> http://en.wikipedia.org/wiki/Africa%E2%80%93China\_economic\_relations#cite\_note-7

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