M.A. Thesis

Effects of FDI on Corruption- How FDI from China Exacerbates Corruption in Africa

Fang Liu (260666469)

Supervisor: Krzysztof Pelc

Department of Political Science

McGill University

Abstract

An interesting area of research has emerged that explores the relationship between foreign direct investment (FDI) and corruption in developing countries. Several studies have concluded that foreign investment helps curb corruption by improving the quality of governance. The present paper examines the case of China and argues that corruption in Africa can be exacerbated by China's investment activities when the ruling elites are given more opportunities to be involved in bribery. This study uses 2003-2017 panel data from 56 countries in Africa to analyze the impact of China's FDI on local corruption. Results estimated in this study suggest that China's FDI has helped increase corruption level in the sample countries. In addition, authoritarian countries receiving more Chinese FDI are not found to be more corrupt than others. These results improve our understanding of the investment-corruption dynamics, which is critical for designing strategies to promote long-term economic efficiency as well as institutional development in developing countries.

I.   Introduction

Developing countries are becoming more economically engaged in global economy and fostering full-fledged trade and investment linkages with other countries. Foreign Direct Investment (FDI) from developing countries to other developing countries, referred to as South-South FDI, has see significant growth since 2000. The Multinational Corporations (MNCs) based in the BRICS countries (Brazil, Russia, India, China, and South Africa) are increasingly contributing to shape the South-South FDI landscape: outward foreign direct investment (OFDI) from developing countries has grown dramatically, accounting for nearly one-third of global FDI flows in 2018, up from just 4 percent in 1995 (Sirr et al., 2018; UNCTAD, 2018a). These trends clearly demonstrate the growing influence of South-South investment within the realm of the global economic sphere.

FDI serves as a major economic contributor and has become the largest source of external finance for many developing countries, surpassing official development assistance (ODA), remittances, or portfolio investment flows (World Bank, 2018). How FDI inflows lead to economic development has been studied extensively: FDI raises productivity gains through technology transfer and creates better-paying jobs in host countries (Newman et al., 2015; Xu & Sheng, 2012); foreign investors also play a prominent role in harmonizing cross-border investment regulations and promoting industrial or labor standards (Drabek & Marvroidis, 2013; Simmons, 2001). Overall, the existing literature highlights the importance of FDI in upgrading growth and adding value to domestic industries, and more generally, in increasing competitiveness and stability.

China's investment in Africa in particular, has increased drastically with an annual growth rate of 40 percent in the past decade (Pham et al., 2018). While African countries stand to

welcome new investors, critics are concerned about taking too uncritical an attitude toward the benefits of Chinese OFDI. One of the most common skeptic views of China's investment is associated with corruption. Ever since its economic expansion to Africa, China has been alleged to use foreign aid to prop up corrupt regimes and to bribe officials to gain unfair advantage (Hatton, 2017; Leder-Luis, 2018). How Beijing's economic presence engenders corruption in Africa is widely discussed in the media but remained unexplored for scholar works. Existing development studies focus on the correlations of foreign aid and corruption (Isaksson & Kotsadam, 2018a, 2018b), but ignore the fact that FDI also has consequences for corruption.

Most FDI-corruption studies assume that the influence of FDI is determined by the institutional environment of the host country. Foreign investors only react pessimistically towards widespread corruption and have no influence on corruption levels in host countries. Investors are being treated in the literature as a homogeneous group of economic agents deliberately eschewing paying bribes, malfeasance, and public grafts. As a result, investors tend to avoid investing in countries with high level corruption. While this may be true for majority of investors, this paper seeks to highlight the other side of the picture: FDI plays a non-negligible role in shaping host country's institutional environment of corruption over time. This paper attempts to break down FDI and study the political economy of FDI from an unconventional perspective by asking: where does FDI come from and to what extent it will yield different results to institutional change in the host country?

This paper specifically examines China's OFDI into African countries for several reasons. First, China has massively attracted global FDI since its economic reforms in 1978 and is now the largest recipient of FDI of the world (UNCTAD, 2018a); China's OFDI has also surged drastically in the last decade, accounting for nearly 5% of OFDI stock in the global market, with

total flows of $127,560 million (UNCTAD, 2018b). As the largest donor of FDI from the developing world, China not only represents the fastest growing global investor but also showcases the characteristics of south-south FDI. Second, Africa hosts many least developed countries (LDCs) that are particularly prone to corruption. Malfunctioning government institutions in Africa are believed to constitute severe obstacles to investment (Transparency International, 2010) and political leaders of the African countries are expected to control corruption to levels that will not deter FDI inflows (Abotsi & Iyavarakul, 2015). Corruption can occur in several forms, but this paper focuses on political corruption, which takes place at the highest levels of political authority. The presence of Chinese MNCs in Africa provides ruling elites with more opportunities to abuse their power and extract economic benefits from FDI. Lastly, China is replacing other developed countries as the most important providers of money flows for Africa. Development studies regarding Afro-Chinese economic relations mostly focus on the scope and effectiveness of China's foreign aid (Dong & Fan, 2017; Isaksson & Kotsadam, 2018a); studies on Chinese FDI examine the location preferences of China's MNCs in Africa (Donou-Adonsou & Lim, 2018; Mourao, 2018). That Chinese FDI plays a more important role in facilitating growth for Africa and to what extent it would influence Africa's political economy should receive more scholarly attention.

This paper argues that the effects of FDI on corruption are conditional on home country characteristics. To conceptualize the mechanisms underlying corruption, I identify three features of Chinese OFDI that open more opportunities for recipient governments to manipulate the process of distributing economic benefits and worsen corruption: lower anti-bribery law enforcement, higher levels of government participation in foreign investment, and less investment conditions imposed on recipient countries. Besides conforming to local business

practice to gain legitimacy, MNCs are accountable to and constrained by their home-country environment and international community (Kwok & Tadesse, 2006). In recent years, developed countries have progressively used legal framework and demonstrated commitment and ability in combating foreign bribery (Unzicker, 2015). By criminalizing foreign bribery, these countries send a signal to the international community that their MNCs are prohibited from engaging in corrupt business dealings abroad. The US authorities, for example, have brought 575 enforcement actions against MNCs since the Foreign Corrupt Practices Act (FCPA) was enacted in 1977. On the other hand, the Chinese government has not brought (or publicized) any foreign bribery cases or investigations up to 2017 (Dell & McDevitt, 2018). Despite being the subject of transnational corruption cases, Chinese MNCs still face no or legal sanctions for overseas bribery at home.

MNCs often receive substantial political and financial support from their governments to invest abroad, especially in strategically important industries. What distinguishes China from other major investor states is that its OFDI is to a large extent designed to follow the state's policy guidance (Sauvant & Chen, 2014). Chinese companies investing abroad, especially large multinationals, are typically state-owned or state-controlled (Gao & Liu, 2012). Due to their political ties with high officials both in China and Africa, it could be easier for them to establish personal connections that often involve corruption activities. This Chinese way of doing business, guanxi, effectively matches with some traditional social norms and "oils the wheels of bureaucracies" in African host countries to facilitate business deals (S. Zhao, 2015).

In terms of locational choice, Chinese MNCs appear indifferent to host country's political risk (Quer et al., 2017). The unconditionality of Chinese investment in Africa contrasts with most development financing from traditional donor states — who usually require the recipient to

undergo changes in governance structure and adhere to international "best practices" (Lang, 2017). Consequently, recipient governments unwilling to implement the political changes required by traditional donors turn to China as an alternative source of funding. This may be particularly appealing to African ruling elites who have grown tired to the political "nanny" of the North (Wang & Elliot, 2014), and thus lead to a delay or non-action in changes that could have improved corruption problems.

Efforts to analyze the relationship between FDI and corruption face a difficult endogeneity problem: corruption is most likely both a cause and a consequence of FDI received in a country. Regression estimates of FDI's effect on corruption will be subject to omitted variable bias and reversal causality. A common statistical approach to dealing with this simultaneity bias is to use instrumental variables. Identifying external instruments for a time-varying and country-specific independent variable is notoriously difficult, and therefore I rely on the lagged values of FDI to handle possible endogeneity biases. I find robust evidence that Chinese OFDI, as my theory predicts, can be a cause of higher level of corruption in Africa.

The remainder of the paper is organized into seven sections. Section 2 begins by taking theoretical cues from recent scholarship on the relationship between FDI and corruption. Section 3 presents an overview of Chinese OFDI and explores the differences between China and developed country outward investment behaviour. This is followed by an examination of the patterns of Chinese OFDI in Africa and the channels through which Chinese investment influences corruption in Section 4. Section 5 describes the statistical models employed to test my hypotheses, and my specification strategies to deal with endogeneity. Section 6 describes my data and Section 7 reports the empirical results. Section 8 presents the limitations of my research

and proposes several avenues for futures studies. The last section concludes with a discussion of the implications of my findings.

II.   Political Economy of FDI

Development studies have paid attention to the quality of domestic institutions as a key explanation of cross-country differences in both growth rates and income per capita. One strand of literature examines the effects of a specific institutional dimension such as corruption and political regime on FDI. For example, corruption has an adverse effect on FDI location preferences of MNCs (Habib & Zurawicki, 2002; Wei, 2000; J. H. Zhao et al., 2003); Democratic countries attract more FDI than authoritarian ones because the risks of expropriation or nationalization are relatively low under democratic regimes (Ahlquist, 2006; Jensen, 2003). Another way to study FDI determinants is to analyze multiple institutional variants in host countries, such as enforcement of law, political stability, effectiveness of the legal system. Overall, FDI inflows reveals that countries that have weak institutions, especially high corruption and unreliable legal systems, tend to receive less FDI (Gastanaga et al., 1998; Lokesha & Leelavathy, 2012).

The dominant view is that countries with good governance can attract more FDI. Thus, besides tax incentives and export promotions, many host countries strive to make improvements in their institutional environments in an effort to attract FDI (Bailey, 2018; Bailey & Warby, 2019). However, the "competition theory" may not be applicable to MNCs from developing countries, who are gradually overtaking the global FDI domain: they enjoy an "adversity advantage" relative to their competitors from developed economies, because they are already exposed to relatively poor business climates and more political instability at home (Ramamurti,

2009). Given that they have higher tolerance towards political risk, numerous empirical studies show that political risk may not negatively affect their location choice (Buckley et al., 2016; Kang, 2018). Consequently, identifying the source of FDI and the characteristics of MNCs is crucial to understand the impact of FDI on host country's institutional environments as south-south FDI becomes more prevailing.

Corruption is a ubiquitous and costly phenomenon that has become proxy for evaluating the quality of institutions and how they affect FDI flows to countries. While corruption is generally assumed to be a predictor of investment flows, a growing number of studies have challenged the direction of this relationship and examine the effects of FDI on corruption in various ways. FDI is often associated with large infrastructure projects and privatization programs of which economic interests are at stake (Larraín & Tavares, 2004). An increase in FDI represents a large amount of foreign assets flowing into the country and hence an expansion of the opportunities for bribery (Javorcik & Wei, 2000). On the other hand, FDI are believed to improve domestic institutions and curb corruption problems. Kwok and Tadesse (2006) argue that the presence of foreign-owned subsidiaries reduces the level of corruption of the host country by exerting influence and pressure on the local business community. Pinto and Zhu (2016) empirical study shows that the effects of FDI can be either positive (increasing corruption) or negative (reducing corruption), depending on whether the presence of foreign investors alter market dynamics: in developing countries, FDI inflows increase market concentration, resulting in higher rents that public officials can demand from market actors, while the effects are mitigated in developed countries where foreign entry into a market rather promotes competition and reduce rents.

The existing literature mostly presumes that FDI flows from host countries with different economic development levels have homogenous effects on domestic institutions of the host countries. Only a few works in literature demonstrate that the effects of FDI can be heterogenous depending on their source: Demir and Hu (2016)'s empirical analysis suggests that institutional differences between the source and host country create entry barriers for foreign investors but investors from developing countries are less affected by the barriers; Demir (2016) conducts a panel analysis and finds some evidence that the effects of aggregate bilateral FDI flows from the developing countries are negative on the level of corruption in host countries. Despite their growing presence on the international investment field, developing countries, especially China, are criticized for supporting corrupt authoritarian regimes, and undermining Western efforts in developing countries to promote good governance and better political institutional infrastructure. However, no prior studies have formulated systemic theories as to explain how investors from developing countries could be me more likely to worsen institutional development of the host countries. This paper will make a unique contribution to the FDI-corruption literature by exploring corruption mechanisms behind Chinese FDI activities in Africa.

III.   The Uniqueness of Chinese MNCs' OFDI Activities

A special phenomenon that has characterized China's economic achievement is a recent surge in its OFDI. Not until recent years has China been more of a recipient than a contributor of FDI capital in the global market. Along with the deepening of its economic reform and gradual liberalization of its domestic market, China succeeded to increasing its investment in markets overseas over the past couple of decades. This remarkable growth has led to a sizeable literature trying to account for special features of Chinese MNCs.

So how is China's investment distinct from other developed countries? First, State-owned enterprises (SOEs) account for two-thirds of China's outward investment while in other major investor-states foreign investment is dominated by private enterprises (Lehmann & Lehmann, 2017). An interpretation of this state ownership is that the Chinese government, to a certain extent, uses foreign investment to realize its foreign policy objectives. From the "Go Out" policy initiated in 1999, the first time the government of China attached importance to outward foreign investment, to the recent "One Belt, One Road" policy, Beijing has shown its ambition to grow its financial muscle to buy political influence. In addition, China's OFDI driven by state-owned enterprises is often confounded with foreign aid given that both are controlled by the government and follow diplomatic or political motives. Unlike other OECD countries, China's government-provided finance to Africa does not fall primarily into the category of Official Development Aid, but other official flows including FDI (Bräutigam, 2011).

Second, China has a quite different institutional environment than other major source countries of FDI from the developed world. The level of corruption in China, for example, is much higher than in the major industrialized source countries of FDI. Several studies suggest that Chinese MNCs are more experienced and familiar with circumstances surrounding imperfect information, burdensome bureaucracy, and opaque political constraints (Morck et al., 2008; Yeung & Liu, 2008). Kolstad and Wiig (2012) conduct an empirical analysis on China's OFDI and conclude that the worse the institutional environment of a host country is, the more that Chinese OFDI is attracted by the country's natural resources. Buckley et al. (2007) further suggest that "Chinese foreign investors seem not to perceive risk in the same way as industrialised country firms do."

Third, differences between China and developed country outward investment behaviour also arise regarding the role of technology in investment. When China initiated the internationalization of investment in the late 1990s, Chinese MNCs lacked technology innovation, intellectual property protection, management know-how, and global network linkages and thus attempt to acquire these assets abroad (Deng, 2003). After 30 years of economic development, China has substantially advanced its technological capabilities and undertook OFDI to exploit and transfer its technology (Yao & Wang, 2014a). In addition, China Eximbank and China Development Bank, operating as part of Beijing's instruments to support China's oversea development finance, provide strategic lines of credit for certain "national champion" companies—firms the Government believes have the potential to become competitive multinationals (Gallagher & Irwin, 2014). For example, in 2004 Huawei obtained a US $10 billion credit line from CDB and US$600 million from China EximBank to fund its global expansion and has won a considerable number of large telecoms contracts in Africa in the following years (Cissé, 2012). Overall, the dual role of technology level point to another important dimension in examining China's OFDI.

IV.   Chinese Investment in Africa

Chinese FDI to Africa has increased tremendously in recent years, with a remarkable 15 percent average growth rate between 2003 and 2017. The Chinese central government has actively financed, encouraged and organized Chinese business ventures into Africa. Since the 1980s, China has prioritised particularly infrastructure investment projects in Africa, building roads, bridges, airports and power stations, for governments keen to emulate the formula that helped kick-start its own rapid development. Some of the primary motivations that lie behind

China's OFDI in African countries include the desire to secure a solid base of raw materials to fuel China's own rapidly growing economy (Kaplinsky & Morris, 2009; Sanfilippo, 2010), the major growth opportunity presented by emerging market economies (Chen et al., 2018), and the desire to increase China's global political influence (Brautigam, 2009; Mohan, 2013; Wang & Elliot, 2014).

The African continent is therefore a logical place for China to look to extend its geopolitical influence. The largely undeveloped countries of Africa represent a prime opportunity for China to significantly expand its global presence and influence in the world. The nature of China's political motivations is partially revealed by its extensive investments in African infrastructure. If China can rise to a position where it exerts major control over essential economic elements such as the utilities sector and telecommunications in African countries, while also developing military influence, then it also holds considerable political alliance in those nations. Africa is therefore essential to an integral part of Beijing's long-term geopolitical goal of achieving a more multi-polar international system in which China will assume an increasingly powerful, international role (Abdulai, 2016; Allard, 2012).

Backed by dramatically rising investment, Chinese influence has sharply increased in African politics and diplomacy. Africa, as an enormous potential market and thus the epicenter of the diplomatic competition between China and Taiwan, has witnessed numerous practices of "dollar diplomacy": Beijing is willing to spend a huge amount of money to poach Taipei's diplomatic allies. In early 2009, the government of announced the end of diplomatic ties with Republic of China (Taiwan) and meanwhile the rapprochement with People's republic of China (China). The cross-strait scramble for African allies was not novel. Liberia and Chad had twice broken off with Taiwan after caught in the diplomatic tug-of-wars. What made the case of

Malawi salient was that the presence of traditional trade and investment partners such as the US, the UK, the EU, and Taiwan is declining, while China rapidly takes over the landlocked country.

The following case of Malawi not only illustrates the diplomatic repercussions brought by Chinese investment, but also contextualizes the consequential problem of a more rampant corruption situation. In Lilongwe, the capital city of Malawi, high rise buildings have emerged one after another after the two countries established diplomatic relations and signed a memorandum of understanding regarding industry, trade and investment projects in May 2008. Schools, hotels, roads and even the parliament building have been constructed by Chinese. Megaprojects offered by the Chinese government contrast sharply with previous Taiwanese investment programs which focused on improving medical facilities and were mostly suspended after the diplomatic tug war — the number of total Taiwanese investment in Malawi reached $24 million, while the Chinese investment amounted to more than $ 250 million by 2012 (Thindwa, 2014). However, Taipei's little financial support for Lilongwe was not entirely attributed to its inferior economic power to Beijing, but to its regulatory policies on foreign investment. Taiwan International Cooperation Development Fund (TaiwanICDF), the statutory agency in charge of authorizing and reviewing foreign aid and investment projects, employs a rather restrictive policy regarding foreign investment toward the less developed countries: the aid or investment projects executed in countries on the watch list can be suspended as the outcome of Committee' decision if corruption practices are not properly tackled by the host government. China, on the contrary, continued to carry out more investment programs for Malawi and even promised more project financing in 2016 during a summit meeting (Mweninguwe, 2017).

But Chinese FDI comes at a priceless price. Concerns are raised over whether it would further exacerbate the corruption problem in the country. Malawi's corruption problem is deep-

rooted and pervasive, ranging from high-level political corruption to petty bribery as well as patronage and nepotism. In recent years, the country has been embroiled with the "Cashgate" scandal, an unprecedentedly large-scale systemic looting of public fund. When the scandal first came to light in 2012, the UK, the US, Germany and other major donor states suspended their budget support to Malawi, and foreign investors retreated from the market to such an extent that the volume of FDI inflows was negative that year (Blas, 2013; Laing, 2013). But it did not deter Chinese investment. In the same year, the number of Chinese FDI reached $21 million, almost equivalent to the amount of the previous year (Thindwa, 2014). Francis Kasaila, Malawi's former Minister of Foreign Affairs and International Cooperation, commented that "China comes in to support our vision, and not to impose conditions which may not be good for us or contrary to our vision" (Chavula, 2017).

Many other African countries are also plagued with corruption scandals associated with Chinese FDI. The Namibian government investigated more than 30 Chinese companies operating in its country over concerns they were hiding illegal earnings (Uppal, 2009). Kenyan authorities arrested seven officials with the China Road and Bridge Corporation (CRBC) for bribing investigators looking into corruption (Malalo, 2018). With the Chinese drive to increase economic influence in Africa has come notable instances of corruption.

These examples raise the question of whether China's investment presence in Africa might be markedly different from that of MNCs originating in other, more traditional investor countries. This paper attempts to answer the question by identifying three features of Chinese OFDI that may allow more corruption opportunities for host governments. While there is a wide terminology of corruption coined by researchers, this paper concentrates on political corruption, the abuse of power of high officials or local politicians who are more likely to seek rents in

MNCs' activities. It should be noted that *any* MNCs seeking market access or government contracts may have an incentive to bribe local officials. Examining China's investment activities in Africa provides some valuable insights into corruption cases and sheds light on our understanding of the complexed FDI-corruption relationship.

The Lack of Effective Enforcement of China's Foreign Bribery Law

China started to criminalize the bribery of foreign public officials in 2011. The change represented a significant step taken by the Chinese government to bring its bribery laws in line with the current standards set by, for example, the Foreign Corrupt Practices Act (FCPA) in the US. More specifically, the Eighth Amendment of the Criminal Law added Article 164 which prohibited both natural persons and units under Chinese criminal jurisdiction from giving "property to any foreign public official or official of an international public organization for the purpose of seeking illegitimate commercial benefit". Given the extra-territorial application of the new law, the legislation shall be applied to any Chinese national or entity who bribes a foreign government official while doing business outside China.

However, no foreign anti-bribery enforcement actions have been taken by the Chinese government since the enactment of the law. A rather cynical speculation is that China has little incentive to enforce its foreign anti-bribery law because bribery of foreign officials is believed to facilitate business and create a competitive advantage for Chinese MNCs. But China's inertia is hardly unique. Till 2015, half of the 42 countries taking part in the OECD Convention on Combating Foreign Bribery (to which China is not a party) had not yet prosecuted a single foreign bribery case since the Convention came into force in 1999 (OECD, 2017).

In the last decade, the international community succeeded to adopting international legal instruments to fight corruption on international and national levels. The US, for example, as the

world's largest FDI donor, has brought nearly 500 corruption cases in close coordination with foreign law enforcement agencies (Perlman & Sykes, 2018). The other major investor countries such as Germany, Japan, Canada, France and the UK also reinforced the control of foreign corruption by revising existing laws and practices. Stricter enforcement of foreign bribery laws in these countries leads MNCs exercising more caution in their dealings with foreign officials. MNCs from these countries, fearful of corruption prosecutions, could face criminal charges for the same misconduct (double jeopardy) and hefty penalties, while their Chinese counterparts are able to offer bribes with relative impunity. In the case of Chad, a company such as ExxonMobil or Royal Dutch Shell would most certainly face legal repercussions for arranging a bribe in order to avoid an environmental fine. Yet the Chinese National Petroleum Corporation (CNPC) was alleged to have arranged such a bribe and has not been held responsible as a corporation by the Chinese government.

SOEs and Political Connections

Another nonnegligible fact of Chinese OFDI relates to the wide presence of government ownership of firms in the economy. China's investment in Africa is largely undertaken by SOEs which are more prone to corruption due to their closeness to governments and public officials, and the scale of the assets and services they control, particularly in the mining, oil, and construction industries (Smith & Zheng, 2016).

State interventions covered a wide range of actions, from administrative approvals and inspection to industrial policy restrictions. These discretionary actions create considerable rent-seeking opportunities for both home and host government officials. To enter a foreign market, MNCs must secure a great number of licenses, permits, registrations, and any other government approvals. Since the power to authorize the foreign corporation's activities is vested in the hands

of local politicians and officials, SOEs with its closer relationship with home and host governments are more likely to abuse their influence for personal gain than privately incorporated companies.

Reports of Chinese corruption in Africa are numerous and often revolve around Chinese SOEs paying off officials at the highest levels of African governments. One of the world's largest steel companies, Shandong Iron and Steel, allegedly offered former Sierra Leonean President Ernest Bai Koroma a $150 million sweetener to transfer to it the rights to rich iron mines from another company (Thomas, 2015). Another high-profile bribery case was revealed in 2017 when Patrick Ho, a former Secretary of Home Affairs of Hong Kong, was arrested in the US for offering millions of dollars to African officials for oil rights in Chad and Uganda on behalf of Chinese conglomerate CEFC China Energy (Marsh, 2019).

Risk Indifferent Investment and Unconditionality

Chinese MNCs investing in Africa receive substantial supports from the central government even if they are not state owned. To foster the overseas investment, engineering contracts, and search for new markets that were all part of "going global," Beijing promised diplomatic support, export tax exemptions, help with risk assessments, easier emigration approvals, and insurance (Brautigam, 2009). China has also helped finance infrastructure projects based on loans with lower interest rates than most Western countries are willing to make (Yao & Wang, 2014b).

MNCs have different goals, and their interests fundamentally rest upon the need to maximize profits. Nevertheless, the Chinese OFDI policy reflects a geopolitical and economic combination with its MNCs expanding into countries that Western MNCs tend to avoid, such as Angola, Sudan and Sierra Leone. Such African countries have been frustrated by Western

insistence on capacity building, instead preferring China's focus on infrastructure and tangible

projects. In this regard, China has bailed out the so-called "rogue countries" in the face of

international sanctions and criticism. Chinese development finance projects, for instance, are

found to be more concentrated in birth regions of African leaders and politicians- rather than

regions that are the most in need (Dreher et al., 2016).

Developed countries significantly put pressure on foreign governments to synchronize their

regulatory and institutional environments with those of their own. In contrast, China has shown

an explicit willingness to work with any country, regardless of its international reputation. Prior

studies on Chinese MNCs' location choice find empirical evidence that Chinese OFDI is

attracted, rather than deterred, by political risk. The unconditionality of Chinese investment in

Africa contrasts with most development financing from traditional investor states — who usually

require the recipient to undergo changes in governance structure and adhere to international "best

practices" (Lang, 2017). Consequently, recipient governments unwilling to implement the

political changes required by traditional investors turn to China as an alternative source of

funding. This may be particularly appealing to African ruling elites who have grown tired to the

political "nanny" of the North (Wang & Elliot, 2014), and lead to a delay or non-action in

changes that could have improved corruption problems.

How conditionality of foreign investment is conducive to improving public governance in

the host country has been discussed in numerous studies of foreign aid (Montinola, 2010;

Ramcharan, 2002; Rodrick, 2006). Ex post conditions are imposed to ensure that the interim

profitability or performance of the investment program is consistent with the expectations and to

justify continuing investment. In contrast, ex post conditions play a less prominent role in

determining Chinese OFDI locations for African countries. The absence of ex post conditions

makes Chinese FDI more attractive to countries that struggle with fulfilling requirements such as reducing corruption and increasing accountability. Along with this line of bad-money-drives-out-good argument, Yao and Wang (2014b) find evidence that the surge of China's OFDI displaces OECD countries' OFDI in a third host country.

By taking the above discussion into account I contend that the presence of Chinese MNCs is likely to increase corruption in Africa over time and the following research hypothesis has been formulated

H1: Compared with global OFDI flows and stocks, Chinese OFDI will show a stronger association with African countries that are ranked as more corrupt.

In addition, the features of the host markets should be considered when analyzing the effects of FDI on corruption. Although investment decisions are made by MNCs from parent countries, investment conditions are largely shaped by the policies of host government. In authoritarian regimes, FDI profits are more likely to be subject to rent seeking by governments (Wright & Zhu, 2017). Given the economic opportunities created by FDI, authoritarian institutions are better suited for rent extraction from FDI-induced benefits, because authoritarian governments tend to have a greater discretion than democratic governments both over the FDI-related policies and the distribution of economic rents. Therefore, it can be derived that democratic institutions may attenuate or mitigate the negative effect of FDI on corruption.

H2: Higher inward FDI from China is more likely to increases corruption in authoritarian countries than in democratic countries in Africa.

V. Empirical Strategy

This paper applies a panel data analysis to examine the causal relationship between corruption and Chinese FDI in Africa. Since each African country has its own individual characteristics (unit-specific confounders) that may influence the independent or dependent variables, the fixed effects (FE) model provides the most reliable predictions[1]. The estimation model, which allows each group (country) to have its own intercept, is set up as follows:

$$Corruption_{it} = \alpha_i + \beta FDI_{it} + \gamma V_{it} + \varepsilon_{it} \qquad (1)$$

Where α_i is the intercept for each of the individual units of observation accounting for country fixed effects. $Corruption_{it}$ is the level of corruption of country i at time t and its measurement is discussed later in this section. FDI_{it} is the real FDI inflows from China to country i at time t. β is the key parameter of interest to determine whether FDI flows have any effect on the corruption level of the country. V is a vector of control variables and ε represents the normally distributed error term capturing other omitted effects.

As mentioned before, authoritarian regimes are believed to facilitate more rent extraction because rulers in personalist dictatorships typically lack formal institutions that check their individual power and these leaders' families and close political allies often control key economic sector. To investigate whether the effects of Chinese FDI on local corruption level depends upon regime type, I introduce an interaction term between FDI and regime type in Eqn. (2). Based on Polity IV scores, I create a dummy variable Autocracy (*Atcy*) equal to 1 if the country scores lower than 0 for the Polity Variable which ranges between -10 and +10, and to 0 otherwise.

---

[1] The fixed effects model assumes that each group (country) has a non-stochastic group-specific component to the dependent variable. Before conducting the statistic analyses, a Hausman test has proved that the fixed effects model provides the most reliable predictions.

$$Corruption_{it}= \alpha_1+\beta_1 FDI_{it} +\beta_2\ Atcy_{it}*FDI_{it} +\gamma_1 V_{it}+\varepsilon_{it} \qquad (2)$$

In the FE model, the core assumption of exogeneity forbids current values of any variables that enter my regressions to be correlated with past, present, and future values of FDI_{it}. However, if *Corruption$_{it}$* affects FDI_{it+1}, i.e., if reverse causality is present, ε_{it} is necessarily correlated with FDI_{it+1}, and the estimation results are biased and inconsistent.

Admittedly, it may be difficult to identify the independent effect of FDI on corruption in my specification. My argument maintains that investment can be a major factor of corruption problems in the host country. Hypothetically, as investment inflows increases, corruption level also increases. Thus, FDI causes higher corruption level. At the same time, previous studies suggest that a high rate of corruption signals increased business risks that deter foreign investors. The relationship between FDI and corruption is therefore symbiotic, making it more difficult to determine their causality.

In accordance with previous studies (Li & Reuveny, 2003; Malesky, 2009), this paper deals with the endogeneity problem by lagging the explanatory variable, FDI. The idea behind this approach is that while ε_{it} may be correlated with FDI_{it+1} in case of reverse causality, ε_{it-1} may be not. However, using the lagged FDI is only a partial solution and I must be aware of the conditions under which lagging an explanatory variable can achieve causal identification. To justify the use of lagged explanatory variables there must be some reason to expect a significant time lag for the effects to realize, but to what extent FDI in the past should explain current variations in corruption is not theoretically underpinned.

One more viable solution to endogeneity is to fit an instrumental variable (IV) model in a Two-Stage Least Squares (2SLS) setting. The fundamental conception in instrumental variable estimation lies in finding an instrument that is contemporaneously uncorrelated with the error

term in the original model and correlates with the endogenous regressor for which it serves as an instrument; furthermore, the instrument should not have a direct effect on the dependent variable (Wooldridge, 2002). In other words, the instrumental variable must affect the independent variable of interest, and only affect the dependent variable through the independent variable of interest. Recent studies on the consequences of foreign investment have proposed different instruments for FDI. Larraín and Tavares (2004), for example, develop a set of instrumental variables based on geographical and cultural distance between the FDI exporting and recipient countries. Malesky (2009) uses the predicted exchange rate as an instrumental variable for cumulative stocks of FDI. The identification strategy in these studies exploits variation in either economic conditions or geography in the host country.

However, the IV technique introduces problems of its own. It is difficult to find an ideal instrument that is good at predicting yet is not a determinant of corruption. In panel models, finding this variable is even more difficult due to the fact the instrument must also vary over time. In the form of country-level longitudinal data, China-specific variables that would satisfy the conditions of being efficient instrumental variables for FDI hardly exist. Existing databases reporting institutional factors, e.g. legal origin, cultural similarity, colonial history, are commonly used to instrument FDI but are not useful in my case, because both corruption and FDI are driven by the institutional environments. Neither does this paper apply the common geographical measurement for instrumental variables for three reasons. First, geographical variables are time-invariant. Second, my sample of study covers only African countries as the destinations of Chinese OFDI and thus limits the effectiveness of geographical measurements. Third, as mentioned before, Chinese FDI has a unique pattern in its locational choice. The

traditional gravity model with a major emphasis on geography may fail to account for political motives behind investment.

Given that there is no proper instrument for Chinese OFDI and concerns are raised about the result biases caused by using invalid "external" instruments in regression tests (Bun, 2015), I turn to address the problem of endogeneity by implementing the dynamic panel estimator, the Generalized Method of Moments (GMM) methods suggested by Arellano and Bond (1991) and by Blundell and Bond (1998).The GMM estimator corrects for endogeneity by using moment conditions to derive a set of valid "internal" instruments for my endogenous explanatory variable, FDI. Assumed to be a predetermined variable, FDI is instrumented using lagged values of its own. Compared to the FE model, the GMM estimators weaken the exogeneity assumption for the FDI regressor, therefore providing consistent estimates even if reverse causality is present. More specifically, I apply the system GMM proposed by Blundell and Bond (1998) which estimates a single system that combines both regressions in first-differences and in levels. The major advantage of the system GMM estimator is to reduce finite sample bias by exploiting additional moment conditions where the autoregressive parameter is only weakly identified from the first-differenced equation. In my estimation I treat all variables except the unit labo as endogenous to be most

VI.   Data

To test my hypothesis, a measure of the incidence of corrupt behavior across African countries at different levels of development is necessary. Corruption is a very sensitive behavior and extremely hard to observe directly, and available measures are usually not amenable to cross country comparisons. Experience-based measures tend to suffer from sensitivity and social

desirability biases. As a result, perception-based indices that reflect the consensus about the underlying level of all sorts of corruption in different countries are widely considered as a proper proxy measure of corruption in previous studies. I use Transparency International's (TI) annual index of perceived corruption as my main dependent variable. TI's Corruption Perception Index (CPI) ranges from 0 to 100, with 100 being no corruption and 0 being countries where business is totally corrupt. As an alternative to the CPI, the Control of Corruption Index (CCI) in the Worldwide Governance Indicators from the World Bank is also tested in several models. In order to simplify the interpretation of results, I reverse both the values of CPI and CCI so that higher values represent more corruption.

The main explanatory variable is the net FDI inflows to African countries from China. The time frame is restricted to the years 2003 to 2017 because the corresponding data are not available before 2003. The choice of FDI inflows as my dependent variable necessitates justification regarding recent debates on available measures of FDI. The focus of the debates is to identify the relevant measure of foreign investment activity that matches the theoretical mechanisms to be tested. Kerner (2014) suggests that FDI stock estimates are often better conceptual fits to political science questions than flow data. I argue that the entry and presence of Chinese MNCs may contribute to rent creation in African countries, and hence higher corruption. In this sense, I am interested in capturing their presence and business activities at the time, not necessarily their cumulative investment. FDI inflows is more relevant to my study since it can vary across time for each host country. I also include an alternative variable which is given by Chinese FDI inflows as a share of total FDI inflows from the rest of the world: while the first variable provides a measure of the absolute amount of inward FDI, the ratio of Chinese FDI to World FDI allows me a measure of the relevance of FDI inflows to the recipient country's

economy. The measurements of FDI in all regressions are lagged one year to reduce potential endogeneity.

The choice of my control variables is motivated by previous empirical studies on the determinants of corruption level. Economic growth, believed to help reduce corruption, is included as a control variable measured by real GDP growth per capita (percentage). Protectionist trade policies are an important source of rents and most studies predict a negative relationship between corruption and the degree of trade openness within a country (Krueger, 1974; Torrez, 2002). In this paper, trade openness is measured by exports plus imports as percent of GDP. The resources curse theory predicts that resource-rich countries tend to be more corrupt because resource windfalls encourage their governments to engage in rent-seeking behaviours (Bhattacharyya & Hodler, 2010). The data come from World Bank which developed a measurement of total natural resources rents as a share of the gross domestic product (GDP) of a given country. A higher tax rate can potentially induce more corruption in an economy by incentivising tax evasion. Individual as well as companies will have stronger incentives to accept and pay more bribes so as to diminish the tax burden (Nawaz, 2010). I also control for country size (population) based on the argument that corruption is more severe in large countries which may have a low ratio of public service outlets per capita and suffer administrative inefficiency (Fisman & Gatti, 2002). Lastly, the scale of foreign aid to Africa is extraordinarily large relative both to other regions receiving aid and to African economic aggregates. Several studies have identified foreign aid as a major factor in shaping institutional environments in Africa but whether foreign aid fosters local corruption or not remains inconclusive (Asongu, 2012; Mohamed et al., 2015). It is therefore important to control for foreign aid in my model specification, operationalized as official development assistance (ODA).

Table 1 provides summary statistics for the variables that entered the regression analyses.

My dataset consists of 54 countries over 15 years of annual data, giving approximately 800

observations of each variable. Table 1 also reports the variance inflation factors IVIFs) which

ranges from 1.02 to 1.85. VIFs exceeding 5 indicate potential multicollinearity (James et al.,

2013). Given that all values are under the strictest limit of 5, it is confirmed that no serious

correlation and multicollinearity problem exists in my data.

Table 1. Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Max	VIF
CPI	724	30.180	10.754	8.000	65.000	
FDI ($US million)	764	43.900	202.263	-814.910	4,807.860	1.137647
FDI World ($US million)	798	817.026	1,629.611	-7,397.295	11,578.10	1.454329
Trade Openness (%)	731	33.175	19.109	4.429	107.994	1.480058
GDP Growth per capita (%)	755	2.091	7.267	-62.225	122.968	1.073674
Natural Resource Rent (%)	714	14.263	13.573	0.001	63.490	1.706365
Total Tax Rate (%)	654	59.324	56.910	13.600	339.100	1.103513
Autocracy	797	0.737	0.441	0	1	1.194401
Population Growth (%)	791	2.446	0.898	-2.629	4.773	1.675051
Foreign Aid ($US million)	795	75.080	92.429	0.000	1,143.196	1.287866
Workers	460	3,961.967	10,399.280	0.000	91,596.000	1.109894

VII. Regression Results

The results of the regression experiment are presented in Table 2. Model 1 reports the

estimates from my baseline specification, and the results provide prima facie evidence that a

statistically significant link between Chinese FDI and corruption exists. Model 2 is the

augmented specification of Model 1 including the interaction term *Chinese FDI*Autocracy*. The

results obtained from Model 2 suggest that Chinese FDI into Africa is more conducive to

corruption in authoritarian regimes where ruling elites are more likely to extract profits from

rent-seeking activities. Model 3 and Model 4 reports the estimates from the same specifications but the independent variable is replaced by World FDI to measure the impact of Non-Chinese FDI on corruption in Africa. The effects of world FDI on corruption are not found in Model 3 and Model 4. The alternative independent variable, FDI Percentage, is employed in Model 5 and Model 6, and the results remain robust to my hypotheses[2].

For robustness of my results, Table 3 replicates the same models employed in Table 2 using the alternative dependent variable CCI. The parameter estimates are quite similar to those based on the CPI. This is not surprising since, for my sample of countries, the correlation coefficient between these two indices is 0.9296. What is noteworthy is that in Model 9 and Model 10 the coefficients of World FDI bear significant and negative signs, indicating that FDI flows from the world overall decrease corruption in Africa.

It is possible that Chinese FDI flows might be more important in influencing corruption level in certain African countries than others. The first 5 columns of Table 4 report the results of disaggregated analyses based on geographical grouping of African countries. Only Central and Southern Africa show the significant impact of Chinese FDI on level of corruption, as found in the aggregate regression. A plausible reason for this result differential is that Central and Southern African countries have performed better in attracting Chinese FDI and accommodated more Chinese MNCs in the past decade. The last 4 columns of Table 4 show the results of disaggregated analyses where countries that fall below the average income are categorized as low income and countries above are categorized as high income. The results imply that higher income countries are more susceptible to corruption problems associated with Chinese FDI.

---

[2] *Foreign Aid* is the only control variable that is constantly significant and positive across nearly every regression model. This is consistent with the findings by previous studies that foreign aid would foster corruption rather than reducing it.

Although consistent with previous findings that the effect of FDI on corruption is conditional on the host economic development, this finding contradicts with Pinto and Zhu (2016)'s empirics that higher income countries ought to combat corruption problems associated with FDI better than lower income countries. My finding also suggests that the negative impact of FDI on corruption from the overall sample is being driven by the higher income countries rather than the lower income countries.

Table 5 presents the results of dynamic panel data analyses by utilizing the two-step system GMM procedure. The effect of the past level of corruption is statistically significant at 1% level with positive signs in all models. Therefore, corruption does seem to have inertia, and that part of present corruption attributes to its initial conditions significantly. In Model 14 and 18 where the interaction dummy is included, the coefficient of the FDI-Autocracy becomes insignificant and this is not consistent with the results obtained from the FE model. Interestingly, the interaction coefficient is significant and negative in Model 16 and 20, affirming the corruption-improving impact of World FDI. Overall the regression results obtained from Table 5 support Hypothesis 1 but not Hypothesis 2.

VIII.   Limitations and Avenues for Further Research

There are four major limitations with my research approach that, if resolved, would be important steps forward from this work. The first limitation with my study concerns data availability. My research fails to include all the potential determinants of corruption as control variables, because time series data for certain cultural and sociodemographic determinants are not available for my sample of African countries. For example, religion and schooling, deemed

to be the most crucial factors of corruption suggested by previous studies, are missing in my

empirical tests and it may lead to confounding bias.

Table 2. Fixed-Effect Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable: CPI					
China OFDI$_{t-1}$	0.947*	0.592				
	(0.539)	(0.550)				
World OFDI$_{t-1}$			0.230	2.692		
			(0.855)	(3.650)		
China OFDI Flows as % of World Flows					0.203**	-13.386
					(0.795)	(17.525)
Trade Openness	-0.046	-0.040	-0.057	-0.057	-0.048	-0.049
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)
Natural Resource Rents	0.074*	0.073*	0.082**	0.080*	0.076*	0.077*
	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)
GDP Growth per Capita	-0.017	-0.026	-0.022	-0.021	-0.016	-0.017
	(0.043)	(0.043)	(0.044)	(0.044)	(0.044)	(0.044)
Total Tax Rate	-0.011**	-0.009*	-0.011**	-0.011**	-0.011**	-0.011**
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Population Growth	0.089	-0.038	0.247	0.259	0.069	0.042
	(0.577)	(0.574)	(0.578)	(0.578)	(0.579)	(0.580)
Foreign Aid	0.875**	0.955**	0.948**	0.926**	0.850**	0.866**
	(0.411)	(0.409)	(0.412)	(0.413)	(0.414)	(0.415)
China OFDI: Autocracy		6.894***				
		(2.432)				
World OFDI: Autocracy				-2.605		
				(3.754)		
China OFDI Flows as % of World Flows: Autocracy						13.614*
						(17.539)
Observations	540	540	550	550	540	540
R^2	0.035	0.051	0.033	0.034	0.029	0.031
Adjusted R^2	-0.074	-0.059	-0.076	-0.077	-0.081	-0.082
F Statistic	2.539** (df = 7; 484)	3.259*** (df = 8; 483)	2.440** (df = 7; 493)	2.193** (df = 8; 492)	2.094** (df = 7; 484)	1.906* (df = 8; 483)

Note: *p**p***p<0.01

Table 3. Fixed-Effect Regression Results

			Dependent variable:			
			CCI			
	(7)	(8)	(9)	(10)	(11)	(12)
China OFDI$_{t-1}$	0.025**	0.029				
	(0.020)	(0.021)				
World OFDI$_{t-1}$			-0.017*	-0.324**		
			(0.031)	(0.133)		
China OFDI Flows as % of World Flows					0.024*	0.470
					(0.032)	(0.641)
Trade Openness	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Natural Resource Rents	0.0002	0.0003	0.0002	0.0004	0.0002	0.0002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
GDP Growth per Capita	0.001	0.002	0.001	0.001	0.002	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Total Tax Rate	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Population Growth	0.045**	0.046**	0.041**	0.040*	0.044**	0.043**
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Foreign Aid	0.049***	0.048***	0.044***	0.046***	0.050***	0.051***
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
China OFDI: Autocracy		0.077*				
		(0.091)				
World OFDI: Autocracy				-0.324**		
				(0.137)		
China OFDI Flows as % of World Flows: Autocracy						0.447*
						(0.642)
Observations	553	553	567	567	552	552
R^2	0.045	0.046	0.037	0.047	0.043	0.044
Adjusted R^2	-0.061	-0.062	-0.069	-0.060	-0.063	-0.064
F Statistic	3.322*** (df = 7; 497)	2.994*** (df = 8; 496)	2.769*** (df = 7; 510)	3.144*** (df = 8; 509)	3.210*** (df = 7; 496)	2.866*** (df = 8; 495)

Note: *p**p***p<0.01

Table 4. Fixed-Effect Regression Results

Dependent variable:

CPI

	North Africa	East Africa	West Africa	Southern Africa	Central Africa	Higher Income	Lower Income	Higher Income	Lower Income
China OFDI$_{t-1}$	6.979	1.547	-5.361	0.841*	7.387*	0.999**	-0.883	0.726	-9.467
	(6.541)	(5.028)	(5.472)	(0.487)	(3.910)	(0.484)	(4.463)	(0.487)	(9.551)
Trade Openness	-0.068	0.082	-0.016	0.142*	-0.131**	-0.039	-0.020	-0.036	-0.017
	(0.101)	(0.124)	(0.056)	(0.073)	(0.059)	(0.045)	(0.053)	(0.044)	(0.053)
Natural Resource Rents	-0.087	-0.180	0.303***	-0.050	0.088**	0.013	0.137*	0.016	0.134*
	(0.099)	(0.208)	(0.098)	(0.081)	(0.043)	(0.049)	(0.072)	(0.048)	(0.072)
GDP Growth per Capita	0.278*	-0.086	-0.048	-0.096	-0.004	0.057	-0.007	0.038	-0.008
	(0.154)	(0.175)	(0.086)	(0.083)	(0.041)	(0.066)	(0.059)	(0.065)	(0.059)
Total Tax Rate	0.022	-0.371***	-0.006	-0.048	0.001	-0.171***	-0.004	-0.159***	-0.003
	(0.080)	(0.109)	(0.006)	(0.096)	(0.004)	(0.052)	(0.006)	(0.051)	(0.006)
Population Growth	2.627	0.777	-2.798*	7.362***	-2.143**	1.640***	-2.676**	1.483**	-2.764**
	(3.335)	(0.964)	(1.455)	(1.557)	(0.935)	(0.631)	(1.154)	(0.625)	(1.157)
Foreign Aid	0.057	2.666**	1.112	-1.704*	0.298	0.170	2.769***	0.378	2.660***
	(0.911)	(1.082)	(1.029)	(0.984)	(0.437)	(0.424)	(0.910)	(0.424)	(0.916)
China OFDI: Autocracy								7.145***	11.008
								(2.523)	(10.828)
Observations	59	120	164	106	91	272	268	272	268
R^2	0.244	0.209	0.202	0.236	0.182	0.089	0.099	0.119	0.103
Adjusted R^2	0.067	0.068	0.084	0.108	0.031	-0.029	-0.015	0.0005	-0.014
F Statistic	2.167* (df = 7; 47)	3.805*** (df = 7; 101)	5.135*** (df = 7; 142)	3.962*** (df = 7; 90)	2.411** (df = 7; 76)	3.347*** (df = 7; 240)	3.736*** (df = 7; 237)	4.016*** (df = 8; 239)	3.399*** (df = 8; 236)

Note: *p **p ***p<0.01

Table 5. Dynamic Regression Results (System GMM)

	Dependent variable:							
	CPI				CCI			
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
China OFDI$_{t-1}$	0.184*	1.012			0.009*	0.004		
	(0.159)	(0.654)			(0.005)	(0.011)		
World OFDI$_{t-1}$			0.211	1.158**			-0.006*	0.010
			(0.133)	(0.546)			(0.003)	(0.012)
CPI$_{t-1}$	0.964***	0.926***	0.959***	0.893***				
	(0.023)	(0.057)	(0.023)	(0.071)				
CCI$_{t-1}$					0.978***	0.950***	0.977***	0.932***
					(0.014)	(0.034)	(0.014)	(0.047)
Trade Openness	0.012	0.018	0.011	0.017	0.001**	0.001*	0.001**	0.001
	(0.012)	(0.025)	(0.014)	(0.028)	(0.0004)	(0.001)	(0.0004)	(0.001)
Natural Resource Rents	-0.018	0.023	-0.021	0.030	-0.001***	-0.001	-0.001***	-0.0003
	(0.019)	(0.047)	(0.019)	(0.047)	(0.0005)	(0.001)	(0.0004)	(0.001)
GDP Growth per Capita	0.059*	0.073*	0.059*	0.086*	0.001	0.001	0.001	0.001
	(0.035)	(0.043)	(0.035)	(0.046)	(0.001)	(0.001)	(0.001)	(0.002)
Total Tax Rate	-0.003	0.001	-0.003	0.001	0.0001	0.0002*	0.0001	0.0002**
	(0.002)	(0.004)	(0.003)	(0.004)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Population Growth	-0.022	-0.400	-0.033	-0.481	0.002	-0.003	0.001	-0.012
	(0.220)	(0.561)	(0.225)	(0.640)	(0.007)	(0.012)	(0.008)	(0.019)
Foreign Aid	0.015**	-0.273**	-0.067**	-0.581**	0.006**	-0.001**	0.005**	-0.005**
	(0.112)	(0.344)	(0.139)	(0.470)	(0.006)	(0.009)	(0.005)	(0.012)
China OFDI: Autocracy		-0.667				-0.017		
		(0.463)				(0.013)		
World OFDI: Autocracy				-0.681*				-0.019*
				(0.384)				(0.013)
Number of Countries	54	54	54	54	54	54	54	54
Number of Observations Used	1007	1007	1024	1024	1057	1057	1084	1084
Lag Structure	t-1, collapsed	t-1, collapsed	t-1, collapsed	t-1, collapsed	t-1, collapsed	t-1, collapsed	t-1, collapsed	t-1, collapsed
Sargan Test	42.7173**	40.0579**	43.2629***	40.415***	36.1222**	35.5628**	37.1627**	35.7299**
AR Test 1	-4.17184***	-4.06885***	-4.24739***	-4.26392***	-4.82536***	-4.88075***	-4.91275***	-4.84789***
AR Test 2	-0.021077	-0.244855	-0.0634391	0.160573	-0.351852	-0.308807	-0.293264	-0.247596

Note: *p**p***p<0.01

The second major limitation with my study concerns the dichotomy of countries being either democratic or authoritarian. In reality, the institution in the host country is neither

monolithic nor homogeneous. An FDI host country's institution may be considered well designed in terms of judicial independence or financial regulation while scoring poorly in terms of democracy. Furthermore, the mechanism through which FDI affects corruption level in democratic countries does not seem as obvious as in authoritarian cases. How democratic audiences respond to the spillovers of FDI? What *kind* of democratic institutions help curb corruption problems for an FDI host country? Developing a more nuanced understanding and taxonomy of institution seems necessary for future research on FDI from both theoretical and empirical perspectives.

Third, my research may fail to capture the dynamics of Chinese FDI, as it is becoming more diverse in terms of enterprise ownership, source and recipient regions, and industrial sectors. One interesting focus for future research on Chinese OFDI in Africa may be on the micro-level, to determine whether small and private Chinese firms behave differently there than the government or its SOEs.

Last but not the least, this paper cannot simply ignore the predominant trend in the literature that portrays corruption as predicting inflows of FDI. Although reverse causality (the effect of corruption on FDI) can be considered a nuisance that poses a threat to my empirical results, this paper must recognize it as a substantive phenomenon. It is plausible that China's OFDI opts for countries with a higher level of corruption in the first place. Previous studies have empirically examined if corruption level is a determinant of Chinese OFDI in Africa and presented mixed results, but they have not fully answered the puzzling question: Is China really favoring more corrupt countries to a larger extent than global investors in Africa? If so, why? An intuitive explanation is that China's outbound investment policies can be motivated by geopolitical strategies such as securing natural resources and wielding diplomatic power. As a

result, China may invest in corrupt countries that traditional investors avoid. But even if this holds true, another question remains unanswered: Does China choose investment countries based on their corruptibility as a purposeful action or is it an unintended consequence of international politics? To answer these questions is beyond the scope of my research, but future studies on Sino-African economic partnership, especially the ones rely on observational data for causal reference, should always incorporate designs with the potential for endogeneity.

IX.   Conclusion

Over the last decade, Africa has experienced tremendous economic transformation. The continent has attracted a large volume of investments and developed closed economic ties with emerging partners. However, the growing importance of developing country multinationals in cross-border investments has created a controversy regarding their impacts on host country institutions. Considering China's increased presence in Africa and the mounting criticism concerning Chinese investment practices, the present paper investigates whether Chinese FDI fuels local-level corruption in Africa. This study contributes to the existing literature by identifying three main features of Chinese OFDI that could open more opportunities for host governments in Africa to practice corruption. First, China's reluctance to prosecute transnational corruption undermines the coordinated efforts of Western countries, which have increasingly used legal framework to combat foreign bribery. Second, Chinese investment in Africa is largely taken by SOEs which are more likely to abuse their influence for personal gains due to their closer ties with home and host government officials. Lastly, Chinese FDI may disincentivize African countries to improve the quality of governance. Countries unwilling or unable to

implement the political changes required by traditional Western investors may turn to China as an alternative source of funding.

This paper revisits the association between corruption and FDI flows for a panel of 56 African countries over the period of 2003–2017 and employs both static and dynamic panel data methodologies. The empirical results reported in this paper have substantive implications. The fact that Chinese OFDI is more closely linked than global OFDI to corrupt countries in Africa supports both the popular impressions nurtured by the international press and many political observers, suggesting that FDI and corruption can be mutually reinforcing factors: not only do African countries with a higher level of corruption attract more Chinese FDI, but also Chinese FDI in turn exacerbate the corruption problem. My empirical results overall do not support the notion that corruption level should be lower among democratic countries in Africa, as suggested by prior studies. Additionally, my finding suggests that the political effects of FDI are not uniform but heterogeneous, depending on the characteristics of the source of FDI. Future research should further explore whether the increasing investment activities of other major investing countries, such as Russia and India, would have the same detrimental impact on host countries' institution.

Albeit its rapid growth pace, China's investment activities in Africa are still in their early stages and it is therefore difficult to fully comprehend their longer-term impacts. The dilemma facing MNCs and parent countries, as well as African governments and concerned civil society actors, is how to successfully preserve their economic interests without undermining the structures and emerging institutions which are crucial to building successful market economies within the framework of a liberal constitutional state. As China continues to increase its development presence it is crucial to understand how its features and its policy of non-

interference complement or hinder the development and governance efforts of other development actors.

Acknowledgments

References

David N. Abdulai. (2016). *Chinese Investment in Africa How African Countries Can Position Themselves to Benefit from China's Foray into Africa*: Taylor & Francis.

Anselm Komla Abotsi, & Tongyai Iyavarakul. (2015). Tolerable Level of Corruption for Foreign Direct Investment in Africa. *Contemporary Economics, 9*, 249-270.

John S. Ahlquist. (2006). Economic Policy, Institutions, and Capital Flows: Portfolio and Direct Investment Flows in Developing Countries. *International Studies Quarterly, 50*, 681-704.

Gayle Allard. (2012). Chinese OFDI in Africa: Trends, Prospects, and Threats. In I. Alon, M. Fetscherin, & P. Gugler (Eds.), *Chinese International Investments*. New York: Palgrave Macmillan.

Manuel Arellano, & Stephen Bond. (1991). Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application toEmployment Equations. *The Review of Economic Studies, 58*, 277-297.

Simplice A. Asongu. (2012). On the Effect of Foreign Aid on Corruption. *Economic Bulletin, 32*(3), 2174-2180.

Nicholas Bailey. (2018). Exploring the Relationship Between Institutional Factors and FDI Attractiveness: A Meta-Analytic Review. *International Business Review, 27(1)*, 139-148.

Nicholas Bailey, & Brian Warby. (2019). Explaining the competition for FDI: Evidence from Costa Rica and cross-national industry-level FDI data. *Research in International Business and Finance, 47*, 67-77.

World Bank. (2018). *Global Investment Competitiveness Report 2017/2018*. Retrieved from

Sambit Bhattacharyya, & Roland Hodler. (2010). Natural Resources,Democracy and Corruption. *European Economic Review, 54*, 608-621.

Javier Blas. (2013). Malawi 'cash-gate' corruption scandal unfolds like a thriller. Retrieved from https://www.ft.com/content/c17480e0-50fb-11e3-b499-00144feabdc0

Richard Blundell, & Stephen Bond. (1998). Initial Conditions and Moment Restrictions in Dynamic Panel Data Models. *Journal of Econometrics, 87*(1), 115-143.

Deborah Brautigam. (2009). *The Dragon's Gift: The Real Story of China in Africa*. New York: Oxford University Press.

Deborah Bräutigam. (2011). Aid 'With Chinese Characteristics': Chinese Foreign Aid and Development Finance Meet the OECD-DAC Aid Regime. *Journal of International Development, 23*(5), 752-764.

Peter J. Buckley, Liang Chen, Jeremy Lawrence Clegg, & Hinrich Voss. (2016). The Role of Experience in FDI Location Choice: Endogenous Risk, Exogenous Risk, and High-Level Government Visits. *Journal of International Management, 22(2)*, 131-146.

Peter J. Buckley, L. Jeremy Clegg, Adam R. Cross, Xin Liu, Hinrich Voss, & Ping Zheng. (2007). The Determinants of Chinese Outward Foreign Direct Investment. *Journal of International Business Studies, 38*(4), 499-518.

Maurice J. G. Bun. (2015). Identifying the Impact of Deterrence on Crime: Internal versus External Instruments. *Applied Economics Letters, 22*(3), 204-208.

James Chavula. (2017). Rusty Remains of Malawi-Taiwan Ties. Retrieved from https://mwnation.com/rusty-remains-malawi-taiwan-ties/

Wenjie Chen, David Dollar, & Heiwai Tang. (2018). Why Is China Investing in Africa? Evidence from the Firm Level. *TheWorld Bank Economic Review, 32*(3), 610-632.

Daouda Cissé. (2012). *FOCAC: Trade, Investments and Aid in China-Africa Relations*. Retrieved from

Gillian Dell, & Andrew McDevitt. (2018). *Exporting Corruption- Progress Report 2018: Assessing Enforcement of the OECD Anti-Bribery Convention*. Retrieved from

Firat Demir. (2016). Effects of FDI Flows on Institutional Development: Does It Matter Where the Investors are from? *Wolrd Development, 78*, 341-359.

Firat Demir, & Chenghao Hu. (2016). Institutional Differences and the Direction of Bilateral FDI Flows: Are South-South Flows any Different than the Rest? *The World Economy, 39*(12), 2000-2024.

Ping Deng. (2003). Foreign Investment by Multinationals from Emerging Countries: The Case of China. *Journal of Leadership and Organizational Studies, 10*(2), 113-124.

Tang Dong, & Cijun Fan. (2017). The effects of China's aid and trade on its ODI in African countries. *Emerging Markets Review, 33*, 1-18.

Ficawoyi Donou-Adonsou, & Sokchea Lim. (2018). On the Importance of Chinese Investment in Africa. *Review of Development Finance, 8*(1), 63-73.

Zdenek Drabek, & Petros C. Marvroidis. (2013). *Regulation Of Foreign Investment: Challenges To International Harmonization*.

Axel Dreher, Andreas Fuchs, Roland Hodler, Bradley C. Parks, Paul A. Raschky, & Michael J. Tierney. (2016). *Aid on Demand: African Leaders and the Geography of China's Foreign Assistance*. Retrieved from

Raymond Fisman, & Roberta Gatti. (2002). Decentralization and Corruption: Evidence Across Countries. *Journal of Public Economics, 83*(3), 325-345.

Kevin P. Gallagher, & Amos Irwin. (2014). Exporting National Champions: China's Outward Foreign Direct Investment Finance in Comparative Perspective. *China & World Economy, 22*(6).

Lan Gao, & Xiaohui Liu. (2012). The Internationalization of Chinese State-Owned Enterprises: What Challenges Do They Face? *International Business*, 63-82.

Victor M. Gastanaga, Jeffrey Nugent, & Bistra Pashamova. (1998). Host Country Reforms and FDI Inflows: How Much Difference do they Make? *World Development, 26*(7), 1299-1314.

Mohsin Habib, & Leon Zurawicki. (2002). Corruption and Foreign Direct Investment. *Journal of International Business Studies, 33*(2), 291-307.

Celia Hatton. (2017). China's secret aid empire uncovered. Retrieved from https://www.bbc.com/news/world-asia-china-41564841

Transparency International. (2010). *The Anti-Corruption Catalyst: Realising the MDGs by 2015*. Retrieved from Berlin, Germany: https://www.transparency.org/whatwedo/publication/the_anti_corruption_catalyst_realising_the_mdgs_by_2015

Ann-Sofie Isaksson, & Andreas Kotsadam. (2018a). Chinese Aid and Local Corruption. *Journal of Public Economics, 159*, 146-159.

Ann-Sofie Isaksson, & Andreas Kotsadam. (2018b). Racing to the Bottom? Chinese Development projects and trade union involvement in Africa. *World Development, 106*, 284-298.

Gareth James, Daniela Witten, Trevor Hastie, & Robert Tibshirani. (2013). *An Introduction to Statistical Learning: with Applications in R*. New York: Springer.

Beata Smarzynska Javorcik, & Shang-Jin Wei. (2000). *Corruption and the composition of foreign direct investment - firm-level evidence*. Retrieved from Washington DC:

Nathan M. Jensen. (2003). Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization, 57*(3), 587-616.

Yuanfei Kang. (2018). Regulatory Institutions, Natural Resource Endowment and Location Choice of Emerging-Market FDI: A Dynamic Panel Data Analysis. *Journal of Multinational Financial Management, 45*, 1-14.

Raphael Kaplinsky, & Mike Morris. (2009). Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons. *The European Journal of Development Research, 21*(4), 551-569.

Andrew Kerner. (2014). What We Talk About When We Talk About Foreign Direct Investment. *Internation Studies Quarterly, 58*, 804-815.

Ivar Kolstad, & Arne Wiig. (2012). What determines Chinese outward FDI? *Journal of World Business, 47*(1), 26-34.

Anne O. Krueger. (1974). The Political Economy of the Rent-Seeking Society. *The American Economic Review, 64*, 291-303.

Chuck C. Y. Kwok, & Solomon Tadesse. (2006). The MNC as an Agent of Change for Host-Country Institutions: FDI and Corruption. *Journal of International Business Studies,, 37*, 767-785.

Aislinn Laing. (2013). Britain Suspends Aid to Malawi over Corruption Claims and Attempted Murder of Whistleblower. Retrieved from https://www.telegraph.co.uk/news/worldnews/africaandindianocean/malawi/10457574/Britain-suspends-aid-to-Malawi-over-corruption-claims-and-attempted-murder-of-whistleblower.html

Bertram Lang (2017). Re: Engaging China in the Fight against Transnational Bribery: "Operation Skynet" as a new opportunity for OECD countries

Felipe B. Larraín, & José Tavares. (2004). Does Foreign Direct Investment Decrease Corruption? *Cuadernos de Economia, 41*, 217-230.

Jetson Leder-Luis. (2018). Do Chinese Aid in Africa Worsen Corruption? And If So, Why? Retrieved from https://www.corruptionwatch.org.za/do-chinese-aid-projects-in-africa-make-corruption-worse-and-if-so-why/

Ana Teresa Tavares Lehmann, & Frederick Lehmann. (2017). Outward Direct Vnvestment by Chinese State-Owned Enterprises: Can host Country Policy Act as a Country-Specific Advantage? *Competitiveness Review: An International Business Journal, 27*(3), 231-252.

Quan Li, & Rafael Reuveny. (2003). Economic Globalization and Democracy: An Empirical Analysis. *British Journal of Political Science, 33*(1), 29-54.

B.K. Lokesha, & D.S. Leelavathy. (2012). Determinants of Foreign Direct Investment: A Macro Perspective. *Indian Journal of Industrial Relations, 47*, 459-469.

Humphrey Malalo. (2018). Kenya Arrests Two Top Officials for Suspected Corruption over new $3 Billion Railway. Retrieved from https://www.reuters.com/article/us-kenya-corruption-railway/kenya-arrests-two-top-officials-for-suspected-corruption-over-new-3-billion-railway-idUSKBN1KW07L

Edmund J. Malesky. (2009). Malesky, Edmund J., Foreign Direct Investors as Agents of Economic Transition: An Instrumental Variables Analysis *Quarterly Journal of Political Science, 4*, 59-85.

Jenni Marsh. (2019). Disgraced Former Hong Kong Politician Jailed for 3 Years for Bribing African leaders at the UN. Retrieved from https://www.cnn.com/2019/03/25/asia/patrick-ho-sentencing-intl/index.html

Masoud Rashid Mohamed, Shivee Ranjanee Kaliappan, Normaz WANA Ismail, & W.N.W Azman-Saini. (2015). Effect of Foreign Aid on Corruption: Evidence from Sub-Saharan African Countries. *International Journal of Social Economics, 42*(1), 47-63.

Giles Mohan. (2013). Beyond the Enclave: Towards a Critical Political Economy of China and Africa. *Development and Change, 44*(6), 1255-1272.

Gabriella R. Montinola. (2010). When Does Aid Conditionality Work? *Studies in Comparative International Development, 45*(3), 358-382.

Randall Morck, Bernard Yeung, & Minyuan Zhao. (2008). Perspectives on China's Outward Foreign Direct Investment. *Journal of International Business Studies, 39*(3), 337-350.

Paulo Reis Mourao. (2018). What is China Seeking from Africa? An analysis of the economic and political determinants of Chinese Outward Foreign Direct Investment based on Stochastic Frontier Models. *China Economic Review, 48*, 258-268.

Raphael Mweninguwe. (2017). Malawi-China Diplomatic Ties: 10 Years On. Retrieved from https://thediplomat.com/2017/09/malawi-china-diplomatic-ties-10-years-on/

Farzana Nawaz. (2010). *Exploring the Relationships between Corruption and Tax Revenue*. Retrieved from

Carol Newman, John Rand, Theodore Talbot, & Finn Tarp. (2015). Technology Transfers, Foreign Investment and Productivity spillovers. *European Economic Review, 76*, 168-187.

OECD. (2017). *2016 Data On Enforcement of the Anti-Bribery Convention: Special Focus on International Cooperation*. Retrieved from

Rebecca L. Perlman, & Alan O. Sykes. (2018). The Political Economy of the Foreign Corrupt Practices Act: An Exploratory Analysis. *The JOurnal of Legal Analysis, 9*(2), 154-182.

J. Peter Pham, Abdoul Salam Bello, & Boubacar-Sid Barry. (2018). Chinese Aid and Investment Are Good for Africa. Retrieved from https://foreignpolicy.com/2018/08/31/chinese-aid-and-investment-are-good-for-africa/

Pablo M. Pinto, & Boliang Zhu. (2016). Fortune or Evil? The Effect of Inward Foreign Direct Investment on Corruption. *Internation Studies Quarterly, 60*, 693-705.

Diego Quer, Enrique Claver, & Laura Rienda. (2017). Cultural Distance, Political Risk and Location Decisions of Emerging-Market Multinationals: A Comparison between Chinese and Indian Firms. *Journal of the Asia Pacific Economy, 22*(4), 587-603.

Ravi Ramamurti. (2009). What Have We Learned About Emerging-Market MNEs. In R. RamamurtiJ & J. V. Singh (Eds.), *Emerging Multinationals in Emerging Markets* (pp. 399-426). Cambridge: Cambridge University Press.

Rodney Ramcharan. (2002). *How Does Conditional Aid (Not) Work?* Retrieved from

Dani Rodrick. (2006). Goodbye Washington Consensus, Hello Washington Confusion? A Review of the World Bank's Economic Growth in the 1990s: Learning from a Decade of Reform. *JOURNAL OF ECONOMIC LITERATURE, 44*(4), 973-987.

Marco Sanfilippo. (2010). Chinese FDI to Africa: What Is the Nexus with Foreign Economic Cooperation? *African Development Review, 22*(1), 599-614.

Karl P. Sauvant, & Victor Zitian Chen. (2014). China's Regulatory Framework for Outward Foreign Direct Investment. *China Economic Journal, 7*(1), 141-163.

Beth A. Simmons. (2001). The International Politics of Harmonization: The Case of Capital Market Regulation. *International Organization, 55*(3), 589-620.

Gordon Sirr, John Garvey, & Liam A. Gallagher. (2018). Local conditions and economic growth from

South–South FDI. *The Journal of International Trade and Economic*

Development, 27, 380-388.

Chris Smith, & Yu Zheng. (2016). Chinese MNCs' globalization, work and employment. In J. Drahokoupil, R. Andrijasevic, & D. Sacchetto (Eds.), *Flexible workforces and low profit margins: electronics assembly between Europe and China* (pp. 67-92). Brussels: The European Trade Union Institute.

Theodora C. Thindwa. (2014). China-Malawi Relations: An Analysis of Trade Patterns and Development Implications. *African East-Asia Affairs*, 42-77.

Abdul Rashid Thomas. (2015). Foreign Investors May Leave Sierra Leone Due to Corruption and Lack of Rule of Law. Retrieved from https://www.thesierraleonetelegraph.com/foreign-investors-may-leave-sierra-leone-due-to-corruption-and-lack-of-the-rule-of-law/

Jimmy Torrez. (2002). The Effect of Openness on Corruption. *Journal of International Trade and Economic Development, 11*(4), 387-403.

UNCTAD. (2018a). *Global Investment Trends Monitor, No. 30* Retrieved from

UNCTAD. (2018b). *World Investment Report 2018*. Retrieved from

Andrea D. Bontrager Unzicker. (2015). Indiana Journal of Global Legal Studies. *Indiana Journal of Global Legal Studies, 7*, 655-686.

Disha Uppal. (2009). Chinese Firm Embroiled in Namibian Corruption Scandal. *Deutsche Welle.*

Fei-Ling Wang, & Wsi A. Elliot. (2014). China in Africa: Presence, Perceptions and Prospects. *Journal of Contemporary China, 23*(90), 1012-1032.

Shang-Jin Wei. (2000). Local Corruption and Global Capital Flows. *Brookings Papers on Economic Activity, 2000*(2), 303-354.

Jeffrey Marc Wooldridge. (2002). *Econometric Analysis of Cross Section and Panel Data*. Cambridge: MA: MIT Press.

Joseph Wright, & Boliang Zhu. (2017). Monopoly Rents and Foreign Direct Investment in Fixed Assets. *Internation Studies Quarterly, 62*(2), 341-356.

Xipeng Xu, & Yu Sheng. (2012). Productivity Spillovers from Foreign Direct Investment: Firm-Level Evidence from China. *Wolrd Development, 40*(1), 62-74.

Shujie Yao, & Pan Wang. (2014a). Dynamic Relationship between China's IFDI and OFDI. In P. Wang (Ed.), *China's Outward Foreign Direct Investments and Impact on the World Economy* (pp. 124-162). London: Palgrave Macmillan.

Shujie Yao, & Pan Wang. (2014b). Location, Resources and Technology of China's OFDI. In *China's Outward Foreign Direct Investments and Impact on the World Economy* (pp. 79-123). London: Palgrave Macmillan UK.

Henry Wai-chung Yeung, & Weidong Liu. (2008). Globalizing China: The Rise of Mainland Firms in the Global Economy. *Eurasian Geography and Economics, 49f*, 57-86.

John Hongxin Zhao, Seung H. Kim, & Jianjun Du. (2003). The Impact of Corruption and Transparency on Foreign Direct Investment: An Empirical Analysis. *Management International Review, 43*, 41-62.

Suisheng Zhao. (2015). *China in Africa: Strategic Motives and Economic Interests*. New York: Routledge.