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ARTICLE

Follow the Giver: Is Chinese MNEs' Investment in Africa Linked to Official Aid?

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Abstract

Does Chinese aid to African countries trigger Chinese foreign direct investment? Bridging the literature on the impact of foreign aid on foreign direct investment (FDI) and that on state ownership, we consider FDI by China's state-owned enterprises (SOEs) compared with that of its privately owned enterprises (POEs) and find FDI by the former is more likely to follow Chinese governmental aid to Africa. Borrowing from institutional theory, we posit that FDI by SOEs follows political imperatives while FDI by POEs pursues market motives. Using data from multiple sources on 3,760 Chinese FDI projects in Africa between 2001 and 2015, we find a correlation between SOE FDI and government aid than that of POEs; that aid has a greater impact on the probability of FDI when the policies of the host country and those of China are in sync, especially in the case of SOEs; and that in low-investment-risk countries the link between aid and investment is weakened, especially in the case of POEs. The results are robust and consistent across different measures and analyses. We contribute to the literature on the relationship between aid and FDI, as well as to that on varieties of capitalism.

摘要

中国对非洲国家的援助是否促进了中国企业对非洲的直接投资（FDI）？本文回顾了国际援助对外商直接投资的影响以及企业所有权方面相关文献，比较了中国国有企业和私营企业在非洲的投资情况。基于制度理论，我们认为国有企业在非投资倾向于遵循政治目标，而私营企业的投资则更多基于市场动机。通过对 2001 年至 2015 年间中国在非洲地区的 3760 个 FDI 项目的多数据源分析，我们发现国际援助与 FDI 投资之间的正相关关系在国有企业中更加显著，在两国政策高度一致时援助对国有企业 FDI 的影响更大。在低投资风险国家，援助与投资之间的正相关关系会减弱，该效应对于私营企业来说更加显著。在不同测量和分析方法下以上结论均保持稳健。本研究对国际援助与 FDI 关系研究和制度多样性方面的文献做出了贡献。

Keywords: Africa; China; foreign aid; foreign direct investment; institutional forces; multinational enterprises
关键词: 对外援助; 外商直接投资; 跨国企业; 中国; 非洲; 制度力

Introduction

Aid and foreign direct investment (FDI) are both widely seen as means by which less developed economies can develop (Donaubauer, Herzer, & Nunnenkamp, 2014). The former is usually based on inter-governmental or bilateral agreements forged for humanitarian or geopolitical purposes, whereas the latter involves the profit-seeking behavior of multinational enterprises (MNEs). China's growing foreign aid and FDI over the past few decades, particularly in Africa, has sparked the interest of scholars and policymakers in part because of the complexities involved (Voss, Buckley, & Cross, 2010). Some studies suggest that Chinese aid has been used to pave the way for entry by its MNEs by reducing risk, building a munificent environment in host countries for Chinese firms, and establishing good

political relationships with them (Morgan & Zheng, 2019; Zhang, Yuan, & Kong, 2010). Others argue that FDI projects by Chinese MNEs are national policy tools undertaken to support the Chinese government's economic, social, and political goals (Dreher, Fuchs, Parks, Strange, & Tierney, 2018; Witt & Lewin, 2007).

The root of the differing views on Chinese aid and FDI is a strong suspicion of their relatively lower independence from their government. Since the 1990s, China has been using large state-owned enterprises (SOEs) as a vehicle for outward FDI in less developed economies (Arnoldi, Villadsen, Chen, & Na, 2019; Jiang, Peng, Yang, & Mutlu, 2015). As the economic transition in China introduced market logic into Chinese SOEs (Child & Rodrigues, 2005; Raynard, Lu, & Jing, 2020), they sought business opportunities in other countries, while continuing to support the Chinese government (Huang, Xie, Li, & Reddy, 2017; Zhou, Gao, & Zhao, 2017), for example, by procuring key resources to fuel China's economic expansion (Deng, 2013). As the rapid economic transition continued, privately owned enterprises (POEs) emerged, along with their SOE counterparts, as prolific sources of FDI in developing and developed economies (Lardy, 2014; Luo & Tung, 2018). Some have speculated that POEs are also acting as state agents (Huang et al., 2017).

We answer the call of Witt, Li, Välikangas, and Lewin (2021) to explore the role played by governments and politics in international business and investigate whether Chinese aid influences SOE and POE FDI in Africa in different ways. We distinguish FDI projects conducted by Chinese SOEs from those of POEs and argue that SOEs are more likely than POEs to follow Chinese aid to a target country. Our rationale stems from the fact that SOEs operate under a hybrid government-market institutional logic, while POEs operate mainly under a market-oriented one (Boisot & Child, 1996; Li, Cui, & Lu, 2014). We further test the distinction by examining how political and market environments influence the association of Chinese aid and the FDI decisions of the two.

We test this hypothesis, using hand-collected data from multiple sources, on a matched sample of 3,598 Chinese aid projects and 3,760 Chinese FDI events in 50 African countries between 2001 and 2015. Addressing potential causal direction and endogeneity concerns with conditional logit models and lagged dependent variables, we find a tendency on the part of both SOEs and POEs to invest in an African country which has seen an increase in its share of Chinese aid in the entire continent, but that the impact is significantly greater for SOEs than for POEs. We further test the institutional logic of this relationship and find that the effect of Chinese aid on FDI is stronger in the case of SOEs when the focal country has policies consistent with those voiced by China in the United Nations, but that this is not the case for POEs. In contrast, when the focal aid-recipient country has low investment risk, the association between aid and FDI deteriorates for POEs, while it remains undeterred for SOEs. Altogether, our findings provide clues that Chinese SOEs invest in Africa to support China's goals while POEs are likely to act as their own agents and are less likely to follow aid in low-risk countries.

Our findings contribute to three streams of literature. First, we extend previous research on the relationship between aid and FDI by borrowing from the varieties of capitalism literature and distinguishing between the reactions of Chinese SOEs and POEs following Chinese aid to an African country. Second, our research indicates that differences in institutional constraints within China also extend outside her borders. While SOEs are under coercive institutional pressure from their home and host governments, POEs may also act as free agents and seek economic returns from their investment in Africa. Our third contribution is about the mechanism through which profit-driven MNEs may take advantage of the close inter-government relationship between home and host countries. We show that the benefits could be a reduction in investment risk, as Chinese POE FDI in a host country is positively associated with Chinese aid when – and only when – the investment environment is high risk. We also offer some practical and policy implications.

Theoretical Background

Foreign Aid and FDI Location Choice

Foreign aid is material help given by one country to another country (or region). The recipient country is typically less economically developed than the donor and/or dealing with natural disasters or

conflicts (Boone, 1996). Foreign aid takes various forms, including, but not limited to, the shipment of emergency food and water, medical assistance, and other material, developmental, or technical assistance, grants, concessional loans, trade credits, and debt forgiveness (Bluhm et al., 2018; Zeleza, 2014). Donors often set well-defined goals, but the impact of aid on recipient countries is often complex and multifaceted (Garriga & Phillips, 2014). Research on foreign aid examines its efficacy in achieving intended outcomes, such as improving infrastructure or the education system, or achieving economic growth (Boone, 1996; Williamson, 2008). In another stream of research which attempts to explain why aid may not work as well as expected, researchers have uncovered unintended consequences arising from inefficient resource allocation in recipient countries (Harms & Lutz, 2006; Kimura & Todo, 2010) and non-developmental motives on the part of donors (Dreher et al., 2018; Garriga & Phillips, 2014). In general, regardless of intended outcomes or unintended consequences, foreign aid is presumed to benefit the recipient country in one way or another (Dreher et al., 2018).

One major area of interest for scholars has been the effect of aid on bilateral relations, particularly FDI from a donor country to a recipient one (Nwaogu & Ryan, 2015; Selaya & Sunesen, 2012). The mechanism is through the aid itself and other channels afforded by it. Aid is typically fundamentally and structurally facilitated by donor-country firms and organizations that have the capacity to carry out the intended mission. For example, in 2012, direct (i.e., non-multilateral) US aid projects in Afghanistan were initially almost entirely carried out by American agencies and companies – some were later subcontracted (Tarnoff, 2012).

The implementation of aid projects increases the exchange of information between donors and recipients and stimulates the building of formal and informal relationships. These confer legitimacy and social capital to the donor country, and garner MNEs recipient country knowledge (Kimura & Todo, 2010; Morgan & Zheng, 2019). This not only lessens the possibility of conflict between donor-country MNEs and recipient-country stakeholders, but also engenders the building of trust and the possibility of developing joint business opportunities (Morgan & Zheng, 2019; Stevens & Newenham-Kahindi, 2017). The combination of such legitimacy creation and relationship-building paves the way for firms from a donor country to take advantage of opportunities in a recipient country at lesser risk (Zhang et al., 2010). Furthermore, information gathered through aid projects is often helpful to donor-country MNEs as they become more knowledgeable about underdeveloped economies in which local data are absent, non-transparent, or unreliable (Garriga & Phillips, 2014).

Scholars suggest that in addition to implementing agencies investing in recipient countries, in order to carry out aid projects, other firms from the focal donor-country follow aid to recipient countries (Morgan & Zheng, 2019). Investing abroad is a crucial decision for MNEs. MNEs prefer to invest in more stable countries with lower environmental uncertainties (Delios & Henisz, 2003) and less liability of foreignness (Johanson & Vahlne, 2009), but also with more business opportunities (Dunning, 1998; Luo & Tung, 2018). Aid can help in achieving most of these by strengthening inter-governmental relations between donors and recipients, or at least by signaling potential resolutions to uncertainties in the destination country (Garriga & Phillips, 2014; Shapiro, Vecino, & Li, 2018). As MNEs need to conform to institutional pressures in both home and host countries, friendly and stable inter-governmental relations between them reduce tensions caused by this duality (Kostova & Roth, 2002). MNEs that conform to the recipient country's institutional norms are able to reduce the liability of foreignness and minimize the likelihood of hostile action on the part of a host government (Asiedu, Jin, & Nandwa, 2009). Indeed, Shapiro et al. (2018) find donor-country MNEs are much less likely to become involved in public disputes with a host government than MNEs from other countries. While home country aid does not necessarily reduce FDI risks or increase business opportunities (Harms & Lutz, 2006; Remmer, 2004), it does usually make recipient countries safer and more friendly, thereby increasing their attractiveness (Kang & Won, 2017; Kimura & Todo, 2010).

Chinese SOE and POE FDI

SOEs dominated China's economy during the central planning era. Now, after four decades of pro-market transition, the percentage of SOEs in China's economy has been substantially reduced and

the SOEs remaining transformed into more market-oriented entities (Raynard et al., 2020). They receive less support from the government, and they are less constrained by it. SOEs take part in market competition. Some have gone public and are listed domestically, some even abroad (Haveman, Jia, Shi, & Wang, 2017). Nonetheless, Chinese SOEs and POEs are still quite different.

In China, SOEs are granted better property rights protection (Che & Qian, 1998), have easier access to scarce resources held by the government (Hanley, Liu, & Vaona, 2015), and even have monopoly status in some key industries (Magnus, 2018). SOEs also enjoy a high status in China because of legitimacy spillovers from the government (Raynard et al., 2020), albeit this comes with an obligation to fulfill governmental economic, social, and political goals (Zhou et al., 2017). Due to their inherent hybrid nature and dual identities, Chinese SOEs may struggle to strike a balance between such obligations and market competitiveness (Guo, Huy, & Xiao, 2017).

Beginning in the 1950s, most Chinese FDI was undertaken by SOEs (Deng, 2013). After China joined the WTO, POEs were permitted to engage in international expansion practices (Buckley et al., 2007). This slightly preceded China transitioning from being a major FDI recipient to an exporter of capital. Compared with the international expansion of Chinese POEs, that of Chinese SOEs is usually seen as undertaken to implement the government's earlier 'Go-Out' policy or a response to the more recent Belt and Road Initiative (Huang, Shen, & Zhang, 2022; Wang & Liu, 2022). On the one hand, resources provided by the Chinese government may uniquely help SOEs deal with international market risk and latecomer disadvantages, but on the other hand, SOEs can be overburdened with state-related responsibilities. In some of these cases, links with the government provide SOEs with an unfair advantage to the extent that POEs are unable to compete (Tang, Wang, & Shen, 2021).

POEs might enjoy an advantage stemming from favorable government policy (Lu, Liu, & Wang, 2011), while at the same time, they might be hampered by requirements to secure permission to invest in a particular foreign country (Stevens & Newenham-Kahindi, 2017). They might benefit from governmental support, and might also have to compete with SOEs for access to markets and resources (Tang et al., 2021). POEs also differ from SOEs in that they tend to have a somewhat riskier approach to cross-border investment in order to acquire technology and brands (Lyles, Li, & Yan, 2014) and to improve their economic performance (Ramasamy, Yeung, & Laforet, 2012). Furthermore, Ramasamy et al. (2012) also suggest that SOEs are more likely to invest in risky countries, while POEs tend to focus more on commercially viable opportunities.

Conceptual Framework and Hypotheses Development

Chinese aid and FDI are both salient and controversial. Chinese aid to Africa started in 1956, shortly after the formation of the People's Republic of China. At that time newly independent African countries needed help in building their nations, and China was keen to support countries that did not want to be aligned with either the Soviet Union or the West (Zeleza, 2014). From the 1980s, as its reforms and economic developments accelerated, China was deemed by some to be a 'rogue donor' and accused of using aid to secure geopolitical favors, natural resources, and other economic or non-economic benefits at the expense of the development and independence of recipient countries (Dreher et al., 2018, 2019; Strange & Humphrey, 2019). In the second decade of the 21st century, Chinese aid to Africa attracted even more attention and controversy even though it amounted to less than one-fifth of one percent of the Chinese government's total aid budget, as opposed to over 5 percent in the 1970s (Morgan & Zheng, 2019; Strange & Humphrey, 2019). Today Chinese FDI and the rise of Chinese MNEs have become global business topics fraught with geopolitical tension. In 2020, China's total FDI flow to Africa was US$4.23 billion and its FDI stock had reached US$43.4 billion. At 2.8 percent of China's total FDI flow and 1.7 percent of its global FDI stock, it was the second smallest to any continent (MOFCOM, 2021). Scholars, policymakers, and the media continue to grapple with what makes Chinese aid and MNE FDI in Africa different from that of other countries (Lessard, 2014; *The Economist*, 2022), although little evidence has been found to support this (Demir, 2016; Dreher et al., 2018). Questions still swirl around Chinese SOE and POE FDI behavior

in aid-recipient countries. We take an institutional view of SOEs and POEs to explore differences in their investment behavior in Africa.

Aid from China and Chinese SOE vs. POE FDI

Chinese aid may reduce risk and increase the payoff of SOEs and POEs investment in recipient countries, encouraging them to undertake FDI (Morgan & Zheng, 2019; Zhang et al., 2010). First, when the Chinese government provides assistance and enters into a bilateral relationship with a recipient country, it shows confidence in that country, which might be seen as a quasi-guarantee for Chinese investment (Asiedu et al., 2009). In addition, sociopolitical risks in recipient countries may be lower if the conflict between the government in power and other stakeholders can be mitigated by an improvement in general welfare brought about by aid. Second, aid may have a vanguard effect that provides Chinese MNEs with access to local social capital and tacit knowledge (Morgan & Zheng, 2019; Stevens & Newenham-Kahindi, 2017), thereby reducing SOE and POE environmental and behavioral uncertainties and bringing to light business opportunities that require trust and cooperation in joint business development (Kimura & Todo, 2010).

Finally, regardless of whether the motives behind Chinese aid are purely humanitarian or other motivations are at play (Abdulai, 2016; Dreher et al., 2018), some scholars suggest that Chinese aid in Africa improves recipient country institutions (Arewa, 2016) and infrastructure (Donaubauer, Meyer, & Nunnenkamp, 2016), creating more information and investment opportunities for MNEs (Garriga & Phillips, 2014). Chinese SOEs and POEs may follow aid trends in their FDI (Ebbers, 2018; Li et al., 2014), irrespective of whether they intend to further the geopolitical goals of the Chinese government (Dreher et al., 2018) or are motivated by other interests (Witt & Lewin, 2007).

Differences in the institutional forces to which SOEs and POEs are subject to may cause them to behave differently when investing in recipient countries. While both types of firms are under some pressure to further China's interests in a recipient country, this is more the case for SOEs because government ownership confers on them additional privileges and constraints (Morck, Yeung, & Zhao, 2008). The equity linkage between SOEs and the government entails obligations that intensify institutional pressure. The top managers of SOEs are usually political appointees and are closely monitored at both the central and local government levels to ensure that they further sociopolitical goals as well as market efficiency (Guo et al., 2017). Indeed, at times SOEs pursue precarious sociopolitical objectives (Bass & Chakrabarty, 2014) or attempt to exert tight control over key sectors and industries (Magnus, 2018; Zheng & Huang, 2018), even at the expense of profitability. In that sense, we might consider SOEs to be acting as government agents as opposed to being purely profit-driven. They are, therefore, more likely to follow Chinese aid to recipient countries in order to ensure that projects are implemented and political goals are met (Wang, Cui, Vu, & Feng, 2022). In exchange, their interests are protected by state institutions, reducing the risks associated with investing in distant countries. The Chinese government gives SOEs resources and forgives their financial inefficiencies (Huang et al., 2017; Li et al., 2014). Moreover, as the government accumulates social capital and local knowledge through its aid projects, SOEs' closeness to the government gives them greater access to knowledge and more legitimacy than is the case for POEs.

Aid-recipient governments are also motivated to safeguard Chinese SOEs, as the property of the aiding government, from expropriation and conflicts with local stakeholders. Their motivation is to ensure the economic interests of the aid-providing government and maintain a good standing bilateral relationships and flow of aid (Asiedu et al., 2009). Some have suggested that SOEs play on this strategy to elaborate on their identity with the Chinese government to increase their legitimacy and credibility (Wang et al., 2022).

There is much less institutional pressure on POEs to pursue national interests, but they are also a few rungs below on the hierarchical ladder in terms of access to resources and they do not enjoy the same level of protection as SOEs (Magnus, 2018; Zheng & Huang, 2018). Host country protection could be afforded to Chinese POEs, but not as strongly as it is for SOEs in which the government

has an ownership stake (Wang et al., 2022). As POEs are not seen as having the same legitimacy in the eyes of aid-recipient governments, they are not treated in the same way unless they are subcontracting or partnering with SOEs (Ramasamy et al., 2012; Wang et al., 2022). Furthermore, even though POEs might get a pat on the back for furthering Chinese interests, SOE managers are more likely to be rewarded with career promotions (Guo et al., 2017). For these reasons, POEs are more likely to follow a market-oriented logic created via institutional transformation and competition (Lazzarini, Mesquita, Monteiro, & Musacchio, 2021; Witt & Lewin, 2007). Therefore, regardless of whether SOEs are profit-driven or not, they are more likely than POEs to engage in FDI in countries that are recipients of Chinese aid.

> *Hypothesis 1 (H1): The likelihood of a Chinese firm making an FDI in a country will have a greater association with the relative share of aid the country received from the Chinese government if the firm is a SOE than if it is a POE.*

Aid-Recipient Country Political Alignment with China

We expect the relative advantage that SOEs have over POEs when investing in a country to be amplified the more politically aligned the host country is with China. Such countries are more likely to see Chinese aid in a positive way, and aid is thus more likely to lead to greater social capital and legitimacy for the Chinese government, which it can then confer on SOEs, resulting in their enjoying a better reputation and higher levels of protection from recipient countries (Wang et al., 2022).

Whether a country sends aid for humanitarian reasons, to gain access to critical resources, or to increase soft power (Arewa, 2016), the aiding government will try to protect its interests and image in the recipient country (Akhtaruzzaman, Berg, & Lien, 2017; Donaubauer et al., 2016). Chinese SOEs, as institutional actors (Butzbach, Fuller, Schnyder, & Svystunova, 2022), whether fulfilling their responsibilities to the state (Dreher et al., 2018) or seeking economic returns (Bass & Chakrabarty, 2014; Ralston, Terpstra-Tong, Terpstra, Wang, & Egri, 2006), will do the same. The coercive institutional pressure does not allow them to shirk these responsibilities. They are more likely to protect China's interests by making stronger commitments through investment in African countries whose policies are aligned with those of the Chinese government (Abdulai, 2016; Dreher et al., 2018; Lu et al., 2018). Indeed, SOEs are often implementing agencies of China's aid programs and are able to establish closer ties with the recipient governments to convey legitimacy and protect China's image (Morck et al., 2008; Raynard et al., 2020; Wang et al., 2022).

POEs, in contrast, are relatively free to follow market logic (Ramasamy et al., 2012; Yang, Ru, & Ren, 2015), although they are expected to protect national interests to some degree (Lardy, 2014). Given the differences in responsibilities and potential benefits of SOEs and POEs, it is more likely that SOEs will invest in aid-recipient African countries that have policies aligned with those of China. African countries that support China on the international stage can expect to be rewarded with more SOE investment in addition to aid. Hence, we propose our second hypothesis:

> *Hypothesis 2 (H2): The political alignment of the aid recipient country with China can strengthen the positive association between the share of aid the country has received from the Chinese government and the likelihood of Chinese firms investing there, but the association is stronger for SOEs than for POEs.*

The Desirable Investment Profile of Aid-Recipient Countries

Many studies (e.g., Ramasamy et al., 2012; Wang & Liu, 2022) have shown that Chinese SOEs are more willing than POEs to operate in higher political risk countries. Borrowing from this logic, we hold that the institutional pressure on SOEs explains why they appear to pay less attention to economic factors such as destination country's investment risk, while POEs seem to respond more to market pressures and more driven by financial opportunities (Lazzarini et al., 2021). When operating in aid-recipient

countries, SOEs are forced to act as national champions (Lazzarini et al., 2021) charged with helping to implement the Chinese government's agenda (Butzbach et al., 2022). The implementation of an aid project may be the very reason SOEs decide to invest in an African country, and thus it is not surprising that the success of the project will be their primary objective (Wang et al., 2022). This is consistent with the role of SOEs to invest in countries that demonstrate political views congruent with those of China, and hence are likely to pay less attention to their investment risk profile.

Chinese SOEs seek to maintain China's and its aid's image as altruistic (Li et al., 2014). This is not to say that there are no other goals. Undoubtedly, China is interested in obtaining resources in many – if not all – of the African countries to which it supplies aid. However, it is important to China that it is not seen as an exploitative neo-colonial power (Abdulai, 2016; Zeleza, 2014), but that its motives are primarily seen as altruistic (Arewa, 2016). In their role as representatives of the Chinese government, SOEs are charged with helping on both fronts: building the image China wishes to project and protecting strategic resources in recipient countries (Wang et al., 2022), even if those efforts are at the expense of financial performance (Zheng & Huang, 2018). In sum, while some SOEs try to improve performance through various strategies, such as outsourcing activities to POEs (Wang et al., 2022), the legitimacy of China's intentions is vested in SOEs' success in completing and implementing their projects (Lazzarini et al., 2021; Morgan & Zheng, 2019), regardless of the financial risks involved (Li et al., 2014; Wang & Liu, 2022).

In contrast, even though POEs may receive some support from the government and in return can be expected to consummate China's interests (Morgan & Zheng, 2019), they are able to pursue a market logic (Yang et al., 2015) and avoid high-risk regions (Lazzarini et al., 2021). They can be expected to balance return and learning opportunities against risk (Lyles et al., 2014) and hence to generally prefer to operate in lower-risk, market-oriented countries (Ramasamy et al., 2012; Yang et al., 2015).

Based on these institutional and ownership logics, we suggest that when the investment profile of an African country is deemed to be less risky and more profitable, POE investment will be less likely to follow government aid, in contrast to SOEs which are not allowed to be deterred by high risk. Hence our third and final hypothesis:

> *Hypothesis 3 (H3): A low-risk investment profile in an aid-recipient country weakens the positive association between the share of aid the country has received from the Chinese government and the likelihood of Chinese firms investing there, more so for POEs than for SOEs.*

Methods

Data

To test our hypotheses, we constructed a dataset from several sources. Approvals of investments in Africa by Chinese firms were hand-collected from China's Ministry of Commerce (MOFCOM). The sample contains 3,760 investments by 2,120 MNEs from all 30 provincial-level administrative zones of mainland China between 2001 and 2015. MOFCOM stopped collecting firm-level data in 2015, hence the cutoff date. A large majority of these 2,120 firms are not publicly traded or are subsidiaries of partially public firms, making it impossible to obtain the size of their African investments or even the most basic firm-level information (e.g., employment size, revenues, etc.). We were able to find information on their ownership by manually matching firm names with data posted on Tianyancha (https://www.tianyancha.com), a corporate-intelligence website with information on Chinese firms.

We obtain data on Chinese official aid from AidData (Bluhm et al., 2018). The dataset includes 3,598 projects in 50 recipient countries in Africa between 2000 and 2014. This database has been widely used in previous studies (e.g., Dreher et al., 2018; Morgan & Zheng, 2019; Strange, Dreher, Fuchs, Parks, & Tierney, 2017).

Information on countries receiving Chinese aid is obtained from multiple sources, such as the World Development Indicators (WDI), the Centre d'Études Prospectives et d'Informations Internationales (CEPII), the International Country Risks Group (ICRG), the United Nations General Assembly, and the United Nations Conference on Trade and Development (UNCTAD).

Measures

The list of all variables, a brief description of their measurement, and their sources are provided in Table 1.

Dependent variable

Fifty of the 54 African countries received Chinese financial aid during the study period. MOFCOM reports the name of the company that made a direct investment in a country in a given year but not its amount. Therefore, following Li, Hernandez, and Gwon (2019), our dependent variable $invest_{ijt}$ is a dummy variable coded 1 if a firm i made an investment in country j in year t, and 0 otherwise. This means that if a Chinese firm made two investments in the same year or in different years, they are

Table 1. Definition of key variables and their data sources

Variable	Description	Data sources
Dependent variable		
invest$_{ijt}$	Code as 1 if firm i made investment in country j in year t, 0 otherwise	China's Ministry of Commerce (MOFCOM)
Independent variable		
AidRatio	Proportion of the number of aid projects received by each country in year $t-1$ to the total number of Chinese aid projects in year $t-1$	AidData
Moderators		
UN voting alignment	Voting similarity index with China in each UN session	Bailey et al. (2017)
Investment profile	Risk of investment (0 = the highest risk, to 12 = the least risk)	International Country Risks Group (ICRG)
Control variables		
Aid ratio$_{t-2}$	Proportion of the number of aid projects received by each country in year $t-2$ to the total number of Chinese aid projects in year $t-2$	AidData
Geographic distance	log of the weighted distance from China	Centre d'Études Prospectives et d'Informations Internationales (CEPII)
Bilateral investment treaties (BITs)	Code as 1 from the year BIT with China came into force, 0 otherwise	United Nations Conference on Trade and Development (UNCTAD)
Government stability	Political stability	International Country Risks Group (ICRG)
Law and order	Strength of legal system and popular observance of law	International Country Risks Group (ICRG)
Corruption	Corruption within the political system	International Country Risks Group (ICRG)
Population	Log of million population (2014 constant $)	World Development Indicators (WDI)
GDP per capita	Log of GDP per capita (2014 constant $)	World Development Indicators (WDI)
Annual export value	Log of annual export value from China	China Statistic Yearbook
Internal conflict	Political violence and its actual or potential impact on governance	International Country Risks Group (ICRG)
Socioeconomic conditions	Socioeconomic pressures at work	International Country Risks Group (ICRG)

coded as separate entries. Similarly, firm i investing in two projects in country j in year t yields two entries.

We distinguish ownership and separate the sample into direct investments made by SOEs and those made by POEs. We manually collected information about the ownership of firms from Tianyancha. We defined SOEs as firms controlled by the central or local governments or by the State-Owned Assets Supervision and Administration Commission. Other firms were labeled POEs.

Independent variable

Due to the lack of transparency in China's official reporting, the specific aid projects in each country and their amount are not available. We measured a country's yearly amount of aid received from China (its AidRatio) by its share of all aid projects financed by China in Africa in that particular year. We obtained the data from Version 2.0 of AidData, an open-source collection of data that publishes the Chinese Official Financial Aid to Africa as a subset of the Global Chinese Developmental Finance Dataset, which it aggregates from multiple sources. While this source has been criticized for its lack of transparency, it has been used by previous scholars (Dreher et al., 2018; Morgan & Zheng, 2019; Strange et al., 2017) and is the most reliable source currently available (Constantaras, 2016).

Moderators

Political alignment of the recipient country with China's policies was measured by the similarity in votes cast each year at United Nations sessions (Bailey, Strezhnev, & Voeten, 2017). The variable is coded 1 if country j in year t voted similar to China, and zero if not.

The International Country Risk Guide (ICRG) proposes the investment profile, measured as the quality of a country's institutional environment and hence its level of risk. It has three subcomponents: contract viability and expropriation, profits repatriation, and payment delays. Each component is rated from 4 (best) to 0 (worst). We added scores for these three subcomponents to measure a country's level of risk, so the score varies from 12 (lowest risk or best investment profile) to zero (highest risk or worst profile).

Control variables

Table 1 shows the sources of the country-level variables we entered to control for endogeneity and other potential effects. One factor affecting foreign investment is geographic distance, so we control for that with the log of the number of kilometers between China and the host country (Mayer & Zignago, 2011). We also control for bilateral investment treaties (BITs), which are coded 1 from the year when a BIT with China came into force, and 0 otherwise. We also entered ICRG indices measuring a country's government stability, law and order, level of internal conflicts, socioeconomic conditions, and level of corruption. We also controlled for other economic factors and include the natural log of the focal country's population, GDP per capita, and annual export value (the latter two variables are measured at constant 2014 dollars). To account for reverse causality and endogeneity, we also entered the lagged aid ratio as a control variable (Li, Ding, Hu, & Wan, 2021).

Analytical Methods

Conditional logit

Following Li et al. (2019), we use the conditional logit estimator to test our hypotheses. This model estimates the conditional probability that a Chinese firm will choose to invest in a particular country from a set of alternative investment locations (Tan & Meyer, 2011). We model the probability of MNE i investing in country j in year t as:

$$P_{ijt} = \frac{\exp(\beta X_{ijt-1})}{\sum_{k=1}^{m} \exp(\beta X_{ikt-1})}$$

where P_{ijt} is the probability of firm i, whether SOE or POE, investing in country j in year t; X is a set of explanatory variables in year $t-1$; k is the set of alternative investment locations; and β is the coefficient

of maximum likelihood estimation of the probability that the explanatory variables will affect the dependent variable. The variance in this model is across country attributes. Factors that do not vary across countries are directly accounted for, similar to a fixed effect. Thus, firm characteristics are included in this model (Greene, 2018).

Potential endogeneity

We used several techniques to deal with potential endogeneity and performed supplementary analyses. Amongst them, we lagged all explanatory variables by one year to account for possible reverse causality, and lagged the independent variable by 2 years to control for unobserved firm characteristics that may cause endogeneity problems. We employed conditional logit estimation to solve some of these problems by accounting for the variance of firm attributes and unobserved factors. We also utilized instrumental variables to eliminate potential endogeneity issues.

Results

Table 2 shows the descriptive statistics and correlation matrix. We calculate the variance inflation factors (VIFs) to test for multicollinearity. The average VIF is 1.83, and the maximum is 2.71, both well below the recommended threshold of 10 (Ryan, 2008). The recentering approach is a simple mathematical transformation that helps to assess interaction effects in non-linear models. Following Jeong, Siegel, Chen, and Newey (2020), we center moderators prior to creating the interaction terms. McFadden's R-squared are reported as pseudo R-squared to show the goodness of fit of the models. Unlike the generic R-squared in OLS analysis, pseudo R-squared is specific to logit and conditional logit estimation and does not have the same interpretation as R-squared. Pseudo R-squared is used more for comparing the fit of different models on the same dataset rather than as an absolute measure of goodness of fit, which is what R-squared is used for (Cameron & Windmeijer, 1997). Taking Models 2 (for SOEs) and 3 (for POEs) as the baseline, entering independent variables and interaction terms in models 4–5, 6–7, and 8–9 yield larger pseudo R-squared.

H1 predicts that the likelihood of a Chinese firm investing in an African country is higher the share of that country in China's total African aid disbursements in the previous year, and that the increase will be greater for Chinese SOEs than for Chinese POEs. Model 1 of Table 3 is the baseline model, which only includes control variables. Model 2 tests how China's aid to a given African country affects the likelihood of SOE FDI in that country the following year. The coefficient of aid ratio in Model 2 is positive and significant ($\beta = 9.113$, $p \leq 0.001$), which means that the higher the country's share of the Chinese African aid, the higher the likelihood Chinese SOE will invest in it the following year. Model 3 shows that the same relationship is also statistically significant for POEs ($\beta = 3.855$, $p \leq 0.1$). We use seemingly unrelated estimation (SUEST) to test whether the coefficients are statistically different. The results show that the coefficient of aid on SOE FDI is larger than that on POE FDI, and that this difference is statistically significant after joint post-estimation ($\beta = 2.760$, $p \leq 0.1$). Thus, H1 is supported.

H2 suggests that the political alignment with China moderates the positive association between aid and FDI proposed in H1. We predicted that this relationship would be more significant for SOEs than for POEs. Model 4 of Table 4 shows that the coefficient for the interaction term between a country's aid ratio and its UN voting alignment with China is positively significant for SOEs ($\beta = 185.7$, $p \leq 0.05$), while Model 5 shows that it is not significant for POEs ($\beta = -46.69$, n.s.), providing support for H2.

H3 predicts that the positive association between the share of the Chinese African aid an African country receives and the probability that a Chinese firm will subsequently invest in the country is weaker if the target country is deemed low risk, and that this is more marked for POEs than for SOEs. Model 6 in Table 4 shows that the impact of the interaction between the share of aid and host country investment profile is not significant for SOE investment ($\beta = -1.094$, n.s.), while Model 7 of Table 4 shows that it is negative and significant in the case of POEs ($\beta = -2.239$, $p \leq 0.05$). These results support H3.

Table 2. Descriptive statistics and correlation matrix

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Invest	0.020	0.139									
2. AidRatio	0.016	0.015	0.025***								
3. AidRatio$_{t-2}$	0.016	0.015	0.016***	0.648***							
4. UN voting alignment	0.905	0.047	0.016***	−0.008***	0.023***						
5. Investment profile	7.146	1.906	0.003	−0.046***	−0.059***	−0.100***					
6. Geographic distance	9.259	0.150	−0.004	0.042***	0.054***	−0.028***	0.097***				
7. BITs	0.321	0.467	0.049***	−0.080***	−0.063***	0.138***	−0.054***	−0.153***			
8. Government stability	8.213	1.574	−0.008**	0.155***	0.121***	0.076***	0.484***	0.162***	−0.134***		
9. Law and order	2.982	1.055	0.005	−0.020***	−0.033***	0.101***	0.342***	−0.132***	0.135***	0.330***	
10. Corruption	1.970	0.709	−0.001	−0.150***	−0.129***	−0.232***	0.462***	0.189***	−0.066***	0.282***	0.373***
11. Population	2.158	1.513	0.100***	0.175***	0.147***	0.005	−0.119***	−0.039***	0.233***	−0.235***	−0.138***
12. GDP per capita	6.977	1.172	0.020***	−0.201***	−0.199***	−0.005	0.373***	−0.045***	0.329***	0.030***	0.236***
13. Annual export value	17.629	1.955	0.093***	0.061***	0.034***	0.198***	0.308***	0.024***	0.320***	0.163***	0.193***
14. Internal conflicts	8.324	1.571	−0.005	−0.047***	−0.030***	−0.015***	0.480***	0.358***	−0.161***	0.456***	0.467***
15. Socioeconomic conditions	3.256	1.479	−0.022***	−0.304***	−0.292***	0.063***	0.637***	0.053***	0.254***	0.355***	0.565***
Variables	10	11	12	13	14						
11. Population	−0.185***										
12. GDP per capita	0.179***	−0.305***									
13. Annual Export value	0.079***	0.581***	0.083***								
14. Internal conflicts	0.490***	−0.501***	0.224***	0.060***							
15. Socioeconomic conditions	0.502***	−0.218***	0.541***	0.314***	0.473***						

Notes: **Indicates significance at the $p \leq 0.05$ (***$p \leq 0.01$) level of confidence.

Table 3. Results of conditional logit regression analyses of the likelihood of SOE and POE FDI decisions

Variables	Model 1	Model 2 Likelihood of SOE FDI	Model 3 Likelihood of POE FDI
AidRatio		11.624*** (3.607)	4.036** (1.962)
SUEST test		3.30*	
AidRatio$_{t-2}$	2.956** (1.293)	2.737 (3.404)	0.219 (1.779)
Ln (Geographic distance)	0.698*** (0.221)	0.012 (0.395)	0.984*** (0.279)
BITs	0.106* (0.058)	0.023 (0.101)	0.154** (0.072)
Government stability	−0.017 (0.019)	0.233*** (0.053)	−0.003 (0.026)
Law and order	0.157*** (0.029)	0.133*** (0.049)	0.158*** (0.038)
Corruption	0.028 (0.045)	0.170** (0.078)	−0.008 (0.057)
Ln (Population)	0.781*** (0.046)	0.554*** (0.091)	0.772*** (0.056)
Ln (GDP per capita)	0.359*** (0.041)	0.346*** (0.081)	0.349*** (0.051)
Ln (Annual export value)	0.003 (0.034)	−0.067 (0.060)	0.027 (0.042)
Internal conflict	0.238*** (0.024)	0.254*** (0.043)	0.202*** (0.030)
Socioeconomic conditions	−0.297*** (0.027)	−0.338*** (0.046)	−0.285*** (0.034)
Observations	81,431	42,488	38,943
Log-likelihood	−6,535.805	−4,202.897	−3,660.597
Pseudo R^2	0.089	0.084	0.096
Wald Chi-squared	1,277.65***	889.26***	659.83***

Notes: Robust standard errors are in parentheses. *Indicates significance at the $p \leq 0.10$ (**$p \leq 0.05$; ***$p \leq 0.01$) level of confidence.

Supplementary Analysis and Potential Endogeneity

We performed four sets of supplementary analyses to investigate alternative explanations and rule out endogeneity. Please refer to the Supplementary material to this article for detailed explanations and results. The first supplementary analysis tackles the endogeneity issue inherent in the aid–FDI relationship and the role of home country firms as implementing agencies. To deal with these issues, we omitted all entries by Chinese firms that we determined were implementing aid projects. This did not change our results.

To deal with potential endogeneity, we find an exogenous instrumental variable for the aid ratio from China. We use net official development assistance the recipient country received from the Organization for Economic Co-operation and Development (OECD) countries each year, sourced from the World Bank Indicators. OECD's assistance to each country is unlikely to be associated with Chinese MNEs' FDI location choice because Chinese companies are far less likely to invest in a country following other countries' aid or being the implementing agency for them. The results of the main effect model show that the effect of the instrument variable is statistically significant and positive; hence supporting our main hypothesis.

Table 4. Results of conditional logit regression analyses of the moderation role

Variables	Model 4 Likelihood of SOE FDI	Model 5 Likelihood of POE FDI	Model 6 Likelihood of SOE FDI	Model 7 Likelihood of POE FDI	Model 8 Likelihood of SOE FDI	Model 9 Likelihood of POE FDI
AidRatio	8.744** (3.894)	3.594* (2.138)	11.180*** (3.644)	4.933** (1.995)	8.256** (3.932)	4.472** (2.169)
UN voting alignment	−0.518 (2.756)	6.671*** (1.841)			−0.396 (2.757)	6.392*** (1.820)
AidRatio* UN voting alignment	187.316** (86.993)	47.395 (59.301)			184.867** (86.691)	30.663 (58.768)
Investment profile			0.047 (0.053)	−0.047 (0.032)	0.049 (0.052)	−0.041 (0.032)
AidRatio* Investment profile			−1.444 (1.561)	−2.233** (0.963)	−1.078 (1.510)	−1.769* (0.972)
AidRatio$_{t-2}$	2.693 (3.394)	0.515 (1.807)	2.610 (3.419)	0.745 (1.802)	2.506 (3.410)	0.919 (1.822)
Ln (Geographic distance)	−0.096 (0.396)	0.858*** (0.278)	−0.029 (0.401)	0.799*** (0.280)	−0.114 (0.403)	0.717** (0.280)
BITs	−0.075 (0.104)	0.048 (0.074)	0.003 (0.108)	0.030 (0.079)	−0.078 (0.110)	−0.042 (0.079)
Government stability	0.206*** (0.055)	0.009 (0.026)	0.240*** (0.054)	0.029 (0.028)	0.212*** (0.056)	0.036 (0.028)
Law and order	0.085* (0.051)	0.094** (0.039)	0.136*** (0.051)	0.102*** (0.039)	0.094* (0.053)	0.052 (0.039)
Corruption	0.225*** (0.082)	0.131** (0.061)	0.178** (0.080)	0.076 (0.059)	0.226*** (0.083)	0.190*** (0.062)

(Continued)

Table 4. (*Continued.*)

Variables	Model 4 Likelihood of SOE FDI	Model 5 Likelihood of POE FDI	Model 6 Likelihood of SOE FDI	Model 7 Likelihood of POE FDI	Model 8 Likelihood of SOE FDI	Model 9 Likelihood of POE FDI
Ln (Population)	0.613*** (0.094)	0.778*** (0.056)	0.541*** (0.092)	0.793*** (0.056)	0.601*** (0.095)	0.796*** (0.095)
Ln (GDP per capita)	0.339*** (0.082)	0.318*** (0.051)	0.325*** (0.083)	0.345*** (0.052)	0.322*** (0.084)	0.321*** (0.052)
Ln (Annual export value)	−0.083 (0.061)	0.034 (0.042)	−0.061 (0.061)	0.064 (0.043)	−0.082 (0.062)	0.061 (0.043)
Internal conflict	0.266*** (0.043)	0.199*** (0.030)	0.244*** (0.044)	0.211*** (0.031)	0.255*** (0.045)	0.207*** (0.032)
Socioeconomic conditions	−0.317*** (0.046)	−0.287*** (0.035)	−0.346*** (0.053)	−0.214*** (0.037)	−0.335*** (0.053)	−0.230*** (0.037)
Observations	42,488	38,943	42,488	38,943	42,488	38,943
Log-likelihood	−3,992.376	−3,056.590	−4,190.440	−3,260.298	−4,169.142	−3,056.077
Pseudo R^2	0.087	0.101	0.085	0.098	0.088	0.103
Wald Chi-squared	914.27***	939.52***	914.17***	760.43***	955.98***	794.47***

Notes: Robust standard errors are in parentheses. *Indicates significance at the $p \leq 0.10$ (**$p \leq 0.05$; ***$p \leq 0.01$) level of confidence.

We also investigate an alternative measure for our main independent variable, the level of aid provided by China to each African country. We replace the aid ratio by the number of aid projects a recipient country receives each year. The results are very similar to our main analyses and support our hypotheses. The final test uses a different methodology, a mixed logit model, to deal with unobserved heterogeneity. Again, the results are similar.

Discussion

The surge in Chinese FDI over the past two decades is a complex phenomenon that has drawn scholarly attention from numerous economic and political perspectives (Huang et al., 2017). One salient issue is the significant influence the government has on Chinese MNEs (Arnoldi et al., 2019; Deng, 2013). Many believe that the FDI of Chinese MNEs in some politically unstable African countries is driven more by what is in the interest of the Chinese government than by profit-seeking (Voss et al., 2010). This notion is fueled by marked signs that Chinese MNEs have followed the same pattern as Chinese aid projects in Africa (Morgan & Zheng, 2019; Zhang et al., 2010). In this study, we investigate two ways by which the government may be influencing Chinese MNEs investing in Africa. One has to do with Chinese aid to focal African countries and the other is government ownership.

Our findings show that Chinese aid projects in African countries are significantly associated with the likelihood of Chinese FDI in those countries, although that likelihood is higher for SOEs than for POEs. We argue that aid strengthens inter-governmental relationships between China and recipient countries (Morgan & Zheng, 2019; Stevens & Newenham-Kahindi, 2017), and that Chinese SOEs are in a better position than POEs to reap the benefits because they are owned by the government (Morck et al., 2008).

Our findings also indicate that SOEs seeking to invest abroad may be due to greater government pressure, while POEs are more likely to pursue market opportunities. When SOEs invest abroad they are more constrained by Chinese national policies and objectives, such as Five-Year Plans (Li et al., 2014). They might be said to have a hybrid nature in that they are both government agencies and market players, and as such their FDI has a dual purpose. First, SOEs are more likely to act as intermediaries that implement the Chinese government's aid projects (Wang et al., 2022), while also being economic entities. Second, Chinese SOE FDI in an aid-recipient country clarifies the vague purposes and subsequent consequences of the aid. They are friendship bridges between China and African nations while also ensuring the protection of China's national interests. Previous studies have sought to explain the link between Chinese aid and SOE FDI by a need for resources to fuel China's economic development (Dreher et al., 2018). Our findings suggest that SOE FDI may also serve as a channel to ensure that the recipient country engages in international policies that are aligned with those of China. In contrast, we find that POEs do not only follow SOEs abroad in response to China's Go-Out policy, but also take advantage of Chinese aid in a recipient country to pursue market-based opportunities. This is shown by the fact that their FDI only follows Chinese aid in the case of high-risk countries.

The limitations of this study are primarily due to data. Since the Chinese government does not release official, project-level financial information about its foreign aid activities, we had to rely on AidData, which synthesizes and standardizes a large amount of public information on Chinese aid to African countries – see Dreher et al. (2021) and Strange et al. (2014) for this source and its limitations. Despite our best efforts, we were not able to find the amount of government aid or firm FDI in each African country and so resorted to using a country's share of the total Chinese aid budget for Africa and whether a Chinese firm invested in the focal country. For this reason, we cannot claim causality, but conditional correlations. Future research might attempt to collect data on the amount of aid granted to a particular country and see whether this affects the results.

Theoretical Implications

Despite limitations, we make three theoretical contributions. Our first is the literature connecting aid, FDI, and varieties of capitalism in the Chinese context. The findings of previous empirical studies on

the relationship between aid and FDI, in general, have been mixed (e.g., Harms & Lutz, 2006; Selaya & Sunesen, 2012), but scholars have found a consistently positive relationship between aid and FDI from donor countries (e.g., Kang & Won, 2017; Kimura & Todo, 2010). We find, at least in the case of China, that aid has a 'vanguard effect' (Kimura & Todo, 2010; Stevens & Newenham-Kahindi, 2017) that attracts MNE investment to aid-recipient countries. We suggest several reasons for this and show their mechanisms, but propose that the observed outcome depends chiefly on the nature of Chinese MNEs (Wang et al., 2022) and on differences between SOEs and POEs (Tang et al., 2021). The singularity of the view of Chinese MNEs that may state that all Chinese MNEs are agents of the government may have prevented us heretofore from understanding the real purpose of Chinese SOEs and POEs. By this, we mean that Western MNEs are often seen as acting independently from their governments, while scholars and policymakers often view Chinese MNEs as being an extension of the state charged with heralding China's soft power (Lazzarini et al., 2021). We do not intend to refute that one of the roles of Chinese MNEs is establishing Chinese soft power abroad, but we do want to draw attention to our findings that POEs are more aligned with market logic than with government policies (Lardy, 2014). In addition, although Chinese SOEs do have certain obligations to the state, they can also contribute to the development of host countries. Future studies might revisit other aspects of Chinese MNE behavior with the understanding that SOEs and POEs operate under different rules under different capitalist or other systems rather than the assumption that they are homogeneous.

Second, our research contributes to the broader international business literature by answering calls (e.g., Wang et al., 2022; Witt et al., 2021) to investigate the relevant unexplored role of political influence on international business (e.g., Wang et al., 2022; Witt et al., 2021). Chinese aid has been criticized by some for being less development-oriented than that of Western countries, indeed China has been accused of harming institutions in recipient countries (Halper, 2010), although others counter such accusations (Arewa, 2016; Dreher et al., 2018; Zeleza, 2014). Chinese MNEs investing in Africa are sometimes portrayed as helping the Chinese government further its geopolitical goals (Morgan & Zheng, 2019), and sometimes as shrewd profit-seeking businesses with superior entrepreneurial and managerial skills that can be adept at dealing with weak African institutions (Wang & Liu, 2022). We find that the institutional constraints on SOE FDI decision-making lead them to prioritize the agenda of the government over economic opportunities. There is no contradiction in Chinese SOEs helping the government build bridges with African countries and nurturing jointly held global interests, but also seeing to their own interests as MNEs. In other words, it is not a case of either-or, but rather of MNEs taking on an additional layer of responsibility.

Our third contribution is to highlight the conditional association between POE investment and Chinese aid. The primary motivation of Chinese POEs is not the furtherance of government goals, but the pursuit of economic opportunities in Africa that grow out of Chinese aid. However, when their economic interests are at risk, POEs rely on the legitimacy, social relationships, learning, and business opportunities Chinese aid creates. Our results complement previous studies that have found that Chinese POEs are risk averse in their FDI (e.g., Ramasamy et al., 2012) and provide the boundary condition of institutional support in high-risk environments.

Practical Implications and Future Studies

Our findings do not support the criticism leveled at Chinese SOEs – or POEs. SOE FDI has broad strategic objectives (Huang et al., 2022), which go beyond asset-seeking and market expansion. We acknowledge that SOEs pursue strategic assets, such as natural resources, and that they are also charged with implementing aid projects (Abdulai, 2016). Meeting this multitude of obligations can make for quite complex situations. However, aid-recipient countries stand to gain from this and create win-win situations by actively directing FDI from donor countries to partnership with key industries and firms. Such relationships with profit-seeking MNEs can further target economic development in aid-recipient countries (Lyles et al., 2014).

Chinese aid is increasing globally. Can that aid be structured in such a way as to further Chinese domestic economic development and its POEs as well as aid-recipient countries? Assuming the Chinese government's plan is to increase its soft power (Arewa, 2016) and to protect its interests

and image in aid-recipient countries (Akhtaruzzaman et al., 2017), what role might POEs play? African countries are eager to have better technology and to benefit from scientific advances through FDI to fuel their development, but the potential contribution of Chinese firms, particularly that of SOEs, although much cheaper, may be perceived to be not nearly as good as that of their Western counterparts. However, in recent years, many Chinese POEs have emerged to possess superior technology with known positive images. Future studies might investigate whether well-known POE FDI can further China-brand recognition without relying on help from the government. As an extension, future studies can probe whether POEs are more effective than SOEs in utilizing aid to improve China's soft power in Africa and other developing nations.

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References

Abdulai, D. N. 2016. *Chinese investment in Africa: How African countries can position themselves to benefit from China's foray into Africa*, 1st ed. New York: Routledge.

Akhtaruzzaman, M., Berg, N., & Lien, D. 2017. Confucius Institutes and FDI flows from China to Africa. *China Economic Review*, **44**: 241–252.

Arewa, O. A. 2016. Constructing Africa: Chinese investment, infrastructure deficits, and development. *Cornell International Law Journal*, **49**(1): 101–139.

Arnoldi, J., Villadsen, A. R., Chen, X., & Na, C. 2019. Multi-level state capitalism: Chinese state-owned business groups. *Management and Organization Review*, **15**(1): 55–79.

Asiedu, E., Jin, Y., & Nandwa, B. 2009. Does foreign aid mitigate the adverse effect of expropriation risk on foreign direct investment? *Journal of International Economics*, **78**(2): 268–275.

Bailey, M. A., Strezhnev, A., & Voeten, E. 2017. Estimating dynamic state preferences from United Nations voting data. *Journal of Conflict Resolution*, **61**(2): 430–456.

Bass, E., & Chakrabarty, S. 2014. Resource security: Competition for global resources, strategic intent, and governments as owners. *Journal of International Business Studies*, **45**(8): 961–979.

Bluhm, R., Dreher, A., Fuchs, A., Parks, B., Strange, A., & Tierney, M. J. 2018. *Connective financing: Chinese infrastructure projects and the diffusion of economic activity in developing countries*. AidData Working Paper No. 64. Available at SSRN: https://ssrn.com/abstract=3262101

Boisot, M., & Child, J. 1996. From fiefs to clans and network capitalism: Explaining China's emerging economic order. *Administrative Science Quarterly*, **41**(4): 600–628.

Boone, P. 1996. Politics and the effectiveness of foreign aid. *European Economic Review*, **40**(2): 289–329.

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. 2007. The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, **38**(4): 499–518.

Butzbach, O., Fuller, D. B., Schnyder, G., & Svystunova, L. 2022. State-owned enterprises as institutional actors: A hybrid historical institutionalist and institutional work framework. *Management and Organization Review*, **18**(6): 1032–1076.

Cameron, A. C., & Windmeijer, F. A. 1997. An R-squared measure of goodness of fit for some common nonlinear regression models. *Journal of Econometrics*, **77**(2): 329–342.

Che, J., & Qian, Y. 1998. Insecure property rights and government ownership of firms. *The Quarterly Journal of Economics*, **113**(2): 467–496.

Child, J., & Rodrigues, S. B. 2005. The internationalization of Chinese firms: A case for theoretical extension? *Management and Organization Review*, **1**(3): 381–410.

Constantaras, E. 2016. Visualizing China's aid to Africa: China aid map reveals nearly $100 billion infrastructure investment boom in Africa. *ChinaFile*. Center on U.S.-China Relations. [Cited 14 July 2022]. Available from URL: from https://www.chinafile.com/infographics/visualizing-chinas-aid-africa

Delios, A., & Henisz, W. 2003. Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980–1998. *Strategic Management Journal*, **24**(11): 1153–1164.

Demir, F. 2016. Effects of FDI flows on institutional development: Does it matter where the investors are from? *World Development*, **78**: 341–359.

Deng, P. 2013. Chinese outward direct investment research: Theoretical integration and recommendations. *Management and Organization Review*, **9**(3): 513–539.

Donaubauer, J., Herzer, D., & Nunnenkamp, P. 2014. Does aid for education attract foreign investors? An empirical analysis for Latin America. *The European Journal of Development Research*, **26**: 597–613.

Donaubauer, J., Meyer, B., & Nunnenkamp, P. 2016. Aid, infrastructure, and FDI: Assessing the transmission channel with a new index of infrastructure. *World Development*, **78**: 230–245.

Dreher, A., Fuchs, A., Parks, B., Strange, A. M., & Tierney, M. J. 2018. Apples and dragon fruits: The determinants of aid and other forms of state financing from China to Africa. *International Studies Quarterly*, **62**(1): 182–194.

Dreher, A., Fuchs, A., Parks, B., Strange A., & Tierney M. J. 2021. Aid, China, and growth: Evidence from a new global development finance dataset. *American Economic Journal: Economic Policy*, **13**(2): 135–174.

Dreher, A., Fuchs, A., Hodler, R., Parks, B. C., Raschky, P. A., & Tierney, M. J. 2019. African leaders and the geography of China's foreign assistance. *Journal of Development Economics*, **140**: 44–71.

Dunning, J. H. 1998. Location and the multinational enterprise: a neglected factor? *Journal of International Business Studies*, **29**(1): 45–66.

Ebbers, H. 2018. *Unravelling modern China*. New Jersey: World Scientific Publishing Company.

Garriga, A. C., & Phillips, B. J. 2014. Foreign aid as a signal to investors: Predicting FDI in post-conflict countries. *Journal of Conflict Resolution*, **58**(2): 280–306.

Greene, W. 2018. *Econometric analysis*, 8th ed. London: Pearson.

Guo, Y., Huy, Q. N., & Xiao, Z. 2017. How middle managers manage the political environment to achieve market goals: Insights from China's state-owned enterprises. *Strategic Management Journal*, **38**(3): 676–696.

Halper, S. 2010. Beijing's coalition of the willing. *Foreign Policy*, (180): 100.

Hanley, A., Liu, W.-H., & Vaona, A. 2015. Credit depth, government intervention and innovation in China: Evidence from the provincial data. *Eurasian Business Review*, **5**(1): 73–98.

Harms, P., & Lutz, M. 2006. Aid, governance and private foreign investment: Some puzzling findings for the 1990s. *The Economic Journal*, **116**(513): 773–790.

Haveman, H. A., Jia, N., Shi, J., & Wang, Y. 2017. The dynamics of political embeddedness in China. *Administrative Science Quarterly*, **62**(1): 67–104.

Huang, Y., Shen, L., & Zhang, C. 2022. Home-country government support, the belt and road initiative, and the foreign performance of Chinese state-owned subsidiaries. *Asia Pacific Journal of Management*, **39**: 1023–1049.

Huang, Y., Xie, E., Li, Y., & Reddy, K. 2017. Does state ownership facilitate outward FDI of Chinese SOEs? Institutional development, market competition, and the logic of interdependence between governments and SOEs. *International Business Review*, **26**(1): 176–188.

Jeong, Y., Siegel, J. I., Chen, S. Y. P., & Newey, W. K. 2020. A recentering approach for interpreting interaction effects from logit, probit, and other nonlinear models. *Strategic Management Journal*, **41**(11): 2072–2091.

Jiang, Y., Peng, M. W., Yang, X., & Mutlu, C. C. 2015. Privatization, governance, and survival: MNE investments in private participation projects in emerging economies. *Journal of World Business*, **50**(2): 294–301.

Johanson, J., & Vahlne, J.-E. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, **40**(9): 1411–1431.

Kang, G. S., & Won, Y. 2017. Does Korea's official development assistance (ODA) promote its FDI? *Journal of Economic Research*, **22**(1): 23–46.

Kimura, H., & Todo, Y. 2010. Is foreign aid a vanguard of foreign direct investment? A gravity-equation approach. *World Development*, **38**(4): 482–497.

Kostova, T., & Roth, K. 2002. Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, **45**(1): 215–233.

Lardy, N. R. 2014. *Markets over Mao: The rise of private business in China*. Peterson Institute for International Economics. New York: Columbia University Press.

Lazzarini, S. G., Mesquita, L. F., Monteiro, F., & Musacchio, A. 2021. Leviathan as an inventor: An extended agency model of state-owned versus private firm invention in emerging and developed economies. *Journal of International Business Studies*, **52**(4): 560–594.

Lessard, D. 2014. *The evolution of EMNCs and EMNC thinking: A capabilities perspective. Understanding multinationals from emerging markets*. London: Cambridge University Press.

Li, J., Ding, H., Hu, Y., & Wan, G. 2021. Dealing with dynamic endogeneity in international business research. *Journal of International Business Studies*, **52**(3): 339–362.

Li, M. H., Cui, L., & Lu, J. 2014. Varieties in state capitalism: Outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *Journal of International Business Studies*, **45**(8): 980–1004.

Li, Y., Hernandez, E., & Gwon, S. 2019. When do ethnic communities affect foreign location choice? Dual entry strategies of Korean banks in China. *Academy of Management Journal*, **62**(1): 172–195.

Lu, J., Liu, X., & Wang, H. 2011. Motives for outward FDI of Chinese private firms firm resources, industry dynamics, and government policies. *Management and Organization Review*, **7**(2): 223–248.

Lu, J. W., Li, W., Wu, A., & Huang, X. 2018. Political hazards and entry modes of Chinese investments in Africa. *Asia Pacific Journal of Management*, **35**(1): 39–61.

Luo, Y., & Tung, R. L. 2018. A general theory of springboard MNEs. *Journal of International Business Studies*, **49**(2): 129–152.

Lyles, M., Li, D., & Yan, H. 2014. Chinese outward foreign direct investment performance: The role of learning. *Management and Organization Review*, **10**(3): 411–437.

Magnus, G. 2018. *Red flags: Why Xi's China is in Jeopardy*. New Haven: Yale University Press.

Mayer, T., & Zignago, S. 2011. *Notes on CEPII's distances measures: The GeoDist database*. CEPII Working Paper No. 2011-25.

MOFCOM. 2021. 2020 Statistical bulletin of China's outward foreign direct investment. *Ministry of Commerce of the P.R.C.* [Cited 4 April 2022]. Available from URL: http://images.mofcom.gov.cn/hzs/202111/20211112140104651.pdf

Morck, R., Yeung, B., & Zhao, M. 2008. Perspectives on China's outward foreign direct investment. *Journal of International Business Studies*, **39**(3): 337–350.

Morgan, P., & Zheng, Y. 2019. Tracing the legacy: China's historical aid and contemporary investment in Africa. *International Studies Quarterly*, **63**(3): 558–573.

Nwaogu, U., & Ryan, M. 2015. FDI, foreign aid, remittance and economic growth in developing countries. *Review of Development Economics*, **19**(1): 100–115.

Ralston, D. A., Terpstra-Tong, J., Terpstra, R. H., Wang, X., & Egri, C. 2006. Today's state-owned enterprises of China: Are they dying dinosaurs or dynamic dynamos? *Strategic Management Journal*, **27**(9): 825–843.

Ramasamy, B., Yeung, M., & Laforet, S. 2012. China's outward foreign direct investment: Location choice and firm ownership. *Journal of World Business*, **47**(1): 17–25.

Raynard, M., Lu, F., & Jing, R. 2020. Reinventing the state-owned enterprise? Negotiating change during profound environmental upheaval. *Academy of Management Journal*, **63**(4): 1300–1335.

Remmer, K. L. 2004. Does foreign aid promote the expansion of government? *American Journal of Political Science*, **48**(1): 77–92.

Ryan, T. P. 2008. *Modern regression methods*, vol. **655**. Hoboken, NJ: John Wiley & Sons.

Selaya, P., & Sunesen, E. R. 2012. Does foreign aid increase foreign direct investment? *World Development*, **40**(11): 2155–2176.

Shapiro, D. M., Vecino, C., & Li, J. 2018. Exploring China's state-led FDI model: Evidence from the extractive sectors in Latin America. *Asia Pacific Journal of Management*, **35**(1): 11–37.

Stevens, C. E., & Newenham-Kahindi, A. 2017. Legitimacy spillovers and political risk: The case of FDI in the East African community. *Global Strategy Journal*, **7**(1): 10–35.

Strange, A., Dreher, A., Fuchs, A., Parks, B., & Tierney, M. 2017. Tracking underreported financial flows: China's development finance and the aid–conflict nexus revisited. *Journal of Conflict Resolution*, **61**(5): 935–963.

Strange, A., O'Donnell, B., Gamboa, D., Parks, B., & Perla, C. 2014. *AidData's methodology for tracking underreported financial flows, version 1.1*. Williamsburg, VA: AidData at William & Mary.

Strange, R., & Humphrey, J. 2019. What lies between market and hierarchy? Insights from internalization theory and global value chain theory. *Journal of International Business Studies*, **50**(8): 1401–1413.

Tan, D., & Meyer, K. E. 2011. Country-of-origin and industry FDI agglomeration of foreign investors in an emerging economy. *Journal of International Business Studies*, **42**(4): 504–520.

Tang, Q., Wang, L., & Shen, H. 2021. How do SOEs and FIEs affect POEs' performance in emerging economies? Moderating effects of managerial ties. *Asia Pacific Journal of Management*, **38**(2): 767–788.

Tarnoff, C. 2012. *Afghanistan: US foreign assistance*, Congressional Research Service, 23. Library of Congress, Washington, DC.

The Economist. 2022. How Chinese firms have dominated African infrastructure: Western firms grumble more but compete less. Middle East & Africa. [Cited 15 August 2022]. Available from URL: https://www.economist.com/middle-east-and-africa/how-chinese-firms-have-dominated-african-infrastructure/21807721

Voss, H., Buckley, P. J., & Cross, A. R. 2010. The impact of home country institutional effects on the internationalization strategy of Chinese firms. *Multinational Business Review*, **18**(3): 25–48.

Wang, D., Cui, L., Vu, T., & Feng, T. 2022. Political capital and MNE responses to institutional voids: The case of Chinese state-owned enterprises in Africa. *Organization Studies*, **43**(1): 105–126.

Wang, Q., & Liu, B. 2022. State equity and outward FDI under the theme of belt and road initiative. *Asia Pacific Journal of Management*, **39**(3): 877–897.

Williamson, C. R. 2008. Foreign aid and human development: The impact of foreign aid to the health sector. *Southern Economic Journal*, **75**(1): 188–207.

Witt, M. A., & Lewin, A. Y. 2007. Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, **38**(4): 579–594.

Witt, M. A., Li, P. P., Välikangas, L., & Lewin, A. Y. 2021. De-globalization and decoupling: Game changing consequences? *Management and Organization Review*, **17**(1): 6–15.

Yang, H., Ru, J., & Ren, T. 2015. Ownership and M&A performance in a transitional economy: The case of the Chinese real estate industry. *Management and Organization Review*, **11**(4): 715–737.

Zeleza, P. T. 2014. The Africa-China relationship: Challenges and opportunities. *Canadian Journal of African Studies / Revue Canadienne des Études Africaines*, **48**(1): 145–169.

Zhang, H., Yuan, J., & Kong, Y. 2010. A study on the linkage between China's ODA and FDI to Africa [in Chinese]. *World Economic Research*, **201**(11): 69–74, 89.

Zheng, Y., & Huang, Y. 2018. *Market in state: The political economy of domination in China*. London: Cambridge University Press.

Zhou, K. Z., Gao, G. Y., & Zhao, H. 2017. State ownership and firm innovation in China: An integrated view of institutional and efficiency logics. *Administrative Science Quarterly*, **62**(2): 375–404.

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