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From Politics to Business: How a state-led fund is investing in Africa? The case of the China-Africa Development Fund

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ABSTRACT

Chinese development and finance in Africa has been increasing constantly, with president Xi Jinping announcing 60 billion U.S dollars of financing and aid to Africa at the Forum on China-Africa Cooperation (FOCAC) in 2018. Meanwhile, state-owned and state-led funds, especially bilateral and multilateral cooperation funds have flourished in the past decade, while no literature has examined these funds. As the Asian-giant becomes an increasingly important political and economic actor on the continent, this paper explores how a state-led fund is investing in Africa. In particular, the paper looks at the investment of the China-Africa Development Fund (CAD Fund), an equity investment fund focusing on investment in Africa. This paper first and foremost attempts to understand the investment motives for the CAD Fund through analyzing its governance structure and investment strategies, specifically by looking at how the Fund facilitates industrial alliances, its platform model in the infrastructure sector, and its involvement in agriculture. It argues that the CAD Fund is neither entirely state-controlled nor fully market-led in its motivation, incentives and daily operations. Nevertheless, even though the fund is oriented towards development related sectors, the primary driver of CAD Fund's investments is the combination of state interest and market forces, rather than the development of Africa. Moreover, with its more diversified and relatively flexible investment approaches, the Fund, along with other government-led funds, such as Silk and Road Fund, China-Latin America and Caribbean Industrial Investment and Cooperation Fund, has the potential of filling the gap between official grants and loan under the traditional model, which carries the possibility to transform the shape of global development finance.

Introduction

The background of this paper is connected with China's growing economic and political presence in Africa under the context of globalization. China has become Africa's largest trading partner for 10 consecutive years since 2009. Today, the continent is also the Asian giant's second-largest market for overseas project contracting and fourth-largest outward investment destination. China's expansion in Africa also fits into Chinese President Xi Jinping's development framework—'the Belt and Road Initiative', which joins a continental economic belt and a maritime road to promote cooperation and interconnectivity from Eurasia to Africa.

China's political and economic engagement in Africa has been widely discussed in media and scholarship (e.g. Bräutigam, 2011[1] ; Power and Mohan 2013[2] ; Mawdsley 2008, Taylor 2009 [3]). It has been presented as one element of the Asian giant's 'global rise' (Gu, Humphrey and Messner 2008)[4] , a vision of Beijing-driven neo-colonialism or neo-imperialism (Lumumba-Kasongo, 2011)[5] , a promotion of an alternative/ Non-Western development models in the process of decolonization, and/or a new dimension of multilateralism of South-South Cooperation (Abdenur,2014)[6] . When discussing Chinese financing for its overseas projects, most academic and public attention has focused on infrastructure projects and China's two development banks - China Development Bank and China Export-Import Bank (Chen 2018[7] ; Moss & Rose, 2006[8]). Although other sources of Chinese finance, especially a range of bilateral and multilateral funds have also emerged over the past decade, not much literature has examined these alternatives. Below are some examples of regional and bilateral funds that initiated or created by the Chinese government.

- 1 Bräutigam, D. (2011). China in Africa: what can Western donors learn? A report for the Norwegian Investment Fund for Developing Countries (NORFUND).
- 2 Mohan, G., & Lampert, B. (2013). Negotiating China: Reinserting African Agency into China–Africa Relations. African Affairs, 112(446), 92-110.
- 3 Taylor, I. (2009). China's new role in Africa. Boulder, CO: Lynne Rienner Publishers.
- 4 GU, J., Humphrey, J., & Messner, D. (2008). Global governance and developing countries: the implications of the rise of China. World development, 36(2), 274-292.
- 5 Lumumba-Kasongo, T. (2011). China-Africa relations: A neo-imperialism or a neo-colonialism? A reflection. African and Asian Studies, 10(2-3), 234-266.
- 6 Abdenur, A. E. (2014). China and the BRICS development bank: Legitimacy and multilateralism in South–South cooperation. IDS Bulletin, 45(4), 85-101.
- 7 Chen, M. (2019). State Actors, Market Games: Credit Guarantees and the Funding of China Development Bank. New Political Economy, 1-16.
- 8 Moss, T., & Rose, S. (2006). China Exim Bank and Africa: New Lending, New Challenges.

Table 1: Some examples of cooperation funds created by the Chinese government

Name	Fund Size	Stakeholders	Founding year	Area served
China-Africa Development Fund	10 Billion USD	China Development Bank (CDB)	2007	Africa
China-ASEAN INvestment Cooperation Fund	10 Billion USD 9garget)	The Export-Import Bank of China (Chexim); China Investment Corporation	2010	Southeast Asia
Silk Road Fund	40 Billion USD + 100 Million RMB[9]	State Administration of Foreign Exchange (SAFE); China Investment Corporation (CIC); The Export-Import Bank of China (Chexim); China Development Bank (CDB)	2014	The Belt and Road initiative related industries and project
China-Latin America and Caribbean Industrial Investment and Cooperation Fund (CLAIFund)	30 Billion USD (target); 10 Billion USD (first round of funding)	State Administration of Foreign Exchange (SAFE); China Development Bank (CDB)	2015	Latin-America
China-Africa Fund for Industrial Cooperation (CAFIC)[10]	10 Billion USD (first round of funding)	State Administration of Foreign Exchange (SAFE); The Export-Import Bank of China (Chexim)[11]	2015	Africa

As we can see from Table 1, equity investment has been a part of China's two major policy banks' (CDB and Chexim) finance overseas expansion. For example, under CDB, the China-Africa Development Fund (CAD Fund hereinafter) has become a primary investment vehicle, and an important bridge facilitating Chinese companies to invest in Africa, providing as the basis to serve "China-Africa Cooperation", "the Belt and Road Initiative" and "The Three Networks and Industrialization"(三网一化, sanwang yihua).[12]

Funded by the China Development Bank, a Chinese government policy bank, the CAD Fund is China's first equity investment fund focusing on Africa. After its fourth replenishment, the fund has reached 10 billion U.S dollars in 2018. It aims to stimulate investment in Africa by Chinese companies in power generation, transportation infrastructure, natural resources, manufacturing and other sectors. Since the announcement of the Belt and Road Initiative (BRI), CAD Fund plans to make more investment and to direct more capital into Africa, in light of the need to enhance international production capacity and equipment manufacturing cooperation. According to China's state-owned Xinhua News Agency, CAD Fund has invested more than 4.6 billion U.S. dollars in 92 projects in 36 African countries by August, 2018, which could leverage a total

- 9 Xinhua News Agency. (2017): China to Contribute Additional 100 billion RMB to Silk Road Fund, available at: http://www.xinhuanet.com/english/2017-05/14/c_136281304.htm, accessed on November 4th, 2019.
- 10 Caixin (2019): Exclusive: China to Combine Africa, Latin America Investment Funds, available at: https://www.caixinglobal.com/2019-02-19/exclusive-china-to-combine-africa-latin-america-investment-funds-101381418.html, accessed on November 4th, 2019. Notably, according to the article, China will combine the management of CLAIFund and CAFIC, the two funds' project appraisal and investment decisions will be unified under the management of a single new company under SAFE, while continue to operate under separate names.
- 11 Ibid. SAFE holds 80% of CAFIC, through SAFE's wholly-owned arm Wutongshu Investment Platform and policy lender The Export-Import Bank of China takes the remaining 20%.
- 12 "The Three Networks and Industrialization" refers to China's cooperation with Africa in constructing Africa's three major networks—high-speed railways, highways and regional aviation and in promoting industrialization in Africa.

investment of more than 23 billion U.S. dollars from Chinese enterprises in Africa.[13] According to the report, once all the projects are put in place, they can help increase Africa's export by US$5.8 billion, tax revenue by US$1b and benefit more than 8.7 million people in Africa.

Table 2: Some key development finance institutions' total investment and financing amount in Africa

Name	Total financing commitment in Africa (Billion USD)	Founding Year
World Bank Group (WB)	73 (as of January, 2019)	1944
African Development Bank (AfDB)	47.5 (as of January, 2018)	1964
China Development Bank (CDB)	50 (as of September, 2018	1994
The Export-Import Bank of China (CHEXIM)	87 (as of July, 2019)	1994
China-Africa Development Fund (CAD Fund)	4.6(as of August, 2018)	2007

As can be seen in Table 2, the CAD Fund does not represent a large share of the global development finance in Africa. Nevertheless, this paper is the first scholarly effort to give a full evaluation of this emerging financial institution's funding mechanism, investment models, incentives, current development and challenges as well as its rationale behind its financing activities. The paper wishes to contribute to a better understanding of the Chinese economic footprint on the continent by studying the CAD Fund.

The paper aims to answer the following questions:

1. What are the motives behind CAD Fund's investment in Africa?

2. What are the principal characteristics and trends of the CAD Fund's investment in terms of choosing business partners and projects? What are the implications?

3. How does CAD Fund use market approach and equity investment to serve China's interests in Africa?

By using project data, media reports and interviews, this paper first presents the funding mechanism and explores the logic behind how and why certain projects were financed; secondly, highlights the prospects and the challenges that exist in a state-led fund; thirdly, contributes to the understanding of how a state-led fund uses market approach and equity investment to serve China's interests in Africa. It argues that the CAD Fund is neither entirely state-led nor fully market-led in its motivation, incentives and daily operations. Nevertheless, the primary driver of CAD Fund's investments is the combination of state interest and market forces, rather than the development of Africa. Moreover, with its more diversified and relatively flexible investment approaches, the Fund, along with other government-led funds, such as Silk and Road Fund, China-Latin America and Caribbean Industrial Investment and Cooperation Fund, has the potential of creating a revolution on the ground by filling the gap between official grants and loan under the traditional model, which carries the possibility to transform the shape of global development finance.

Methodology

The methodology used in this report is a combination of desktop research and interview approaches. Project

- 13 Xinhua News Agency. (2018). CAD Fund reaches US$10 billion, available at: http://www.xinhuanet.com/fortune/2018-09/01/c_1123365524.htm, accessed on November 4th, 2019.

data are obtained from open resources such as information released by CAD Fund, China Development Bank (CDB) – CAD Fund's sole shareholder, as well as CAD Fund's co-investors and media reports. The author also conducted semi-structured interviews with stakeholders, which include managers of the CAD Fund and its co-investors, and officials from its governing authorities.

The official website of CAD Fund does not provide systematic information about the projects that the Fund has been involved in. The heading "project overview" on CAD Fund's website lists areas of activities, namely: agriculture, manufacturing, industrial, infrastructure and natural resources. However, for each area of activity, the website only provided information for one project. The "news" section and the fund's introductory brochure does include reports about their investment projects, but few of them provide comprehensive investment or project information. Thus, finding information about the projects which CAD Fund is involved has proved to be a difficult and challenging task.

This difficulty of acquiring data is not unique to the CAD Fund. Many national development finance institutions, especially those from development countries, including the Chinese ones, have a long way to go towards data transparency and accessibility (F20, 2019)[14]. In an effort to overcome this problem, the Global Development Policy Center (GDP Center) at Boston University and the China-Africa Research Initiative (CARI) of the Paul Nits School of Advanced International Studies have developed a methodology for tracking China's global policy bank's data over the past years, which is tracking project investment via internet search engines and open sources verification[15]. The researcher used the same methodology for this project to collect project data in this paper. Information from public sources is complemented by interviews and fieldwork. The author was able to compile a database of 72 projects financed or invested by the CAD Fund, which covers 78% (72 out of 92) of all the CAD Fund-financed projects between 2006 and mid-2018. The author coded the following information about the projects: name of the African subsidiary, host country, project approval year, sector, name and ownership type of co-investor(s), total value of the project, CAD Fund's contribution and share, and disclosed scope of investment.

Between late April to September 2019, the author conducted field research in China, Angola, Kenya, Ethiopia and Zambia and visited some of the CAD Fund's projects. The author conducted 25 semi-structured interviews with stakeholders from the CAD Fund, Development Agency in Zambia, Kenyan Ministry of Finance as well as representatives of CAD Fund's Chinese partners. These interviews help bridge the information gap in open resources, such as the status of implementation, the form of cooperation, impacts on host societies, as well as benefits and challenges perceived by various stakeholders. All the interviewees have been anonymized to protect their identity.[16]

Limitations of the Project

Some limitations of this project should be noted. Firstly, given the difficulty in obtaining data and the low level of transparency in the CAD Fund's operations, it is impossible for the researcher to track all the projects. Secondly, some of the information and analysis are based on self-reporting by CAD Fund and its co-investors, and therefore imply a risk of bias. Thirdly, this research has not covered enough African perspective, which is crucially important. More interviews and observations with African stakeholders are encouraged in further research. Nevertheless, this study is the first attempt to provide a systematic and in-depth analysis of the operation of the CAD Fund in the last decade. The limitations do not change the fact that this report provides

- 14 Bhattacharya, A., Gallagher, K.P., Muñoz Cabré, M., Jeong, M., & Ma, X. (2019) Aligning G20 Infrastructure Investment with Climate Goals and the 2030 Agenda, Foundations 20 Platform, a report to the G20.
- 15 See CARI's database on China-Africa Finance at http://www.sais-cari.org/data , while GDP Center's database on China-Latin America Finance at https://www.thedialogue.org/map_list/
- 16 Note: As some Chinese SOEs and the CAD Fund have very strict requirements of the process of requesting interview, some of the information was gathered through an informal way, such as coffee/dinner discussion, as the informants prefer.

an source of information and ideas for improving the policy framework for Chinese investment in Africa.

The Political Economy of Chinese Equity in Africa

Establishment and Developments of the CAD Fund

The China-Africa Development Fund is one of the 'Eight Measures' for China-Africa cooperation announced by the then-president Hu Jintao on the 2006 Beijing Summit of the Forum on China-Africa Cooperation (Taylor, 2012)[17]. It was inaugurated in June 2007 and headquartered in Beijing.

During the Johannesburg Summit of FOCAC in 2015, Chinese President Xi Jinping announced that China would inject an additional US$ 5 billion into the fund in support of the "10 Cooperation Programs" between China and Africa, raising the fund's size to US$ 10 billion. In September 2018, President Xi Jinping put forward the "Eight Major Initiatives" in his keynote speech at the Opening Ceremony of the Beijing Summit of FOCAC, where he stressed the importance of continuing to make good use of the China-Africa Development Fund and other institutions.[18]The fund also stated that the next step will be to further play a guiding role as the platform to expand investment in Africa, to better localize the "Belt and Road Initiative" in the development of Africa, and to help build a closer China-Africa community of common destiny.[19]

The China Development Bank (CDB) configured a 50-year lifespan for the fund, as largest private equity fund and the first equity fund in China dedicated to Chinese investments in Africa.[20] CDB has accumulated profound experience investing in Africa through its "Going Global" initiative, and laid a solid foundation for the development of thre CAD Fund.

Some observers have described the CAD Fund as a sovereign wealth fund (Grimm& Schickerling)[21] ; however, this is not entirely true. As Prof. Bräutigam points out in her blog, most sovereign wealth funds, such as the China Investment Corporation (CIC) are funded directly from the reserves of central banks; therefore, the CAD Fund does not fall into this category.[22]

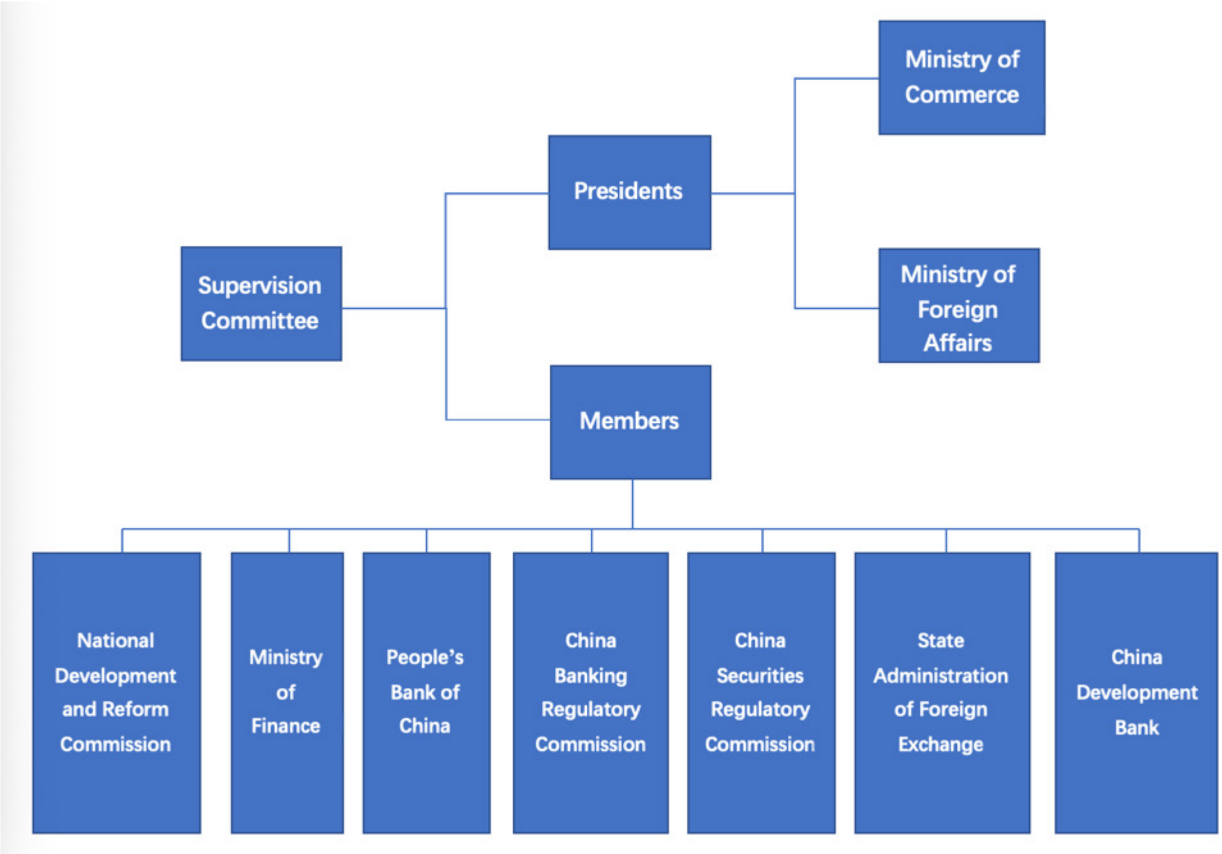
Domestic links with governmental institutions

As mentioned above, the CAD Fund is initiated by the Chinese government and operated by the China Development Bank (CDB). Although the CAD Fund only has one shareholder (CDB), it subjects to a supervision committee composed of leaders from the Ministry of Commerce, the Ministry of Foreign Affairs, National Development and Reform Commission, Ministry of Finance, People's Bank of China, China Banking Regulatory Commission, China Securities Regulatory Commission, State Administration of Foreign Exchange and China Development Bank.[23] Leaders or representatives from other institutions such as State-

- 17 Taylor, I. (2012). From Santa Claus to Serious Business: Where Should FOCAC Go Next? African East-Asian Affairs, 74.
- 18 MOFCOM. (2018). Elaboration on the Eight Major Initiatives of the FOCAC Beijing Summit, available at: http://english.mofcom.gov.cn/article/policyrelease/Cocoon/201809/20180902788698.shtml, accessed on November 1st, 2019.
- 19 Xinhua News Agency. (2018). CADFund reaches US$10 billion. available at: http://www.xinhuanet.com/fortune/2018-09/01/c_1123365524.htm.
- 20 Ministry of Commerce of the People's Republic of China [中华人民共和国商务部](2007).Related Questions about China-Africa Development Fund[中非发展基金有关问题解答], available at: http://www.mofcom.gov.cn/article/zhengcejd/bj/200707/20070704863585.shtml, accessed on November 1st, 2019.
- 21 Grimm, S., & Schickerling, E. (2013). The China-African Development Fund (CAD Fund) as a sovereign wealth fund for Africa's development.
- 22 Bräutigam, D. (2015). Mysteries of the China Africa Development Fund. China Africa Research Initiative Blog.
- 23 Zhang, Yuze(2012), China-Africa Development Fund Tortuous Financing in Phase II[中非基金二期曲折融资]. New Century Weekly[新世纪周刊] no.16, 62-65. Also available at: http://www.cssn.cn/jjx/xk/jjx_yyjjx/jjx_jrx/201310/

owned Assets Supervision and Administration Commission and the Liaison of the CPC Central Committee (African Department) might also participate in the supervision meeting.[24] Figure 1 in below demonstrates the organizational framework of the supervision committee of the CAD Fund and the bureaucratic complexities in Beijing.

Figure 1: Organizational framework of CAD Fund's supervision committee (by the author)



Notably, the supervisory committee provides guidance to the CAD Fund regarding China's foreign and economic policy. The supervision committee coordinates high-level visits, and its members meet for high-level investment decisions, especially if the investment is considered as 'major investment decision' (重大投资决策,zhongda touzi juece) or potentially sensitive. As for other investment decisions, the investment strategy and amount are usually decided by the board of the Fund, independent of the supervision committee.

Apart from the government institutions mentioned above, the CAD Fund also works closely with local governments and other ministry-level institutions, such as Ministry of Agriculture, on businesses with local enterprises and on specific sectors. For example, Chinese Ministry of Agriculture and Hainan's Provincial Government both played a role in facilitating thxe cooperation between the CAD Fund, Hainan Rubber, and China Development Bank's Hainan Branch. The ministry provides strategic guidance and support for the investment; while the implementation of the project is undertaken by the Fund and the CDB Branch.[25]

For another example, the CAD Fund has worked closely with Hebei provincial government. In 2014, the Hebei

t20131024_522216.shtml, accessed on November 4 th, 2019.

- 24 Interview with representative of the CAD Fund, July 5th, 2019.
- 25 Interview with representative of Hainan Rubber, August 20th, 2019.

Provincial government unveiled a plan to shift its excess industrial capacities in steel, cement, glass etc. overseas by 2023. This was part of the plan to upgrade and restructure Hebei's economy, and also came out while the province was under pressure to reduce the scale of high-pollution industries in the Beijing-Tianjie-Hebei area. In the same year, the CAD Fund, Hebei Iron & Steel Group – China's biggest steel producer, and South Africa's Industrial Development Corporation signed an MoU in Beijing, which drew concern that the CAD Fund will facilitate the migration of domestic polluting companies to Africa, where job-creating industries are urgently-needed.[26]

In short, CAD Fund's development and investment supports and is also supported by various government institutions. The Fund works with both central-level and provincial level government institutions, and they may influence some of the fund's investment decisions and strategies to some degree.

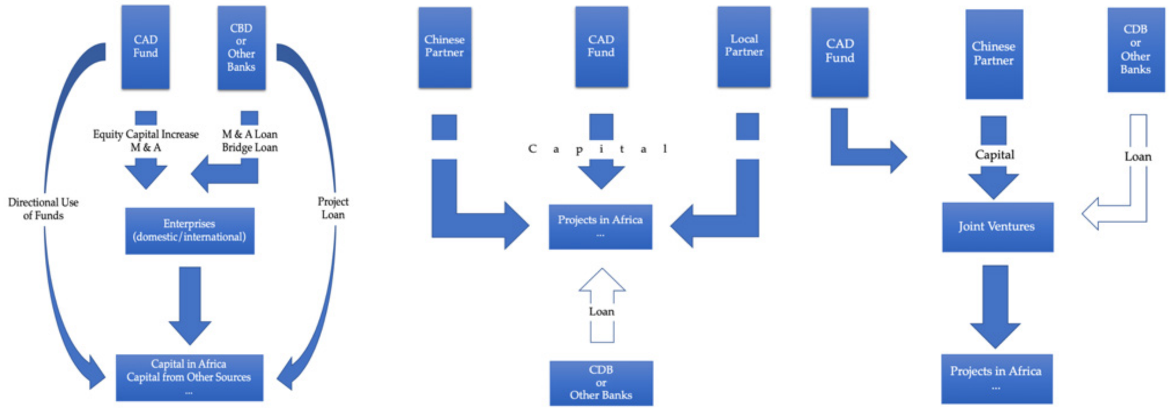
Investment approaches and models

The CAD Fund has four main investment approaches. The first approach is equity investment, which is the most dominant investment approach of CAD Fund.[27] Unlike CDB, which functions as a creditor, CAD Fund could acquire equity ownership of the projects, and therefore, participates in the governance of corporate affairs in these joint ventures. In most cases, CAD Fund does not seek a majority share in its portfolio companies – limiting its investment to 10% to 50% of the shares. Nor does it participate in the daily management of the joint ventures. However, it does involve in the making of major decisions, such as the appointment of directors, supervisors, and financial officers. In theory, CAD Fund would exit the investment projects in five to eight years through IPO, transfer agreement, stockholders buyout, etc..[28] The second approach is quasi-equity investment, which may include preferred stock, hybrid capital instruments and convertible bonds. Thirdly, CAD Fund also invests in "fund of funds". Lastly, CAD Fund also provides consulting services to Chinese enterprises, helping them overcome barriers of investing in Africa and connecting Chinese and African enterprises.[29]

Chi Jianxin, the former president of the CAD Fund summarizes the CAD Fund's cooperation models into three main models, 1) equity participation model; 2) platform model; 3) direct investment model (Chi, 2016)[30], which could be shown in the Figures below.[31]

- 26 NYT. (2014). China's Industrial Heartland to Push Overflow Abroad. Available at: https://cn.nytimes.com/china/20141121/c21industry/dual/.
- 27 Chi, Jianxin. (2016). "中非发展基金助力中非产能合作" [China-Africa Development Fund Boots China-Africa Capacity Cooperation]. 西亚非洲 [West Asia and Africa],no.4, 34-48.
- 28 Sino-Africa Investment Union. "中非发展基金政策解读". http://www.china-africa.org/inspection/2015-06-23/316.html.
- 29 Information obtained from CAD Fund's open reports, online sources and interviews.
- 30 Chi, Jianxin. (2016). "中非发展基金助力中非产能合作" [China-Africa Development Fund Boots China-Africa Capacity Cooperation]. 西亚非洲 [West Asia and Africa],no.4, 34-48.
- 31 Figure 2: Equity participation model; Figure 3: Platform model; Figure 4: Direct investment model. The Figures were formulated by the author, based on information from CAD Fund's official website (cadfund.com), Chi (2016) and interviews.

Figure 2, Figure 3, and Figure 4



The CAD Fund does not have functions of an official aid agency. It does not allocate the projects by countries. Its capital is combined with that of its investment partners, and projects are required to be independently operated, and independently bear losses and gains and investment risks. For enterprises, participation of the fund could expand the scale of corporate finance and share the risks. For African countries, equity investment from the fund does not increase their debt burden. Neither does it restrict the possibility of getting extra loans from its shareholder CDB or other banks.

Africa Development Fund as a benchmark?

In comparison, a development fund with a longer standing in Africa is the African Development Fund (ADF). Administrated by the African Development Bank (AfDB), ADF has been operating as a solution to two major constraints of the African Development Bank had commenced operations in 1974 i) the limited amount of resources which the Bank could provide and ii) the nature as well as the terms of the loans, which were not fully appropriate for the poorest of its member countries, especially for projects with long-term durations or non-financial returns.[32] The fund has accumulatively invested 45 billion US dollars on the African continent – nearly ten times as much as the CAD Fund.[33]

In contrast against the Africa Development Fund (ADF), which is the concessional window of the African Development Bank (AfDB) Group, the CAD Fund is a market-led investment fund. Rather than boosting investment, the aim of the ADF is the promotion of economic and social development in Africa. The ADF only operates low-income regional member countries. Rather than commercial investment products, ADF's financial products are concessional loans, grants for projects and programs, risk guarantees, and support through technical assistance for studies and capacity building. The ADF allocates its resources according to performance and need, while the CAD Fund does not allocated its capital by country.[34] Also different from the CAD Fund, which has a sole shareholder – the China Development Bank, the ADF's shareholders are donor states. The largest shareholder of the ADF is the United Kingdom, followed by the United States and Japan.[35]

As for sectoral distribution of their supported projects, ADF is more focused on infrastructure, transport,

- 32 About the ADF, available at: https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf/about-the-adf, accessed on November 2nd, 2019.
- 33 Ibid.
- 34 AfDB. ADF Country Resources Allocation. Available at https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf/adf-country-resources-allocation.
- 35 About the ADF, available at: https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf/about-the-adf, accessed on November 2nd, 2019.

agriculture, energy, as well as an array of development sectors including water supply and sanitation, environment, etc.,[36] while the CAD Fund has less interests in these sectors. Below is a table summarizing key information of the CAD Fund and ADF.

Table 3: key information of the CAD Fund and Africa Development Fund

	CAD Fund	ADF
Year of establishment	2006	1964
Shareholder	China Development Bank	Donor states (such as United Kingdom, United States, Japan, etc.)
Authorized capital	US$4.6 billion	US$ 42.2 billion (UA 30.06 billion)[37]
Type of finance provided	Equity investment; Quasi-equity investment; Fund investment	Concessional loans, grants, risk guarantees; technical assistance
Range of funding provided (min/max, per project)	Minimum: US $5 m Maximum: Unknown	No minimum; maximum US$1.4m (UA 1m)
Total disbursement	USD 4.6 billion (up to August, 2018)[38]	USD 45 billion (UA 29.4 billion, up to 2016)[39]

Observations

1. The major partners are SOEs and listed companies

The major partners of CAD Fund are Chinese SOEs. One of the reasons is that the minimum amount that CAD Fund will engage with is US$ 5 million. The Fund usually also looks for a promising return, which effectively means that projects will have to have a minimum value of US$ 10 million. Thus, a lot of private enterprises are excluded, as most of them are small or medium size[40] (Sun, Jayaram & Kassiri, 2017). In addition, SOEs are also preferred for carrying lower risks than private enterprises. An informant from the CAD Fund explained:

"In terms of probability, private firms are more likely to have troubles in capital management. For example, the Fund used to collaborate with a Chinese private enterprise on the Wanbao rice project in Mozambique, but the boss of the company involved in illegal fundraising and this was of course unexpected. We lost money because we chose a wrong partner and the project now is taken over by an SOE[41]. I am not saying that we can generalize to the conclusion that Chinese private firms are not trustworthy, actually many of them are doing amazing work in Africa, but we tend to think it is easier for us to collaborate with SOEs, as we are in the same system and it is thus easier for us to control some risks. Put it in a simpler way, the monk can run away, but

- 36 AfDB. ADF Country Resources Allocation. Available at https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf/adf-country-resources-allocation.
- 37 Data obtained from: https://landportal.org/pt/organization/african-development-fund, accessed on October 30th, 2019.
- 38 Data obtained from AfDB, (2019). Financial Report 2018, p106. https://www.afdb.org/en/documents/financial-report-2018, accessed on October 30th, 2019.
- 39 Data obtained from the official website of African Development Bank, https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf/about-the-adf, accessed on October 30th, 2019.
- 40 Sun, I. Y., Jayaram, K., & Kassiri, O. (2017). Dance of the lions and dragons: How are Africa and China engaging, and how will the partnership evolve? McKinsey.
- 41 Note: State-owned China Railway 20 Bureau Group has taken over the project.

the temple will not run with him."[42]

According to our database, we also found that, among over 80 Chinese partners, more than 60% are listed companies. Among the listed companies, most of them are SOEs, while there are also over 12 private companies. They are regarded as successful Chinese private companies; some are on the list of the top 500 Chinese private companies (i.e., Humanwell Healthcare Group, Midea Group). This shows that the CAD Fund has strict requirements concerning the co-investors' financial capacity.

While this shows the risk-averse nature of the fund, the downside is that many Chinese private companies and African firms with comprehensive experiences in terms of operation business in Africa might be excluded.

At the same time, the close ties formed between the Fund and the SOEs might also lead to another kind of risk – as suggested by an informant:

"We have to admit that working with SOEs could either be very efficient or not efficient at all. When there is an issue, we don't really negotiate as we are from the same family (一家人,yijiaren). We talk, and we try to find a solution. If we could not find the solution, we leave it as it is. However, the problem is that for those projects which are not performing well, it is difficult for us to drop out if the partner is an SOE."[43]

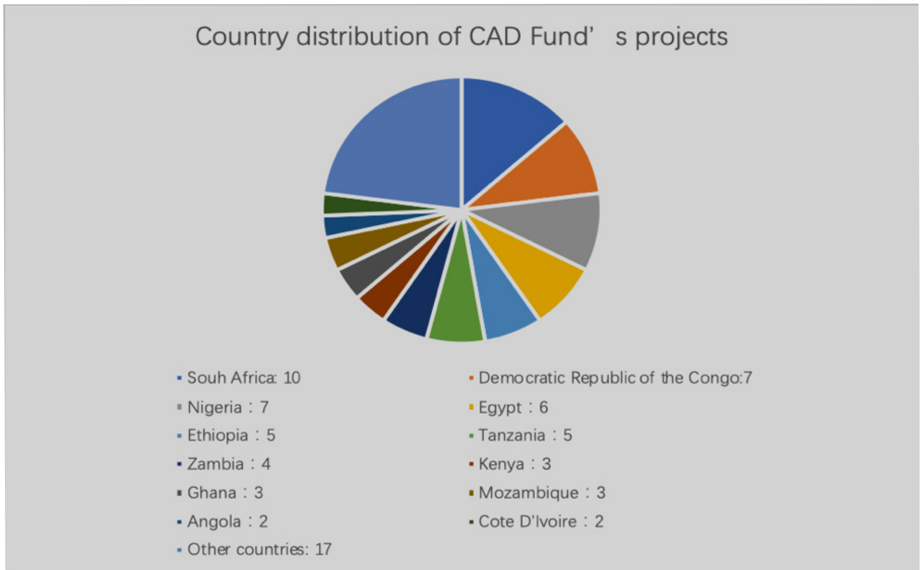
2. African companies are not the principal focus of the CAD Fund

It has been difficult for the Fund to find suitable, mature local enterprises with both capacity and experience in African countries. One informant from the CAD Fund explained:

"The Fund would love to work more closely with African companies, especially the private sector. But oftentimes it is not feasible commercially. First, the Fund is different from loans or aid. The Fund has an expectation on profits. Second, if using the 'investment + loan' model, the company not only needs to have borrowing capacity but also repayment ability, which many African companies lack."[44]

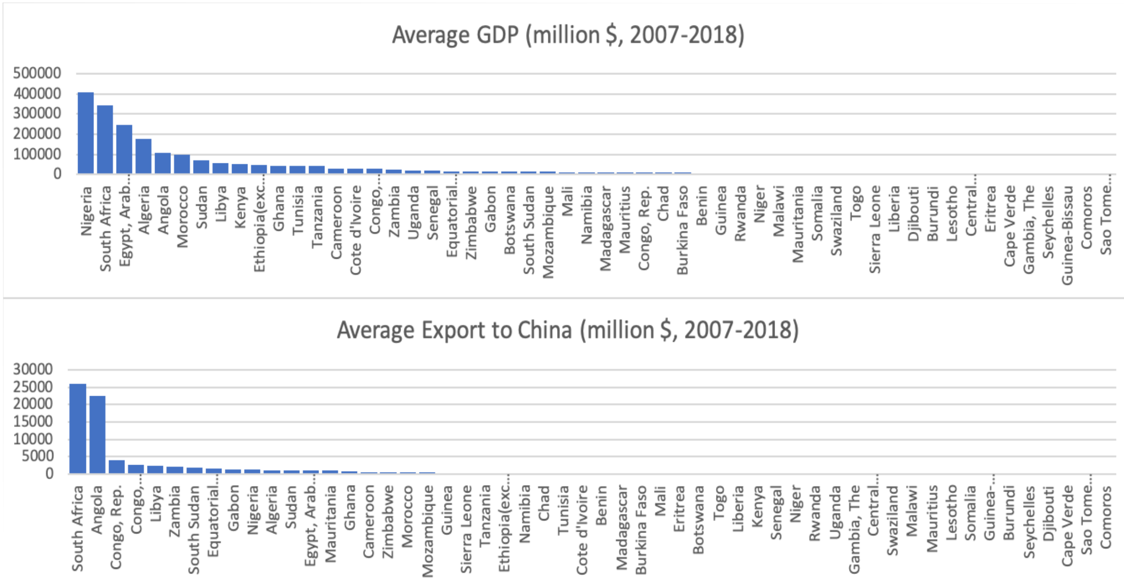
3. Country distribution of CAD Fund's projects

Figure 5: Country distribution of CAD Fund's projects (number of projects), based on the 72 projects in the author's database.



- 42 Interview with staff from the CAD Fund, April 24th, 2019.
- 43 Interview with staff from the CAD Fund, April 24th, 2019.
- 44 Interview with representative from the CAD Fund, August 20th, 2019.

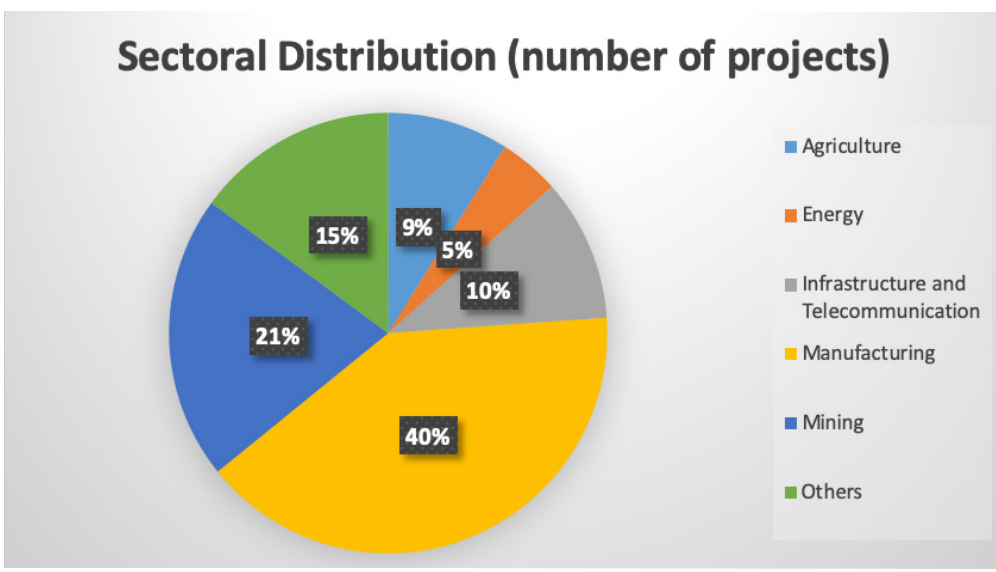
Figure 6: Average GDP and Export to China between 2007 and 2018 of African Countries.[45]



As Figure 5 shows, the majority of CAD Fund projects are concentrated in a few countries such as South Africa (10 projects), DRC (7 projects), Nigeria (7 projects), Tanzania (5 projects), Egypt (6 projects), Ethiopia (5 projects), and Tanzania (5 projects). Comparing with the GDP of African countries since 2007, or China's import from these countries, Nigeria, South Africa, Egypt, Algeria, Angola are the top five African countries in terms of GDP, and South Africa, Angola, Republic of Congo, DRC, and Libya. The county distribution of CAD Fund's projects could be roughly said to be correlated with the countries' GDPs as well as their trade ties with China, but also not entirely dependent on these factors.

4. Sectoral Distribution

Figure 7: Sector distribution of the CAD Fund financed projects (number of projects)



• 45 The Figure is created by the author, data were obtained from the Worls Bank Data and the World Bank's World Integrated Trade Solutions., available at https://data.worldbank.org/indicator/NY.GDP.MKTP.CD and https://wits.worldbank.org/CountryProfile/en/Country/CHN/StartYear/2007/EndYear/2018/TradeFlow/Import/Partner/ALL/Indicator/MPRT-TRD-VL#. Accessed December 20th, 2019.

Looking at the number of projects CAD Fund has invested, we find the CAD Fund invests in a diversity of industries, including manufacturing, energy, infrastructure, telecommunication, mining, logistics, media and investment management. Based on the data compilation, 40% of the projects are in manufacturing, 21% are in mining, 10% are in infrastructure and telecommunication, and 9% are in agriculture.

The concentration of projects in the manufacturing sector is potentially related to the industrial over-capacity in domestic China.[46]While China's economic achievement since the opening-up policy is widely acknowledged, excess capacity, which means the demand for products is lower than supply capacity, has been one of the key challenges China has been facing since 2006.[47] The Guiding Opinion on Eliminating Severe Excess Capacities, issued by China's State Council in 2013, highlighted the urgency of tackling excess capacity, especially in 'traditional manufacturing industries' such as steel, aluminum and flat glass. Meanwhile, as a positive response to national policy, the CAD Fund has also been trying to promote industry capacity cooperation in Africa, which has helped some Chinese companies to relocate their manufacturing operations from China to Africa.

However, while manufacturing is the sector that the Fund financed the biggest number of project, it does not necessarily mean that the Fund has invested most of its money in manufacturing. If we look at the volume of investment flows instead of project numbers, the Fund's investment in mining is much bigger than manufacturing. Most of the mining projects sponsored by the Fund are as large as several hundred million U.S dollars. However, manufacturing projects investments are usually between 5 million dollars to 50 million dollars.

This observation also echoes with our fieldwork interviews, as our interviewees suggested that over 40% of the total investment values of the Fund go to the mining sectors.[48]

Below is a table that shows some of the largest investments the CAD Fund has been involved in, all of which are in the mining sector, and the Fund's investment for each project is more than 150 million US dollars.

Table 4: some of the largest investment by the CAD Fund, based on the author's database.

Project Name	Sector	Country	Partner
Gold mining project	Mining	South Africa	Baiyin Nonferrous Group, Changsanyue Capital Co. Ltd.
TF Copper& Cobalt Mine	Mining	DRC	China Molybdenum Company Limited
Zijing Mining Project	Mining	DRC	Zijin Mining Group Ltd

Meanwhile, although a substantial amount of CAD Fund investment goes to the natural resources and energy sector (19 out of 72 projects), to say that the CAD Fund is resource-seeking is an oversimplification. In DRC, for example, 5 out of the 7 projects are in the mining sector, but in South Africa, which is also a resource-rich country, the CAD Fund's investment is more diversified as it has invested in multiple sectors, including manufacturing, mining, and media.

It is also necessary to mention that the sectors that CAD Fund are involved in do not always match African countries' priority sectors. According to interviews with Zambia Development Agency, an African institution

- 46 More information please see "Guidelines to Resolve Severe Overcapacity Problems", available at: http://www.gov.cn/zwgk/2013-10/15/content_2507143.htm, released by the State Council in 2013.
- 47 European Chamber, (2009). "Over Capacity in China: Causes, Impacts, and Recommendations.", p21. Available at https://www.europeanchamber.com.cn/en/publications-archive/27/Overcapacity_in_China_Causes_Impacts_and_Recommendations.
- 48 Interview with representatives of the CAD Fund, April 28th, May 5th, 2019.

that has reached out to CAD Fund in the past years, there might be differences between them and the CAD Fund in terms of mindset on what are the priority sectors for development.

Investment Strategies of the CAD Fund

Facilitating Industrial Alliance: Financing Chinese Automakers

Due to limited disposable income of the local population and the high costs of new vehicles, second-hand vehicles, especially Japanese, European and American second-hand vehicles dominate Africa's automotive retail sector (Deloitte, 2018)[49], which leaves limited space for Chinese automakers. In this context, the CAD Fund has set up joint ventures with China's state-owned automakers such as Brilliance Auto Group, Cherry International, First Automobile Works, and China North Vehicle, hoping to break into the African automotive market against fierce competition from mature players such as Japan.[50] Table 5 describes the details of CAD Fund's automobile partners.

Table 5: Joint Ventures with CAD Fund participation in the automotive industry in Africa[51]

Name of the Joint Venture	Country	Year	Partner	Major Partner	Listed = 1 Not Listed = 0	Size (US million)	CAD Fund's Investment (US million)	CAD Fund's Share
China-Africa Brilliance Investment Co., Ltd	Egypt	2010	Brilliance Auto Group	SOE	1	750	Unknown	40%
Chery Overseas Industrial Investment Co.,	Egypt	2011	Chery International	SOE	0	500	225	45%
FAW Africa Investment Co., Ltd	South Africa	2010	First Automobile Works	SOE	0	100	45	45%
Ever Star Industries (Pty) Ltd	South Africa	2010	China North Vehicle Co. Ltd., Beiben Heavy Duty Truck Co. Ltd., China Construction Bank South Africa Branch	SOE	1	30	9	36.73%
China-Africa Foton Investment Co., Ltd	Algeria, Nigeria, Egypt, Kenya	2018	Foton, China-Africa Capacity Cooperation Fund	SOE	1	150	45.45	30%

- 49 Deloitte (2018): Deloitte Africa Automotive Insights: Navigating the African Automotive Sector: Ethiopia, Kenya and Nigeria, available at: https://www2.deloitte.com/content/dam/Deloitte/za/Documents/manufacturing/za_Africa-Auto-2016-Report-28-May-2018.pdf, accessed on December 20th, 2019.
- 50 Interview with representative from the Fund, August 20th, 2019.
- 51 Note: the table is created by the author; related sources are from each joint venture's official website.

According to the CAD Fund, its partners FAW, Cherry, Brilliance and North Vehicles have set up assembly plants in Africa. The total investment is 400 million US dollars, while CAD Fund alone has invested around 100 million USD dollars. These joint ventures will be able to produce more than 100,000 cars in Africa, including automobile cars and heavy-duty trucks. In addition, the CAD Fund, Foton Motor, along with the China-Africa Fund for Industrial Cooperation established another joint venture in 2018, which will speed up the Foton's expansion in the African market.[52] The joint-venture cooperation model and the large capital injection by the CAD Fund are slated to help these Chinese automakers settle into the African market.

According to Chi Jianxin, the former president of the CAD Fund, the Fund has an excellent organizational and coordination ability, and could play a leadership role among Chinese companies, especially in helping them to avoid vicious competition within the industry, and to safeguard China's overall interests (Chi, 2016).[53] As discussed in the previous sections, this might not be entirely true when it comes to Chinese private firms as most of them are operating in Africa independently and receive little guidance or support from Beijing or other state-owned stakeholders.[54] However, the CAD Fund's role as a 'bridge' to facilitate coordination among Chinese SOEs is feasible in certain industries, particularly if the Fund owns shares of several joint ventures in the same industry. A number of Africa-based representatives of Chinese SOEs tell the author in the interviews that China's economic and commercial counsellor's office have limited abilities in terms of coordinating potential conflicts and competition among the SOEs.[55] In comparison, the Fund's strategy might have more practical significance in the long term. For example, the Fund has led four vehicle enterprises, FAW, Chery, Brilliance, and North vehicles, to forge into 'The Automotive Alliance' to share resources in Africa. These Chinese brands also occasionally hold annual meetings and share operational experiences in Africa. The CAD Fund, China-Africa Brilliance Investment, FAW Africa Investment, Chery Overseas Industrial Investment, and Ever Star Industries also signed an MOU to promote capacity cooperation, and to share their connections, services and information, in hopes that these joint ventures will have great potential in the African markets.[56] Furthermore, the CAD Fund also encourages other Chinese SOEs to buy the vehicles and heavy duty-trucks produced by its partners.[57] Thus, the fund becomes an focal agent among the Chinese SOEs, aiming to better coordinate their common interests and potential conflicts.

Platform for Project Preparation: CAD Fund' involvement in Infrastructure

For the Chinese government, there is an urgent need to better coordinate the conflict of interests among various SOEs. Chinese companies in Africa have attracted plenty of media attention and public scrutiny about their contravention of competition laws. For example, in 2015, Zambian media reported the unhealthy competition between three Chinese state-owned companies over the US$2 billion 750 megawatts Kafue Gorge Lower power station contract.[58] The establishment of China Overseas Infrastructure Development and Investment Corporation Limited (COIDIC) in 2016 is an exemplary effort towards this end.[59]

- 52 China Trucks. (2018) Foton Partners with CADF and CAFIC to Deepen Investment Cooperation in Africa. Available at: http://m.chinatrucks.com/news/8187.html, accessed on November 3rd, 2019.
- 53 Chi, Jianxin. (2016). "中非发展基金助力中非产能合作" [China-Africa Development Fund Boots China-Africa Capacity Cooperation]. 西亚非洲 [West Asia and Africa],no.4, 34-48.
- 54 Interviews with entrepreneurs of Chinese private companies in Africa, April, May, 2019.
- 55 Interviews with multiple Africa-based representatives of Chinese SOEs, April, May, 2019.
- 56 Interview with representatives from the CAD Fund, April, May, 2019.
- 57 Ibid.
- 58 Daily Nation (2015).Zesco Boss Free. Available at: https://www.zambiadailynation.com/2015/11/04/zesco-boss-free/, accessed on November 1st, 2019. CSCEC prosecuted Victor Mundende, managing director of Zambian state-owned power company-Zambia Electricity Supply Corporation Limited, to court after losing the bid.
- 59 China Daily. (2016): Establishment of China Overseas Infrastructure Development and Investment Corporation Limited. Available at: http://www.chinadaily.com.cn/m/gezhouba/2016-09/15/content_27010690.htm, accessed on November 5th, 2019.

Established and led by the CAD Fund, its shareholders consist of large Chinese state-owned enterprises in large-scale infrastructure building, investment, operation, and design, including China Gezhouba Group Overseas Investment Co., Ltd., China Civil Engineering Construction Corporation, China Telecom Global Limited, Changjiang Survey, Planning, Design and Research, China ENFI Engineering Corporation, and Hebei Jointo Energy Investment Co., Ltd.. According to the CAD Fund, COIDIC is China's first overseas infrastructure platform, and specializes in early-stage development and investment of overseas infrastructure.

With a total registered capital of US$ 500 million, COIDIC is the world's largest company that engages in the early stage development of overseas infrastructure. It has dual headquarters in Beijing and Johannesburg. It is reported that the establishment of COIDIC is a major innovative achievement as part of the effort to implement the China-Africa Infrastructure Plan. It has also become an active leader in the establishment of SEZs abroad and an influential global "project incubator platform" for essential infrastructure development. According to an interviewee from COIDIC, "platforms such as COIDIC could not only help SOEs better integrate their resources, but also reduce or avoid unhealthy competition in Africa."[60]

In addition to undertaking specific projects, COIDIC also offers a Sovereign Development Service (SDS) and provides working teams to collaborate with host country governments to review national development plans and to selects viable projects for development. According to the Board President of COIDIC and the Vice-President of the CAD Fund, the COIDIC has signed development agreements with Republic of Congo, Madagascar and Cote d'Ivoire as well as the Common Market for Eastern and Southern Africa (COMESA).[61] In addition, COIDIC, Port of Djibouti and Administration of Free Trade Zone inked a memorandum of understanding (MOU) in 2018 on oil reservoirs and supporting infrastructure projects. Based on the MOU, COIDIC has been granted the exclusive right to explore the project. This will become the first large oil reservoir facility in the region.[62]

Balancing Diplomatic and Commercial Interests: CAD Fund's Involvement in Agriculture

While investment performances and returns is a priority for the CAD Fund, bolstering China's international image is also a major political interests of China in Africa (Thrall, 2015).[63] Therefore, sometimes political or diplomatic factors rather than economic concerns could play greater roles, e.g. when it comes to the Fund's involvement in the agricultural sector. The rate of return on agricultural investment is generally low in Africa, especially comparing with the mining sector. Yet the Fund still has invested in a number of agricultural projects due to the motivation of building a positive image in Africa. A representative from the CAD Fund explained:

"Agriculture is a sector that can attract most voters in African countries, as the majority of African population are farmers. Several African government officials that went to Beijing and had meetings with us emphasized the importance of investing in agricultural projects in their countries, as they wanted to make ensure a stable political environment. For the CAD Fund, we naturally care about interests. But as a state-owned fund, we also have corporate social responsibilities to fulfill, and we have to keep China's image in Africa positive. For agricultural projects, we initially planned to recoup 10% of the Fund's total capital. However, we are still far from reaching this target, as the returns on agricultural investment is low, and can sometimes even be negative."[64]

- 60 Interview with representative from COIDIC, May 20th, 2019.
- 61 Source: http://epaper.21jingji.com/html/2018-01/01/content_77683.htm, accessed on October 20th, 2019.
- 62 Xinhua Finance Agency, (2018). COIDIC, Djibouti FTZ ink MOU, available at: http://en.xfafinance.com/html/BR/International_Cooperation/2018/363690.shtml, accessed on October 20 th, 2019.
- 63 Thrall, L. (2015). China's expanding African relations: Implications for US national security. Rand Corporation.
- 64 Interview with representative from the CAD Fund, June 10th, 2019.

Information from our database suggests that compared to manufacturing and mining, agriculture is not a major sector for the CAD Fund's investment. The agriculture projects that are invested or financed by the CAD Fund include Johnken Farm in Zambia, Wanbao rice farm project in Mozambique, sisal farm in Tanzania, cotton plantation and processing project in Malawi, Mozambique and Zambia, rubber plantation project in Cameroon, Cote d'Ivoire, DRC and Nigeria, as well as the China-Sudan Agriculture Experiment Park. Table 6 reveals the basic project information for the agriculture projects that the CAD Fund has invested.

Table 6: The Agriculture Projects involved by the CAD Fund[65]

Country	Project	Product	Product Destination	Investor / Partner	Partner Type
Zambia	Johnken Farm	Corn, Livestock, Vegetables	Zambia	China-Africa Agriculture Investment Co., Ltd.	Joint Venture (with SOE-China National Agriculture Development Group Corporation)
Mozambique	Wanbao Rice Farm Project	Rice	Mozambique	Stage 1: Xiangyang Wanbao Grains & Oils Co., Stage 2: China Railway 20 Bureau Group Co., Ltd	Stage 1: Private Firm Stage 2: SOE
Tanzania	Sisal farm	Sisal (Production and Processing)	EU and China	China-Africa Agriculture Investment Co., Ltd.	Joint Venture (with SOE-China National Agriculture Development Group Corporation)
Malawi, Mozambique, Zambia	China-Africa Cotton Project	Cotton	Southern African Development Community and International Market	China-Africa Cotton Development Ltd.	Joint Venture (with private firms-Qingdao Ruichang Cotton Industrial Co., Ltd and Qingdao Huifu Textile Co., Ltd)
Cameroon, Cote d'Ivoire, DRC & Nigeria	Rubber Plantation	Rubber	Mainly to China	Sinochem Corporation	SOE
Portuguese Language Countries in Africa	Rubber plantation (Initial Framework Agreement)	Rubber	Mainly to China	China Hainan Rubber Industry Group	SOE
Sudan	China-Sudan Agriculture Experiment Park	Agriculture Experiment Park	Unknown	China Shandong International Economic & Technical Cooperation Group Ltd	SOE

• 65 Note: The table is created by the author, combining multiple online sources and interviews with representatives from the CAD Fund and China-Africa Agriculture Investment Co., Ltd.

Contrary to suspicions from some media that Chinese investment in agriculture in Africa is mainly for China's domestic food security,[66] most agricultural projects invested or financed by the CAD Fund are not export-oriented. Agricultural products such as corn, livestock, vegetables and rice are only sold to the locals, instead of exported to China. A representative from the China-Africa Agriculture Investment Co., Ltd. (CAAIC) explained:

"We are not interested in the agricultural resources/products in Africa, as we and our top leaders know that Chinese food security must be controlled by ourselves, and food security will have to be solved domestically."[67]

Meanwhile, the fund has also invested in some export-oriented agricultural projects, such as natural rubber. This is not only an agricultural commodity, but is also one of the a strategic industrial material. Different from the CAD Fund's food crop agriculture (e.g., CAD Fund's agriculture projects in Zambia and Mozambique), which are more or less 'projects for good image', the Fund's investment in natural rubber is more resource-oriented and market-driven. In 2018, China imported 3.6 billion US Dollars worth of natural rubber (25 % of global exported natural rubber), making it the largest rubber importer in the world. So far, the largest agricultural investment by the CAD Fund took place in 2016, when the fund bought a 10 percent stake in Singapore's Halcyon Agri Corporation Ltd.. The CAD Fund's co-investor is one of the world's top five natural rubber enterprises – state-owned Sinochem International, which has stakes in 24 rubber plantations, and five factories in different African countries.

It has a planting area of over 60,000 hectares. Besides the cooperation with Sinochem, the CAD Fund, along with China Development Bank's Hainan Branch, has also signed an agreement with Hainan Rubber in 2017. Under the agreement, Hainan Rubber will take charge of the implementation and management of projects. By using the "investment + loan" model, the Fund will not only bring investment to Hainan Rubber, but will also take advantage of fund management and capital operation. China Development Bank's Hainan branch will provide loans and comprehensive financial services. According to Rubber & Plastic News[68], the agreement has a special focus on the Community of Portuguese Language Countries in Africa.

The CAD Fund uses diverse investment models in agricultural investments. The Fund has invested in both green-field and existing farms, and has used 'investment+loan' model by collaborating with domestic banks from China, such as the China Development Bank or the Industrial and Commercial Bank of China.

For example, China State Farm, subsidiary of the state-owned China National Agriculture Development Group Corporation (CNADGC) had started operating its Johnken Farm in Zambia and a sisal farm in Tanzania since the 1990s. Both farms have faced various operational difficulties since they were established. The CAD Fund and the China National Agricultural Development Group Corporation set up a joint venture known as the China-Africa Agriculture Investment Co., Ltd. (CAAIC) in 2010. The CAD Fund owns 45% of the shares in the joint-venture, and injected capital into the two farms. Funded at 1 billion RMB (US$161 million), the CAAIC was intended to be a platform to promote China's farming, fishing, animal husbandry, livestock, and agro-processing, together with marketing investments in Africa.

The Fund's investment in the agricultural sector is also relatively flexible, without having a fixed or strict target of return rate, compared to its investment in other sectors. A representative from the CAD Fund's partner CNADGC explained:

"The CAD Fund had its own profitability goal that initially intended to reach 12% each year, on average. However, the Fund realized it was difficult to reach this goal, especially with failing investments such as the

- 66 The Guardian, (2012). Chinese food security may be motivating investments in Africa. https://www.theguardian.com/global-development/2012/may/10/chinese-food-security-investments-africa
- 67 Interview with representative from CAAIC, May 29th, 2019.
- 68 Rubber&Plastic News.(2017), Hainan Rubber Targets Natural Rubber Projects in Africa, available at: https://www.rubbernews.com/article/20171227/NEWS/171229972/hainan-rubber-targets-natural-rubber-projects-in-africa

Wanbao Rice farm. In response, it changed its profitability goal to a more realistic 7% per year. But for some years, when there were droughts due to climate change, it was even difficult for us to reach that goal. We could then negotiate. You know, agriculture is highly dependent on the weather. So, there are many things that we are not able to control. I think the Fund also realized that, so they are usually quite flexible when we negotiate with them. Thus, we are presenting a good image of China to African people."[69]

Some of its agricultural investment has also combined with investment in manufacturing or infrastructure sector. For example, the CAD Fund not only provided capital for cotton cultivation in the China-Africa cotton projects, but was also invested in textile factories built by its partner for cotton production, in hopes of promoting industrialization in the host country. (Xinhua, 2018)[70].

From the discussion above, we can summarize the motives of the CAD Fund's investment in the agricultural sector in Africa. On the one hand, the fund wishes, through agricultural investment, to benefit people's livelihood and present a good image to African governments and African people. Even when facing difficulties with profitability, such strategic objectives compel the Fund to stay. On the other hand, the decision to invest in some agriculture projects is related to the demand in China. This might not apply to rice, vegetables or livestock products, but other products such as rubber. For example, all of the agricultural products produced by Johnken Farm have been sold locally in Zambia, while most of the rubber goods produced by the CAD Fund's partners were exported to the Chinese market. Moreover, the Fund has a diverse combination of investment approaches in agriculture, and is relatively flexible. The Fund has invested in both existing farms and green-field, and has sometimes combined manufacturing and infrastructure investment.

The Changing Incentive System and the Tightening Accountability Mechanism of the CAD Fund

The incentive system plays an important role for a company or an institution's development, as it will affect the staff's mindset, behavior, decisions and working efficiency in their everyday work. According to informants of the CAD Fund, the incentive system was created with the purpose of 'fulfilling the unity of policy and efficiency'.[71] The CAD Fund has been changing its incentive system or more specifically, the indicators on staff performance and performance-related bonuses since its establishment. For the CAD Fund, the priority in the first few years was "allocating the money" rather than "managing the asset". This shows that in its initial stage, efficiency was the Fund's priority, which tends to bring higher risks. While in recent years, the Fund has become more cautious about risks. One staff from the CAD Fund Africa office explained:

"Initially, we suddenly got millions of dollars. Our job was to allocate the money, and we had to allocate it quickly, since we needed to fulfill the President's promise at FOCAC. In the first several years, especially in the first two or three years, we did not have much experience with companies investing in Africa. At that time, we just needed to allocate the money. We made quick decisions on investing in some projects, and those projects were not very successful. In fact, it was also a learning process for us. Now we have gained experience and have learned some lessons from some failed cases. Thus, we have become more cautious with our decision-making. The indicator of staff performance is also no longer 'the ability to allocate money' but 'the ability to allocate the money wisely'."[72]

The Fund has also developed a comprehensive accountability mechanism. Notably, the accountability mechanism is not only implemented at the CAD Fund, but at all SOEs, including the State-owned Assets Supervision and Administration Commission. In 2016, the General Office of the State Council launched the

- 69 Interview with representative from CNADGC, May 30th, 2019.
- 70 Xinhuanet. (2018). Chinese Company Launches Groundbreaking Ceremony for Textile Factories in Malawi. Available at: http://www.xinhuanet.com/english/2018-03/20/c_137052406.htm, accessed on November 4th, 2019.
- 71 Interview with multiple representatives from the CAD Fund, April and May, 2019.
- 72 Interview with representative from the CAD Fund, July 20th, 2019.

Opinion on Establishing an Accountability System for Business Operations and Investment in Violation and Regulations by State-owned Enterprises. This is aimed at improving the efficiency of state-owned capital, enhancing the vigor of SOEs, and preventing losses with state-owned assets, to maintain and increase the value of state-owned assets.[73]

Similar to other Chinese SOEs, the CAD Fund also implemented the "accountability system" within the company. The principal would be responsible to the project that he or she was responsible for, or involved with. The Fund also developed a comprehensive project evaluation procedure. According to an interviewee from the CAD Fund, "when working on projects, the principal and other staff have to go through the procudure step by step and be very careful, as they will be responsible to the projects if the projects fail". The tightening accountability mechanism shows that the CAD Fund has become more cautious, and has become more concerned about the long-term rather than short-term interests. This also means that the Fund would be less likely to quickly invest in projects with high-risk. A representative of the Fund revealed:

"After implementing the accountability mechanism, many staff became less productive and less proactive. They have to constantly think about potential risks. Investment is an art, and different people could have very different views towards one project. Can you really explain everything, and justify each procedure? You can't. It is human nature to worry about the risks when everything seems very uncertain in Africa. Before implementing the accountability mechanism, we used to worry less, and each staff had more agencies. But now, efficiency is no longer our priority - we need to spend a lot time measure the potential risks and return. The internal approval process is usually also very time-consuming."[74]

In the meantime, the CAD Fund has also been trying to better quantify its project evaluation system for projects and partners, in interest of long-run profitability. The indicators include, but are not limited to, a solid credit record, clear equity and management structure, strong shareholder relations, a transparent balance sheet, and a clear strategy for Africa. However, as China and other emerging powers criticize the World Bank and IMF for their inefficiency (He, 2016[75]; Dollar, 2018[76]), the tightening accountability mechanism of the Fund might also lower efficiency and avoid some risky projects that is urgently needed for development, which might pose another challenge for development finance in Africa.

Discussions and Conclusions

Investment Motives of the CAD Fund

There has been plenty of debate on how to interpret Chinese state actors overseas, especially whether and to what extent Chinese SOEs are instruments of Chinese statecraft. However, little attention has been paid to state-owned/state-led fund, such as the CAD Fund. This paper provides an analysis of the investment motives for the CAD Fund through analyzing its structure and investment strategies, especially by looking at how the Fund facilitates industrial alliances, its platform model in the infrastructure sector, and its involvement in agriculture. By using case studies, it shows that the Fund pursues a set of different aims and its investment motives of the CAD Fund vary case by case, which resists oversimplification and generalization.

As mentioned earlier, CAD Fund's development and investment supports and is also supported by various

- 73 Opinion of the General Office of the State Council on Establishing an Accountability System for Business Operations and Investment in Violation of Regulations by State-owned Enterprises, available at: http://www.lawinfochina.com/display.aspx?id=b83adaca142a6245bdfb&lib=law, accessed on November 5th,2019.
- 74 Interview with representative from the CAD Fund, April 28th, 2019.
- 75 He A. (2016). China in the international financial system: A study of the NDB and the AIIB, CIGI paper No. 106.
- 76 Dollar, D. (2018). Is China's development finance a challenge to the international order? Asian Economic Policy Review, 13(2), 283-298.

government institutions. The Fund works with both central-level and provincial level government institutions, and they may influence some of the fund's investment decisions and strategies to some degree. The nature and organizational structure of the Fund determines that the Fund has to serve China's political, economic and diplomatic interests in Africa, which includes benefiting the livelihood of African people and bolstering a favorable image in Africa, interests of SOEs, etcs.. Thus its investment activities are driven by more than purely profit maximization.

Nevertheless, although state-actors play an important role in the CAD Fund, many decisions concerning whether to fund a project or not are market-driven and mostly motivated by commercial interests. In other words, the Fund has relative autonomy to make its decisions in its daily operations. For example, the Fund might support the state with offshoring excess industrial capacity to Africa, but state actors do not usually determine the final destinations and the project capital, or choose CAD Fund's partner on its behalf. In general, the Fund chooses partners and projects based on long-term investment return, especially when choosing partners from private enterprises.

Driven by both market forces and state interests, the CAD Fund has played a role of bridging state interests and business development. The paper argues that the CAD is taking an evolving pragmatic investment approach, which enabled the Fund to invest in a large number of projects in a limited time, and is leading the Fund pay more attention to risk management and long-term sustainability.

The two objectives of serving the state's interest while maintaining its market-orientation could sometimes come into tension. As our interviewees pointed out and repeatedly stressed, the CAD Fund's primary concern is its investment returns, which has also become an important indicator for staff performance. But return rate is not always the priority, especially for agriculture projects. For example, some of the agriculture projects have faced difficulties to achieve or sustain profitability. But political and diplomatic factors (i.e., the demand for a positive image and impact; the goal of strengthening government relations) would compel the Fund to stay even when it is not profitable.

Based on the above analysis, the Fund has the following liasing roles as it provides financial support to Chinese enterprises investing in Africa:

1) Serving as an official agent between SOEs and other government organs, playing a coordinating role in helping Chinese SOEs to reduce unhealthy competition in the African market, and providing a platform for SOEs to optimize resources and prevent the losses with state-owned assets.

2) Supporting policy implementation and seeking policy guidance from various government institutions.

3) Investing in resources where China has a demand gap, such as mineral resources and rubber.

4) Acting as a development finance agency and a "PR" card to African countries, showing China's determination as a "responsible" rising power in the Global South and bolstering development impact on the continent.

The CAD Fund has been playing an increasingly prominent role and in numerous ways in facilitating Chinese companies to invest in Africa. In addition, to achieve the tasks above, the fund has developed comprehensive investment strategies, such as facilitating industrial alliances, using platform model for project preparation in the infrastructure sector, which has diversified Chinese FDI in Africa. The dynamics of the CAD fund's investment in Africa shows that China's interests on the continent is multi-layered, more complex and sometimes opposite to the popular perception or argument that China is mainly interested in extracting natural resources from Africa. Securing natural resources to sustain China's domestic economy is certainly one of Beijing's interests in Africa, but Africa's demographic dividend and rising middle class make the continent a big potential market and an ideal destination of Chinese FDI, the health of which is also a key element of Chinese social and state interest, as well as a driver for development in Africa.

Developmental Impacts of the CAD Fund

Using the framework of Kragelund (2007)[77], there are mainly four factors to consider while evaluating actual development impacts:

1) The investment motives;

2) The time horizon of the investment;

3) The extent of linkages to other firms in the economy;

4) The capacity of the local firms to absorb spillovers and face competition.

As discussed above, the primary investment motives of the Fund are to serve China's own interests, rather than the development of Africa. This is also why the Fund's investment has been favoring Chinese partners instead of African partners. Yet as the development of Africa is also embedded in China's diplomatic promises and interests in Africa,[78] part of the Fund's motivation will thus involve African development.

The time horizon of the investment is also an important factor in Kragelund (2007) evaluation framework. The CAD Fund provides long-term patient capital, primarily as equity and may also invest in quasi-equity. As mentioned above, it usually exits from its investment projects in five to eight years and most of CAD Fund's partners have long-term development plans in Africa.

As for the extent of linkages to the local economy and the spillover effects, it is not possible to generalize all the projects the CAD Fund invested or involved. However, as mentioned above, the CAD Fund along with Chinese SOEs have been using the tactic of "group investment" by establishing economic zone, joint ventures or the 'The Automotive Alliance', which optimizes resources and creates supply chains for Chinese companies in the African market. But such strategies might potentially reduce the linkages with local suppliers and companies and may cause tension when simultaneously promoting Chinese companies and fostering African development (Munyi, 2011).[79]

As mentioned, the mining sector is the sector that the CAD Fund invested in the most. In another research project jointed produced by the author and other international researchers on the spillover effects of Chinese FDI in Africa[80], preliminary finding shows that there is little linkage between Chinese companies and local companies in the mining sector in Zambia and Angola.

In addition to Kragelund's framework, a project's social and environmental footprint is an another key aspect of development impact evaluation. There has been several scandals on labor and environmental issues reported in the media on CAD Fund's mining projects, especially in countries such as DRC[81]. Meanwhile, researchers (Chichava, Li & Sambo, 2019) have demonstrated that disagreements around compensation, resource depletion, and labor-relations are the primary sources of controversy and tension generated by Chinese mining projects.[82]

- 77 Kragelund, P. (2007). Chinese drivers for African development? The effects of Chinese investments in Zambia. Africa in China's Global Strategy, 162-181.
- 78 For example, the Forum on China Africa Cooperation (FOCAC) is China's most important diplomatic event for China-Africa cooperation. Its financial commitment, such as commitment on agriculture modernization and infrastructure development shows that the development of Africa is embedded in China's diplomatic promises and interests in Africa.
- 79 Munyi, E. N. (2011). Embracing the Dragon: African policy responses for engaging China and enhancing regional integration.
- 80 More about the project, please see: https://chinaafricaspillover.com/work-plan/
- 81 Guardian. (2016). Children as Young as Seven Mining Cobalt Used in Smartphones, Says Amnesty, available at https://www.theguardian.com/global-development/2016/jan/19/children-as-young-as-seven-mining-cobalt-for-use-in-smartphones-says-amnesty, accessed on November 4th, 2019.
- 82 Chichava, S., Li, S., & Sambo, M. G. (2019). The Blind Spot: International Mining in Angoche and Larde, Mozambique

Manufacturing sector is the sector the CAD Fund invested the most in terms of number of projects. While the CAD Fund's contributions to local employment creation and productivity increase are acknowledged, some of the Fund's manufacturing projects have also encountered pollution complaints and labour conflicts with the locals. For example, China-Africa Overseas Leather Products SC was shut down for forty days due to local complaints that the factory was severely polluting.[83]

In summary, the CAD Fund has a crucial role to play in facilitating Chinese enterprises investing in Africa, especially in the context that companies have been facing bottlenecks for sustainable development domestically. While the Fund's contribution for economic development, especially infrastructure development, job creation, and poverty reduction cannot be ignored, the above issues also need to be noted and better addressed, in order to ensure high-quality development finance in Africa.

The CAD Fund has demonstrated China's interest in identifying its financial contribution as development finance, rather than development assistance. In a broader content, state-owned/state-led funds such as the CAD Fund have the potential to significantly reshape the global development finance, which was originally established under the Bretton Woods system in 1944. With its more diversified and relatively flexible investment approaches, the Fund, along with other government-led funds, such as Silk and Road Fund, China-Latin America and Caribbean Industrial Investment and Cooperation Fund, has the potential of filling the gap between official grants and loan under the traditional model, which carries the possibility to transform the shape of global development finance. The CAD Fund and other China's state-led funds could be viewed as alternative options for the Global South, especially those in need of capital and foreign investment.

Future Research

The CAD Fund has not been established for a long time, and many projects were financed in recent years. Therefore, given the limited time period, it is not easy to analyze or generalize its social, economic and environmental impacts. However, it is important to monitor its developmental impact from different levels, especially from a long-term perspective.

Moreover, a more detailed examination of the level of agency that African countries have in dealing and negotiating with the CAD Fund will be revealing as time progresses. The research can also be extended to other state-led development funds, such as Silk and Road Fund and China-Latin American Cooperation Fund, just to name a few.

Policy Recommendations

Through interviews with different stakeholders, the research produces the following policy recommendations for relevant stakeholders, in hopes of improving mutual gains for the CAD Fund, its Chinese partners, and African countries. Note that the paper does not provide recommendations on certain aspects such as sectoral distribution and investment strategies. The order of policy recommendations does not indicate their relative importance.

For the CAD Fund and its Chinese partners:

1. Information transparency: Low transparency leads to distrust and miscommunication. Insufficient information devalues the anticipation of China being 'a better partner to Africa' than the West. Accessible

(Vol. 28). Working Paper.

- 83 China Daily (2013). By the Bootstraps. Available at: http://africa.chinadaily.com.cn/weekly/2013-06/w14/content_16620709.htm, accessed on November 4th, 2019.

public data such as project information, investment amount and systemized database on CAD Fund's website will be a meaningful step to build the trust among international media, African stakeholders, and the rest of the world, and will also attract more active engagement of a broad set of actors that could help mitigating risks in the Fund's investment projects.

2. Social and Environment Standards and Accountability mechanism: The CAD Fund's major investment areas are manufacturing and mining, which are usually labor-intensive and carry high environmental and social risks. Thus, it is essential for CAD Fund's Chinese partners to pay respect to local labor and environmental laws and regulations, especially considering there have been some scandals such as violations of labour rights and environmental damage in the past. Moreover, safeguarding social and environmental benefits is often not as high a priority as economic growth and job creation in African countries. Thus, the foreign investors have to take the initiative and be responsible. The existing risk evaluation standards of the CAD Fund needs to step up its environmental and social safeguards, and integrate best-practices of sustainable development policies such as climate change and green growth in the context of Africa's development, especially considering a number of its projects might have the possibility of polluting the environment.

3. Strengthen local stakeholder engagement: The CAD Fund needs to further take the African perspective into account, and bring African stakeholders into their decision-making process. It is also important for the CAD Fund and its partners to find ways to maximize their linkages with local partners and incorporate local firms into the international value chain. Willingness to work positively and closely with African partners could make the CAD Fund particularly attractive for African countries as an external source of financing, which could then be used to drive economic diversification. In its future investment, we recommend that the fund and Chinese companies work to build a larger and better partnership with African stakeholders. This includes (but is not limited to) African governments, African companies and civil societies. Regular communication with stakeholders, through different forms such as workshop, can be organized more frequently with African governments, local communities and civil society organizations, such as labor unions and environmental NGOs.

4. Boost collaborative research partnership: As an attempt to bridge the gap between practice and research and an effort to improve the quality of policy recommendation, the research team of the CAD Fund needs to consider building a collaborative research partnership with international scholars, especially scholars and policy-makers from Africa. To be pragmatic, implementing evidence-based research is needed, especially working more closely with African scholars and policy-makers, in order to achieve better and more sustainable developmental impacts.

For African stakeholders:

1. A proactive, strategic, and long-term approach: The African governments need to have a proactive, strategic and long-term approach to develop their economies and to work with China, which should be aligned to their national development strategies. This would help them engage with the CAD fund and other reliable sources with more purpose, and more effectively scale up production and economic transformation.

2. Capacity strengthening: Delivery of development impacts require governments to guarantee capacity building of its public and regulatory agencies. African governments need to ensure the capacities of negotiation, implementation, law-enforcement, and technical know-how, to make sure that the best-fitted deals are made to the host countries and African private partners, generate greater benefits for the local communities and societies.

3. Avoid dependence: In seeking to attract FDI from China, African governments need to avoid substituting dependence on one commodity for dependence on another commodity. Thus, we recommend African countries should seek for more investment partners and aim to channel more investment to market-

seeking FDI rather than resource-seeking FDI.

4. Leverage the advantages of the Fund. African governments should strengthen its role in monitoring the development impact of the CAD Fund and better leverage the Fund's expertise and operational experiences by improving coordination with the Fund. Information and knowledge sharing between relevant government bodies (i.e., Ministry of Finance, Ministry of Commerce, National Planning Commission, National Development Agency, etc.) and the Fund can take place through presentations, discussions, regular meetings and workshops, especially in key areas of the Fund's investment, such as manufacturing, mining and infrastructure. African governments need to lead better coordination mechanisms with the Fund as well as other investors and build the diverse and collective expertise required to attract, facilitate and retain targeted FDI. Without such collective learning efforts and essential reforms, improvement in investment outcome and economic progress can be hard to achieve.

5. Potential role of other regional stakeholders. Regional bodies (i.e., the African Union, the African Development Bank, etc.) and regional funds (i.e., African Development Fund, Emerging Africa Infrastructure Fund) may also play a role in collaborative initiatives with the Fund, such as those on industrialization and sustainable infrastructure development, as well as supporting the collaboration between local enterprises and the Fund.

List of Abbreviations

BRI: The Belt and Road Initiative:

CAD Fund: China-Africa Development Fund

CAFIC: China-Africa Industrial Cooperation Fund (CAFIC)

CDB: China Development Bank

CLAIFund: China-Latin America and Caribbean Industrial Investment and Cooperation Fund

COIDIC: China Overseas Infrastructure Development & Investment Corporation Ltd.

CNADGC: China National Agriculture Development Group Corporation

FOCAC: Forum on China-Africa Cooperation

MoU: Memorandum of Understanding

SAFE: State Administration of Foreign Exchange

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