

The Financial Facet to Sino-African Cooperation: Analyzing Potential Motivations Behind Chinese Investment in African Countries

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Abstract

China's reputation transitioned from political isolation throughout the twentieth century to international influence in the twenty-first century. We see this in the continent of Africa, especially, where multiple countries experience political and economic hardships. Today, China invests in African countries to alleviate these hardships and strengthen foreign relations. Some scholars contend that much of China's approach to foreign direct investment (FDI) in Africa stems from China's domestic interests, while other scholars contend it is more about relationship-building. Taking note that China does both, I ask which aspect to Sino-African relations primarily motivates Chinese lending in Africa. To analyze this question, I utilize data from the China-Africa Research Initiative (CARI) at the Johns Hopkins School of Advanced International Studies by analyzing levels of Chinese lending within all recipient sectors in the continent. Results suggest economic incentives playing a more significant role in Chinese lending than political motives or African countries' governing capabilities. This study recommends other actors in the region be aware of these economic priorities from China when considering their own strategies towards Africa.

Introduction

The relationship between China and Africa is an intuitive example of foreign relations originating from opposite circumstances. Multiple African countries appreciate Chinese investment for its overall impact while China further expands their global influence. However, when it comes to determinants of Chinese investment levels, I notice ambiguity behind which motivation outweighs which. The purpose of this research is to stress the idea of not everything being one-sided, that we should ask “what is it more of” instead of “what is it”. By my conclusion, I acquire a better understanding of *why* China invests in African countries.

There are two critical points to preface before moving forward: *The first point*: when discussing China (or the Chinese Communist Party – CCP), my intention is not to persecute the country, nor do I consider the CCP completely innocent in how they strategize. While I try to avoid provocative rhetoric, I wish not to be controversial, but to reach a conclusion open for future research or debate. *The second point*: Since Africa has diverse history in every country, I do not condone generalizing an entire continent into one universal perspective as default behavior. The rationale for classifying Africa as a single player, in this case, is to identify overarching themes, or patterns, in Chinese lending. This way, explaining Chinese prioritization becomes clearer, even if there are important exceptions with specific African countries.

Literature Review

China’s Economic Success and Ambitions

Lin (2017) and Alami and Dixon (2020) reaffirm how Deng Xiaoping’s economic reform, during the post-Mao era, caused China’s economic growth and international rise. They

mention how China's logic, today, is to boost their own economy as much as possible and strengthen foreign relations. Gu and Carey (2019) discuss the significance behind Africa's projected population exceeding Europe's population within the next thirty years. In theory, population density adds to market activity. Though nothing is absolute, a high population could also create a wealthier economy while a smaller population creates a lesser economy. Gu and Carey (2019) also assert that much of China's logic for maintaining Sino-African relations comes from Africa's possession of natural resources. Given this conclusion, what determines China's behavior under foreign direct investment (FDI)? Wang and Zeng (2018) propose that it is premature to evaluate Chinese motives regarding foreign strategies, that the ends were more important during the 2000s and 2010s than the means. Entering the 2020s, we must revisit China's global rise by analyzing their decision-making in the last two decades.

Other works establish Chinese FDI contributing to the country's impetus. Davies, Desbordes, and Ray (2018), Gu and Carey (2018), Abekah-Koomson and Chinweokwu (2020), Miao, Yushi, and Borojo (2020), Wu, Yuan, Wang, Cao, and Zhou (2020), and Gunessee and Hu (2021) suggest that both China and recipient African nations must work in tandem to make foreign relations successful. Their works imply how cooperation is important for both parties to achieve what they want. Miao, Yushi, and Borojo (2020) discuss the significance behind Africa's dependence on Chinese FDI being just as central as China's dependence on African natural resources. This blends into another facet mentioned by this section's literature: Chinese FDI favors natural resources. Logistically, according to Abekah-Koomson and Chinweokwu (2020), this is because the growing number of manufacturing plants in China, complemented by their growing population, require more natural resources (energy) for machines to run during production. Considering China's ambitious economy yet insufficient oil production, Abekah-

Koomson and Chinweokwu (2020) note how China's circumstances result in higher energy importing.

(Figure 1)

Figure 1, from the U.S. Energy Information Administration (EIA), displays Chinese demand for petroleum rising significantly each year and domestic oil production being comparatively flat. The EIA also reported, in 2019, that China's demand for foreign petroleum accounts for two-thirds of the total global demand for foreign petroleum (when considering all countries). According to Abekah-Koomson and Chinweokwu (2020), Miao, Yushi, and Borojo (2020), and Wu, Yuan, Wang, Cao, and Zhou (2020), China relies on energy imports because their natural resources are insufficient. This also sparked China's interests in African natural resources.

China Favors Domestic Affairs, but Values Foreign Relations

The Forum on China-Africa Cooperation (FOCAC) summits (a series of international cooperation summits between China and African countries) did not cause significant GDP growth in African countries, yet China's economy grew substantially from the initiatives, says Abekah-Koomson and Chinweokwu (2020) and Miao, Yushi, and Borojo (2020). Last year, before Gunessee and Hu's (2021) study, Miao, Yushi and Borojo (2020) acknowledged Chinese strategies in Africa, empirically speaking, being effective within multiple African resource-fueled sectors, in terms of overall production. As China's economy grows, growth in Africa's energy production shortly follows, but not so much in the continent's total GDP, they concluded. Wu, Yuan, Wang, Cao, and Zhou (2020) uphold this idea as well; while both parties do benefit from cooperation, the creditor (China) benefits much more than the recipient (the African

country). FDI from a financial institution poses risks due to the recipient being at the mercy of a lender. This creates long-term consequences for developing countries relying on any form of aid yet struggle to pay it back.

Gerstel (2018) and Chatzky and McBride (2019) argue that if China invests in these economies long enough, consequences for developing countries ensue. Both articles also mention how China is transparent about their desire for becoming the next global superpower. Chatzky and McBride (2019) pose a realist view to Sino-African relations, and Miao, Yushi, and Borojo (2020) and Wu, Yuan, Wang, Cao, and Zhou (2020) uphold their sentiment through quantitative research. These scholars argue that putting a developing country into a debt trap with FDI, like Ethiopia or Angola for example, causes them to be vulnerable to their lenders.

Maswana and Farooki (2013) and Harchaoui, Maseland and Watkinson (2020) find that Chinese FDI in Africa depends on a country's possession of natural resources and economic status. While Africa's natural resources play a crucial role in their level of Chinese lending, Maswana and Farooki (2013), Kopinski (2018) and Maswana (2020) discover how Africa's natural resources create long-term consequences for the continent through increased levels of corruption and instability. The paradox Africa faces, they concede, is how higher resource-exporting stimulates short-term economies but could also threaten the same economies in the long-run.

Adesina (2017), Kopinski (2018), and Maswana (2020) agree that the Republic of Angola is a prime example of an African country receiving special Chinese attention. Adesina (2017), reviewing Justin Pierce's book on Angolan history, says Pearce informed readers of Angola's transitional period from authoritarian to democratic came to fruition in 2010. The book also mentions how Angola possess the most oil in their continent and is one of the most resource-rich

countries in the world. Despite their decades of corruption and political hardships, diamonds and oil practically saved them from becoming a complete failed state, contributes Kopinksi (2018).

(Table 1)

China's demand for petroleum rose within the last twenty years and continues to rise each day, according to the U.S. Energy Information Administration (2020). Harchaoui, Maseland, and Watkinson (2020) indirectly explain the reason for China's interest in Angola: they argue how China wants a share of Africa's oil extractions. Cross-referencing *Table 1* with Harchaoui, Maseland, and Watkinson's (2020) conclusion supports the idea of China investing in Angola due to Angola's abundance of oil. In *Table 1*, I present CARI's Chinese loan data, "Mining Africa" information on African resource-possession, the United Nations Development Programme's Human Development Index, and OPEC's membership. Shan, Lin, Li, and Zeng (2018) remind us that simply possessing copious amounts of natural resources (and being a member of OPEC) does not mean China emphatically invests in that country's resource-based sectors.

In Summary

No researcher can truly answer "why" China invests in Africa, because no one knows of the CCP members' intentions but the members themselves. What we can do is use real world events and outcomes of decision-making to determine possible explanations. Inconveniently, even when evaluating these events and decisions, Chinese motivations still create conflicting perspectives. The first perspective, highlighted by Maswana and Farooki (2013), Gu and Carey (2018) Shan, Lin, Li, and Zeng (2018), Humphrey and Michaelowa (2019), Harchaoui, Maseland, and Watkinson (2020), Miao, Yushi, and Borojo (2020), and Gunessee and Hu

(2021), emphasizes China's desire for global expansion and competition. Their openness for competing with other global entities supports this perspective. This perspective portrays China as favoring their domestic incentives over relationship-building, a more realist take on Sino-African relations. If developing countries, like Angola, Nigeria, and the DR Congo, did not possess highly concentrated resources, their level of overall loans may be different. **Table 1** displays this through China's little to no investment in non-resource-based sectors. This perspective also highlights the cynicism behind Sino-African relations yet acknowledges the good China does with their influence.

The second perspective, favored by Risberg (2019) and Hendrix (2020), and indirectly backed by Adesina (2017), Kopinski (2018), Wang and Zeng (2018), and Maswana (2020), argues how China should not be solely viewed as a provocateur. This generates the question of Chinese motivations in a more idealist view, contrary to the previous literature. It promotes the idea of China focusing on third world struggles and strengthening foreign relations more than prioritizing their own needs. Wang and Zeng (2018) would probably add that even if China were to perform FDI for self-interest, we cannot deny the positive effect they have on Africa. While the realist-based literature acknowledges this positive effect, they concentrate on China's interests over their African impact.

Finally, a third perspective, highlighted by Large and Chien (2008), Rich and Banerjee (2015), and Solomon (2018), contends that Chinese investment in Africa depends on each African countries' political ties with the CCP. In other words, China's behavior primarily stems from their political motives. Given how China believes that Taiwan (governed by the Republic of China – or ROC, Taiwan's nationalist party) belongs to the mainland, China warns African countries that they must cut any ties with Taiwan to receive any of their loans. This is China's

way of ensuring that their recipients stay loyal to the CCP over the ROC. By the twenty-first century, forty-five countries demonstrated loyalty to the CCP, according to Rich and Banerjee (2015) and Solomon (2018). Today, Taiwan only has one loyal African country: Swaziland, confirms Solomon (2018). According to CARI, Swaziland gets no Chinese aid whatsoever, while Angola and the DR Congo (countries that distanced themselves from Taiwan in the twentieth century) received much of China's foreign aid in Africa. Rich and Banerjee (2015) emphasize how China's political motives shape Africa's economic incentives and Large and Chien (2008) discuss how this behavior stems from China's quest for global status.

Methods and Analysis

To approach this inquiry, I select Chinese loan data from CARI at the Johns Hopkins School of Advanced International Studies, compiled by Brautigam, Hwang, Link, and Acker (2019) to see which set of literature had the stronger perspective. The dataset primarily covers the finance levels from China's banking sector, which comprises three main variables: Chinese lending by recipient African countries, by recipient African sectors, and by Chinese financiers (China Development Bank, Export-Import Bank of China, Suppliers' Credits, and "other"). From here, I divide Chinese lending levels into three rankings: "*Little to None*" (with a hard emphasis on "*None*"), "*Medium*", and "*High*." I use this as my dependent variable. I begin with bivariate tests and finish with a multiple regression analysis with five of my six independent variables. Unfortunately, the main limitation to this research was the fact that not all fifty-four African countries had data for each of my independent variables. Nevertheless, CARI possessed data for most African countries.

Economic Incentives

My first hypothesis states that China invests in African countries primarily for economic motives of the Chinese. To analyze this, I first look at the relationship between China's level of importing from Africa (also retrieved from CARI) with Chinese lending levels. Like my *lending levels* variable (dependent), my *importing level* variable (independent) splits into three rankings: "Little to None", "Medium", and "High". **Table 2/Figure 2** suggests that the *more* African countries export to China, the *more* China provides in loans. The cross tabulation reveals the p-value to both the Chi-Square test and the Gamma is statistically significant.

(Table 2/Figure 2)

The second economic variable looks at the level of freedom from corruption among African countries. The idea behind corruption being an economic-themed variable has to do with risk. The higher corrupt the recipient country, the less credible they are in paying back their creditors. Using data from the Heritage Foundation, compiled by Miller, Kim, and Holmes (2014), where they ranked countries' freedom levels into scores (using a 10-point scale; 0 being "more corrupt" and 10 being "less corrupt"). I bin the interval numbers into three rankings: "Low", "Medium", and "High" freedom levels. It is also important to understand that Africa, regrettably, contains high corruption across the continent. When I say "High" freedom, I follow the Heritage Foundation methods to mean "More freedom from corruption". **Table 3/Figure 3** suggests that the *lower* the freedom from corruption (or higher the corruption level) the *less* China gives to that country. However, while the Chi-square test is statistically significant, the Gamma's p-value is not significant (.205); we must take these results lightly.

(Table 3/Figure 3)

Quality of Governance

My second hypothesis states that the current state of an African country, due to the performance of their government, determines Chinese lending levels, which draws from the idealist-based conclusions from Risberg (2019) and Hendrix (2020). To recall the strategic perspective, does China favor the idea of foreign relations setting the foundation for global influence over economic power? The first variable is the level of state security. This variable came from data provided by Fund for Peace's "Security Threats Index", where they scored each countries' societal impact on citizens' safety. I split their security threats scores (1.00 = least secure, 10.00 = most secure) into two rankings: Countries above or equal to a 5.00 score classify as "*More Secure*" while countries below a 5.00 score classify as "*Less Secure*". **Table 4/Figure 4** reports that **52.0 percent** of China's *high*-level investment goes towards countries that are *less* secure. **53.8 percent** of China's *medium*-level lending went towards *more* secure countries. With a p-value of **.002** for the Chi-Square test and **.278** for the Gamma, we must also interpret this trend with caution.

(Table 4/Figure 4)

The second independent variable revealed the weakest bivariate relationship of the two governance-themed variables. I analyzed the effectiveness of recipient-governments' attempt in governing their country. I choose a "government effectiveness" variable, based on the "Government Effectiveness Index" by Kaufmann, Kraay, and Mastruzzi (2010) from the Worldwide Governance Indicators Project, where they create scores based on "quality of public [and] civil service, independence from political pressures, and quality of policy implementation" (-2.5 = least effective, 2.5 = most effective). I rank their scores into "*Less Effective*", "*Somewhat Effective*", and "*More Effective*". The results also reveal tenuousness (**.232** for the Chi-Square's

p-value and **.969** for the Gamma's p-value). The data display no real convincing pattern to Chinese lending based on African governments' ability to govern. From both governance-themed results, I deem China's investment in Africa not being contingent upon Africa's wellbeing. Let me be clear, I do not assert that *Table 5/Figure 5* means that China does not care for African stability, but that China's financial strategies stem from other aspects.

(Table 5/Figure 5)

Political Assurance

My final hypothesis states that China's level of investment reflects their diplomatic strategies in African countries. The first variable I evaluate is China's Trade Investment Value (TIV) in providing weaponry to African countries. The TIV scores come from the Stockholm International Peace Research Institute (SIPRI) Arms Database. Like my other independent variables, I divide the data into rankings of "*Low*", "*Medium*", and "*High*" TIV scores. *Table 6/Figure 6* suggests there is a connection between Chinese arming and lending. The *higher* the arming, the *higher* the lending, and the same trend for *medium* and *low* levels. In addition, there is statistical significance within this relationship (Chi-Square p-value is **.002** and Gamma p-value is **.043**). I interpret this as higher level of arming resulting in stronger security in a nation, which lures China into investing in these countries. I view this as higher security being more relevant to China in this bivariate relationship. Unlike in *Table 4/Figure 4* (security test), China has control over the level of security with their arming, which is the reason *Table 6/Figure 6* reveals a stronger relationship.

(Table 6/Figure 6)

Another political variable is African countries' overall diplomatic ties with China as opposed to diplomatic ties with Taiwan, more notably. I documented the duration of years each African country formed their alliance with China (with consideration of periodical relationship cuts and restoration with some countries). For example, Angola formed their alliance with the CCP in 1983. I subtracted that year from 2018 (the last year from the CARI loan data) to create an interval measure of 35 years of diplomatic ties. I compiled this information mostly using China's Ministry of Finance webpage, which overviews each African country's diplomatic history with China up to 2004. I usually perceive information directly from the CCP very cautiously but given how this information is more historical than quantitative, and very public, I believe it is reliable. Knowing that history developed beyond the CCP's 2004 report, I also utilize more recent articles from Rich and Banerjee (2015) and Solomon (2018) who report more recent timelines. From here, I break down the relationship-durations into three rankings labeled "*Short Duration*", "*Medium Duration*", and "*Long Duration*" (based on the number of years a country had ties with China while distancing themselves from Taiwan). The results from **Table 7/Figure 7** display a very weak bivariate relationship with a Chi-Square p-value of **.696** and a Gamma p-value of **.287**.

(Table 7/Figure7)

Multiple Regression Analysis

Of the six bivariate relationships, only two independent variables (Chinese Imports from Africa and Chinese TIV in Arming Africa) possess complete statistical significance. This means that only two independent variables share a strong relationship between the dependent variable (Chinese lending levels). To be practical, the major weakness behind working with ordinal

variables is the vagueness of the information. Therefore, I go one more step in solving my question. The last step is understanding how these variables look under a multiple regression analysis (when considering their interval data). However, since the variables “*Freedom from Corruption*” and “*African Government Effectiveness*” indicate a near-perfect positive correlation between each other (the Pearson’s Correlation is **.837**), I cut one of these two variables from my multiple regression analysis. In this case, I leave out the “*Freedom from Corruption*” variable. According to **Table 8**, we notice Chinese imports having a statistical significance of **.000** (significant at the .001 level) and duration of diplomatic ties being **.049** (significant at the .05 level). The other three variables reveal no statistical significance.

(**Table 8**)

Conclusion

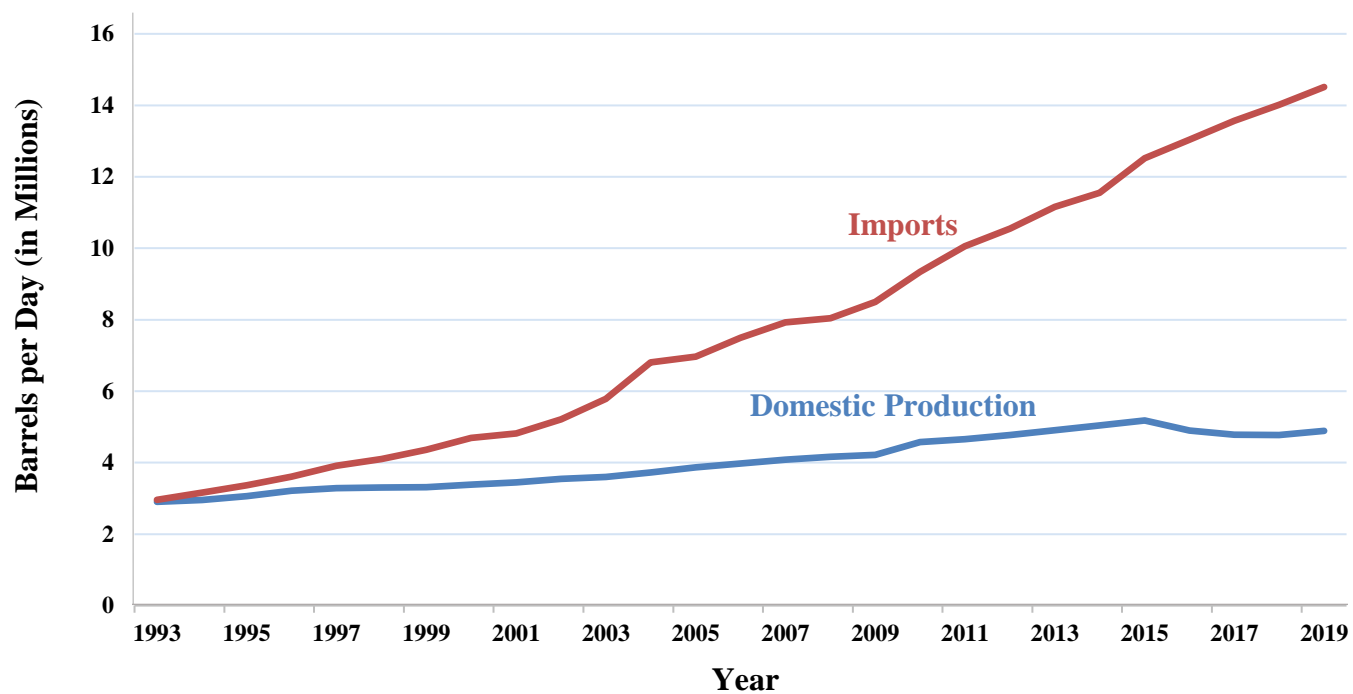
This study concludes that Chinese imports from Africa is the strongest determinant of Chinese lending levels, meaning that the economic aspect is the primary motivation behind Chinese investment in Africa. Considering **Table 8**, the R-squared value was **.792**, meaning that the model explains 79 percent of the variance in Chinese lending. Regarding the six bivariate tests, the two strongest relationships came from independent variables involving Chinese statistics (Chinese imports and Chinese arm sales), whereas the weaker relationships came from independent variables that were less tangible to China.

To recapitulate, all three aspects to Chinese investment in African countries are relevant. However, when it comes to the CCP’s answer of what is more important to them, economic incentives carry more weight. This study also concludes that the second prioritized motive to

China, when considering how they invest in Africa, is their political strategies, supported by *Table 8*. What does this mean for other foreign financiers in Africa? This study recommends they adjust their investment strategies around China's economic ambitions. To expand, other players may want to imitate Chinese FDI if they mostly prioritize profit. Conversely, if these other players wish to approach lending with more political or humanitarian emphasis, they may want to avoid adopting Chinese strategies, since the results display the CCP prioritizing their economic motives over their other motives.

Appendix

Figure 1- Comparing China's Petroleum Domestic Production and Importing (1993-2019)



Source: U.S. Energy Information Administration

Table 1 - Comparing Resource-Based Sectors with Non-Resource-Based Sectors Aided by Chinese Financiers in Some of Africa's Most Natural Resource-Rich Countries (2000-2018)

Resource-Rich African Countries	Is the Country a Member of OPEC?	Resource Sector Chinese Aid (US Millions)	Non-Resource Sector Chinese Aid (US Millions)	TOTAL (US Millions)
Angola	Yes	32,025	11,207	43,232
Nigeria	Yes	4,599	1,671	6,176
R Congo	Yes	3,399	471	5,070
DR Congo	No	1,992	511	2,433
Guinea	Yes	1,448	560	2,008
Gabon*	Yes	843	499	1,342
Egypt*	No	690	3,492	4,182
Algeria*	Yes	0	9	9
Libya*	Yes	0	0	0

*** Developed Countries**

Note: “Resource Sector Chinese Aid (US Millions)” makes up merely three sectors, while “Non-Resource Sector Chinese Aid (US Millions)” makes up twenty-four sectors, according to CARI.

Source(s): China African Research Initiative at the Johns Hopkins Schools of Advanced International Studies
 United Nations Development Programme
 Organization of the Petroleum Exporting Countries
 Mining Africa

Table 2 - Level of Chinese Investment in Africa Based on Level of Chinese Imports from African Countries (2000-2018)

Level of Lending	Level of Importing			Total
	Little to None	Medium	High	
Little to None	61.1% (11)	23.5% (4)	17.6% (3)	34.6% (18)
Medium	27.8% (5)	52.9% (9)	17.6% (3)	32.7% (17)
High	11.1% (2)	23.5% (4)	64.7% (11)	32.7% (17)
Total	100.0% (18)	100.0% (17)	100.0% (17)	100.0% (52)

Gamma = .619, p < .000

$X^2 = 17.441^a$, p < .002

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies

Figure 2 – Levels of Chinese Importing from Africa by Chinese Lending Levels in Africa (2000-2018)

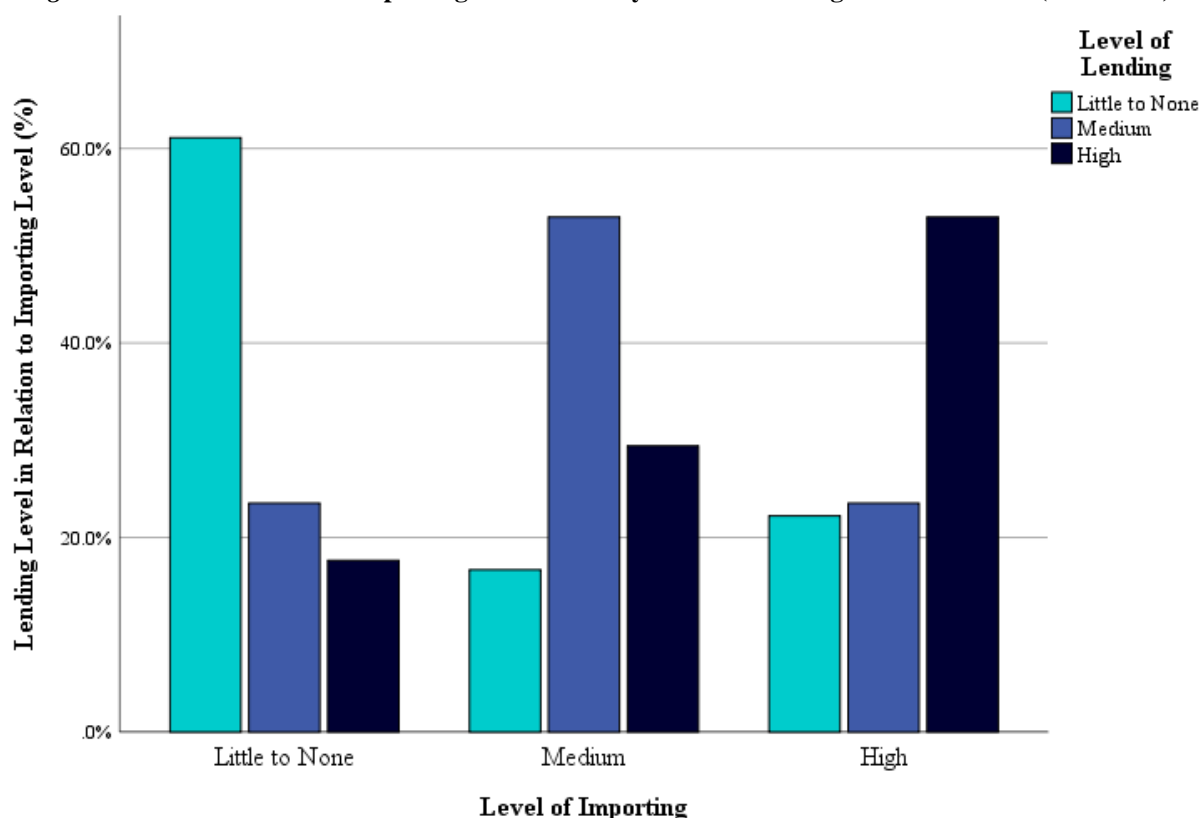


Table 3 - Level of Chinese Investment in Africa Based on Level of Freedom from Corruption in Africa (2000-2018)

Level of Lending	<u>Level of Freedom from Corruption</u>			Total
	Low	Medium	High	
Little to None	36.8% (7)	15.4% (2)	42.9% (6)	32.6% (15)
Medium	15.8% (3)	61.2% (8)	42.9% (6)	37.0% (17)
High	47.4% (9)	23.1% (2)	14.3% (2)	30.4% (14)
Total	100.0% (19)	100.0% (13)	100.0% (14)	100.0% (46)

Gamma = -.259, p < .205

$X^2 = 9.520^a$, p < .049

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies
Heritage Foundation

Figure 3 – African Freedom from Corruption Levels by Chinese Lending Levels in Arica (2000-2018)

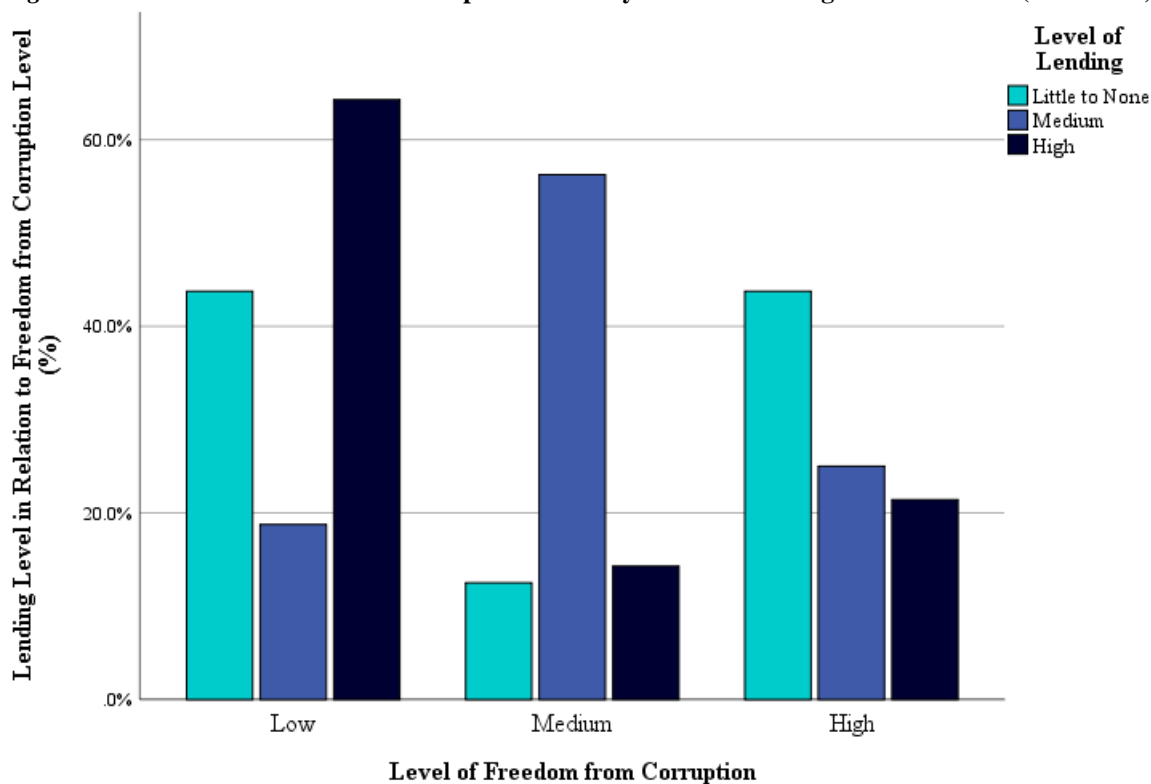


Table 4 - Level of Chinese Investment in Africa Based on the Security Threats Index Levels for African Countries (2000-2018)

Level of Lending	Level of Security		Total
	More Secure	Less Secure	
Little to None	30.8% (8)	40.8% (10)	35.3% (18)
Medium	53.8% (14)	8.0% (2)	31.4% (16)
High	15.4% (4)	52.0% (13)	33.3% (17)
Total	100.0% (26)	100.0% (25)	100.0% (51)

Gamma = .233, p < .278

$X^2 = 13.973^a$, p < .001

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies Fund for Peace

Figure 4 - Africa's Security Levels by Chinese Lending Levels in Africa (2000-2018)

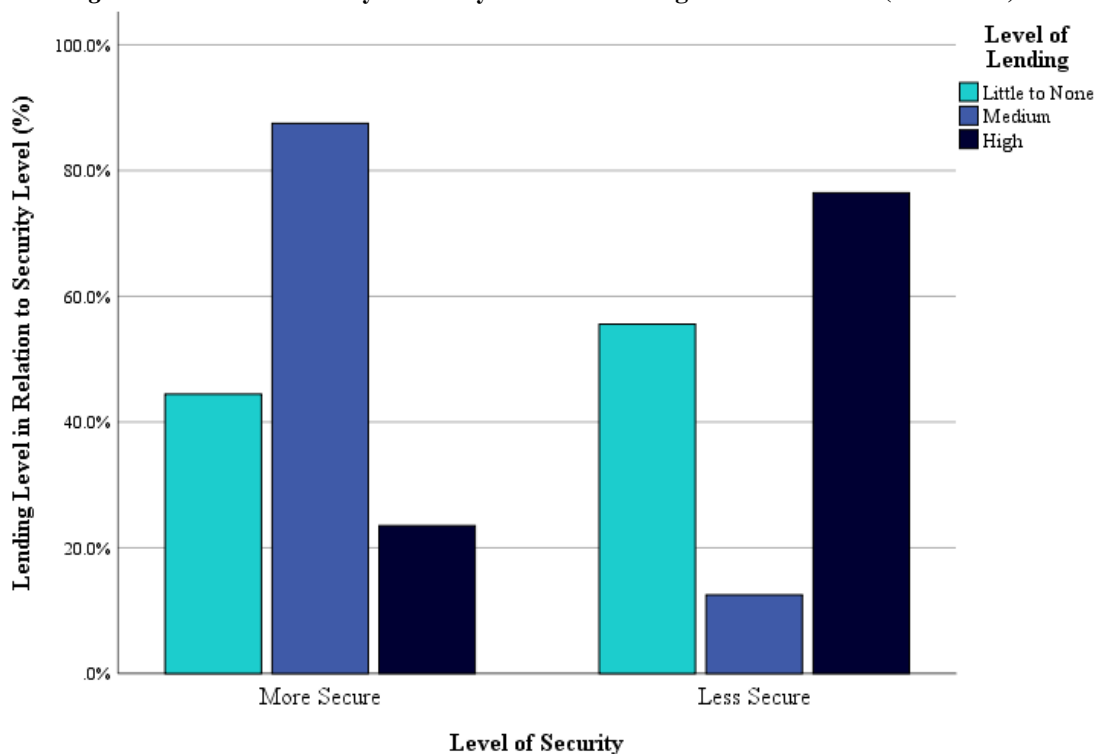


Table 5 - Level of Chinese Investment in Africa Based on Effectiveness of African Countries' Governing Body (2000-2018)

Level of Lending	<u>Level of Government Effectiveness</u>			Total
	Less Effective	Somewhat Effective	More Effective	
Little to None	40.0% (6)	33.3% (5)	23.5% (4)	31.9% (15)
Medium	13.3% (2)	46.7% (7)	47.1% (8)	36.2% (17)
High	46.7% (7)	20.0% (3)	29.4% (5)	31.9% (15)
Total	100.0% (15)	100.0% (15)	100.0% (17)	100.0% (47)

Gamma = .008, p < .969

$X^2 = 5.592^a$, p < .232

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies
Worldwide Governance Indicators Project from the World Bank Group

Figure 5 – African Countries' Government Effectiveness by Chinese Lending Levels in Africa (2000-2018)

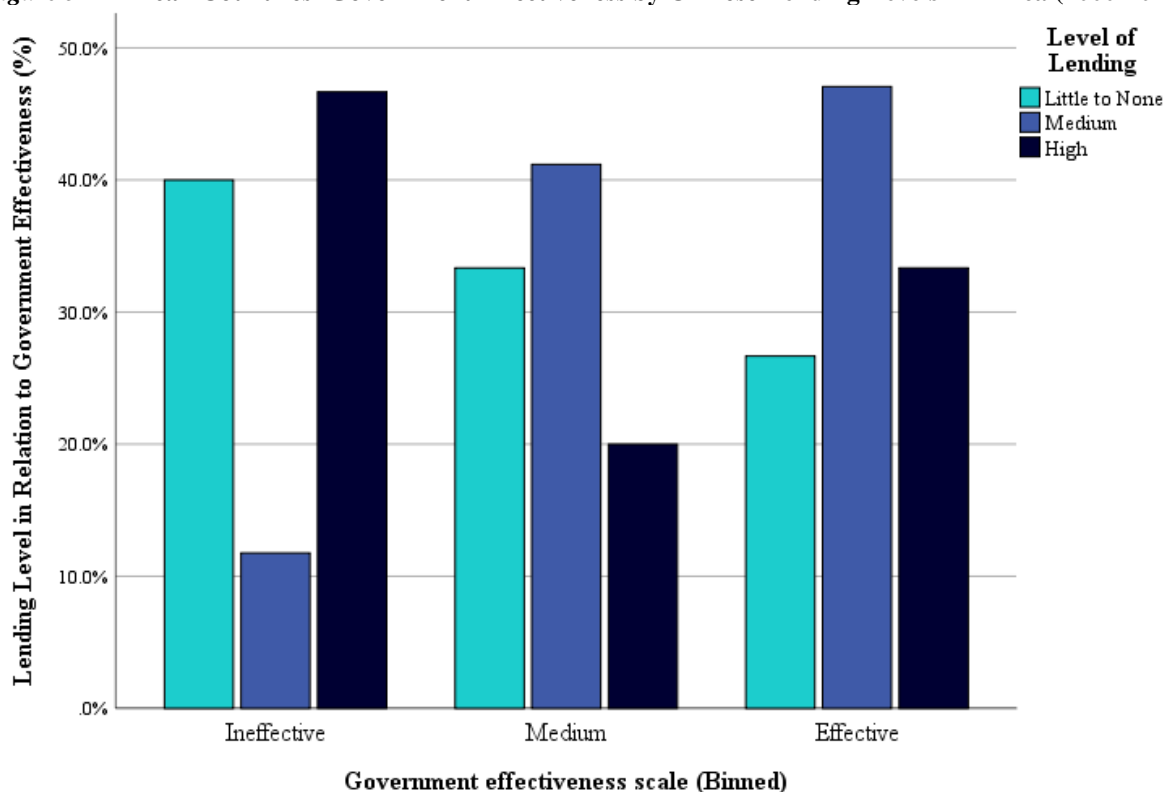


Table 6 - Level of Chinese Investment in Africa Based on Level of China's Total Investment Value in Arming Africa (2000-2018)

Level of Lending	<u>Total Investment Value Level</u>			
	Low	Medium	High	Total
Little to None	47.8% (11)	50.0% (6)	5.9% (1)	34.6% (18)
Medium	30.4% (7)	25.0% (3)	41.2% (7)	32.7% (17)
High	21.7% (5)	25.0% (3)	52.9% (9)	32.7% (17)
Total	100.0% (23)	100.0% (12)	100.0% (17)	100.0% (52)

Gamma = .472, p < .002

$X^2 = 9.855^a$, p < .043

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies
Stockholm International Peace Research Institute

Figure 6 – Chinese TIV in Africa Score Levels by Chinese Lending Levels in Africa (2000-2018)

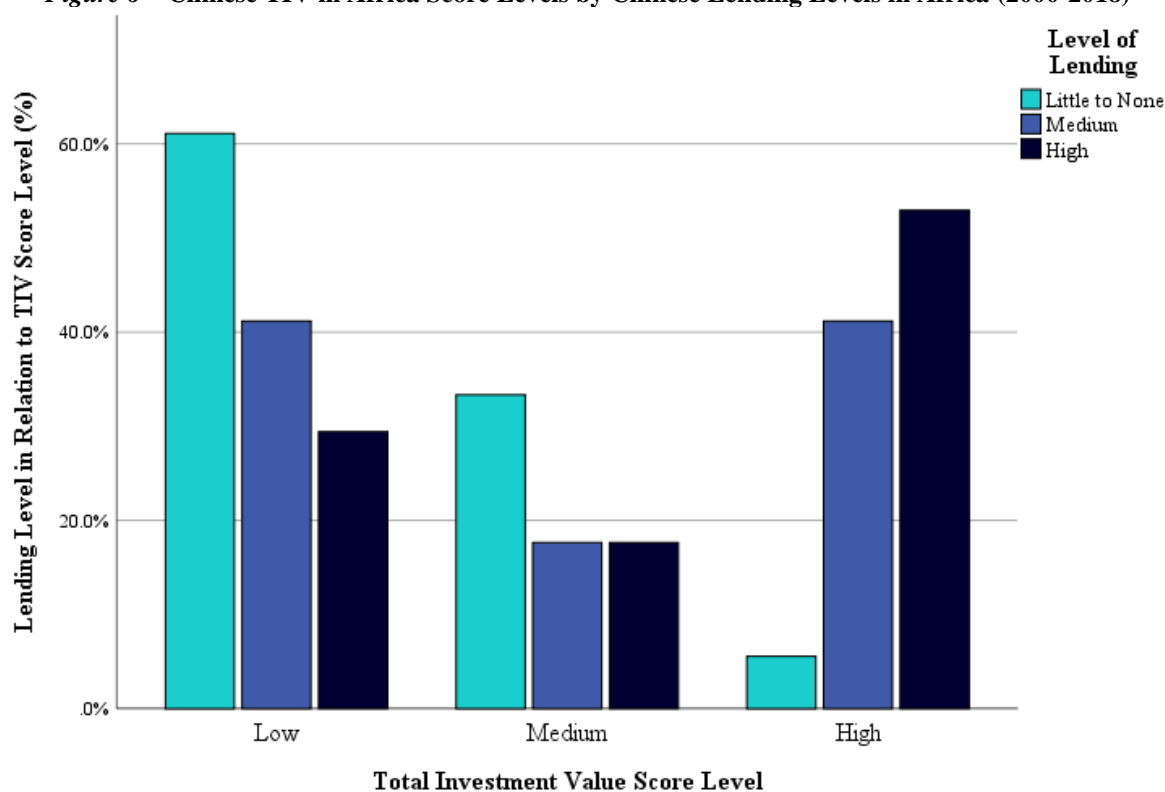


Table 7 - Level of Chinese Investment in Africa Based on Duration of Sino-African Diplomatic Ties Among African Countries (Based on Number of Years) (2000-2018)

Diplomatic Ties Duration (Based on Number of Years)

Level of Lending	Short Duration	Medium Duration	Long Duration	Total
Little to None	47.1% (8)	27.8% (5)	26.7% (4)	34.0% (17)
Medium	23.5% (4)	38.9% (7)	33.3% (5)	32.0% (16)
High	29.4% (5)	33.3% (6)	40.0% (6)	34.0% (17)
Total	100.0% (17)	100.0% (18)	100.0% (15)	100.0% (50)

Gamma = .189, p < .287

$X^2 = 2.218^a$, p < .696

Note: p-value is only significant at/below the .05 level

Source(s): China Africa Research Initiative at the Johns Hopkins School of Advanced International Studies
Ministry of Foreign Affairs of the People's Republic of China
Rich and Banerjee (2015)
Solomon (2018)

Figure 7 – Sino-African Diplomatic Ties Duration Levels by Chinese Lending Levels in Africa (2000-2018)

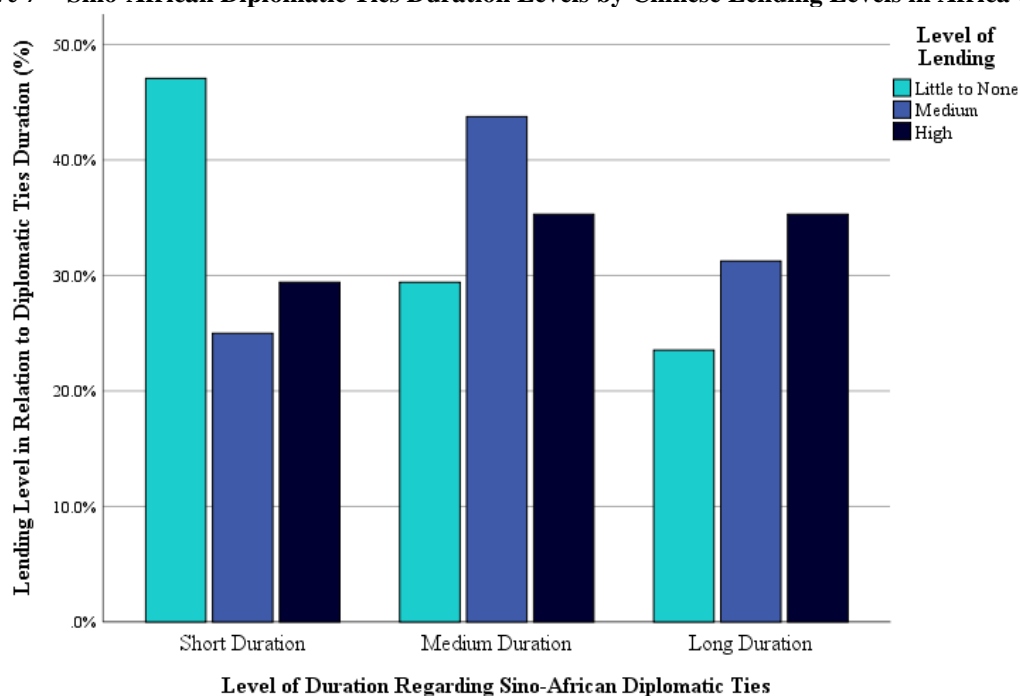


Table 8 - Multiple Regression Analysis of Chinese Investment in Africa (2000-2018)

Independent Variable	B	Std. B	Sig.
Chinese Imports from Africa	.119 (.010)	.880	.000**
African Security Index Scores	39.305 (335.935)	.009	.907
African Government Effectiveness Scale	-58.388 (40.396)	-.117	.156
Chinese TIV in Arming Africa	-1.244 (3.361)	-.029	.713
African Duration of Diplomatic Ties with China	89.454 (44.052)	.161	.049*
Constant	-1222.924 (3691.542)		.742

R² = .792

R² Adj. = .766

**** significant at the .001 level, * significant at the .05 level**

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