Ties that Bind?

Chinese Investment and Political Influence in Africa

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Abstract

Over the past two decades, China has invested heavily in Africa alongside a growing demand for natural resources. Scholars have argued that Chinese investment will lead African countries to turn toward China's model of political and economic development and increase China's political influence. Others, however, characterize China's investment in Africa as exploitative, making the implications for political influence less clear. Thus, whether foreign investment leads to increased political influence presents an empirical question. I test the effect of Chinese influence on attitudes toward democracy, the main alternative to the Chinese political model, using Afrobarometer and AidData for twenty-five African countries between 1999 and 2015. I use a Bartik like instrument for Chinese investment constructed from the product of local mineral shares and the change in Chinese consumption of minerals at the national level to enable a causal interpretation of results. I find that Chinese investment negatively impacted support for free and fair elections, and this effect is stronger for projects involving healthcare (which might generate greater public good will). However, Chinese investment did not have a wide-ranging impact on other democratic values. This finding suggests that scholars should adopt a more nuanced understanding of the effect of foreign investment on public opinion and consider how different types of investment projects contribute to political influence in receiving countries.

1 Introduction

During the past two decades, China has invested heavily in Africa, a continent rich in natural resources. Beyond securing access to these resources, some argue that China's investment in Africa is part of a broader strategy to influence public opinion in countries around the

world.[1] Using economic ties, China seeks to gain political influence in developing countries, and one type of influence China seeks in Africa is support for its political and economic model.[2] China's efforts to gain influence in Africa has caused many Western leaders – who view any increase in China's political influence as an affront to Western influence – to grow uneasy.

Under the Obama administration, concerns about China's expanding influence in Africa centered around a loss of support for liberal democracy. Secretary of State Hillary Clinton, a vocal critic of China's presence in Africa, spoke of major flaws in the Chinese political system before a group of African leaders and cautioned that Africans should instead "learn from the United States and democracies."[3] Similarly, Prime Minister David Cameron warned a group of African leaders to be wary of "authoritarian capitalism" saying, "I passionately believe in liberal democracy – and I believe Africa can do it too."[4] Officials in the Trump administration, meanwhile, frame concerns in terms of diminished economic and national security influence, although they still list promoting good governance, transparency, and accountability as key U.S. strategic goals in the region. Common to both administrations' response is the belief that China has gained influence on the continent, a sentiment summed up by National Security Advisor John Bolton in 2018,

> "Great power competitors, namely China and Russia, are rapidly expanding their financial and political influence across Africa. They are deliberately and aggressively targeting their investments in the region to gain a competitive advantage over the United States."[5]

Belief that China is expanding its political influence in Africa also extends to academic circles. Many scholars interpret Chinese investment in Africa as a form of "economic statecraft" designed to "win over African citizens and leaders, and thus improve [China's] influence

[1] In the early 2000's, party leaders emphasized the need to enhance China's "capacity to exert an influence on world opinion" as a natural consequence of China's growing economic power. (Kurlantzick 2007, p. 39)

[2] 56-57 Kurlantzick 2007; Liang 2012.

[3] Reuters Editorial 2011.

[4] Groves 2011.

[5] Bolton 2018.

over the continent."[6] This narrative is driven by China's massive spending on the continent, and China has supported projects aimed at promoting good will including funding schools and hospitals. Chinese investment also blurs the line between foreign investment, aid, and trade as China bundles official development financing into deals aimed at securing access to natural resources;[7] similarly, Chinese investment shows close synergy between public and private actors, as Chinese companies receive loans from the government and operate at its behest.[8]

Foreign Investment and Political Influence

Despite widespread interest, little is known about whether foreign investment can promote political influence. One large scale project of this nature, the Marshall Plan, is often credited with having successfully promoted U.S. democratic values in Europe after World War II;[9] however, the literature lacks an empirical test of this theory. Belief that foreign aid produces political influence lives on in policy circles nonetheless, with National Security Advisor John Bolton commenting that the United States should develop a plan similar to the Marshall Plan to ensure aid dollars promote U.S. strategic interests in Africa.[10] Although the literature on foreign direct investment has not examined this question in a systematic way,[11] the literature on counterinsurgency provides insight.

One relevant strain from the counterinsurgency literature examines whether aid programs can increase government support by "winning hearts and minds" in a post-conflict setting. Although the evidence is far from conclusive, recent research suggests that in some contexts, small, closely-monitored aid projects can increase support for the government (measured by information shared with the government), although the mechanism is unclear.[12] However,

[6] (Morgan 2018, p. 48). Similarly, Kurlantzick (2007, p. 150) writes that "trade, investment, aid, and the appeal of China's economic model" make up a "potential weapon" of Chinese influence in Africa.

[7] Throughout this paper, I refer to Chinese investment as the broader category of official government-financed projects in Africa, some of which resemble aid projects.

[8] Haglund 2008; Kaplinsky and Morris 2009.

[9] Talbott and Moreland 2017, pp. 96, 18; Hogan and Hogan 1987, pp. 428–429.

[10] Bolton 2018.

[11] See Pandya (2016) for a discussion of common topics in the study of foreign direct investment.

[12] For example, it is unclear whether these projects generate support by winning "hearts and minds," or

the context for these tentative conclusions – small, U.S. aid projects in post-conflict settings – differs greatly from that of Chinese investment in Africa, which some Chinese call *dasabi* (roughly translated as "throwing money around").[13] Thus, whether Chinese foreign direct investment in Africa can generate political influence in receiving countries presents an empirical question. I test this question by looking at one specific type of political influence – support for democracy, which presents the main Western alternative to China's political model.

The "Charm" of Chinese Investment

There are several features of Chinese investment in Africa that might lead to increased political influence. First, Chinese investment could lead to influence due to its sheer scale – China invested $121.6 billion in government-financed projects in Africa between 2000 and 2014.[14] China has also invested a large portion of this sum in infrastructure, a move that many Africans receive positively. Although Chinese investment in infrastructure is strategic (as it allows China to gain access to natural resources for extraction), many Africans believe this infrastructure will further industrialization and economic development.[15] Indeed, China has financed wide ranging infrastructure projects on the continent including the construction of railroads, highways, airports, ports, dams, telecommunication networks, and power grids.[16] These projects are especially important to Africans because Western countries have chosen not to invest in infrastructure. Djibouti's foreign minister summed up these sentiments saying, "It was quite natural that we raise our partnership with China. Neither Europe nor America were ready to build the infrastructure we needed."[17]

China has also savvily promoted its relationship with African countries, which could help investment translate into influence. Government officials emphasize that China's relationship

whether an opportunity cost mechanism is at work as citizens gain greater access to economic opportunities (Berman, Shapiro, and Felter 2011).

[13]com) 2020.

[14]Landler and Wong 2018.

[15]Edinger and Pistorius 2011; Robbins and Perkins 2012.

[16]Robbins 2013; Feng and Pilling 2019; Pham, Bello, and Barry 2019.

[17]*In strategic Djibouti, a microcosm of China's growing foothold in Africa* 2019.

with African countries is rooted in equality and mutual respect (principles it articulated in an official policy in 2006),[18] and China has refrained from criticizing countries' human rights records. This approach is viewed favorably by some countries (including fledgling democracies), and China has sought to capitalize on this by portraying the United States as hypocritical on human rights issues. Thus, China seeks to frame itself as an ideal economic partner in its dealings with African countries.

Lastly, Chinese investment in Africa could lead to influence due to its timing. Since the 1990s, China has rapidly industrialized, lifting millions of its citizens out of poverty in the process. Notably, China followed a very different development model than that promoted by the West and eschewed political reforms and neoliberalism in favor of protectionist, state-managed development. The "Washington Consensus" (a set of U.S.-promoted neoliberal structural reforms), meanwhile, led to several high profile failures in the 1990s as countries employing these polices experienced harsh economic adjustments. Thus, China's political and economic model has gained influence because of China's economic success, a trend that was accelerated by the global financial crisis.

The global financial crisis undermined confidence in the Western financial system, as many developing countries viewed the United States and (to a lesser extent) Europe responsible for causing the crisis and incapable of leading an effective global response. As these countries turned inward to address the needs of domestic constituencies, China stepped up to play a bigger role in the international financial system. The Group of Eight expanded to the Group of Twenty (in which China now plays an important role), and China poured money into regional economic organizations to balance the power of traditional, Western-run organizations. Thus, the crisis allowed China to emerge as a major player in the international financial system and created an opening for China's political and economic model to gain traction.[19]

[18] Haglund 2008.
[19] Öniş 2017.

Neocolonialism, Exploitation, and Backlash

On the other hand, some argue that Chinese investment amounts to a form of neocolonialism as China exploits African countries for economic gain. Critics argue that Chinese loans have left African governments deeply in debt and vulnerable to manipulation on key national security issues.[20] This has given rise to anti-Chinese sentiment in some countries, revealing deep dissatisfaction with China's engagement on the continent.[21] One major source of this discontent is the perception that Chinese investment has failed to deliver significant economic benefits for locals.

Many Africans had hoped that Chinese investment would spur "spill-over" industrialization through technology transfers and increased demand for local industries, but instead Chinese companies typically import semi-raw materials from China rather than buying from local producers.[22] Similarly, Chinese companies often hire Chinese nationals rather than locals, creating small employment gains in areas receiving investment.[23] Further, Chinese-financed infrastructure projects often stipulate that work must be completed by Chinese companies, barring local companies from bidding for contracts. The construction of new port in Djibouti illustrates these concerns: Djibouti's government received a loan from China for the project, which was constructed using Chinese companies (as stipulated by the loan) and today services Chinese ships exporting goods to Djibouti.[24] Thus, many Africans believe that rather than producing economic benefits, Chinese investment exploits African countries.

This concern is especially salient for extractive sectors, which makes up an important part of Chinese investment on the continent. Critics argue that Chinese investment in extractive sectors exploits Africa's finite natural resources at a time when governments are unable to

[20] *In strategic Djibouti, a microcosm of China's growing foothold in Africa* 2019.

[21] Hairong and Sautman 2013.

[22] Kragelund 2009.

[23] Although Chinese companies blame their failure to hire locals on a lack of skilled labor, evidence from Peru suggest that Chinese companies privilege Chinese workers over locals regardless (Gonzalez-Vicente 2011; Kragelund 2009). There are also concerns about Chinese labor standard – including a 2005 explosion at a Chinese-run mine in Zambia that resulted in 54 deaths – although the scale of this problem remains disputed (Hairong and Sautman 2013).

[24] *In strategic Djibouti, a microcosm of China's growing foothold in Africa* 2019.

capitalize on these resources to promote economic development.[25] An example of one such problem is that African governments often lack the resources and infrastructure necessary to extract natural resources domestically, leaving them dependent on foreign investors. African governments have also failed to negotiate investment deals with China that include local workers and industries, thus muting the potential economic benefits of investment. Environmental degradation poses another concern for extractive sectors, as mining projects are often located in ecologically sensitive areas.[26] Although this presents a concern for all foreign mining projects, Chinese projects in particular have proven problematic given China's poor environmental record[27] and the fact that African governments often lack the resources to effectively monitor projects.[28] Thus, widespread concerns about China's exploitation of Africa through investment suggests that investment may produce backlash rather than influence.

Concurrent Research

Several concurrent works examine whether Chinese investment in Africa leads to political influence.[29] The most relevant of these is research by Blair, Robert, and Roessler (2019), who use Afrobarometer and AidData data to study the effect of Chinese investment on public attitudes toward democracy in several African countries. They find that Chinese investment often had an insignificant correlation with support for democracy, but it was positively correlated in some cases. They conclude that rather than decreasing support for liberal democracy, if anything, Chinese investment increases support. I build on their research in several important ways.

First, I analyze respondents from twenty-five countries and additional survey rounds, expanding the sample size from the six countries that Blair and coauthors analyze. Second, I control for the presence of a World Bank project at the local level, something that

[25]Kragelund 2009.

[26]Gonzalez-Vicente 2011.

[27]Western companies often must comply with minimum safety and environmental standards to receive loans from Western banks, but Chinese companies receiving loans from the Chinese government do not face similar standards (Haglund 2008).

[28]Haglund 2008.

[29]Gehring, Kaplan, and Wong 2019.

is theoretically significant for the question at hand but excluded from their analysis. Third, I distinguish between different types of Chinese projects, since health projects may impact attitudes very differently than mining or other investment projects. Lastly and most importantly, I employ an identification strategy that supports a causal interpretation of results. Contrary to Blair and coauthors, I find no evidence that Chinese investment increased support for democracy. In fact, I find evidence that Chinese investment decreased support for free and fair elections. Thus, this project's primary contribution lies in employing a research design that enables causal inference.

2 Data

To measure the dependent variable – support for democracy, I use data from Afrobarometer, a research institution which conducts high quality surveys of political and economic attitudes across Africa. I use data from five survey rounds between 1999 and 2015, which offers the chance to compare changes in attitudes over time in response to Chinese investment. I analyze this data at the individual level, yielding a sample of 95,000 in 297 regions across 25 countries. Since individual characteristics including gender, age, and whether the respondent lives in an urban or rural environment might bias results, I include these as controls.

To measure the independent variable – exposure to Chinese investment, I use data from AidData's Geocoded Global Chinese Official Finance Dataset, which includes all Chinese government-financed investment projects between 2000 and 2014. Since there is likely some lasting effect of exposure to Chinese investment beyond the initial year in which a project is completed, I code investment for regions that have received a Chinese-financed project in the last three years. In total, 14% of regions in the sample were exposed to Chinese investment during the surveyed years. For robustness, I test two additional specifications of investment: receiving a project in the last two years and receiving one in the last year.

I also include a measure of exposure to a World Bank project, as this might also influence

Table 1: Estimates of Support for Democracy and Chinese Investment

	Democracy				Free Elections			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS	*OLS*	*IV*	*IV*	*OLS*	*OLS*	*IV*	*IV*
Investment	0.077***	0.072***	0.175***	0.172	0.059***	0.061***	0.011	0.023
	(0.005)	(0.006)	(0.017)	(0.017)	(0.012)	(0.012)	(0.034)	(0.035)
World Bank Project		0.028***		0.016**		−0.010		−0.004
		(0.004)		(0.005)		(0.010)		(0.011)
Observations	94,707	94,707	94,707	94,707	78,291	78,291	78,291	78,291
All Instrumental Variables			✓	✓			✓	✓
Kleibergen-Paap rk Wald F statistic			383.40	364.78			347.76	332.82

*Note: *p<0.05; **p<0.01; ***p<0.001*

attitudes toward democracy (but likely in the opposite direction). I use AidData's World Bank Geocoded Research Release Dataset, which includes data for all countries and years in the sample. Similar to investment, I code exposure to a World Bank project for regions that received a project in the past three years. During the surveyed years, 36% of regions in the sample were exposed to World Bank projects. Lastly, I use data from the United States Geological Survey (measuring local mineral stocks) and data from the Observatory of Economic Complexity (measuring Chinese imports of minerals) to construct a Bartik like instrument, which I discuss in the next section.

3 Empirical Strategy

I wish to estimate the effect of Chinese investment on attitudes toward democracy, formally

$$y_{iljt} = \beta_0 + \beta_1 x_{ljt} + \beta_2 \omega_i' + \beta_3 \upsilon_{ljt} + \gamma_{jt} + \delta_l + \epsilon_{iljt}, \tag{1}$$

where y measures attitudes toward democracy for an individual (i) in a province (l) of a country (j) in a specific year (t), ω' is a vector of controls, and υ indicates the presence

of a World Bank investment project. However, a major challenge to estimating this effect is that regions that receive investment differ systematically from those that do not. For example, summary statistics (Table 4 in Appendix A) show that areas with investment differed significantly on nearly all covariate and were more often urban areas with higher average levels of education. Accordingly, estimation using ordinary least squares will produce biased results, as displayed in Table 1. To account for the endogeneity of Chinese investment, I employ an instrumental variable approach using a Bartik like instrument.

Bartik instruments are widely used in the immigration literature and rely on the inner product of two inputs – shifts and shares – to exogenously predict changes in the endogenous independent variable.[30] I construct a shift-share instrument to estimate exposure to Chinese investment,

$$z_{jlt}^{k} = s_{l}^{k} * \Delta ln[g_{J-j}^{k}], \tag{2}$$

where s is the normalized stock of mineral (k) interacted with the normalized (J - j) change in the log of Chinese consumption ($\Delta ln[g]$) of that mineral. This identification strategy exploits the exogeneity of changes in Chinese consumption of minerals interacted with normalized mineral shares to exogenously predict exposure to Chinese investment projects, which in turn allows one to study the relationship between Chinese investment and attitudes toward democracy.

While the canonical Bartik instrument sums across all industries (i.e., minerals) to create one instrument, recent research argues that it is preferable to treat each industry shift-share instrument as an independent instrumental variable and select (or weight) key instruments in the first stage estimation.[31] Goldsmith-Pinkham, Sorkin, and Swift (2018) propose a method of weighting that assigns a majority of the weights to a small number of instruments that provide the best conditional estimate of the dependent variable. Other research uses the Lasso (Least Absolute Shrinkage) method to select optimal instruments in the context of

[30] Formally, the Bartik instrument is represented as $B_l = \sum_k z_{lk} g_k$.

[31] Goldsmith-Pinkham, Sorkin, and Swift 2018; Ash 2015; Borusyak, Hull, and Jaravel 2018.

a sparse first stage (i.e., when conditional approximation of the dependent variable can be explained by relatively few instrumental variables).[32] Since it is not clear which of the 32 mineral shift-share instruments drive Chinese investment, I use Lasso to select instruments that provide the best conditional approximation of Chinese investment, thus adding to the growing body of literature employing Bartik like instruments.[33]

Exclusion Restriction

Importantly, this estimation strategy supports a causal interpretation of results and rests on two key assumptions. First, I assume that the shift-share instruments vary exogenously, and second, I assume that the instruments do not affect attitudes toward democracy through *any way other than exposure to Chinese investment*. The first assumption depends on exogenous variation in the change of Chinese mineral consumption over time and across the sample, which is interacted with normalized local mineral stocks. The most plausible potential violation of the second assumption is that a form of the "resource curse" might affect attitudes toward democracy through some means other than Chinese investment. I argue that this does not pose a significant threat to causal inference since analysis is conducted at the local level and country-year fixed effects control for potential national trends stemming from increased resource exports. Further, analysis of corruption perceptions does not support the claim that areas with investment are exposed to more corrupt politicians that might dampen support for democracy. I discuss this alternate explanation in more detail following a discussion of my results.

4 Results

Tables 2 and 3 present the main results of equation 1. In all models, the Kleibergen-Paap F statistic is close to or above ten, indicating that the selected instruments are relevant.

[32] Ash 2015

[33] Greenstone, Mas, and Nguyen 2020; Ash 2015; Acemoglu and Linn 2004; Christian and Barrett 2017; Nunn and Qian 2014; Jæger et al. 2016.

I include two questions to measure support for democracy: whether a respondent prefers democracy to other political systems and how strongly a respondent supports free and fair elections. Answers are coded on a three-point and five-point scale respectively, where the highest number indicates strong support for democracy. I also test two specifications of the independent variable – exposure to Chinese investment projects and exposure to health projects, as health projects are more likely to generate good will than some other types of investment. Thus, health projects provide an easy case for testing Chinese influence.

For each combination of the dependent and independent variables, I test two model specifications. In the first specification, I include country and year fixed effects with standard errors clustered at the region level. This specification controls for both country and time-specific factors that vary across the sample. In the second specification, I include country-year and region fixed effects as well as standard errors clustered at the region level. This specification controls for variation in national trends over time as well as trends across regions. However, this specification could also cause the effect of investment to appear too small if changes in local attitudes driven by investment are absorbed as part of a national trend. Thus, models with country-year fixed effects provide a test of robustness for how Chinese investment affects public attitudes toward democracy.

Results show a negative relationship between Chinese investment and support for democracy, though this relationship is only statistically significant in one model. There is evidence, however, to support the claim that Chinese investment decreases support for free and fair elections, as the relationship was statistically significant in three of the four models. Further, two of the models show a positive and statistically significant relationship between support for democracy and exposure to a World Bank project, offering support for the hypothesis that foreign aid promotes acceptance of a donor's values. Across both outcomes, exposure to a health project produced a bigger effect on average than exposure to the broader category of all investment projects, suggesting that projects with clear public benefits may indeed lead to greater political influence through increased good will. This finding suggests that

Table 2: Lasso Estimate of Support for Democracy

	(1)	(2)	(3)	(4)
Investment	−0.052	−0.046		
	(0.078)	(0.089)		
Health Project			−0.148*	−0.047
			(0.072)	(0.103)
Female	−0.060***	−0.061***	−0.060***	−0.061***
	(0.006)	(0.006)	(0.006)	(0.006)
Rural	−0.019	−0.015*	−0.024**	−0.015*
	(0.012)	(0.007)	(0.009)	(0.007)
Age	0.007***	0.007***	0.007***	0.007***
	(0.001)	(0.001)	(0.001)	(0.001)
Age Squared	−0.0001***	−0.0001***	−0.0001***	−0.0001***
	(0.00001)	(0.00001)	(0.00001)	(0.00001)
Education	0.059***	0.058***	0.060***	0.058***
	(0.005)	(0.005)	(0.005)	(0.005)
Employed	0.011	0.005	0.011	0.005
	(0.008)	(0.008)	(0.008)	(0.008)
World Bank Project	0.031*	−0.001	0.026	−0.005
	(0.015)	(0.021)	(0.016)	(0.023)
Observations	85,509	85,507	85,509	85,507
Number of Clusters	297	297	297	297
Kleibergen-Paap rk Wald F statistic	36.13	9.66	35.32	11.22
Country-Year FE's	No	Yes	No	Yes
Year FE's	Yes	No	Yes	No
Country FE's	Yes	No	Yes	No
Region FE's	No	Yes	No	Yes
Cluster Region	Yes	Yes	Yes	Yes
*Note: *p<0.05; **p<0.01; ***p<0.001*				

Table 3: Lasso Estimate of Support for Free Elections

	(1)	(2)	(3)	(4)
Investment	−0.286*	−0.425**		
	(0.119)	(0.118)		
Health Project			−0.716**	−0.549
			(0.253)	(0.308)
Female	0.006	−0.038***	0.007	−0.038***
	(0.011)	(0.009)	(0.011)	(0.010)
Rural	0.037	−0.012	−0.060	−0.012
	(0.020)	(0.014)	(0.032)	(0.014)
Age	0.004	0.007***	0.003	0.007***
	(0.002)	(0.001)	(0.002)	(0.002)
Age Squared	0.000	−0.0001***	−0.000	−0.0001**
	(0.000)	(0.00001)	(0.000)	(0.00002)
Education	0.011	0.046***	0.013	0.045***
	(0.012)	(0.008)	(0.012)	(0.008)
Employed	0.052**	0.040**	0.052**	0.038**
	(0.016)	(0.014)	(0.017)	(0.014)
World Bank Project	0.075*	−0.017	0.044	−0.079
	(0.034)	(0.043)	(0.043)	(0.059)
Observations	77,749	76,653	77,749	76,653
Number of Clusters	297	297	297	297
Kleibergen-Paap rk Wald F statistic	49.04	11.48	24.27	8.61
Country-Year FE's	No	Yes	No	Yes
Country FE's	Yes	No	Yes	No
Year FE's	Yes	No	Yes	No
Region FE's	No	Yes	No	Yes
Cluster Region	Yes	Yes	Yes	Yes
*Note: *p<0.05; **p<0.01; ***p<0.001*				

different types of Chinese investment projects have varying effects on public attitudes toward democracy, an important insight for scholars studying the effects of foreign investment.

Other Democracy-Related Questions

To probe the scale of the effect of Chinese investment on public attitudes toward democracy, I test several other relevant outcomes using all controls and country-year and region fixed effects with standard errors clustered at the region level. I selected additional outcomes on the basis of questions that appeared over multiple rounds and expressed value statements (i.e., a respondent expresses support for an idea). I chose three outcomes related to presidential or prime minister oversight by parliament (two questions) and the courts (one question). I also include a measure of how strongly respondents oppose one-party rule, a characteristic of the Chinese political system. These questions are measured on a five-point scale where five indicates strong support for democracy.

In Figure 1, I present coefficient plots showing the estimate and 95% confidence interval for the effect of Chinese investment on each outcome. Results show that investment did not have a statistically significant effect on the other democracy-related questions tested here. This evidence suggests that although Chinese investment may have decreased support for free and fair elections, it has not caused major changes in support for democratic values more broadly. Notably, my instrumental variable estimation supports a different conclusion than concurrent research about the effect of Chinese investment on attitudes toward democracy. While Blair, Robert, and Roessler (2019) conclude that, if anything, Chinese investment has strengthened support for liberal democracy, I find no such evidence. Instead, it appears that Chinese investment decreased support for democracy, although the effect appears modest.

Alternate Explanation: The 'Resource Curse'

As with all instrumental variable strategies, the greatest threat to causal inference lies in a violation of the exclusion restrictions; for this estimation strategy, the "political resource curse" presents one such possible violation. According to this theory, natural resource wealth

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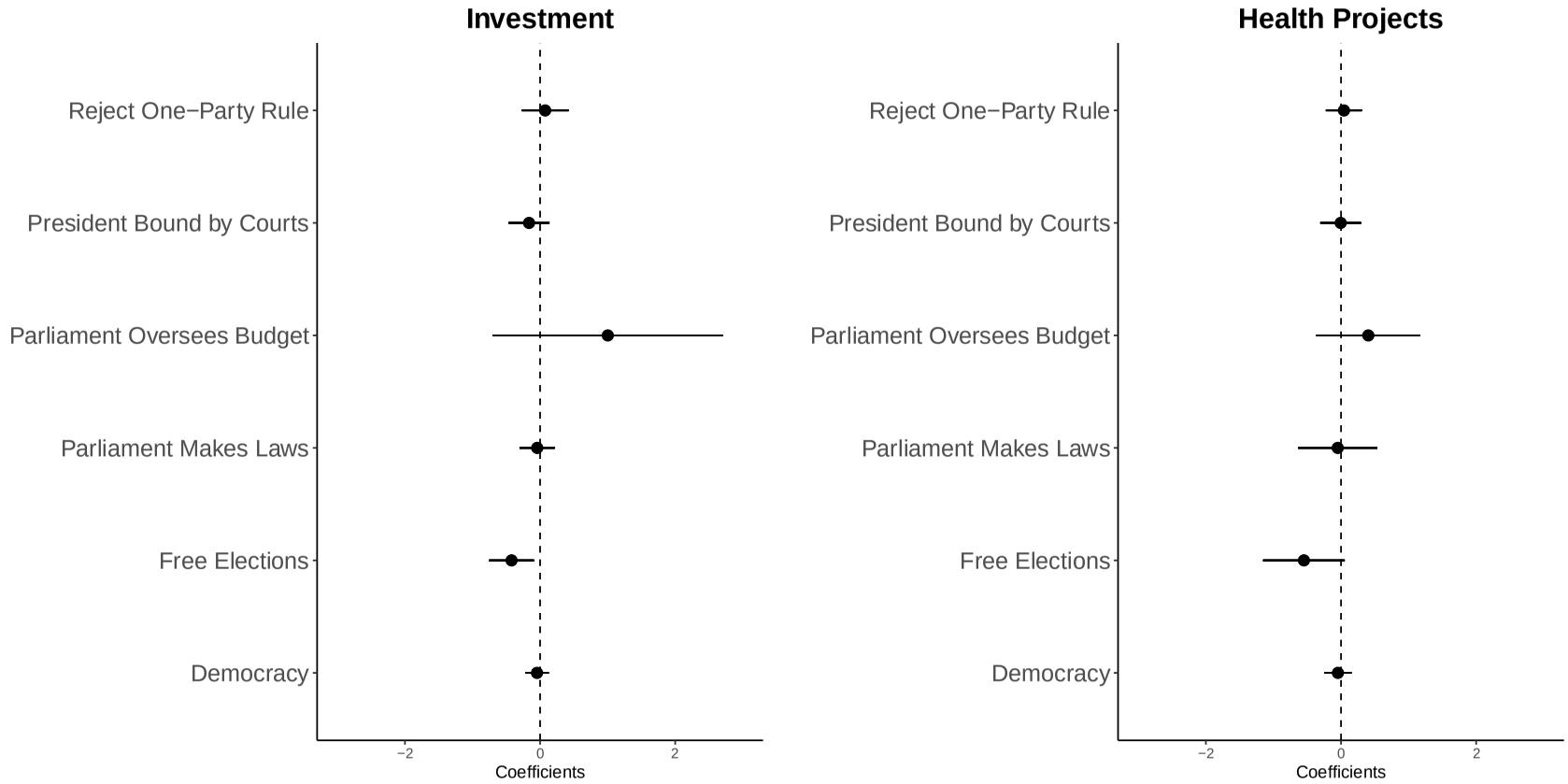
Figure 1: Coefficient Plots for Investment and Health Projects



Notes: These coefficient plots report estimates and 95% confidence intervals of the effect of all Chinese investment and Chinese health projects on a selection of democracy-related questions. Covariates include gender, age, age squared, education, employed, and an indicator for the presence of a World Bank project at the local level. Lasso-selected instruments for the investment plot are antimony, cobalt, and iron. The lasso-selected instrument for the health project plot is cobalt. The models include country-year and region fixed effects, with standard errors clustered at the region level.

can adversely affect a country's governance by allowing politicians to exploit natural resource wealth for personal gain, thus lowering public accountability. In the context of this research project, the resource curse suggests that the instrument – normalized local mineral stocks interacted with the change in Chinese consumption of that mineral at the national level – might affect public attitudes toward democracy in some way other than exposure to Chinese investment. For example, increased mineral consumption could lead to greater corruption as politicians exploit resource wealth for personal gain, thereby decreasing public support for democracy. I consider the plausibility of this explanation below.

First, however, it is worth nothing that there is still an ongoing debate as to whether the resource curse exists and how it functions.[34] Further, much of the research on this subject has lacked rigorous empirical testing, and one work that does apply rigorous empirical tests finds evidence that increased resource reliance is not, in fact, associated with lower levels of democracy.[35] Putting these qualifications aside, however, I test the plausibility of this explanation using questions from the survey that measure perceptions of corruption. I test these outcomes using my main model specification with all controls and country-year and region fixed effects, and I find that there was no statistically significant relationship between Chinese investment and perceptions of corruption (see Figure 2 in Appendix B). These results support the conclusion that Chinese investment does not influence attitudes toward democracy by driving perceptions of corruption.

I have also requested additional data from Afrobarometer to further probe the plausibility of the exclusion restriction. Already, country-year fixed effects control for national trends, including if resource extraction led citizens to perceive national leaders as more corrupt. However, additional geo-coded data will allow me to conduct analysis at a smaller geographic unit, thus isolating the potential effect of exposure to increased corruption to the local level where government officials are unlikely to capture the spoils of resource extraction. This data will allow me to further test whether this alternate explanation is plausible, although

[34] See Ross (2015) for a review of the literature.
[35] Haber, Menaldo, et al. 2011.

current analysis suggests that it does not pose a threat to causal inference.

5 Conclusion

This project aims to contribute to the literature on foreign aid and investment by providing a rigorous empirical test of the effect of Chinese investment on attitudes toward democracy. I employ a Bartik like instrument that supports a causal interpretation of results, and my results differ in important ways from existing research. These findings support the tentative conclusion that foreign aid and investment may lead to political influence for donors, though this effect appears to be modest. Further, my analysis supports the hypothesis that different types of Chinese investment projects affect public attitudes in varying ways. For policy circles, these findings suggest Chinese investment, and especially projects with clear public benefits, decreased support for free and fair elections, although investment does not appear to affect attitudes toward a wide range of democratic values. These findings suggest that researchers and policy makers should carefully consider the effects of different types of investment on political influence and adopt a more nuanced understanding of the effect of Chinese investment on political influence in Africa.

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A Summary Statistics

Table 4: Summary Statistics

Statistic	FDI (1)	No FDI (2)	p-value/ χ^2 value (3)	OLS (4)	p-value (5)
Female	0.500	0.500	1	0.004	0.101
				(0.003)	
Rural	0.450	0.616	0.000	−0.085	0.000
				(0.003)	
Age	36.02	36.47	0.000	0.0004	0.000
	(13.82)	(14.15)		(0.0001)	
Education	1.49	1.31	0.000	0.017	0.000
	(0.96)	(0.98)		(0.002)	
Employed	0.374	0.363	0.005	−0.005	0.081
				(0.003)	
World Bank Project	0.532	0.352	0.000	.125	0.000
				(0.003)	
N	17,063	75,915			

Notes: Column 1 reports the mean of continuous values and the proportion for binary variables, with standard deviations in parentheses. Column 4 is obtained through a regression of the control variables on an indicator for Chinese foreign direct investment, and column 5 reports the p-values of these estimates.

B Coefficient Plot: Corruption Perception

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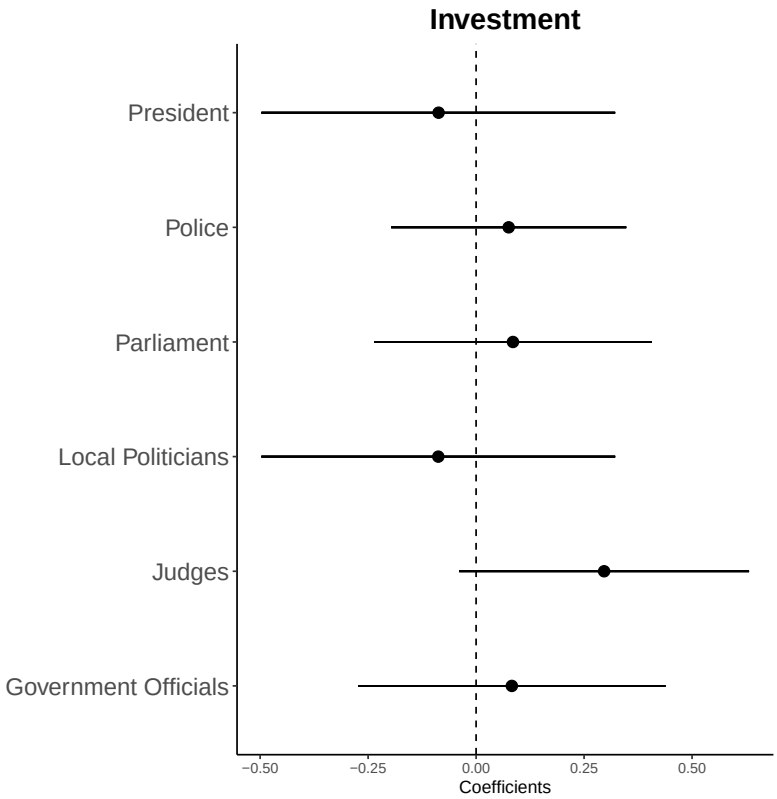
Figure 2: Coefficient Plot of Investment and Corruption Perception



Notes: This coefficient plot reports estimates and 95% confidence intervals of the effect of all Chinese investment on the perception of corruption for the listed government officials. Covariates include gender, age, age squared, education, employed, and an indicator for the presence of a World Bank project at the local level. The models include country-year and region fixed effects, with standard errors clustered at the region level.