Winning Hearts and Minds or Stoking Resentment? Exploring the Effects of Chinese Foreign Aid on Africans' Perceptions of China

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Abstract

As China expands its worldwide economic footprint through ambitious policies such as the Belt and Road Initiative, an increasing number of average people are exposed to Chinese workers and China's business practices. These experiences in turn shape their perceptions of China. One facet of China's foreign economic activities at the center of scholarly and policy debates is foreign aid. While IPE and China scholars have focused on the economic effects of China's official financing, few studies examine how aid shapes citizen's opinions of China in recipient countries. Using geo-tagged Afrobarometer surveys and AidData's Official Chinese Finance data, I examine the mechanisms through which direct exposure to Chinese aid influences citizens' perceptions and theorize China's financing has differential effects based on projects' characteristics and impacts on local communities. Findings show salient commercial projects make citizens less likely to perceive China's aid regime as effective and less fond of China's role in their country. Evidence suggests the in-flows of Han laborers that often accompany such projects exacerbate xenophobia and economic grievances in local communities. Contrary to expectations, however, whether Chinese aid meets Western OECD standards has no bearing on attitudes toward China. Taken together, the results suggest Chinese foreign aid as a soft power tool is of limited efficacy.

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1 Introduction

Since China launched its Going Out Policy in 1999, its foreign economic footprint has grown dramatically. Apart from expanding its foreign direct investment portfolio, foreign aid has also been a key element of China's global strategy. African countries were some of the earliest beneficiaries of China's Going Out Policy and continue to be major recipients of Chinese aid. Between 2000 and 2012, China committed roughly 52 billion dollars (deflated 2014) in foreign aid to African countries (Bluhm et al. 2018).[1] More recently at the 2018 Forum on China-Africa Cooperation, Chinese President Xi Jinping pledged another $60 billion in unconditional aid and investment to African countries.[2]

Commitments of this magnitude have made China an increasingly important player in global aid and finance. Yet, its aid practices do not strictly adhere to the norms of the Organization of Economic Cooperation and Development (OECD) (Strange et al. 2017). This non-traditional approach to aid has drawn criticism from scholars and Western policy-makers who have labeled China a 'rogue donor' (Naím 2007) with less-altruistic or even malign interests (Alden 2005; Tull 2006; Halper 2010). The United States government, too, has advanced a similar narrative about China's foreign aid practices and has taken steps to counter China's aid initiatives.[3]

The tit-for-tat competition between these two countries highlights the inherently geopolitical nature of foreign aid and reflects a well-established literature on the foreign aid allocation (Morgenthau 1962; Schraeder, Hooks, and Taylor 1998; Alesina and

1. This number reflects only projects that qualify as complete or implemented and ignores commitments which vastly out pace realized projects. For example, if one includes commitments, China's official finance to Africa between these years approaches $121.8 billion (USD deflated).

2. Fifield, Anna. "China pledges $60 billion in aid and loans to Africa, no 'political conditions attached,'" Washington Post, Sep 3, 2018. Accessed online at https://www.washingtonpost.com/world/china-pledges-60-billion-in-aid-and-loans-to-africa-no-strings-attached/2018/09/03/a446af2a-af88-11e8-a810-4d6b627c3d5d_story.html?noredirect=on&utm_term=.575c79c3bbd7.

3. In its 2017 National Security White Paper, the United States identifies Africa's strategic importance and frames the US role in the region as offering an economic alternative to "China's often extractive economic footprint on the continent." To match word with deed, the US signed into law the *Better Utilization of Investments Leading to Development* (BUILD) Act of 2018, which transformed the Overseas Private Investment Corporation (OPIC) into the US International Development and Finance Corporation. At $60 billion, the new body has double the budget of OPIC. More importantly, it can take an equity stake in its investments, unlike OPIC.

Dollar 2000; Kuziemko and Werker 2006; Mesquita and Smith 2007; Berman, Shapiro, and Felter 2011; Vreeland and Dreher 2014; Dreher and Fuchs 2015). However, these forms of economic assistance also play a role in Sino-US soft power competition. Indeed, one of the key aims of the US Agency of International Development (USAID) since the end of the Cold War has been the promotion of liberal democracy and free market capitalism (Scott and Carter 2019). Achieving this aim extends beyond altering recipient government's governance practices through conditionality, but also reshaping citizens' attitudes towards the US and the economic and political models it espouses. China, too, sees its foreign aid and investment as a soft power tool, and has increasingly deployed them across Southeast Asia and Africa as part of its "charm offensive" (Kurlantzick 2007; Lai 2012). Chinese diplomatic missions to developing nations often entail an announcement of economic assistance, cultural or educational program, or commercial investments (Brazys and Dukalskis 2019). From Hu Jintao's "harmonious society" to Xi Jinping's "win-win cooperation," China's Ministry of Foreign Affairs has consistently updated its framing of these efforts to align with each successive leader's foreign policy brand.

While it is clear that donor countries such as China and the United States see development assistance as a means to advance their soft power, it less clear whether it is effective. Previous research shows that once initiated, projects can have an array of cross-cutting short and long term effects on local communities such as increasing long-term access to electricity (Civellia, Horowitz, and Teixeria 2018), reduced infant mortality (Kotsadam et al. 2018) and interregional economic inequality (Bluhm et al. 2018), increased perceptions of corruption (Isaksson and Kotsadam 2018), and environmental degradation (BenYishay et al. 2016). Such effects could portend positive, negative, or no impact on citizens' perceptions of donor countries, and predicated upon a diffuse mechanism (Dietrich, Mahmud, and Winters 2018) in which citizens' correctly attribute outcomes with aid projects and the associated donor countries. Few studies directly address this question especially at the level of the individual. In on US foreign and attitudes toward America, Tokdemir (2017) finds some evidence aid may influence attitudes by creating economic

winners and losers and that aid-induced Anti-Americanism is more extreme in autocracies. Yet these results are based on cross-national survey data and country-level aid data, and thus cannot test the purported mechanism. Others such as Findley et al. (2017) and Dietrich, Mahmud, and Winters (2018) have explored important prerequisite questions such as attitudes toward donor agency versus recipient government control over project implementation and citizens' ability to attribute projects to donor agencies, but not what effect foreign aid has on individual's attitudes toward donor countries? In this paper, I seek to answer this question.

I theorize that the effect of foreign aid on people's attitudes toward donors travels through two primary pathways: direct and indirect exposure. The former occurs when individuals living in close proximity to a project receive benefits, including training or educational programs, new hospitals, schools, or improved infrastructure. Proximity can also expose people to negative outcomes including environmental degradation or increased corruption. Individuals then attribute some responsibility for these outcomes to the donor country and update their opinions of the donor accordingly. The latter occurs when a donor country's increased presence in the country becomes politicized and penetrates national political discourse. Once this happens, even individuals who may not be directly exposed to aid projects are likely to form opinions on the issue. Without direct experience to guide them, existing sociopolitical beliefs are likely to serve as heuristic stand-ins for their opinion toward donors. Indirect exposure is inherently a diffuse process. The effect of aid may be moderated by prior sociotropic attitudes, partisanship, media and information consumption, whether and to what degree the aid is utilized for political gain, and so on.

Given the highly conditional, complicated nature of the indirect exposure, I focus on the direct pathway in this paper. To do so, I examine Chinese aid in Africa. Since 2000, China's foreign aid portfolio on the African continent has expanded to encompass over 30 countries. As a (relatively) new entrant onto the development aid scene, China has worked hard to advertise its presence and differentiate itself from traditional Western donors

(Brazys and Dukalskis 2019). Moreover, it lacks the historical "baggage" associated former colonizers and other Western countries with a long history on the continent. China's aid regime is also diverse. While some of its projects meet the Organization of Economic Cooperation and Development's (OECD) Official Development Assistance guidelines which are considered the "gold standard" of foreign aid by Western donors, other projects follow no such guidelines and instead more closely resemble some mixture of aid and commercial financing.

I utilize geo-coded Afrobarometer survey data from 2014-2015 (BenYishay et al. 2017) that asks respondents multiple questions about Chinese influence in their country and geo-coded data on Chinese government-financed projects in Africa over period from 2000-2014 (Bluhm et al. 2018). By matching respondents with projects, I use distance as a proxy for the likelihood of direct exposure to aid and estimate the effect on these individuals' attitudes toward China's role in their country as well as the economic effectiveness of its aid.

Results show that direct exposure negatively impacts attitudes towards China. This effect is driven solely by China's commercial aid, however, which constitutes a small portion of its overall project portfolio. Living in close proximity to these projects makes individuals 4.6 percent less likely to perceive Chinese aid as effective and 3.7 percent less likely to view China's role in their country as positive, but has no impact on whether they find China's development model attractive.[4] I theorize that commercial projects because of the oftentimes large Han labor force that accompanies their construction, stoke xenophobic sentiments and economic grievances among local communities. The findings bear out my expectations. Individuals living in proximity to these sites are more likely to take issue with the behavior of Chinese citizens and worry about them hurting local labor markets. Overall, the findings suggest concerns over China's ability to buy soft power via its aid regime are unsubstantiated. Not only does direct exposure to most Chinese aid have no impact on citizen attitudes, but by taking a non-traditional approach

4. The 95% confidence intervals for these are [1.1,7.7] and [1.1,6.6], respectively.

that blends free market commercial investments in with its development aid, China may be undermining itself.

This paper contributes to a number of research areas. First, it expands the literature on foreign aid, examining its soft power (Nye Jr. 2004) implications. The use of aid as a foreign policy instrument has traditionally examined it from a hard power angle either as a function of geopolitical interests during the Cold War (Morgenthau 1962; Mesquita and Smith 2007; 2009; Qian 2015; Kuziemko and Werker 2006) or as a function of targeted development objectives thereafter (Mavrotas and Ouattara 2006; Altincekic and Bearce 2014; Fuchs, Dreher, and Nunnenkamp 2014; Lee and Lim 2014; Bodenstein and Kemmerling 2015; Winters and Martinez 2015). Moreover, much of this research examines donor-recipient government dynamics (Dietrich 2015) rather than donor government-recipient citizen dynamics. Only a handful of studies broach the latter dynamic and examine citizen aid preferences, attribution ability, or support for their own government (Baldwin and Winters 2018; Blair and Roessler 2021; Dietrich, Mahmud, and Winters 2018; Findley et al. 2017; Goldsmith, Horiuchi, and Wood 2014). Foreign aid is, arguably, one of the most direct means for donor governments to interact with and shape foreign citizen's attitudes, and yet the author is only aware of one study on this question (Tokdemir 2017) direct exposure to aid, I help shed light on the whether aid is an effective soft power.

Second, it contributes to the rich literature on China's foreign economic statecraft. Like the foreign aid literature more broadly, this literature has primarily focused on outcomes at the foreign government level, exploring how China uses trade to buy accommodation on issues it cares about (Kastner 2016) or punishes countries for undermining it (Fuchs, Dreher, and Nunnenkamp 2014); whether increased trade with China leads closer ideological proximity with China in the UNGA (Flores-Macías and Kreps 2013); and how China secures strategic resources (Norris 2016), to name a list a few examples. Yet, the role of its foreign aid regime as an additional aspect of its economic statecraft is largely underexplored. Whether Chinese aid wins hearts and minds or stokes resentments

among foreign populaces will arguably have important impacts on its ability to further its foreign policy agenda within a country. Increased support for China's model for political and economic development can help build a coalition of like-minded regimes around the world that friendlier to the Chinese Communist Party. Conversely, decreased support can translate into anti-China sentiment, precipitate backlash, strengthen 'anti-China' and 'debt-trap diplomacy' narratives, and ultimately weaken China's ability to translate its economic might into desired foreign policy outcomes. As Bräutigam (2020) shows, this latter dynamic is especially plausible in electoral democracies where the opportunity for opposition parties to weaponize Chinese aid for political gain is particularly attractive.

Finally, it contribute to the literature on China's burgeoning economic footprint in Africa (2009; Brazys, Elkink, and Kelly 2017; Isaksson and Kotsadam 2018; Dreher et al. 2018; Bluhm et al. 2018). While some of this research does examine cross-national attitudes toward China (Morgan 2019), showing considerable support for China's economic and political role within most countries, these studies are descriptive and do not determine to what degree such opinions can be ascribed to direct exposure to Chinese aid. This study fills the gap.

2 Chinese Financing in Context

The attitudinal shift within IPE is part of a broader trend towards connecting the micro and the macro. To this end, numerous studies examine the determinants of individuals' attitudes toward a range of economic issues including trade (Scheve and Slaughter 2001; Mayda and Rodrik 2005; Hiscox 2006; Mansfield and Mutz 2009; Kaltenthaler and Miller 2013; Naoi and Kume 2015; Mutz and Kim 2017; Owen and Johnston 2017; Rho and Tomz 2017), foreign direct investment (Fayerweather 1982; Domínguez 1982; Scheve and Slaughter 2004; Pandya 2010), preferential trade agreements (Spilker, Bernauer, and Umaña 2016), and foreign aid (Findley et al. 2017). While these studies identify the role of sectoral, factoral, and sociotropic variables in driving personal opinions and beliefs, they usually treat international economic flows as the dependent

variable. Utilizing flows such as aid as independent variables is more rare.

In terms of international economic flows, aid closely parallels foreign direct investment (FDI) in two qualitative ways. First, much like FDI consists of myriad conceptually and empirically distinct flows which augur theoretically diverse outcomes (Kerner 2014), foreign aid is also complex. Aid varies in the degree to which it bypasses recipient governments (Dietrich 2015), how specifically targeted it is, and the size of the grant or lending type. As Dreher et al. (2018, 131) point out, it is important to distinguish between lending types as China's portfolio of development finance is quite diverse and motivated by foreign policy *and* development priorities.

2.1 Categorizing Chinese Aid

One useful typology that parses out varieties of Chinese financing is AidData's TUFF methodology (Strange et al. 2017). The TUFF typology separates Chinese financing into two main categories depending on whether it meets OECD standards for official development assistance (ODA-like). To qualify as ODA, financing must be provided by official agencies to developing countries or multilateral institutions; promote the economic development and welfare of recipient countries as its main priority; and have a grant component that meets or exceeds 25 percent. Projects of this kind vary widely in scale and salience, and encompass technical assistance, concessional loans, scholarship, debt relief, and grants with development intent. For example, in 2007, China committed $150 million dollars to expand the African Union headquarters in Addis Ababa, Ethiopia, and then a year later agreed to an additional $61 million in funding for a conference center attached to the headquarters. The three year construction project which involved 1,200 Chinese and Ethiopian workers began in January 2009 and ended on January 28, 2012. This large-scale, high salience project was announced at the Forum on China-Africa Cooperation in Beijing. Conversely, cases like a 2009 delegation from the Nantong Municipal Council of China donating 20,000 (in undefined currency) to a Botswanan primary school to purchase a photocopier and computer represent small-scale, low-salience projects.

If the lending fails to meet the ODA stipulations, but is still funded by a Chinese government agency, then it is considered other official financing (OOF). These projects not only vary in terms of scale and salience but also their primary development intent. They encompass non-concessional loans with some development intent, commercial loans, export credits, Confucius Institutes, and grants with representational intent. As a commercial example, in 2007 two Chinese railway engineering firms negotiated a contract with the Sudanese government to construct a 762 km railway linking Khartoum and Port Sudan. The Chinese government financed the project with export credits. Whereas a Chinese donation of computers and over 100,000 publications on Chinese history, art, science, politics, and culture to the Tanzanian National Library's China Library at its opening in September, 2012 exemplify a cultural representation project.

As one can see, ODA- and OOF-like projects represent distinctly different aims. Yet there is no reason to assume Chinese 'aid' will or will not meet ODA standards since China does not funnel its financing through a single entity nor does it define aid in alignment with the OECD DAC definition (Bräutigam 2010). Indeed, much of China's aid does not neatly fit into either category but instead exists in some vague middle ground between the two. Lack of transparency further exacerbates accurate classification. Despite these challenges, the ODA/OOF distinction still offers theoretical utility. Many Chinese projects do meet ODA standards and even for vague projects we can infer based on other characteristics how similar they are to either category. Given the two categories' varied aims, we should expect each type to result in varied economic and social outcomes.

A growing body of research verifies these expectations. Scholars have identified an array of local outcomes—deleterious and positive—associated with these different types of Chinese aid. For instance, China's ODA-like aid not only improves economic development (2017), but also increases local corruption (Isaksson and Kotsadam 2018; Brazys, Elkink, and Kelly 2017). Similarly, OOF is associated with diverse outcomes. BenYishay et al. (2016) find higher levels of environmental degradation around Chinese OOF projects, while Bluhm et al. (2018) show it reduces interregional economic inequality. These studies

identify how outcomes vary by flow class, but ignore other potentially meaningful sources of variation. For example, aid projects should vary in effect and salience depending on their scale, sector, and location.

2.2 Aid Allocation, Local Control and Citizen Awareness

To understand how aid influences individual's perceptions of donor countries, we must unpack the aid allocation process. There are two competing narratives about foreign aid in the international political economy literature. One strand of research that suggests aid is primarily driven by the geopolitical prerogatives of donor countries (Morgenthau 1962; Mesquita and Smith 2007; 2009; Qian 2015) and thus highly subject to elite capture (Bräutigam 2000; Smith 2008; Morrison 2009; 2012; Gervasoni 2010). Another strand argues that since the Cold War donor self-interest and development priorities have converged (Bermeo 2017). Targeted toward specific issues, this type of aid is effective (Mavrotas and Ouattara 2006; Altincekic and Bearce 2014; Fuchs, Dreher, and Nunnenkamp 2014; Lee and Lim 2014; Bodenstein and Kemmerling 2015; Winters and Martinez 2015) and less prone to elite capture (Birchler, Limpach, and Michaelowa 2016). Thus, citizens in recipient countries could view aid either skeptically or positively depending on their experience with these politically divergent aid models.

While targeted aid tends to either bypass the hands of recipient governments or come with political stipulations, some donors still prefer to closely coordinate with recipient governments.[5] China is among those that favor government-government lending. It emphasizes the political condition-free nature of its foreign aid as a key selling point over Western and multilateral donors. In contrast to traditional donors that tend to program their aid to "reflect the donors' goals more than those of the country they are assisting" (Bräutigam 2011, 760), Chinese aid programs operate via high-level talks which often result in a 'demand-driven' process (Kragelund 2011; Reisen and Stijns 2011) whereby recipient governments approach China with specific proposals to access a Chinese line of

5. Dietrich (2015) notes that France and Japan are among the few OECD donors that still maintain a very state-centric approach to lending

credit. China then decides to allocate the money or not. Once a project receives a green light, China's *modus operandi* is to control projects through the implementation phase and use Chinese contractors to conduct work (2009). After project completion, "local ownership" is the norm (Nissanke and Söderberg 2011, 26). 2010, 37 offers illustrative examples of this process such as a $58 million line of credit offered to Zimbabwe that was ultimately funneled through a company called Farmer's World who then traveled to China to purchase farming equipment or a Chinese company in Sierra Leone that proposed a rural telecoms project which was ultimately financed by a concessional aid loan.

Hence, both flow types involve some sort of explicit or implicit negotiation between recipient country governments and foreign firms (in the case of OOF) or lending agencies (ODA) over the project terms. For OOF-like projects which in many ways resemble FDI, conditions such as tax incentives and employment quotas for local workers might underpin negotiations while for aid the issue at stake is the degree of recipient government control over implementation, especially the degree to which aid 'bypass' recipient governments via third-party or donor-country agencies (Simone 2013). Assuming that citizens understand the foreign aid process, they should associate aid with both donors and their own government—much as a citizen might hold their elected officials accountable for giving a multinational corporation an overly generous tax break to attract investment—and attribute outcomes to one or both actors to varying degrees.

This assumption is not unwarranted. As Findley et al. (2017, 640) state, "in Uganda, as in many developing countries, signs tying projects to foreign or domestic donors crowd the roadside." Thus, citizens should be able to distinguish amongst different donors. Local politicians are also incentivized to claim credit for delivering projects to their districts in a fashion similar to political pork-barrel (Cruz and Schneider 2017). By this token, it is reasonable to assume that even in countries where aid is less salient, citizens can intuit the basic political motivations of donors and recipients and will form opinions about projects involving both actors. In countries where aid is a prominent feature of economic

and political life, citizens should be even more knowledgeable about the politics of aid.

Qualitative and anecdotal evidence support this notion, at least in relation to Chinese aid. In Ghana, China's contribution of heavy machinery to small-scale mining has exacerbated local environmental degradation. Ghanaian critics not only blame the Chinese, but also other Ghanaians for acting as go-betweens for Chinese partners and the government for doing little to stop these practices.[6] In Zimbabwe, criticism of China's lending practices underpin the platform of the Movement for Democratic Change, the main opposition party. At the root of this criticism is a belief that Chinese loans help prop up Mugabe's Zanu-PF party.[7]. Similar narratives appear in Southeast Asian countries like Malaysia where funds from China's Belt and Road initiative have been implicated in a corruption scandal engulfing the former prime minister Najib Razak.[8] These accounts show aid is not some esoteric facet of politics, but in fact a salient feature of domestic politics in recipient countries.

Given that citizens are able to associate and attribute aid to donors, how then does this influence their attitudes about donors?

3 Aid's Direct and Indirect Effect on Attitudes

The mechanism linking aid and attitudes is complex. It makes sense to deconstruct it into direct and indirect channels. I address each one of these in turn below. Figure 1 provides a stylized theoretical model that encompasses the entire mechanism. The model is stylized insofar as it only displays the most important and plausible connections between variables, but inevitably some potential dependencies are excluded. The figure can be understood as follows.

6. Fick, Maggie. "Ghana crackdown on illegal gold mining inflames tensions with Beijing." *Financial Times*. April 30, 2017. https://www.ft.com/content/cb032036-2a63-11e7-bc4b-5528796fe35c

7. Crabtree, Justina. "Zimbabwe opposition leader reportedly wants to give Chinese investors the boot." *CNBC*. May 3, 2018. https://www.cnbc.com/2018/05/03/zimbabwe-opposition-leader-wants-to-give-china-investors-the-boot.html

8. Wright, Tom and Bradley Hope. "Malaysia Suspects Chinese Cash Paid Troubled Fund's Debt." *Wall Street Journal*. July 31, 2018. https://www.wsj.com/articles/malaysia-suspects-chinese-cash-paid-troubled-funds-debt-1533067876

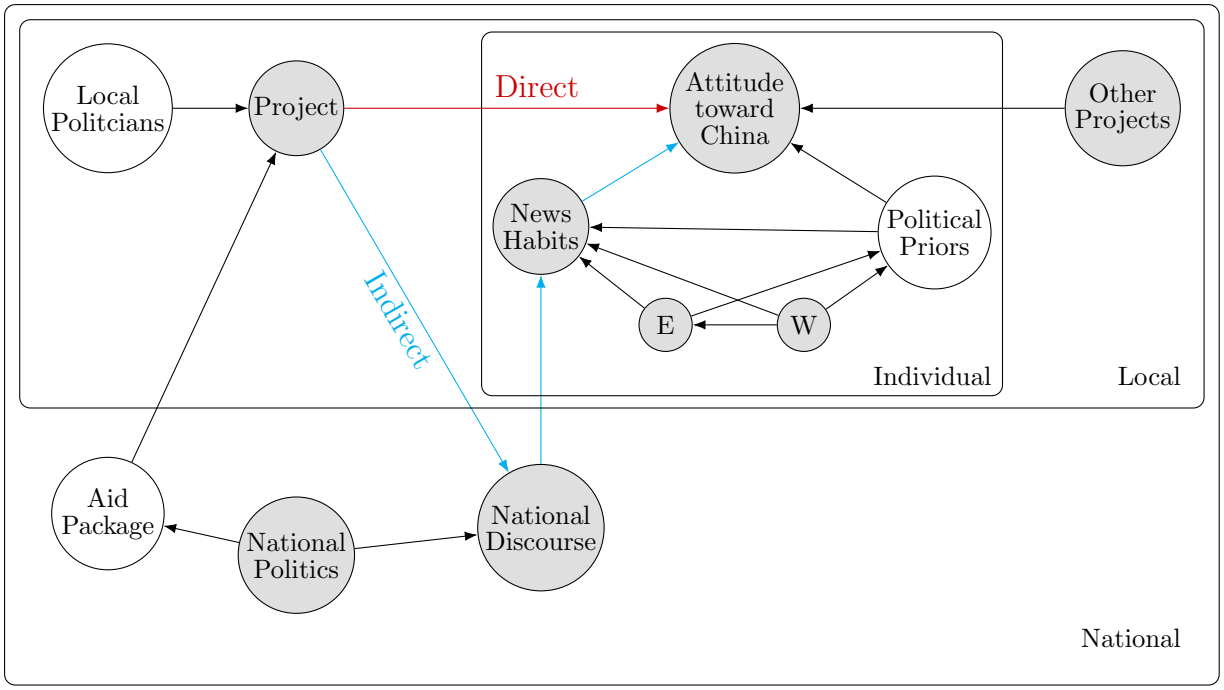

Figure 1: **Connection between Aid and Attitudes toward China.** Gray and white nodes represent observable and unobservable variables, respectively. The behavior of local politicians and Chinese aid packages are considered unobservable because of the high degree of opacity around these negotiations. Individual's prior political beliefs are also treated as not directly observable. E and W denote and individual's education and wealth levels.

Projects are influenced by local aid entrepreneurs such as politicians or companies that seek to bring projects to their districts. Project proposals are contingent upon the aid package China has made available to that country. China's aid package is a function of its foreign policy priorities which are influenced by the recipient country's national politics.[9] Once initiated, projects can travel along two channels to ultimately shape attitudes. The first is through an individual's direct exposure to a project. I theorize about this channel in greater depth below.

The second channel is through national political discourse. While foreign aid is not a headline-grabbing issue in many developed countries, in aid-dependent countries foreign assistance is not only salient but may be so to the degree of ubiquity.[10] Additionally, even if a country is not aid-dependent, large foreign financing deals such as those China

9. Of course, how China's foreign policy priorities shape its aid packages depends a host of other variables as well, but these are assumed to be exogenous to the aid-attitudes process.

10. Recall Findley et al. (2017) example of Ugandan byways lined with signs indicating foreign-funded projects.

has signed with many developing nations are likely to receive a media attention and spark public debate. Thus, while individuals may not be directly exposed to aid, they can still 'experience' it after is has been filtered through domestic political discourse. I assume people's primary engagement with political discourse happens through their news habits—their levels of news consumption and which news they consume—all of which are determined by factors such as their wealth (in underdeveloped countries, access to news is likely to vary greatly), education, and prior political beliefs.

Finally, evidence suggests aid project co-location matters. Brazys, Elkink, and Kelly (2017) find that when World Bank and Chinese aid projects are co-located, individual experiences of corruption increase which could influence attitudes toward donors depending on to whom individuals attribute blame. Blair, Marty, and Roessler (2021) find evidence that exposure to Chinese aid increases support for Western powers, while exposure to Western aid has 'complementary' effects, leading to increase support for Western powers. Taken together, these findings indicate that exposure to multiple aid regimes should have interactive effects on individual's attitudes toward donors. While I include this pathway in figure 1 for completeness, analyzing its effects is beyond the purview of this paper.[11]

Although aid may travel along two distinct paths on its journey towards influencing attitudes, both paths are shaped by projects' objective and *perceived* outcomes to some degree. Imagine two aid projects. The first is a donation of equipment to a local school. This may immediately and objectively improve learning outcomes for students and over the long-term bring positive benefits to the local economy. Yet the long-term benefits are inherently diffuse rendering correct attribution more difficult. Such a project may strongly impact direct beneficiaries' (teachers, students, and their parents) attitudes toward, but its effect is otherwise limited in scope. The second is a telecommunication infrastructure project that increases cell phone coverage over a large area. Even if an individual does not have a cell phone or falls outside of the coverage area, they are more likely to be aware of such a project and perceive a beneficial outcome, despite not having any experience

11. Interested readers should see 2021.

with the objective outcome.

These two scenarios suggest a salience-driven logic. As project salience increases (decreases), the importance of perceived outcomes should grow (shrink) relative to objective outcomes. Salient projects are more likely to impact national discourse, rendering indirect effects a function of perceived outcomes. Conversely, I contend that direct effects are primarily a function of objective outcomes. Of course perception shapes everyone's experienced reality, but for those who are directly impacted by aid projects their perceptions, and thus attitudes, *should be* informed more by the objective outcomes. As the old adage goes: "seeing is believing."

3.1 Direct Exposure

Because the effect of direct exposure depends on objective outcomes, different aid modalities—OOF versus ODA—matter. These flow types have been associated with divergent outcomes on local communities and, thus, should influence attitudes towards donors differently. The three most prominent outcomes relate to corruption, economic growth, and labor markets.

Although the Chinese play an intermediary role in the implementation phase, recipient country elites are in the driver seat at the start and finish, leaving room for elite capture and clientelism to take root. There is some evidence to bear this out. Chinese ODA-like projects are more likely to be situated in the home provinces of national leaders (Dreher et al. 2016) and increase local corruption (Brazys, Elkink, and Kelly 2017; Isaksson and Kotsadam 2018). However, for numerous reasons, it is unclear to whom citizens attribute blame for increased corruption—China, the recipient government, or both. First, Findley et al. (2017) show Ugandans have no preference between different donors, suggesting citizens might not attribute negative outcomes to donors. Second, Blair and Roessler (2021) find that Chinese development finance does not alter people's perceptions of state legitimacy in Africa. Third, China's emphasis on host country project management post-implementation, citizens should be predisposed to attribute outcomes

to their own government. Finally, there is evidence that China's ODA-like finance increases economic growth at rates similar to US and OECD aid (Dreher et al. 2017) which may attenuate any negative ramifications of increased corruption. Citizens may simply view it as part of the costs of economic growth.

China's ODA-like projects also tend to be smaller and focused in softer sectors such as health, government and civil society, and education.[12] Even though these softer projects may not be as visible or create immediately tangible, positive economic spillovers, they address important development needs and can serve to promote a beneficent image of donor countries. A new school or hospital should be viewed positively by local citizens, even if they are healthy or do not have children. Given the less visible nature of ODA projects and their 'altruistic' orientation,

> *I expect that individuals exposed to ODA-like projects should view China more positively but that the geographic range of this effect should be much smaller.*

In contrast with ODA-like aid, Chinese OOF aid tends to consist of turnkey projects focused on 'hard' development areas such as infrastructure, energy creation, mining, and transportation. Though this type of is associated with local environmental degradation (BenYishay et al. 2016), it also produces positive results. In Africa, Chinese OOF projects have improved local household welfare (Martorano, Metzger, and Sanfilippo 2018) and its 'connective financing,' or transportation initiatives, have reduced subnational economic inequalities (Bluhm et al. 2018). Individuals are also likely to perceive outcomes differently depending on local economic conditions. If an individual lives in an underdeveloped country, then they may weigh the economic gains associated with these projects more heavily and treat negative environmental ramifications as an acceptable evil. Given the salience of OOF projects and their effectiveness in generating positive economic outcomes,

> *I expect that exposure to OOF projects should improve citizens' perceptions of China's role in their country.*

12. This is true when considering the number of projects by flow class and sector. When looking at monetary concentrations the picture is mixed and skewed by large projects.

China is also unique in that it often imports a large Han labor force to carry out its projects, resulting in small 'Chinatowns' appearing almost overnight in many recipient countries. This practice has been a source of consternation for recipient citizens who see the Chinese as crowding out local labor markets (Bräutigam 2009). Beyond shifting labor market dynamics, the sudden influx of Han Chinese may also put social strains on communities, leading individuals to feel as though their local culture and traditions are threatened. These perceptions may exacerbate in-vs-out-group sentiments, xenophobia, or ethnocentrism.[13] Therefore,

> *I expect exposure to projects that are associated with large in-flows of Chinese workers such as Commercially-driven projects in the infrastructure, energy creation, and communications sectors will lead to more negative attitudes toward China.*

4 Data

4.1 Chinese-Financed Projects

The data on Chinese-funded projects come from AidData's Geocoded Global Chinese Official Finance Version 1.1.1 data set (Bluhm et al. 2018) that covers 2000-2012. The data set contains project-level information on 1650 projects in Africa totaling 128 billion USD (deflated 2014). To ensure the geographic precision of the data, I follow the conventional approach in the literature (Knutsen et al. 2017; Brazys, Elkink, and Kelly 2017; Isaksson and Kotsadam 2018) and only include projects coded at precision levels 1 or 2. This ensures the associated latitude and longitude either exactly correspond to the geographic location of the project or are within a 25 km radius (Strandow et al. 2011). This leaves 1521 projects across 32 countries spanning North and Sub-Saharan Africa.

A breakdown by donor intent shows that the projects are overwhelmingly intended

13. This is one prominent approach to explaining attitudes in the IPE literature, especially towards trade and FDI. See Mayda and Rodrik (2005); Mansfield and Mutz (2009); Kaltenthaler and Miller (2013); Mutz and Kim (2017).

for development ($N = 1303$), but also commercial ($N = 55$), representation ($N = 50$), and mixed ($N = 113$) purposes. Although development projects dominate by number, they tend to be much smaller in monetary value, averaging 48.5 million dollars per project, whereas commercial and mixed projects average over 128 and 201 million dollars per per project, respectively. Representational projects tend to be the smallest at 21.8 million dollars per project. As for this latter group of representational projects, the term "project" may be a misnomer as these are often gifts for the purpose of advancing intercultural and educational exchange. They are often announced during diplomatic visits. In rarer cases, they are donations to political parties. Appendix A provides additional descriptive figures and tables on projects.

4.2 Opinions of China

Attitudes toward China come from the geo-coded Afrobarometer Round 6 survey data from 2014-2015 (BenYishay et al. 2017). The round 6 Afrobarometer data surveys respondents from 36 African countries on a range of social, political, and economic questions, a number of which specifically pertain to people's perceptions of China. After dropping Swaziland, Burkina Faso, Libya, and Sao Tome and Principe because either China-related questions are not asked there or there are no Chinese-financed projects in those countries, I have a sample of 35,635 respondents from 32 countries and 6,338 township-villages.

I utilize multiple questions to measure perceptions of China. The first asks how well China's economic development assistance meets their country's needs. The second asks whether China's economic and political role is good or bad. Responses fall along a 5 point Likert scale.[14] I dichotomize into a positive category for responses 4 and above, and negative for below.[15] Finally, I create an attitudes index that combines the above questions with a third question that asks respondents which foreign power is the best

14. There are also "Don't know/Haven't heard enough", "Refused to answer", and "China doesn't give development assistance to [ENTER COUNTRY]" categories which I treat as missing.

15. This makes sense given the imbalance across the 5 levels. Aggregate attitudes are overwhelmingly positive. It also gives a probabilistic interpretation to the OLS results for these two questions.

model for future development of their country. If a respondent chose China, they are coded as 1 and 0 otherwise. The index is the sum of all three binary variables. The mean values for the economic assistance, role, and index variables are 0.64, 0.73, and 1.68, respectively. The wording of all three questions along with information about Afrobarometer's sampling scheme can be found in Appendix B.

5 Estimation Strategy

5.1 Identification

In an ideal world, one would have full experimental control over who received what type of aid from China, randomize treatment assignment, and then take pre- and post-treatment measures of people's opinions of China. Unfortunately, we know aid is not distributed randomly across or within nations. To overcome these selection effects and achieve identification, I leverage random variation in the timing of when projects transition from in the pipeline to implementation / completion.[16] Figure 12 in appendix C displays the timing and location of these two types of projects. I estimate two quantities: the effect of exposure to not yet (placebo) and already implemented (treatment) projects as a function of distance from the project sites, respectively. The actual effect of exposure is calculated as the difference between the treatment and placebo groups. This spatial difference-in-differences approach has become standard (see Isaksson and Kotsadam 2018; Kotsadam et al. 2018; Blair, Marty, and Roessler 2021). Assuming that project timing is as-if random, then people located near planned sites are a valid counterfactual comparison group for those living in the vicinity of completed projects.

There are a few potential concerns about the validity of this identification strategy. I address them in appendix C. First, the demand-driven nature of Chinese aid projects

16. Projects may be at one of six stages: pipeline–pledge, pipeline–commitment, implementation, completed, suspended or canceled. The subset of 1521 projects at precision levels 1 or 2 does not contain any suspended or canceled projects. Pipeline projects are planned but have not yet started for various reasons. Once commenced, it is classified as being at the *implementation* stage until it is *completed*. I collapse pipeline–pledge/commitment and implementation/completed projects into two categories, pipeline and executed, respectively.

could be problematic. African leaders are more likely to funnel aid projects to their home regions (Dreher et al. 2016), potentially to reward their supporting coalitions. Other factors such as the importance of a given area to the country's overall economy, its natural resource endowment, and local politicians' entrepreneurship could all alter how likely some places are to become project sites. If the same dynamics that drive project placement also influence implementations timelines, then timing is not random. This issue is of low concern. It is unlikely these political dynamics would fail to influence the project placement and later manifest during implementation. The results in appendix C affirm that placement in a leader's home region has no impact on the likelihood of reaching implementation. Nonetheless, I include a control for whether a project is located in a leader's home region.

Second, it may be that project characteristics lead to systematic differences in implementation timelines. One the one hand, 'hard' development projects in energy, infrastructure, and telecommunications might be deemed higher priority and implemented sooner. OOF-like projects with large Han labor forces (in other words more private contractors and less recipient-government control) might be finished faster. On the other hand, compared with smaller, targeted projects in health and education sectors, 'hard' projects may be more prone to delays, or to simply never materialize for a variety of reasons. The results in Appendix C show that these systematic differences are not present. The only exception is ODA-like and development projects which are slightly more and less likely to be implemented, respectively. Given that I make within-flow class comparisons, this is not an issue.

Finally, citizen attitudes may influence implementation. If news of a planned project reaches a local community and is unpopular, this could lead to protests, delays, or the complete cancellation. If this is the case, then using incomplete projects as a counterfactual would not be valid since there would be systematic differences in attitudes toward China in those communities. I contend this is unlikely since anti-China protests, espe-

cially those related to aid projects, are quite rare prior to the 2014-15 survey period.[17] To further check, I draw on ACLED event data and tabulate the number of China-related protests that occurred within a 25 km vicinity following the project announcement and prior to implementation. Again, results in appendix C show protests have no substantive impact on project initiation.

5.2 Model

To estimate the effects of exposure, I move beyond the conventional approach of creating a binary treatment variable based on whether respondents fall within a given bandwidth of the project site. Instead, I develop a continuous dose-response curve that assumes no fixed bandwidth but only that treatment attenuates as distance from a site increases until it vanishes after some cut point.

Spatial data exhibit certain properties that pose inherent challenges. First, treatment and outcome variables are not measured or defined at the same spatial level. Opinions are measured at the individual level while aid can range in scope from small village-level interventions to large-scale, province-spanning infrastructure projects. Second, treatments exhibit high heterogeneity. While some projects may be concentrated others may consist of multiple phases across time and space that operate in tandem to produce an effect. Third, owing to the previous property, spillover effects are likely a core feature of the treatment, not a bug. Effective aid should have a multiplier effect that extends beyond its spatial "unit." Yet, the temporal and spatial degree of spillover is difficult to identify *a priori*.

Such challenges requires special considerations that most traditional spatial regression models (e.g. Bannerjee et al. 2008; Anselin 2001) which focus on spatially-correlated errors are ill-equipped to handle. More recently, others have chosen to match respondents to treatments based on given distance bandwidths around projects, encoding respondents

17. Of the few China-related protests in the ACLED data, most center on working conditions in Chinese factories. Whether these factories are connected with Chinese official financing is unknown. Only one protest was verifiably-linked to an aid project.

within the threshold as having received treatment and others as controls (e.g. Isaksson and Kotsadam 2018; Blair, Marty, and Roessler 2021). While this approach may help deal with property one above, it homogenizes treatments into a binary dose regardless of how many projects respondents are exposed to a their exact distance to the site. This is problematic because it assumes effects are uniform up until a cutoff and then vanish which is contradictory to natural expectations. In practice, we expect project impacts on local communities and, hence, attitudes should attenuate in a smooth fashion as we get further away, eventually shrinking to zero after some point. Assuming a uniform effect also excludes the possibility of accounting for project salience. More salient projects may have a consistent effect over a larger range while less salient projects attenuate faster.

To overcome these challenges, I implement an additive semi-parametric spatial regression model (Imai et al. 2018). The model estimates a flexible dose-response curve that is a function of a respondent's distance to *all* treatment sites and is defined as follows. Let $i = 1 \ldots, N$ denote respondents and $j = 1, \ldots, J$ index treatment sites. The outcome variable is continuous $Y_i \in \mathbb{R}$ and treatment is binary $X_j \in \{0, 1\}$ for potential and implemented sites, respectively. Treatment is assumed to be random. Distances between respondents and treatment sites are represented by a distance matrix D_{ij}. Consider the specification:

$$Y_i = \alpha^* + \sum_{j=1}^{J} X_j f_i(D_{ij}) + \sum_{j=1}^{J} (1 - X_j) g_i(D_{ij}) + \epsilon_i \tag{1}$$

where $f_i(d)$ and $g_i(d)$ are unknown functions representing the dose-response curve for respondent i for treatment and placebo sites, respectively.

Following Imai et al.'s simulation findings, I use restricted cubic splines to estimates f and g.[18] The flexibility of model (1) handles heterogeneous effects by allowing the same projects to affect individuals differently. However, it does assume treatment sites have an independent effect, i.e. no interaction among treatment sites. The average treatment

18. They find that compared with other estimation functions such as B-splines, natural cubic splines, and truncated power series, restricted cubic splines are most consistent and stable in their retrieval of the true data-generating dose-response curve. My experience corroborates their findings. In initial sensitivity tests, I also tested natural cubic splines and B-splines but found they were extremely sensitive to the chosen D_{max} value, with estimated randomly oscillating in direction as the bandwidth increased.

effect (ATE) as a function of distance is given by:

$$\hat{\tau}(d) = [G^*(d)^\top - G^*(D_{max})]\hat{\beta} \tag{2}$$

where G^* is a vector basis functions $\phi_{1:K}$ calculated at distance d:

$$G^*(d) \equiv (1, \phi_1(d), \ldots, \phi_k(d), -\phi_1(d), \ldots, -\phi_k(d))^\top \tag{3}$$

D_{max} is the distance at which effects are assumed to completely dissipate, and $\hat{\beta}$ is the vector of coefficient estimates for bases of f and g.

I estimate the effects with multiple distance thresholds to compare how this hyper-parameter influences the results. In addition to a baseline model, I also include country- and time-fixed effects models where time denotes the survey year. The results are reweighted using Afrobarometer's survey weights so that samples from each country match national-level demographics, helping ensure the estimated effects are demographically generalizable beyond the samples located within the chosen distance bandwidths.

This approach, although bespoke, offers numerous advantages. It accounts for exposure to numerous projects, allows for a smooth estimate of treatment effects over a large distance, and can help gauge project salience. It also has the benefit of parsing out direct from indirect effects of projects. Assuming the former is a function of a project's impact on the local community, the effects should vary as a function of distance from a project site. Conversely, the latter should depend on other individual habits such as news consumption, political priors, personal networks, all of which should be independent of an individual's distance from a project. Therefore, the intercept and fixed effects will soak up the indirect effects. Combined with the as-if randomness between the treatment and placebo groups, the estimate should only capture the treatment effect.

6 Results

Given that spline basis functions are not directly interpretable, below I focus on analyzing the estimated treatment effects from the two-way fixed effects models. Interested readers can consult Appendix D for all regression panels. Since the estimated treatment effects depend on treatment-outcome site pairs, including pairs with large distances leads to instability in the estimates. Moreover, we can safely assume that projects hundreds of kilometers away from respondents should have no effect on attitudes. Without any *a priori* reason to assume an exact threshold at which effects should fully diminish, I instead present results for 100, 200, and 300 km cut-offs and compare them for consistency. All uncertainty bounds are based on bootstrapped confidence intervals clustered by the township-village sampling units.[19]

The panels in Figure 2 display the estimated average treatment effect of exposure based on all project types. The top panel shows the effect on attitudes towards the efficacy of Chinese economic assistance, the second from top panel shows people's emotional valence towards China's economic and political role in their country, and the second from bottom panel shows proclivity for China's development model, and the bottom panel the China attitudes index. Projects only have a detectable effect on perceptions of China's role in respondent's country, with respondents living on within about a 10km radius of projects being 0.2% less likely to view China's role positively. However, the effects are minuscule, quickly attenuate, and are not detectable when assuming a 200km bandwidth.

Exposure to Chinese aid, in the aggregate, appears to have essentially no impact on attitudes. However, this is not surprising given the degree of heterogeneity different forms of Chinese financing. To test my expectations and examine heterogeneity, I parse out effects for the index by flow class and donor intent. I then examine each of the index's constituent components.

19. Estimated effect sizes grow in magnitude with the threshold but so does uncertainty. One way of understanding this is that the cut-off has a regularizing effect. The short the cut-off the more effects shrink towards zero. This also helps protect against overestimating treatment effects.

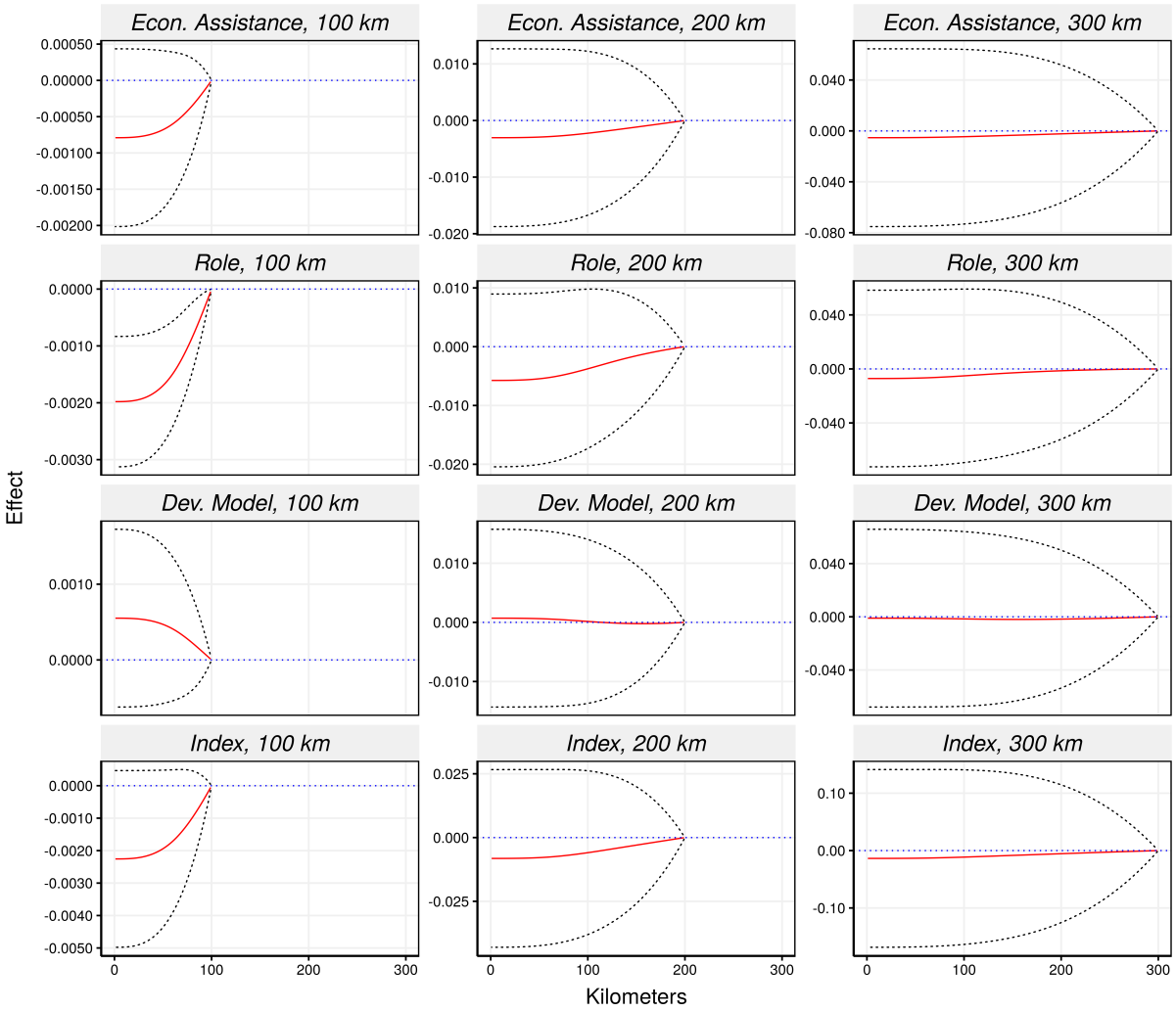

Figure 2: **Effect of Exposure—All Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

6.1 Index of Attitudes toward China

Figure 3 plots the effects of exposure to projects on the index score by flow class. Although at the 100km bandwidth ODA-like sites point in the positive direction while OOF-like and Vague point in the opposite directions, there are no detectable differences across flow classes–contrary to expectations about ODA- and OOF-like projects having a positive impact. This speaks to the way in which aid characteristics influence attitudes. Flow classes are a function of how projects are financed. Given the opacity of Chinese aid deals, it is extremely unlikely individuals would know much if anything about the financing details of a project just through proximity. Flow classes do tend to be correlated with different donor intent types (see figure 9 in appendix A), however, and these do

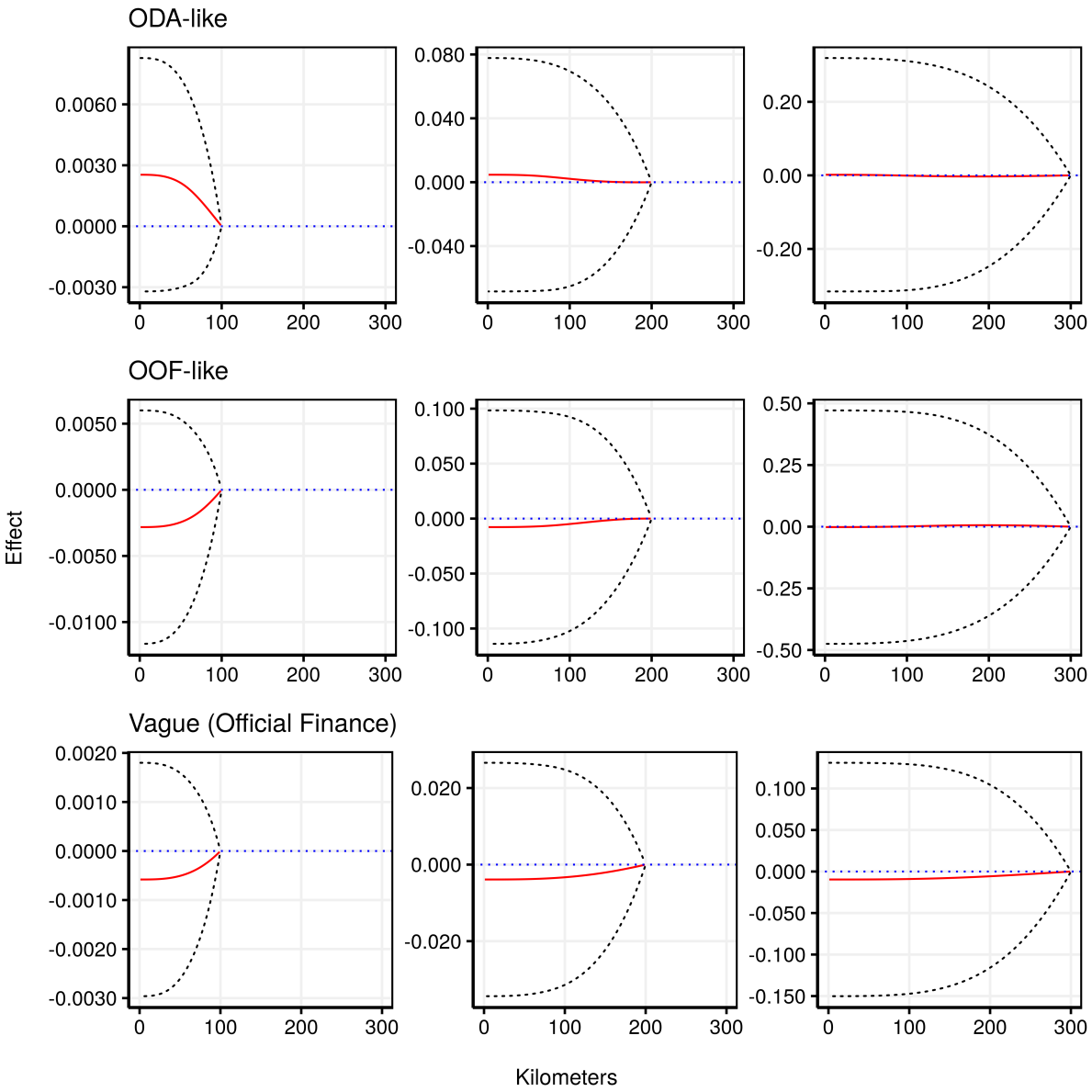

Figure 3: **Effect of Exposure on China Index—By Flow Class.** Black dotted lines indicate 95% confidence intervals.

correspond to salient characteristics.

Disaggregating by intent tells a different story. In figure 4, we can see that exposure to development and commercial projects damages respondents' perceptions of China. Representational and mixed projects may have a positive effect but these are not statistically significant. I focus my attention commercial projects which are significant and detectable up until a threshold of about 120 kilometers. Exposure to commercial projects reduces respondent's score on the China index by 0.06 points up until 60 km at which

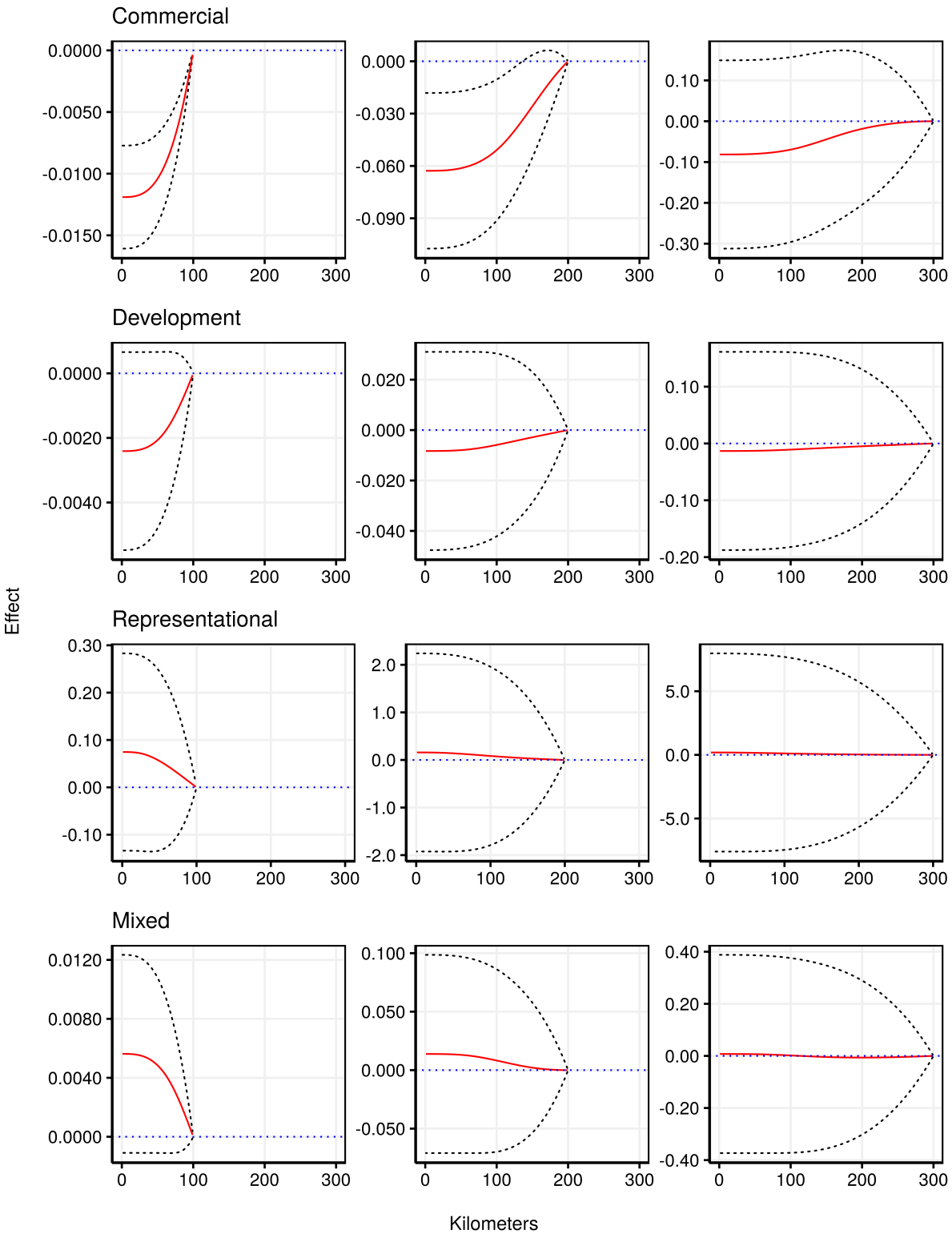

Figure 4: **Effect of Exposure on China Index—By Donor Intent.** Black dotted lines indicate 95% confidence intervals.

point effects start to attenuate. At 100 km the reduction is 0.05 points and at 137 km the reduction is 0.03 points. Effects lose significance beyond 137km. These correspond

to a 3.5, 2.9, and 1.8 percent decrease over the mean index score (1.68), respectively.

These results provide tentative support for the third expectation that commercial projects damage attitudes toward China. However, establishing the mechanism—increased xenophobia and/or crowding labor markets—requires more testing (see below). More importantly, these results provide evidence for the importance of project salience in shaping attitudes. Commercial projects tend to be larger in size and monetary value, focused in hard development sectors, and often involve an imported Han labor force—all of which make for a more noticeable presence in local communities. In addition, the emphasis on hard development speaks to the importance of impact 'radius' in shaping attitudes. Exposure to development projects may damage attitudes towards China, but their often targeted nature makes it difficult to identify any noticeable effect among the wider community around project sites.

Below, I compare the effects of exposure to commercial and development projects on each of the index's constituent components. I focus on these two intent types since they provide the most crisp juxtaposition of project dynamics between all four types. Plots for the other two intent types and flow classes are available in appendix E.

6.2 Exposure to Commercial and Development Projects

Turning first to commercial projects, we see a consistent negative impact on attitudes towards both the efficacy of China's economic assistance as well as China's overall political and economic role in the recipient country. Figure 5 shows the effects for both of these are statistically significant in the 100 and 200 km bandwidths. Focusing on the latter, we see that exposure decreases the probability of viewing Chinese aid as effective by 0.03 for individuals within 50 kilometers, between 50 and 123 kilometers the effect tapers off to 0.02, and from there shrinks toward 0.012 around 150 kilometers at which point it loses significance. When comparing these to the baseline frequency in the entire sample (0.65), these effects correspond to a 4.6, 3.1, and 1.8 percentage change from the mean. The impact on perceptions of China's overall role are slightly smaller. Between

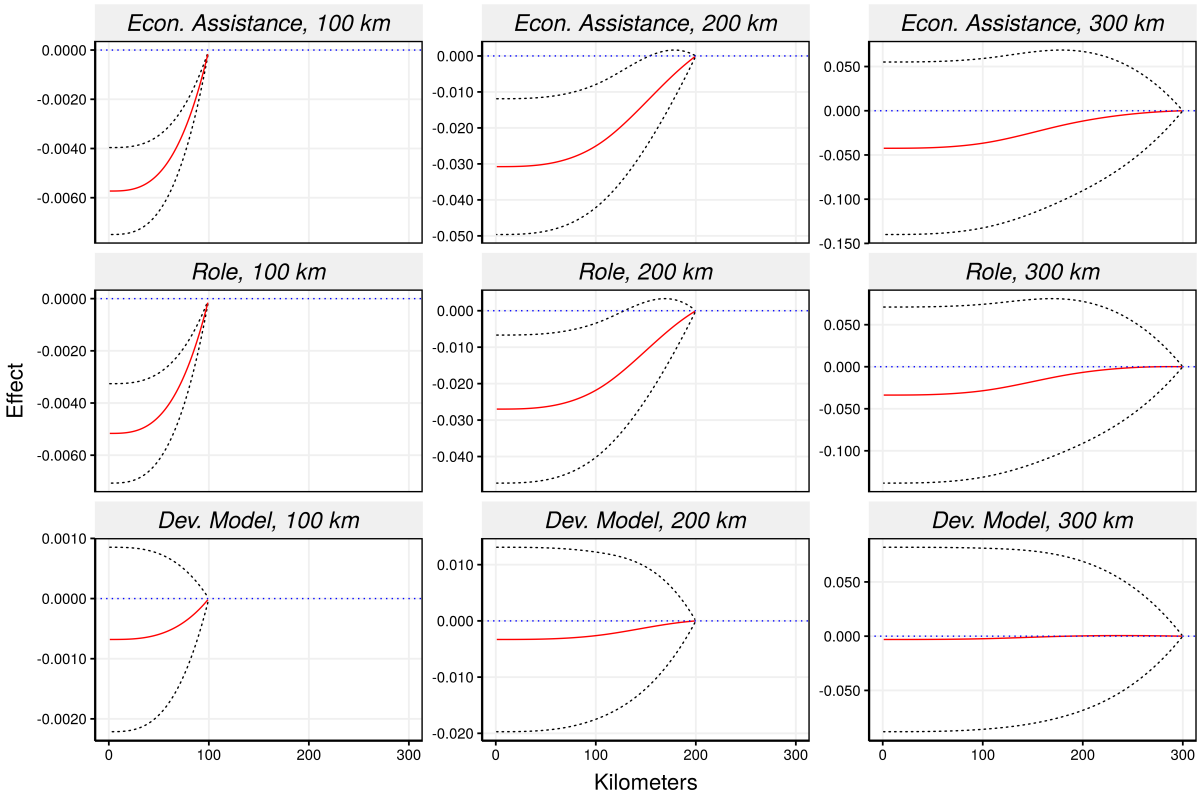

Figure 5: **Effect of Exposure—Commercial Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

0 and 57 kilometers, exposure reduces the probability of favorable view by 0.027 points. The effect shrinks to 0.02 points by 123 kilometers and loses significance shortly thereafter. Comparing each of these to the baseline frequency (0.73) results in a 3.7 and 2.7 percentage change from the mean, respectively.

These results suggests that exposure to China's commercial projects undermines the perceived efficacy of all its entire aid program in a country. Given there are only 55 commercial projects out of 1521 total, this effect is inherently limited to smaller subset of individuals. However, Chinese development projects are often co-located, meaning a single commercial project in an urban area could undercut any possible positive benefits of its other projects. The fact that these results hold out to a radius of 100+ kilometers means a single commercial initiative could be detrimental to China's image in the eyes of a large plurality of citizens, especially in countries with small land areas and concentrated populations.

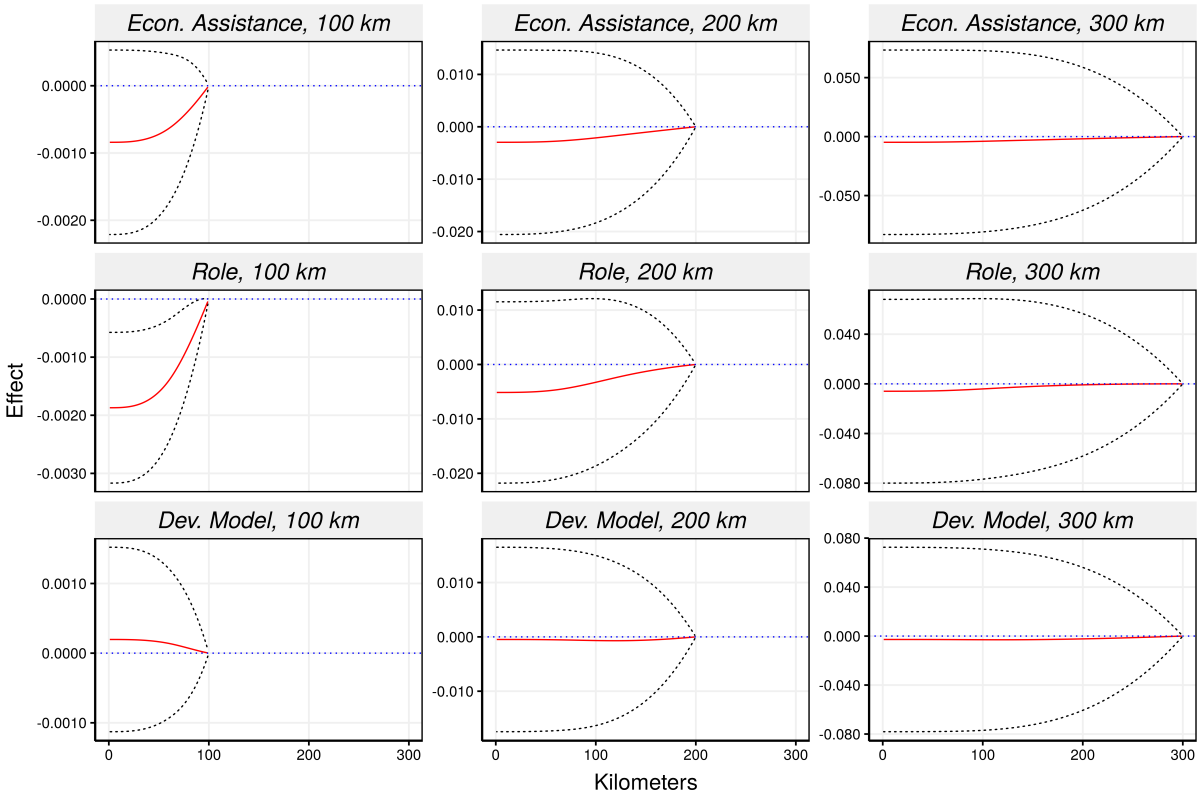

Figure 6: **Effect of Exposure—Development Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

Despite exhibiting characteristics that are in many ways the opposite of commercial projects, China's development sites fare no better at incubating warmer views towards China in the eyes of local community members. Looking at figure 6, we see these projects do not lead to improved perceptions on any three of the constituent elements of the index. In fact, development projects appear slightly undercut China's perceived image as a positive influence (role) on recipient countries among citizens in the immediate vicinity of projects (0.002 probability point reduction). However, this effect is almost negligible.[20]

China's aid fails to improve attitudes across all intent types and flow classes, my first and second expectations do not find support. However, the results of exposure to commercial projects suggests that there is something about the nature of these projects rendering them fundamentally different from the others which leaves local communities with a bad taste in their mouth about China's presence in their country. What are these

20. Results for the other two intent types, mixed and representational, are also negligible or non-existent. See appendix E.

characteristics? Are the deleterious effects a function of Chinese laborers exacerbating xenophobia, crowding out local labor markets, both, or something else entirely?

6.3 Unpacking the Commercial Project Mechanisms

To answer these questions and further tease out the mechanism I pose in my last expectation, I utilize two survey questions that ask respondents to select the primary reason for their negative and positive views of China. For each question, respondents are given a list of potential reasons and they must select one. Fortunately, among the choices listed for the negative views question are behavior of Chinese citizens and concerns over Chinese economic activities taking away jobs or business from the respondent's country, allowing me to directly probe the xenophobia and labor market hypotheses. For each question, I decomposed the reasons into a series of binary variables and re-estimate the same model as before to determine if and how exposure to commercial projects changes the respondent's likelihood of selecting that reason.

Figure 7 shows the treatment effect of direct exposure on five different reasons for negative views (from top to bottom): the behavior of Chinese, cooperation with autocratic (non-democratic) leaders, hurting local labor markets, land grabbing, and resource extraction. The results strongly support both the xenophobia and labor market hypotheses. To aid substantive interpretation, in table 1 I provide the estimated change in probability and normalized effect (change in probability over the baseline (mean) probability) for each of these reasons at different distances. Exposure to commercial projects increases the probability of selecting the behavior of Chinese citizens as their primary reason for negative views of China by 0.008 points and this effect holds out to a distance of 75 kilometers. Though nominally small, when compared with the average respondent, this represents roughly a 12% increase. As for hurting labor markets, exposure increases the probability 0.017 and 0.014 points at 10 and 100 kilometers, respectively. In terms of a change over the average probability, these represent 10 and 8.1% increases. Commercial projects do not have a statistically significant nor substantively meaningful influence on

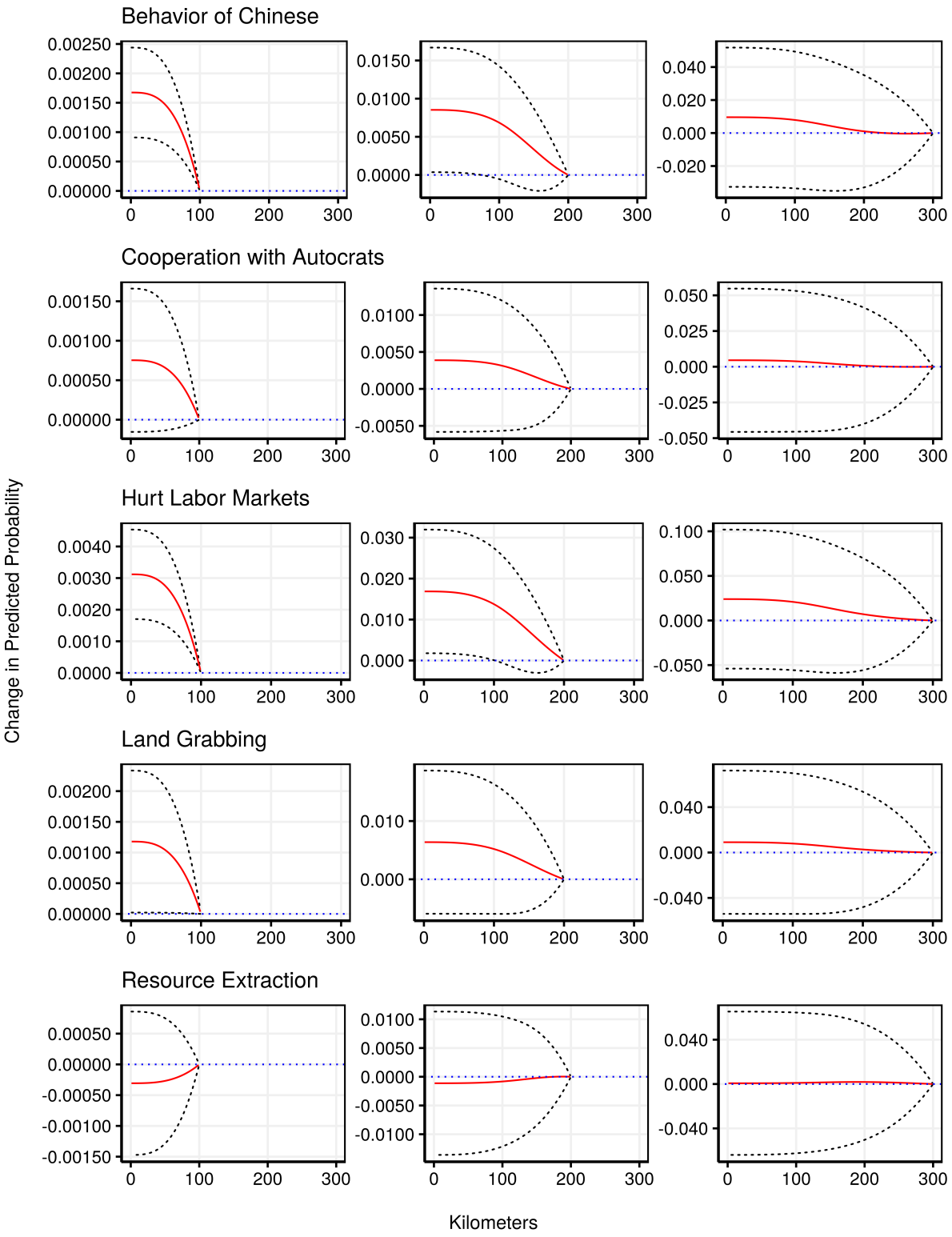

Figure 7: **Effect of Exposure to Commercial Projects on Primary Reason for Negative Views of China.** Black dotted lines indicate 95% bootstrapped confidence intervals.

any of the other reasons.[21]

21. The effect on land grabbing is significant but only within a very small threshold and the effect is

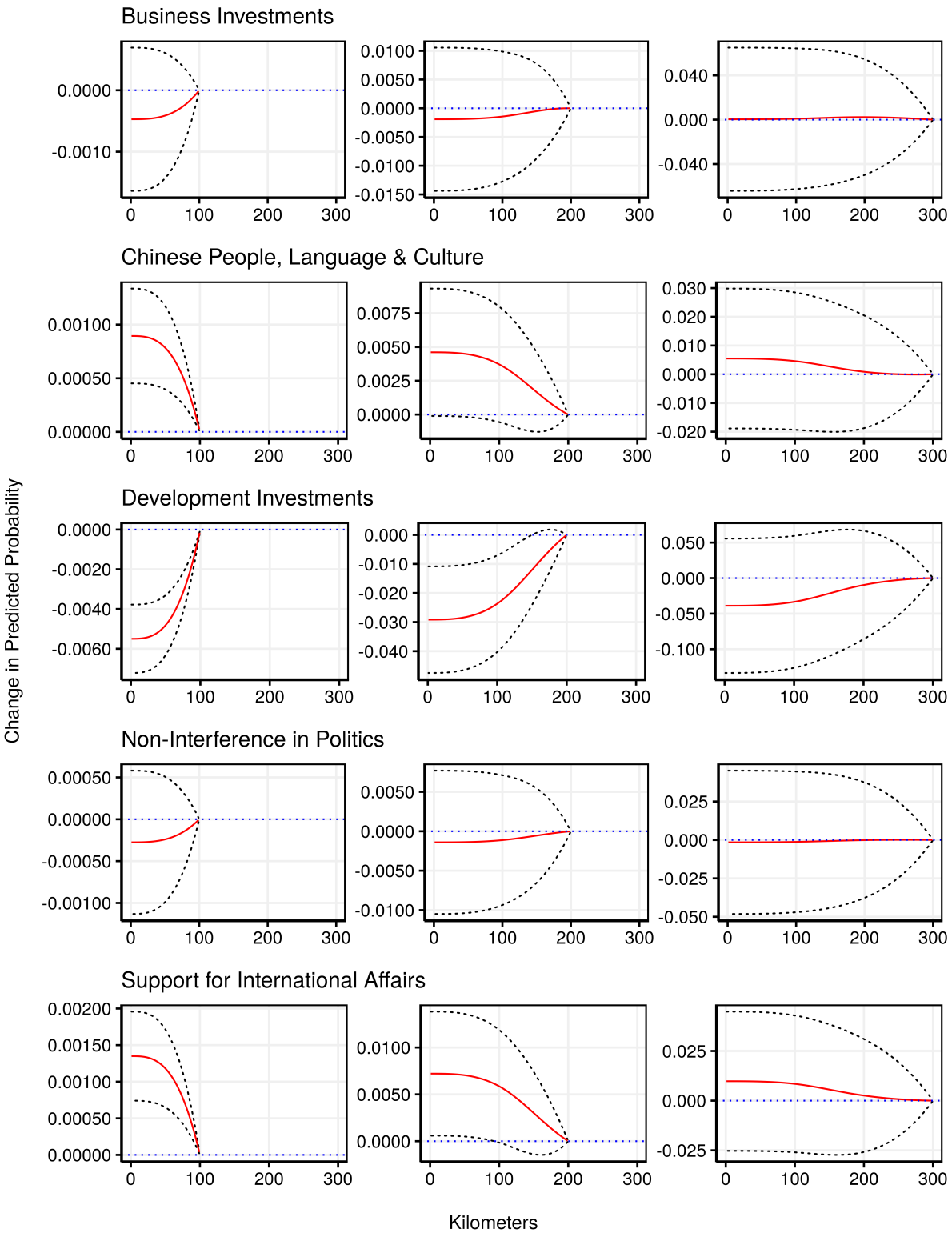

Figure 8: **Effect of Exposure to Commercial Projects on Primary Reason for Positive Views of China.** Black dotted lines indicate 95% bootstrapped confidence intervals.

Another possibility is that exposure to commercial projects alters citizens positive

negligible.

framings about China. Within the aggregate data, respondents overwhelmingly see China's aid regime as effective and China as a beneficial economic and political actor in their country. However, only some of these individuals have any direct experience with Chinese aid. It is possible firsthand experiences with commercial projects may shift these attitudes. Figure 8 plots how exposure changes the probability of selecting five different reasons for positive views: China's business investments; Chinese people, language and culture; China's development investments; China's non-interference approach to foreign relations; and China's support for the recipient country in international affairs.

The results suggest that firsthand experience with China's commercial projects leads to a reorientation of local citizens' positive framings of China. Although commercial projects are more similar to free market business investments in nature, these have no impact on this choice. Instead, these make respondents less likely (-8.2 to -6.6 percent over basline) to select development investments as their primary reason for positive views, suggesting China's commercial projects and their practice of importing Han laborers, undermines their overall aid regime in the eyes of local communities. However, exposure simultaneously increases respondents' likelihood of choosing "China's support for their country's international affairs." In combination, these results suggest there may be a *not in my backyard* (NIMBY) effect at play whereby individuals with firsthand exposure to Chinese commercial investments see China positively at the macro level (i.e. as a good ally to their country), but are unhappy with the micro-level ramifications of that partnership (increased Han presence in their communities).

Table 1: Effect of Exposure to Commercial Projects on Reasons for Positive & Negative Views of China

	Negative Views		Positive Views	
Kilometers	Behavior of Chinese	Hurt Labor Markets	Development Investments	Support for International Affairs
Predicted Change in Probability				
10	0.0085 [0.0004, 0.0167]	0.0169 [0.0018, 0.0320]	-0.0292 [-0.0475, -0.0108]	0.0072 [0.0006, 0.0138]
25	0.0085 [0.0004, 0.0167]	0.0168 [0.0017, 0.0319]	-0.0291 [-0.0474, -0.0108]	0.0072 [0.0006, 0.0138]
50	0.0083 [0.0003, 0.0164]	0.0165 [0.0016, 0.0314]	-0.0285 [-0.0466, -0.0104]	0.0070 [0.0005, 0.0136]
75	0.0078 [0.0000, 0.0157]	0.0156 [0.0011, 0.0301]	-0.0268 [-0.0444, -0.0092]	0.0066 [0.0003, 0.0130]
100	0.0069 [-0.0005, 0.0143]	0.0137 [0.0001, 0.0274]	-0.0237 [-0.0403, -0.0071]	0.0059 [-0.0002, 0.0119]
Change over Baseline (%)				
10	11.9 [0.5, 23.4]	9.9 [1.0, 18.8]	-8.2 [-13.3, -3.0]	10.2 [0.8, 19.5]
25	11.9 [0.5, 23.3]	9.9 [1.0, 18.7]	-8.1 [-13.3, -3.0]	10.1 [0.8, 19.5]
50	11.7 [0.4, 23.0]	9.7 [0.9, 18.5]	-8.0 [-13.1, -2.9]	9.9 [0.7, 19.2]
75	11.0 [0.0, 21.9]	9.1 [0.6, 17.7]	-7.5 [-12.5, -2.6]	9.4 [0.4, 18.3]
100	9.6 [-0.8, 20.0]	8.1 [0.0, 16.1]	-6.6 [-11.3, -2.0]	8.3 [-0.2, 16.7]

Note: 95% bootstrapped confidence intervals in brackets

7 Discussion

To remind readers, I hypothesized that exposure to two different types of Chinese aid, ODA- and OOF-like, would improve local citizens' perceptions of China, with the former less so than the latter. These expectations were based on a growing literature (Martorano, Metzger, and Sanfilippo 2018; Bluhm et al. 2018; Dreher et al. 2017; Blair and Roessler 2021) showing various effects these two types of financing have on local communities in combination with their other characteristics such as sectoral differences. However, neither type of aid has any impact on attitudes. In retrospect, this finding is intuitive when one considers the two flow classes reflect differences in financing details that local communities do not observe. Instead, when examining how direct exposure to aid influences attitudes it makes sense to think about variation in the aid's most salient features.

In the case of China's financing, donor intent type serves as the most useful heuristic for project features.[22] After parsing out aid by project type and specific components of the China attitudes index, heterogeneous effects emerge. Commercial projects hurt perceptions of China's overall role in recipient countries as well as their aid regime's efficacy and development projects also seem to slightly damage perceptions of China's role. Though direct exposure to both types are damaging to China's image, the effects of commercial projects are larger and robust across longer distances. Given that commercial projects tend to be larger in scope, monetary value, and in harder sectors, I take this as evidence of the important role project salience plays in shaping citizen's attitudes. Salience seems to have a multiplier effect. In the case of Chinese aid, salience magnifies a negative effect, but for other donor countries it could amplify positive effects. I do not explore this here, but it is worthy of future research.

The results do provide clear support for my final expectation: projects that are asso-

22. Although intent types are highly correlated with the flow classes, they are still distinct. For instance, ODA-like aid is almost solely for development purposes, but OOF-like projects fall into all four intent categories. See appendix A.

ciated with large in-flows of Chinese workers such as Commercially-driven projects in the infrastructure, energy creation, and communications sectors will lead to more negative attitudes toward China. Direct exposure to commercial projects makes respondents see Chinese economic assistance as less effective and China's role within their country less positively. This is primarily a result of the way in which China tends to execute commercial projects—importing Han labor forces that are perceived as crowding out local labor markets, replacing or infringing upon local culture, or both. These practices blunt receptivity towards China's overall aid regime within recipient countries, but at the same time lead people to see China as a good international ally. These findings concord with Bräutigam's (2009) work.

In short, the soft power ramifications of direct exposure to Chinese aid is complicated. On the one hand, direct exposure undermines attitudes about China's influence *within* recipient countries, but simultaneously makes individuals more likely to see China as a beneficial *foreign* partner. The somewhat muted effects of direct exposure on attitudes combined with the NIMBY effect of commercial aid suggest that the effects of aid on attitudes may primarily travel along the indirect pathway.

8 Conclusion

How does aid influence people's perceptions of donor countries? In this paper, I provide part of the answer by examining the effect of direct exposure to Chinese-funded aid projects on Africans' attitudes toward China. I test the theory by combining Afrobarometer survey data with information on over 1500 Chinese aid projects in Africa. The results provide evidence that direct exposure matters, but these effects are limited to commercial aid which hurts perceptions of China. Given that commercial "aid" is unique to China's aid regime and is more akin to foreign direct investment, my findings may not generalize to traditional Western donors. In essence, there is something unique about China.

By exploring the mechanism through which commercial aid shapes attitudes, I find

that an imported labor force is the primary culprit—a practice which is unique to China among donor countries. The results help contextualize debates about China's aid as a direct threat to traditional Western donors. Although China may be able to 'buy' support of politicians in recipient countries through opaque backroom deals, this is not true among citizens in communities proximate to aid sites. If anything, direct exposure to China's aid undermines China's image within recipient countries. China's foreign aid is not directly fungible with soft power. China's commercial projects are monetarily much larger than it's development projects, evidencing that spending more does not curry more favor with recipient country citizens.

This study builds on a growing literature on how aid shapes recipient citizen attitudes toward donors and their development models. Theoretically, I unpack three different rationales for how aid can shape attitudes conditional upon project characteristics and their expected impacts on local communities. I then directly test the causal mechanism linking those characteristics to changes in attitudes, an aspect that has been lacking in the extant literature. By using cross-sectional geo-located data, I move the empirical needle forward, exploring causal mechanisms at the township-village level across 32 countries.

Though I outline direct and indirect pathways, I only test the latter in this paper. There is good reason to suspect a greater proportion of aid's influence on attitudes travels through the former. In any given country, a limited number of individuals will have direct experience with aid while a far greater number are likely to have heard about a donor's aid program, especially in aid-dependent countries or when donors have a large presence. Indirect pathways, although more nebulous and complex in nature, are no less important. Future work should explore these channels and the myriad individual and domestic political mediating factors lying along them.

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Appendix A Chinese Official Financing Data

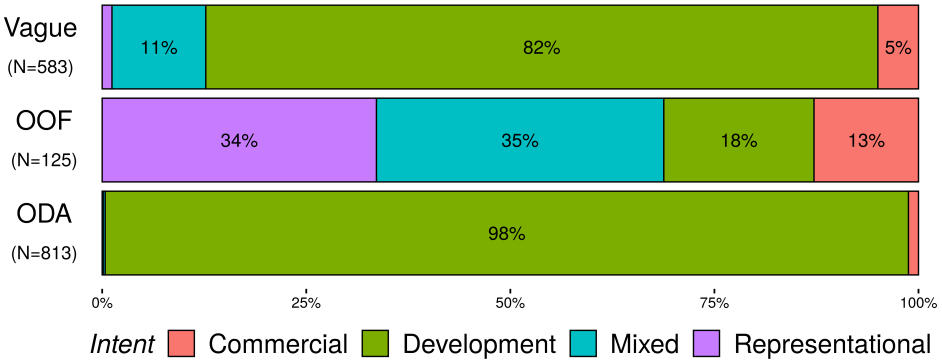

Figure 9: **Flow Class by Donor Intent.** ODA-like and Vague projects are primarily intended for development purposes. OOF projects, however, are more evenly distributed across each intent category. *Note: percent labels are cut off at* $\leq 5\%$.

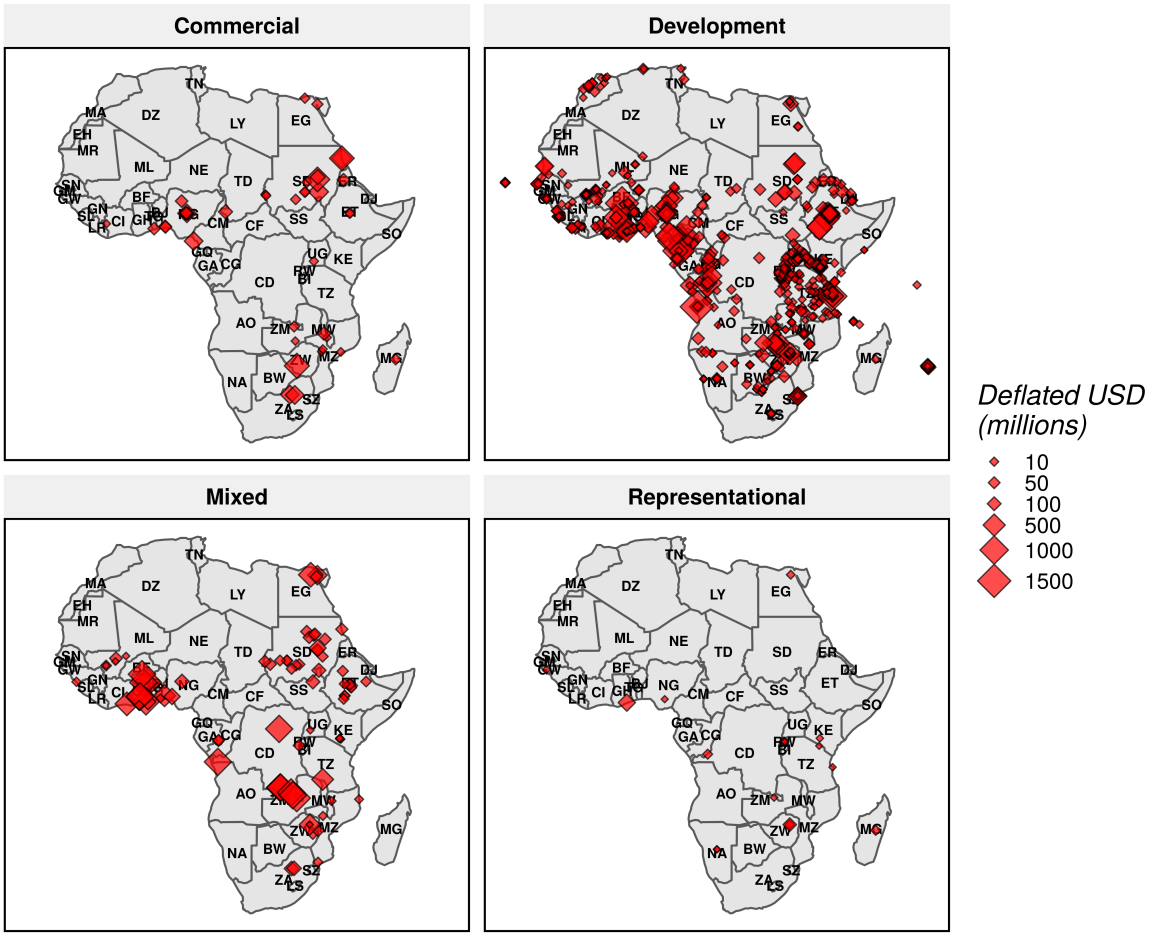

Figure 10: **Geographic Distribution of Projects by Intent and Value.** Projects are sized according to their value in terms of 2014 deflated US dollars.

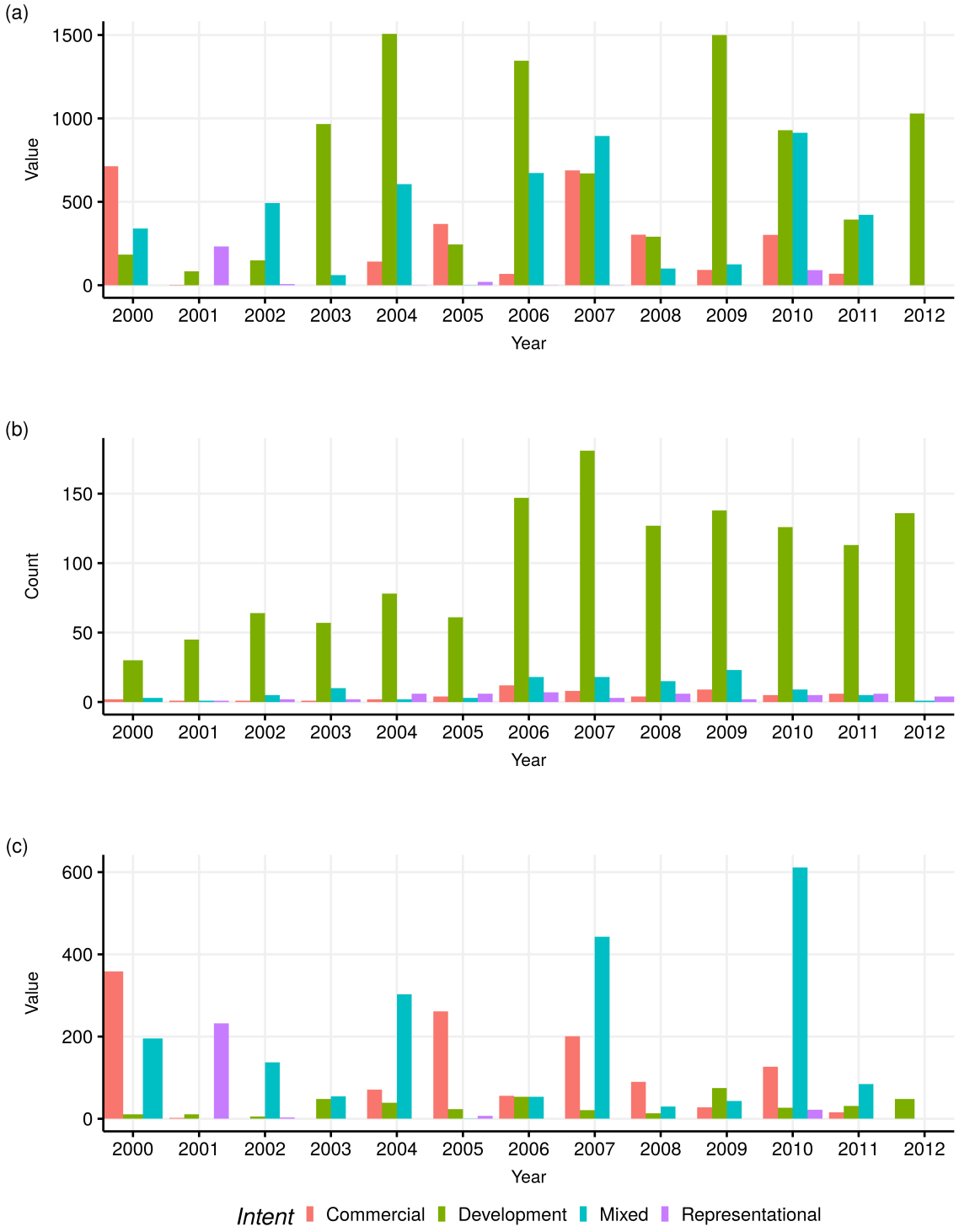

Figure 11: **Project Statistics by Intent and Year.** (A) Total monetary value in 2014 deflated US dollars. (B) The number projects implemented or announced. (C) The average monetary value of projects.

Table 2: Project Statistics by Year and Intent

	Commercial			Development			Mixed			Representational		
Year	N	Amount	Avg.	N	Amount	Avg.	N	Amount	Avg.	N	Amount	Avg.
2000	2	716.92	358.46	30	326.67	10.89	3	586.6	195.53	—	—	—
2001	1	2.01	2.01	45	490.37	10.9	1	0	0	1	232.14	232.14
2002	1	0	0	64	347.97	5.44	5	686.46	137.29	2	6.61	3.31
2003	1	0	0	57	2758.84	48.4	10	543.66	54.37	2	0.05	0.02
2004	2	141.65	70.82	78	3051.56	39.12	2	605.76	302.88	6	0.57	0.1
2005	4	1045.43	261.36	61	1437.82	23.57	3	2.02	0.67	6	41.02	6.84
2006	12	672.9	56.08	147	7865.2	53.5	18	966.64	53.7	7	1.08	0.15
2007	8	1603.83	200.48	181	3830.29	21.16	18	7967.23	442.62	3	0.57	0.19
2008	4	358.95	89.74	127	1665.27	13.11	15	444.24	29.62	6	0.11	0.02
2009	9	252.3	28.03	138	10308.71	74.7	23	1001.53	43.54	2	0	0
2010	5	632.32	126.46	126	3401.08	26.99	9	5503.79	611.53	5	109.67	21.93
2011	6	95.67	15.94	113	3538.4	31.31	5	422.78	84.56	6	0	0
2012	—	—	—	136	6543.04	48.11	1	0	0	4	0.25	0.06
Total												
	55	5521.97	100.78	1303	45565.24	31.32	113	18730.72	150.49	50	392.08	22.06

Note: Amounts are in millions of 2014 deflated US Dollars.

Appendix B Afrobarometer Survey and Questions

Subsection B.1 Afrobarometer Sampling Scheme

Afrobarometer utilizes a clustered, stratified, multi-stage, area probability sampling strategy. Countries are stratified based on their main sub-national unit of government and by an urban/rural divide. This ensures ample coverage of ethnic and linguistic groups. Sampling of respondents from within these units then proceeds in five stages:

1. In rural areas, secondary sampling units are drawn.
2. Randomly select primary sampling units.
3. Randomly select interviewer start points within the unit.
4. Interviewers randomly select households.
5. Interviewers randomly select a respondent within the household and then iterate between males and females to ensure balance.

Subsection B.2 Dependent Variable

Q80A: In your opinion, which of the following countries, if any, would be the best model for the future development of our country?

Q81B: Now let's talk about the role that China plays in our country. In general, do you think that China's economic and political influence on [ENTER COUNTRY] is most positive, or mostly negative, or haven't you head enough to say?

Q1E: Now let's talk about the role that China plays in our country. In your opinion, does China's economic development assistance to [ENTER COUNTRY] do a good job or a bad job of meeting the country's needs, or haven't you heard enough to say?

Subsection B.3 Controls

Q1: How old are you?

Q101: Respondent's gender (Answered by interviewer)

URBRUR: Urban or rural sampling unit (Answered by interviewer)

Appendix C Identification Strategy: Planned versus Implemented Projects

Table 3: Effects of Protests on Likelihood of Project Implementation

	Dependent variable:					
	Project Implemented					
	(1)	(2)	(3)	(4)	(5)	(6)
Leader Home Region	0.041	0.025	0.039	0.023	0.061	0.049
	(0.034)	(0.034)	(0.034)	(0.034)	(0.044)	(0.044)
No. China-related Protests	−0.100	−0.097	−0.101	−0.096	−0.158	−0.153
	(0.085)	(0.085)	(0.085)	(0.085)	(0.102)	(0.101)
ODA-like		0.106***		0.112***		0.037
		(0.023)		(0.023)		(0.029)
OOF-like		0.102**		0.055		0.037
		(0.041)		(0.051)		(0.058)
Development			−0.031	−0.078*		−0.122**
			(0.041)	(0.047)		(0.053)
Commercial			−0.080	−0.093		−0.060
			(0.069)	(0.068)		(0.078)
Representationl			0.032	0.008		0.014
			(0.071)	(0.074)		(0.111)
Monetary Value (logged 2014 USD)					−0.016***	−0.015***
					(0.005)	(0.006)
Constant	0.774***	0.711***	0.804***	0.782***	1.017***	1.100***
	(0.011)	(0.017)	(0.040)	(0.044)	(0.084)	(0.115)
Observations	1,521	1,521	1,518	1,518	1,093	1,090
Log Likelihood	−822.770	−811.275	−817.760	−806.080	−593.663	−584.801
Akaike Inf. Crit.	1,651.540	1,632.551	1,647.519	1,628.159	1,195.326	1,187.601

Note: *p<0.1; **p<0.05; ***p<0.01

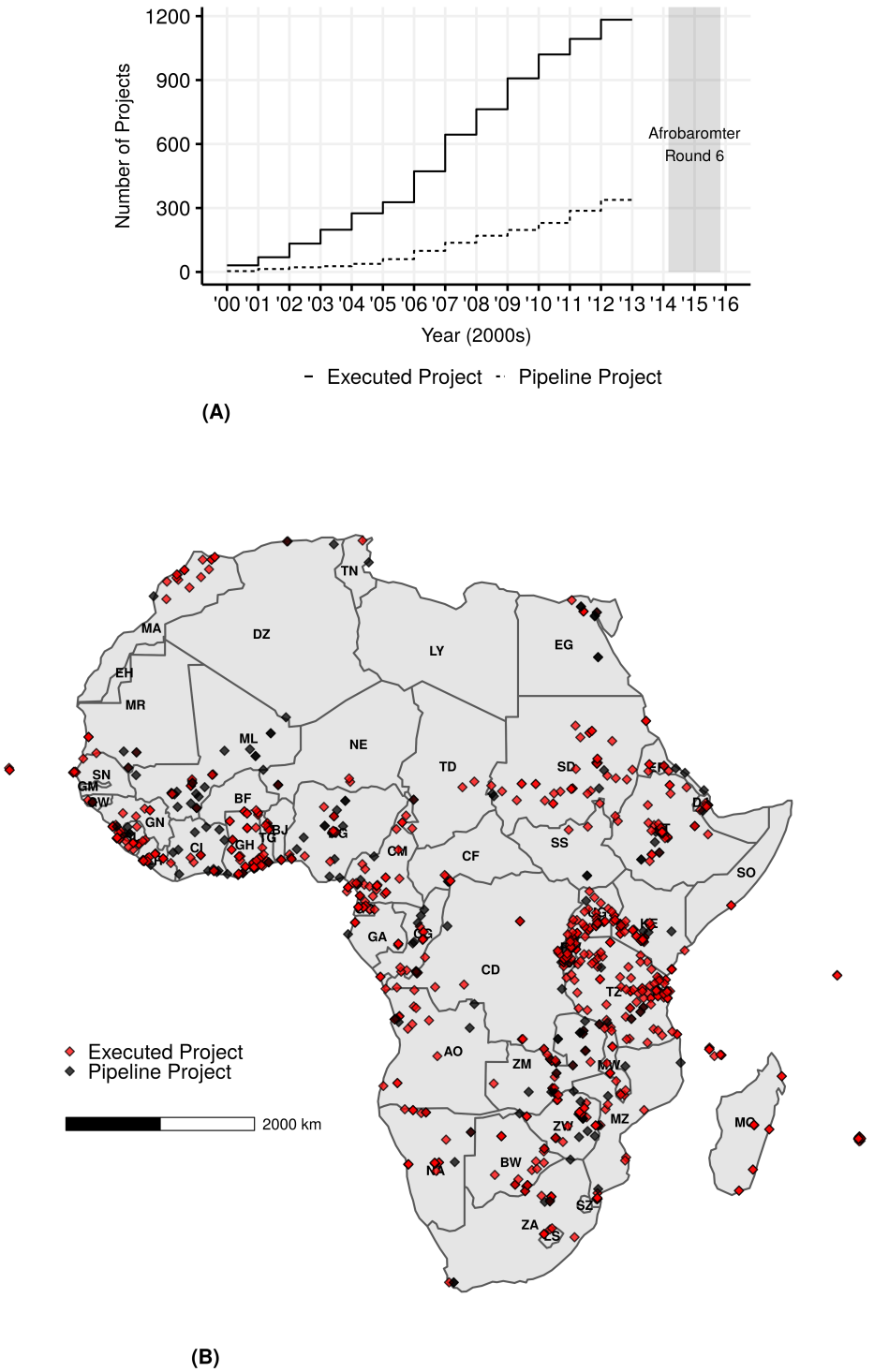

Figure 12: **Timing and Location of Executed versus Pipeline Projects.** (A) The number of executed and pipeline projects coming online each year. I leverage the counterfactual difference in 'exposure' to these two categories. All project data precedes the survey wave. (B) Red and black diamonds indicate the locations of executed and pipeline projects, respectively.

Appendix D Regression Tables

(See next page)

Table 4: Restricted Cubic Spline OLS: All

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	0.001	0.006***	0.001	-0.007***	-0.005***	-0.007***	-0.009**	0.002	-0.009**	-0.003	0.001	-0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.002)
$Treatment_{\phi_2}$	-0.001	-0.012***	-0.001	0.017***	0.011***	0.017***	0.023***	-0.001	0.023***	0.007*	-0.001	0.007*
	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)	(0.008)	(0.008)	(0.008)	(0.004)	(0.004)	(0.004)
$Treatment_{\phi_3}$	0.000	0.006***	0.000	-0.011***	-0.007***	-0.011***	-0.016***	-0.003	-0.016***	-0.005**	-0.001	-0.005**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)	(0.005)	(0.002)	(0.002)	(0.002)
$Treatment_{\phi_4}$	0.000	0.000	0.000	0.001***	0.001***	0.001***	0.002***	0.002***	0.002***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Treatment_{\phi_5}$	-0.000	-0.000***	-0.000	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.023***	-0.052***	-0.023***	-0.001	-0.006	-0.001	-0.035**	-0.100***	-0.035**	-0.012	-0.043***	-0.012
	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	(0.007)	(0.016)	(0.015)	(0.016)	(0.007)	(0.007)	(0.007)
$Control_{\phi_2}$	0.051***	0.118***	0.051***	-0.002	0.012	-0.002	0.073**	0.222***	0.073**	0.024	0.094***	0.024
	(0.016)	(0.015)	(0.016)	(0.016)	(0.015)	(0.016)	(0.037)	(0.034)	(0.037)	(0.017)	(0.015)	(0.017)
$Control_{\phi_3}$	-0.030***	-0.070***	-0.030***	0.004	-0.006	0.004	-0.039*	-0.130***	-0.039*	-0.012	-0.055***	-0.012
	(0.009)	(0.009)	(0.009)	(0.010)	(0.009)	(0.010)	(0.022)	(0.020)	(0.022)	(0.010)	(0.009)	(0.010)
$Control_{\phi_4}$	0.002***	0.005***	0.002***	-0.002*	-0.000	-0.002*	0.000	0.008***	0.000	-0.000	0.003***	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
$Control_{\phi_5}$	-0.000	-0.000***	-0.000	0.000***	0.000**	0.000***	0.001*	-0.000*	0.001*	0.000**	-0.000**	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1300	0.0497	0.1300	0.0427	0.0149	0.0427	0.1285	0.0478	0.1285	0.1018	0.0315	0.1018
Within R^2	0.0042	0.0497	0.0042	0.0057	0.0114	0.0057	0.0092	0.0467	0.0092	0.0058	0.0315	0.0058
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 5: Restricted Cubic Spline OLS: ODA-Like

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.003	0.006*	-0.003	-0.012***	-0.008***	-0.012***	-0.023***	-0.002	-0.023***	-0.008***	-0.000	-0.008***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.006)	(0.007)	(0.006)	(0.003)	(0.003)	(0.003)
$Treatment_{\phi_2}$	0.007	-0.010	0.007	0.027***	0.019***	0.027***	0.052***	0.010	0.052***	0.018***	0.002	0.018***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.014)	(0.015)	(0.014)	(0.006)	(0.007)	(0.006)
$Treatment_{\phi_3}$	-0.004	0.004	-0.004	-0.016***	-0.012***	-0.016***	-0.032***	-0.010	-0.032***	-0.011***	-0.003	-0.011***
	(0.003)	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.008)	(0.009)	(0.008)	(0.004)	(0.004)	(0.004)
$Treatment_{\phi_4}$	0.000	0.000**	0.000	0.001***	0.001***	0.001***	0.003***	0.003***	0.003***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
$Treatment_{\phi_5}$	0.000	-0.000***	0.000	-0.000***	-0.000***	-0.000***	-0.000***	-0.001***	-0.000***	-0.000**	-0.000***	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.011	-0.083***	-0.011	-0.004	0.004	-0.004	0.010	-0.152***	0.010	0.024*	-0.066***	0.024*
	(0.013)	(0.014)	(0.013)	(0.015)	(0.014)	(0.015)	(0.031)	(0.034)	(0.032)	(0.014)	(0.015)	(0.014)
$Control_{\phi_2}$	0.026	0.177***	0.026	0.003	-0.012	0.003	-0.028	0.317***	-0.028	-0.054*	0.138***	-0.054*
	(0.029)	(0.030)	(0.029)	(0.032)	(0.030)	(0.032)	(0.068)	(0.074)	(0.068)	(0.031)	(0.033)	(0.031)
$Control_{\phi_3}$	-0.016	-0.099***	-0.016	0.002	0.010	0.002	0.020	-0.172***	0.020	0.032*	-0.075***	0.032*
	(0.017)	(0.017)	(0.017)	(0.018)	(0.017)	(0.018)	(0.039)	(0.042)	(0.039)	(0.018)	(0.019)	(0.018)
$Control_{\phi_4}$	0.002	0.005***	0.002	-0.002	-0.002**	-0.002	-0.003	0.006**	-0.003	-0.003*	0.003**	-0.003*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)
$Control_{\phi_5}$	-0.000	0.000	-0.000	0.001**	0.001***	0.001**	0.001	0.001**	0.001	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1293	0.0440	0.1293	0.0415	0.0162	0.0415	0.1264	0.0437	0.1264	0.1007	0.0268	0.1007
Within R^2	0.0035	0.0440	0.0035	0.0044	0.0127	0.0044	0.0068	0.0425	0.0068	0.0045	0.0267	0.0045
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 6: Restricted Cubic Spline OLS: OOF-Like

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.015**	-0.002	-0.015**	-0.021***	-0.020***	-0.021***	-0.082***	-0.052***	-0.082***	-0.047***	-0.031***	-0.047***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.015)	(0.017)	(0.015)	(0.007)	(0.008)	(0.007)
$Treatment_{\phi_2}$	0.033**	0.010	0.033**	0.047***	0.045***	0.047***	0.182***	0.124***	0.182***	0.104***	0.071***	0.104***
	(0.014)	(0.015)	(0.014)	(0.015)	(0.015)	(0.015)	(0.034)	(0.036)	(0.034)	(0.016)	(0.017)	(0.016)
$Treatment_{\phi_3}$	-0.020**	-0.010	-0.020**	-0.027***	-0.028***	-0.027***	-0.109***	-0.081***	-0.109***	-0.063***	-0.045***	-0.063***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.020)	(0.021)	(0.020)	(0.009)	(0.010)	(0.009)
$Treatment_{\phi_4}$	0.002***	0.002***	0.002***	0.002***	0.003***	0.002***	0.011***	0.011***	0.011***	0.006***	0.005***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
$Treatment_{\phi_5}$	-0.000*	-0.000***	-0.000*	-0.000	-0.000***	-0.000	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.051*	0.060**	-0.051*	-0.045	-0.044	-0.045	-0.116*	0.103	-0.116*	-0.016	0.087***	-0.016
	(0.028)	(0.027)	(0.028)	(0.033)	(0.032)	(0.033)	(0.065)	(0.068)	(0.065)	(0.031)	(0.032)	(0.031)
$Control_{\phi_2}$	0.120*	-0.128**	0.120*	0.103	0.102	0.103	0.273*	-0.221	0.273*	0.042	-0.192***	0.042
	(0.062)	(0.060)	(0.062)	(0.073)	(0.069)	(0.073)	(0.141)	(0.149)	(0.141)	(0.068)	(0.070)	(0.068)
$Control_{\phi_3}$	-0.077**	0.072**	-0.077**	-0.065	-0.065	-0.065	-0.175**	0.124	-0.175**	-0.029	0.115***	-0.029
	(0.037)	(0.035)	(0.037)	(0.043)	(0.041)	(0.043)	(0.084)	(0.088)	(0.084)	(0.041)	(0.041)	(0.041)
$Control_{\phi_4}$	0.009**	-0.003	0.009**	0.007*	0.008**	0.007*	0.021**	-0.006	0.021**	0.004	-0.010**	0.004
	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)	(0.004)	(0.004)	(0.004)
$Control_{\phi_5}$	-0.002**	-0.001	-0.002**	-0.001*	-0.001***	-0.001*	-0.003**	-0.002	-0.003**	-0.001	0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1295	0.0430	0.1295	0.0416	0.0127	0.0416	0.1278	0.0337	0.1278	0.1015	0.0234	0.1015
Within R^2	0.0037	0.0429	0.0037	0.0045	0.0092	0.0045	0.0084	0.0325	0.0084	0.0054	0.0233	0.0054
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 7: Restricted Cubic Spline OLS: Vague (Official Finance)

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.003	-0.001	-0.003	-0.020***	-0.016***	-0.020***	-0.035***	-0.029***	-0.035***	-0.012***	-0.012***	-0.012***
	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.006)	(0.006)	(0.006)	(0.003)	(0.003)	(0.003)
$Treatment_{\phi_2}$	0.008	0.006	0.008	0.050***	0.040***	0.050***	0.088***	0.078***	0.088***	0.031***	0.032***	0.031***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)	(0.014)	(0.014)	(0.014)	(0.006)	(0.007)	(0.006)
$Treatment_{\phi_3}$	-0.006*	-0.006	-0.006*	-0.032***	-0.025***	-0.032***	-0.058***	-0.054***	-0.058***	-0.021***	-0.023***	-0.021***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.009)	(0.009)	(0.009)	(0.004)	(0.004)	(0.004)
$Treatment_{\phi_4}$	0.001***	0.002***	0.001***	0.003***	0.002***	0.003***	0.006***	0.007***	0.006***	0.002***	0.003***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
$Treatment_{\phi_5}$	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.001***	-0.001***	-0.001***	-0.000***	-0.001***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.023***	-0.063***	-0.023***	0.009	-0.007	0.009	-0.041**	-0.127***	-0.041**	-0.026***	-0.056***	-0.026***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.018)	(0.018)	(0.018)	(0.008)	(0.008)	(0.008)
$Control_{\phi_2}$	0.054***	0.157***	0.054***	-0.026	0.018	-0.026	0.091**	0.312***	0.091**	0.060***	0.137***	0.060***
	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.043)	(0.044)	(0.043)	(0.021)	(0.020)	(0.021)
$Control_{\phi_3}$	-0.033***	-0.102***	-0.033***	0.018	-0.012	0.018	-0.052*	-0.202***	-0.052*	-0.036***	-0.087***	-0.036***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.011)	(0.012)	(0.028)	(0.028)	(0.028)	(0.013)	(0.013)	(0.013)
$Control_{\phi_4}$	0.002*	0.010***	0.002*	-0.003**	0.001	-0.003**	0.001	0.018***	0.001	0.002	0.008***	0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.003)	(0.001)	(0.001)	(0.001)
$Control_{\phi_5}$	-0.000	-0.001***	-0.000	0.001***	0.000	0.001***	0.001*	-0.002***	0.001*	0.000	-0.001***	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1292	0.0466	0.1292	0.0425	0.0151	0.0425	0.1279	0.0425	0.1279	0.1023	0.0317	0.1023
Within R^2	0.0034	0.0465	0.0034	0.0054	0.0116	0.0054	0.0085	0.0414	0.0085	0.0063	0.0316	0.0063
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 8: Restricted Cubic Spline OLS: Commercial

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	0.002	-0.006	0.002	-0.014	-0.022**	-0.014	-0.026	-0.029	-0.026	-0.013	0.001	-0.013
	(0.008)	(0.008)	(0.008)	(0.010)	(0.009)	(0.010)	(0.019)	(0.019)	(0.019)	(0.009)	(0.009)	(0.009)
$Treatment_{\phi_2}$	-0.012	0.019	-0.012	0.045	0.077***	0.045	0.080	0.098	0.080	0.042	-0.002	0.042
	(0.028)	(0.027)	(0.028)	(0.033)	(0.029)	(0.033)	(0.063)	(0.062)	(0.063)	(0.029)	(0.029)	(0.029)
$Treatment_{\phi_3}$	0.012	-0.013	0.012	-0.034	-0.061***	-0.034	-0.058	-0.076	-0.058	-0.033	0.002	-0.033
	(0.021)	(0.020)	(0.021)	(0.025)	(0.022)	(0.025)	(0.048)	(0.047)	(0.048)	(0.022)	(0.022)	(0.022)
$Treatment_{\phi_4}$	-0.002	0.001	-0.002	0.003	0.007***	0.003	0.005	0.007	0.005	0.004*	-0.000	0.004*
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.005)	(0.005)	(0.002)	(0.002)	(0.002)
$Treatment_{\phi_5}$	0.000	0.000	0.000	0.000	-0.001**	0.000	-0.001	-0.000	-0.001	-0.001***	0.000	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.057***	-0.098***	-0.057***	-0.021	-0.029*	-0.021	-0.161***	-0.230***	-0.161***	-0.078***	-0.097***	-0.078***
	(0.019)	(0.021)	(0.019)	(0.019)	(0.018)	(0.019)	(0.043)	(0.048)	(0.043)	(0.019)	(0.022)	(0.019)
$Control_{\phi_2}$	0.194***	0.356***	0.194***	0.075	0.110*	0.075	0.545***	0.827***	0.545***	0.258***	0.343***	0.258***
	(0.064)	(0.070)	(0.064)	(0.063)	(0.060)	(0.063)	(0.144)	(0.159)	(0.144)	(0.063)	(0.073)	(0.063)
$Control_{\phi_3}$	-0.151***	-0.290***	-0.151***	-0.061	-0.092**	-0.061	-0.423***	-0.670***	-0.423***	-0.197***	-0.275***	-0.197***
	(0.050)	(0.054)	(0.050)	(0.048)	(0.046)	(0.048)	(0.111)	(0.123)	(0.111)	(0.049)	(0.057)	(0.049)
$Control_{\phi_4}$	0.016***	0.037***	0.016***	0.009	0.012**	0.009	0.043***	0.084***	0.043***	0.017***	0.034***	0.017***
	(0.005)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.012)	(0.013)	(0.012)	(0.005)	(0.006)	(0.005)
$Control_{\phi_5}$	-0.001	-0.004***	-0.001	-0.002*	-0.001*	-0.002*	-0.003	-0.011***	-0.003	-0.000	-0.005***	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1280	0.0314	0.1280	0.0394	0.0153	0.0394	0.1232	0.0286	0.1232	0.0994	0.0167	0.0994
Within R^2	0.0020	0.0314	0.0020	0.0022	0.0118	0.0022	0.0032	0.0275	0.0032	0.0031	0.0166	0.0031
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 9: Restricted Cubic Spline OLS: Development

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.000	0.004*	-0.000	-0.008***	-0.005***	-0.008***	-0.011***	-0.002	-0.011***	-0.003	0.000	-0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
$Treatment_{\phi_2}$	0.001	-0.007	0.001	0.019***	0.012***	0.019***	0.028***	0.008	0.028***	0.007*	0.002	0.007*
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.009)	(0.009)	(0.009)	(0.004)	(0.004)	(0.004)
$Treatment_{\phi_3}$	-0.001	0.003	-0.001	-0.012***	-0.008***	-0.012***	-0.019***	-0.008	-0.019***	-0.005**	-0.002	-0.005**
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.006)	(0.005)	(0.003)	(0.003)	(0.003)
$Treatment_{\phi_4}$	0.000	0.000**	0.000	0.001***	0.001***	0.001***	0.002***	0.002***	0.002***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Treatment_{\phi_5}$	-0.000	-0.000***	-0.000	-0.000***	-0.000***	-0.000***	-0.000***	-0.001***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.022***	-0.049***	-0.022***	-0.005	-0.007	-0.005	-0.039**	-0.093***	-0.039**	-0.013	-0.041***	-0.012
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.018)	(0.018)	(0.018)	(0.008)	(0.008)	(0.008)
$Control_{\phi_2}$	0.051***	0.111***	0.051***	0.008	0.015	0.008	0.083**	0.206***	0.083**	0.026	0.090***	0.026
	(0.017)	(0.018)	(0.017)	(0.018)	(0.017)	(0.018)	(0.041)	(0.039)	(0.041)	(0.018)	(0.017)	(0.018)
$Control_{\phi_3}$	-0.031***	-0.066***	-0.031***	-0.002	-0.008	-0.002	-0.045*	-0.120***	-0.045*	-0.014	-0.052***	-0.014
	(0.010)	(0.010)	(0.010)	(0.011)	(0.010)	(0.011)	(0.024)	(0.023)	(0.024)	(0.011)	(0.010)	(0.011)
$Control_{\phi_4}$	0.002***	0.004***	0.002***	-0.001	-0.000	-0.001	0.001	0.007***	0.001	0.000	0.003***	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
$Control_{\phi_5}$	-0.000**	-0.000**	-0.000**	0.000***	0.000**	0.000***	0.000	-0.000	0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1299	0.0462	0.1299	0.0428	0.0149	0.0428	0.1281	0.0451	0.1281	0.1014	0.0292	0.1014
Within R^2	0.0042	0.0461	0.0042	0.0058	0.0113	0.0058	0.0087	0.0440	0.0087	0.0054	0.0292	0.0054
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 10: Restricted Cubic Spline OLS: Representational

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.127**	0.261***	-0.127**	-0.161***	0.056	-0.161***	-0.508***	0.307**	-0.507***	-0.217***	0.022	-0.217***
	(0.058)	(0.061)	(0.058)	(0.058)	(0.054)	(0.058)	(0.136)	(0.143)	(0.136)	(0.063)	(0.069)	(0.063)
$Treatment_{\phi_2}$	0.180**	-0.359***	0.180**	0.223***	-0.081	0.223***	0.712***	-0.417**	0.712***	0.304***	-0.022	0.304***
	(0.082)	(0.086)	(0.082)	(0.082)	(0.077)	(0.082)	(0.191)	(0.202)	(0.191)	(0.089)	(0.098)	(0.089)
$Treatment_{\phi_3}$	-0.057**	0.101***	-0.057**	-0.065**	0.029	-0.065**	-0.215***	0.113*	-0.215***	-0.091***	-0.002	-0.091***
	(0.025)	(0.027)	(0.025)	(0.026)	(0.024)	(0.026)	(0.059)	(0.062)	(0.059)	(0.028)	(0.030)	(0.028)
$Treatment_{\phi_4}$	0.003*	-0.004**	0.003*	0.002	-0.005**	0.002	0.010**	-0.005	0.010**	0.004*	0.003	0.004*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)	(0.004)	(0.002)	(0.002)	(0.002)
$Treatment_{\phi_5}$	0.000	0.001***	0.000	0.000	0.002***	0.000	0.001	0.002***	0.001	0.001	-0.000	0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	0.364	0.699**	0.364	0.389	0.484	0.389	1.664*	1.776**	1.662*	0.810*	0.671	0.809*
	(0.398)	(0.356)	(0.398)	(0.424)	(0.344)	(0.425)	(0.917)	(0.838)	(0.916)	(0.469)	(0.428)	(0.469)
$Control_{\phi_2}$	-0.508	-1.017**	-0.509	-0.516	-0.672	-0.516	-2.311*	-2.536**	-2.308*	-1.142*	-0.959	-1.141*
	(0.566)	(0.503)	(0.566)	(0.602)	(0.488)	(0.602)	(1.302)	(1.186)	(1.301)	(0.665)	(0.605)	(0.665)
$Control_{\phi_3}$	0.151	0.343**	0.151	0.124	0.193	0.124	0.672	0.805**	0.671	0.350*	0.305	0.350*
	(0.179)	(0.157)	(0.179)	(0.190)	(0.153)	(0.190)	(0.412)	(0.371)	(0.411)	(0.210)	(0.189)	(0.210)
$Control_{\phi_4}$	-0.006	-0.024**	-0.006	0.008	-0.002	0.008	-0.019	-0.038	-0.019	-0.017	-0.014	-0.017
	(0.014)	(0.011)	(0.014)	(0.014)	(0.011)	(0.014)	(0.031)	(0.026)	(0.031)	(0.016)	(0.013)	(0.016)
$Control_{\phi_5}$	-0.001	-0.002	-0.001	-0.006**	-0.004**	-0.006**	-0.008	-0.011***	-0.008	-0.002	-0.005**	-0.002
	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.005)	(0.004)	(0.005)	(0.003)	(0.002)	(0.003)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1286	0.0392	0.1286	0.0401	0.0148	0.0401	0.1254	0.0381	0.1254	0.1004	0.0233	0.1004
Within R^2	0.0026	0.0392	0.0026	0.0030	0.0113	0.0030	0.0056	0.0370	0.0056	0.0042	0.0232	0.0042
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 11: Restricted Cubic Spline OLS: Mixed

	Econ. & Pol. Role Valence			Dev. Model			Pro-China Index			Aid Efficacy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Treatment_{\phi_1}$	-0.017**	-0.011	-0.017**	-0.039***	-0.025***	-0.039***	-0.117***	-0.099***	-0.117***	-0.063***	-0.065***	-0.063***
	(0.008)	(0.009)	(0.008)	(0.009)	(0.009)	(0.009)	(0.020)	(0.021)	(0.020)	(0.009)	(0.009)	(0.009)
$Treatment_{\phi_2}$	0.043**	0.033*	0.043**	0.085***	0.056***	0.085***	0.266***	0.235***	0.266***	0.144***	0.153***	0.144***
	(0.017)	(0.019)	(0.017)	(0.020)	(0.020)	(0.020)	(0.044)	(0.046)	(0.044)	(0.020)	(0.021)	(0.020)
$Treatment_{\phi_3}$	-0.029***	-0.026**	-0.029***	-0.048***	-0.032***	-0.048***	-0.161***	-0.150***	-0.161***	-0.088***	-0.097***	-0.088***
	(0.010)	(0.011)	(0.010)	(0.012)	(0.012)	(0.012)	(0.026)	(0.027)	(0.026)	(0.012)	(0.012)	(0.012)
$Treatment_{\phi_4}$	0.004***	0.004***	0.004***	0.002**	0.002**	0.002**	0.013***	0.015***	0.013***	0.008***	0.010***	0.008***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
$Treatment_{\phi_5}$	-0.001***	-0.000***	-0.001***	0.000	0.000	0.000	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	0.023	-0.130***	0.023	0.018	-0.076***	0.018	-0.044	-0.369***	-0.044	-0.066**	-0.160***	-0.066**
	(0.025)	(0.024)	(0.025)	(0.028)	(0.025)	(0.028)	(0.057)	(0.054)	(0.057)	(0.028)	(0.026)	(0.028)
$Control_{\phi_2}$	-0.064	0.316***	-0.064	-0.040	0.191***	-0.040	0.079	0.899***	0.079	0.138**	0.385***	0.138**
	(0.056)	(0.054)	(0.056)	(0.063)	(0.057)	(0.063)	(0.129)	(0.123)	(0.129)	(0.063)	(0.059)	(0.063)
$Control_{\phi_3}$	0.048	-0.207***	0.048	0.023	-0.130***	0.023	-0.031	-0.590***	-0.031	-0.074*	-0.249***	-0.074*
	(0.034)	(0.033)	(0.034)	(0.038)	(0.034)	(0.038)	(0.078)	(0.074)	(0.078)	(0.038)	(0.036)	(0.038)
$Control_{\phi_4}$	-0.009***	0.025***	-0.009***	-0.002	0.017***	-0.002	-0.007	0.071***	-0.007	0.002	0.029***	0.002
	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)	(0.007)	(0.006)	(0.007)	(0.004)	(0.003)	(0.004)
$Control_{\phi_5}$	0.002***	-0.004***	0.002***	0.001	-0.002***	0.001	0.004***	-0.012***	0.004***	0.001	-0.005***	0.001
	(0.001)	(0.000)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
Observations	35,529	35,529	35,529	35,529	35,529	35,529	35,033	35,033	35,033	35,033	35,033	35,033
R^2	0.1292	0.0588	0.1292	0.0411	0.0172	0.0411	0.1262	0.0556	0.1262	0.1013	0.0432	0.1013
Within R^2	0.0034	0.0588	0.0034	0.0040	0.0136	0.0040	0.0066	0.0545	0.0066	0.0053	0.0432	0.0053
Country fixed effects	✓		✓	✓		✓	✓		✓	✓		✓
Year fixed effects		✓	✓		✓	✓		✓	✓		✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 12: Restricted Cubic Spline OLS: Reason for Negative Views

	Resource Extraction (1)	Land Grabbing (2)	Labor Markets (3)	Cooperate w/ Autocrats (4)	Chinese Behavior (5)
$Treatment_{\phi_1}$	0.008	-0.006	-0.016**	0.004	0.003
	(0.007)	(0.005)	(0.006)	(0.005)	(0.005)
$Treatment_{\phi_2}$	-0.028	0.015	0.053**	-0.014	-0.007
	(0.021)	(0.018)	(0.021)	(0.015)	(0.016)
$Treatment_{\phi_3}$	0.024	-0.009	-0.040**	0.011	0.003
	(0.016)	(0.013)	(0.016)	(0.012)	(0.013)
$Treatment_{\phi_4}$	-0.004***	-0.001	0.003*	-0.002	0.001
	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)
$Treatment_{\phi_5}$	0.001***	0.000*	-0.000	0.000*	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	0.004	0.008	0.019	0.013	0.022**
	(0.013)	(0.012)	(0.015)	(0.010)	(0.009)
$Control_{\phi_2}$	-0.009	-0.029	-0.063	-0.045	-0.077**
	(0.044)	(0.040)	(0.048)	(0.033)	(0.031)
$Control_{\phi_3}$	0.003	0.024	0.048	0.036	0.060**
	(0.034)	(0.030)	(0.037)	(0.025)	(0.024)
$Control_{\phi_4}$	0.003	-0.004	-0.005	-0.004	-0.007**
	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)
$Control_{\phi_5}$	-0.002***	0.001	0.001	0.000	0.001*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	35,529	35,529	35,529	35,529	35,529
R^2	0.1119	0.0190	0.0272	0.0216	0.0246
Within R^2	0.0038	0.0024	0.0016	0.0024	0.0014
Country fixed effects	✓	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

All models include pre-treatment controls: age, gender, urban-rural, and home region.

Table 13: Restricted Cubic Spline OLS: Reason for Positive Views

	Supp. Int'l Affairs (1)	Dom. Non-Interference (2)	Development Inv. (3)	Culture (4)	Business Inv. (5)
$Treatment_{\phi_1}$	-0.019***	-0.007	-0.003	-0.001	0.006
	(0.007)	(0.004)	(0.008)	(0.002)	(0.008)
$Treatment_{\phi_2}$	0.061***	0.019	0.010	0.003	-0.019
	(0.021)	(0.015)	(0.028)	(0.007)	(0.026)
$Treatment_{\phi_3}$	-0.045***	-0.013	-0.007	-0.002	0.012
	(0.016)	(0.011)	(0.021)	(0.006)	(0.020)
$Treatment_{\phi_4}$	0.003**	0.000	-0.000	0.000	0.000
	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)
$Treatment_{\phi_5}$	-0.000	0.000	0.001	-0.000	-0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$Control_{\phi_1}$	-0.004	-0.010	-0.066***	0.009**	0.001
	(0.010)	(0.009)	(0.018)	(0.005)	(0.015)
$Control_{\phi_2}$	0.009	0.030	0.222***	-0.034**	0.008
	(0.034)	(0.031)	(0.061)	(0.016)	(0.049)
$Control_{\phi_3}$	-0.005	-0.022	-0.174***	0.028**	-0.013
	(0.026)	(0.023)	(0.047)	(0.012)	(0.038)
$Control_{\phi_4}$	-0.000	0.001	0.020***	-0.004***	0.005
	(0.003)	(0.002)	(0.005)	(0.001)	(0.004)
$Control_{\phi_5}$	0.000	0.000	-0.003***	0.001**	-0.001*
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
Observations	35,529	35,529	35,529	35,529	35,529
R^2	0.0192	0.0213	0.1083	0.0227	0.0601
Within R^2	0.0033	0.0027	0.0056	0.0011	0.0030
Country fixed effects	✓	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓	✓

Notes: One-way (township-village) bootstrapped standard errors are in parentheses.

Appendix E Treatment Effect Plots

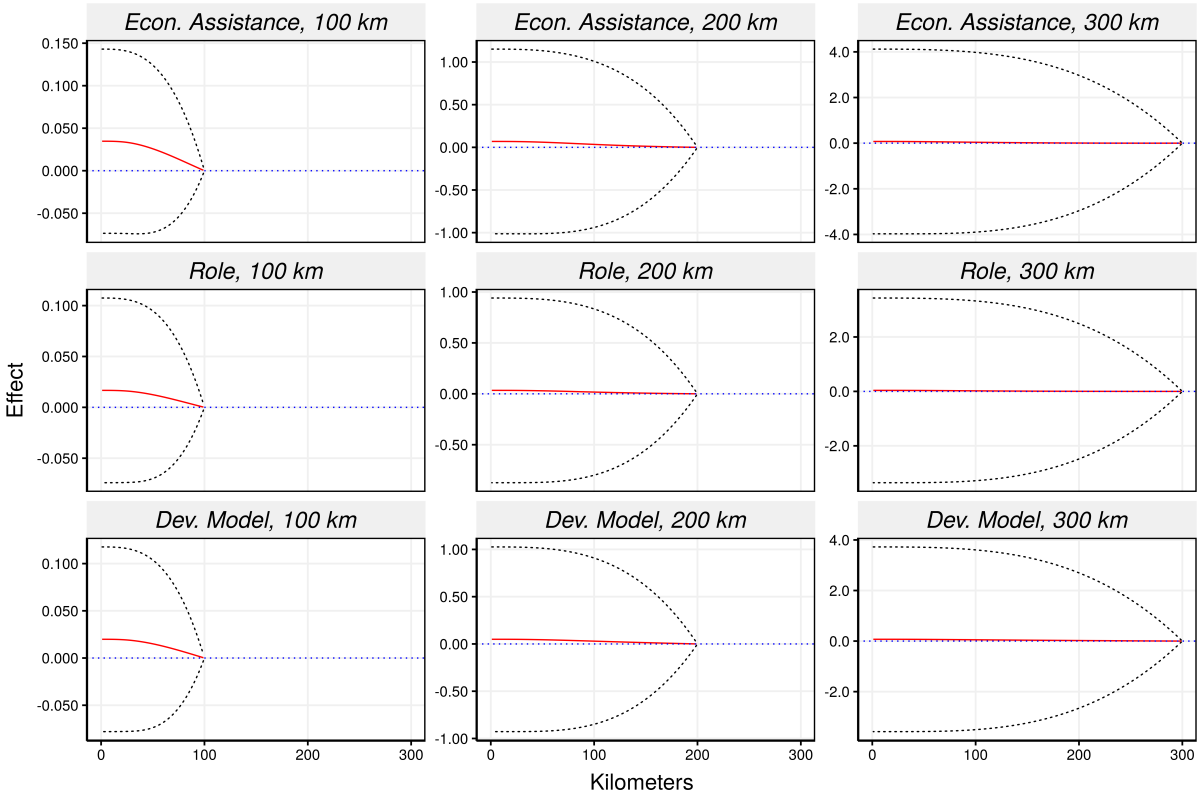

Figure 13: **Effect of Exposure—Representational Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

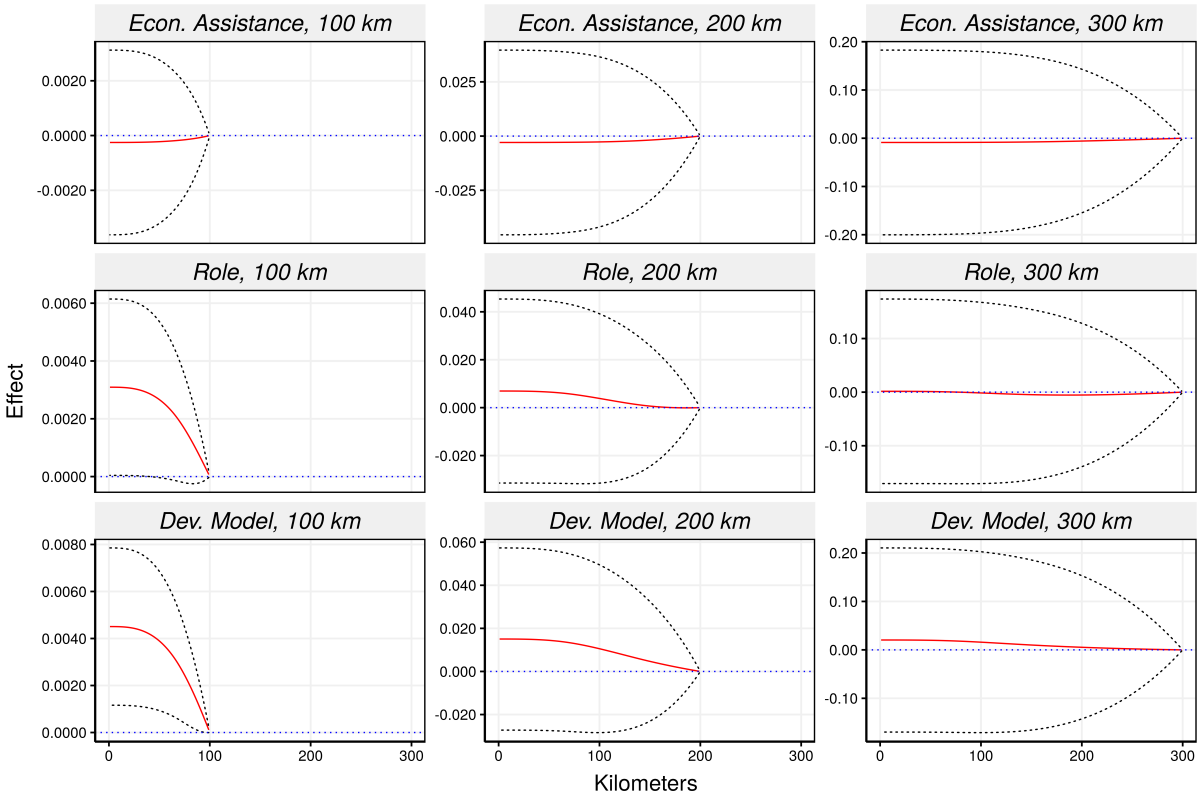

Figure 14: **Effect of Exposure—Mixed Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

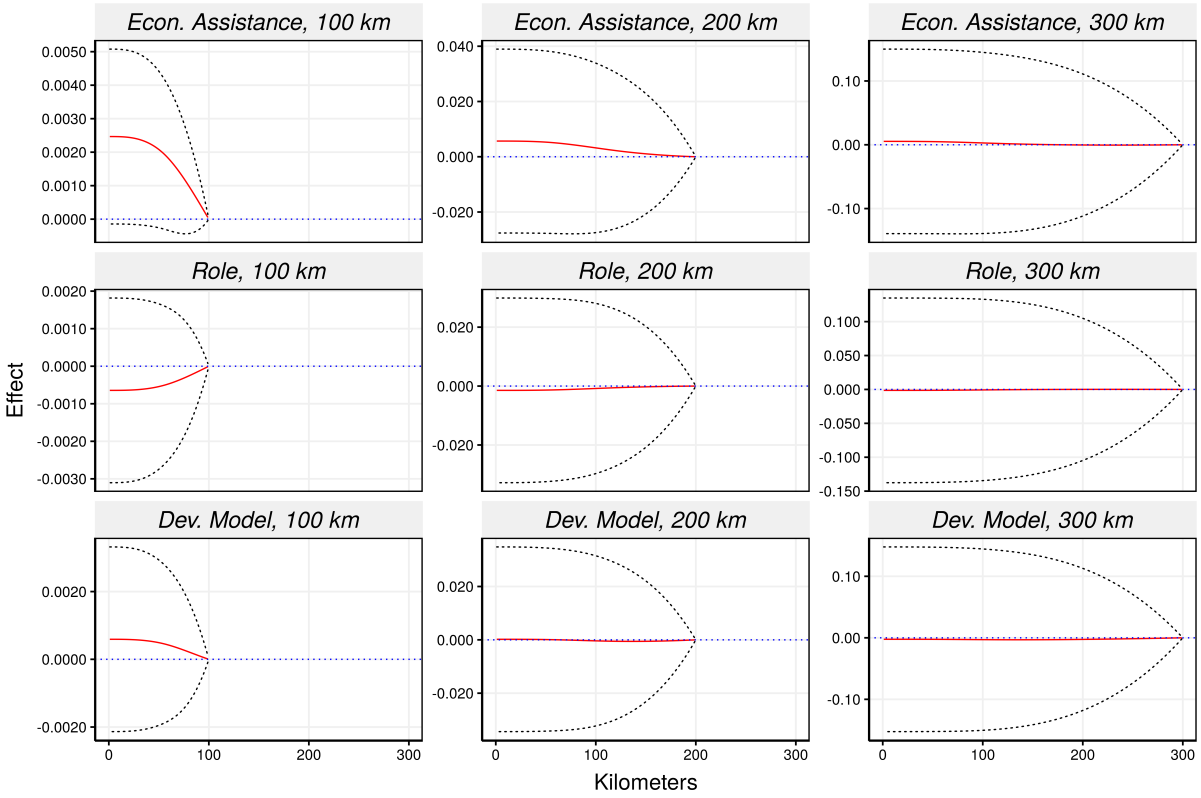

Figure 15: **Effect of Exposure—ODA-like Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

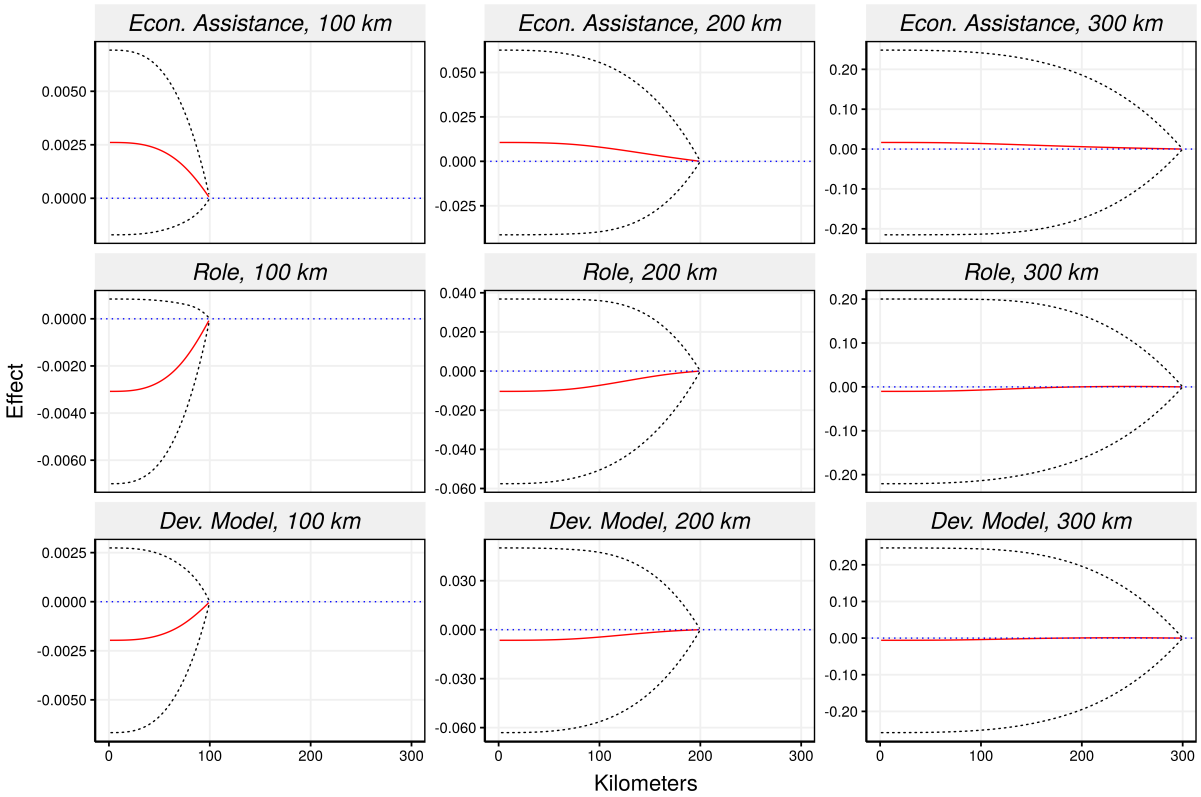

Figure 16: **Effect of Exposure—OOF-like Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.

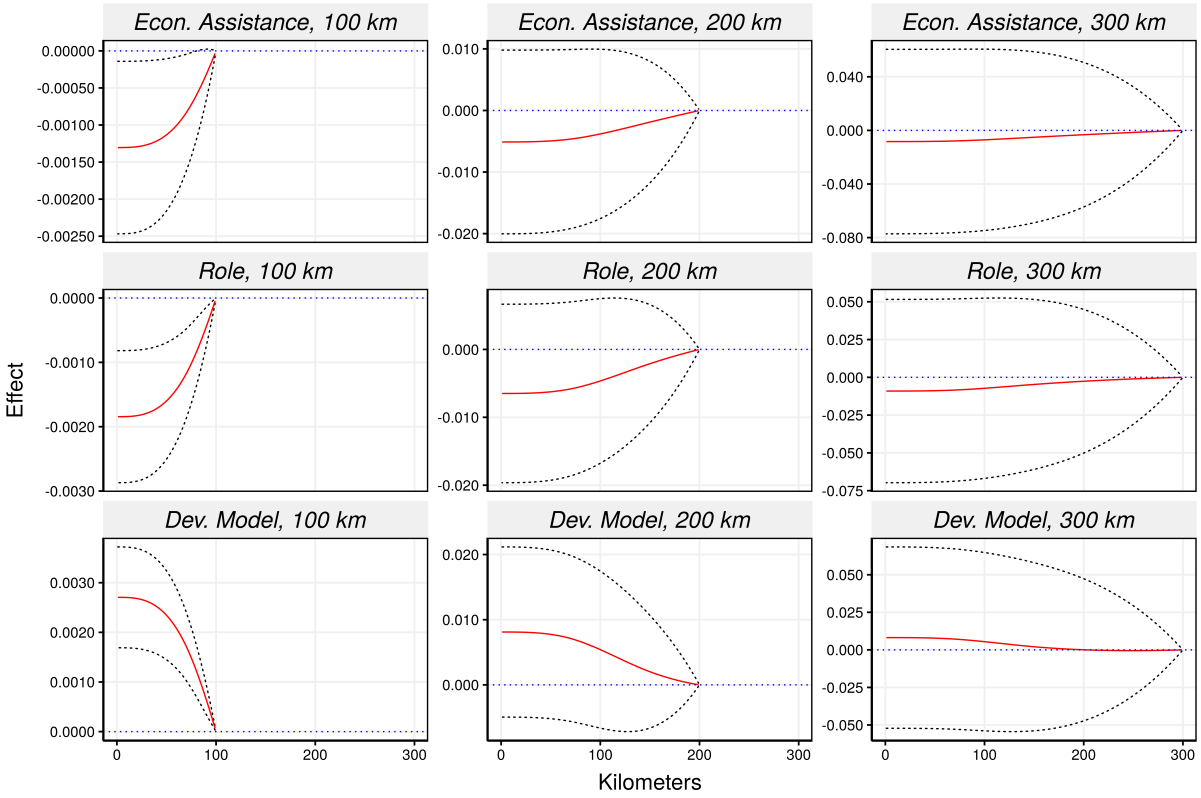

Figure 17: **Effect of Exposure—Vague Projects.** Black dotted lines indicate 95% bootstrapped confidence intervals.