

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Freytag, Andreas; Kautz, Miriam; Wolf, Moritz

Article — Published Version
Chinese aid and democratic values in Latin America

**Public Choice** 

# **Provided in Cooperation with:**

Springer Nature

Suggested Citation: Freytag, Andreas; Kautz, Miriam; Wolf, Moritz (2024): Chinese aid and democratic values in Latin America, Public Choice, ISSN 1573-7101, Springer US, New York, NY, Vol. 198, Iss. 3, pp. 531-593, https://doi.org/10.1007/s11127-023-01141-1

This Version is available at: https://hdl.handle.net/10419/315407

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



http://creativecommons.org/licenses/by/4.0/

## Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





# Chinese aid and democratic values in Latin America

Andreas Freytag<sup>1,2,3</sup> · Miriam Kautz<sup>1</sup> · Moritz Wolf<sup>1</sup>

Received: 3 February 2023 / Accepted: 29 November 2023 / Published online: 14 February 2024 © The Author(s) 2024

#### Abstract

International economic engagement has been increasingly framed in terms of liberal democratic values. Specifically, Chinese aid has been at the center of this debate. Since Chinese aid comes with "no strings attached," a popular narrative is that Chinese aid poses a challenge to conditional aid, thus weakening democracy promotion. This study aims to deepen our understanding of how democratic values are shaped by international economic engagement. Drawing on the Latinobarometro Household Survey, we use an instrumental variable approach to test the effect of Chinese aid on attitudes toward democracy in 18 Latin American countries on the national and regional level. We find that Chinese aid has a non-negative effect on support for democracy. We also find that individuals who have a positive attitude towards China are more likely to value democracy. In contrast, positive attitudes towards the USA have no robust impact on support for democracy.

 $\textbf{Keywords} \ \ China \cdot Latin \ America \cdot Foreign \ aid \cdot Public \ opinion \cdot Support \ for \ democracy \cdot Values$ 

JEL Classifications F35 · F61 · F69 · O54 · P33

### 1 Introduction

China has been economically and politically engaged in many middle-income and developing countries for the last two decades. Chinese strategies comprise geopolitical coalitions such as the Association of Brazil, Russia, India, China, and South Africa (BRICS) as well as investment and development aid in developing countries (Fuchs & Rudyak, 2019). The Chinese government frames these activities as a feature of a

We are grateful to Matthias Neuenkirch, Stefan Kirkegaard Slok-Madsen, Pietro Bomprezzi, and participants at the 2022 Political Economy of Democracy and Dictatorship conference, the 2022 Public Choice meeting, the 2022 European Public Choice meeting, and the anonymous referees for helpful feedback.



Andreas Freytag andreas.freytag@uni-jena.de

Friedrich-Schiller University Jena, Jena, Germany

<sup>&</sup>lt;sup>2</sup> University of Stellenbosch, Stellenbosch, South Africa

<sup>3</sup> CESifo Research Network, Munich, Germany

systems competition with the West (Heath, 2021), claiming that liberal democracies are not well-equipped to solve future problems. Although China does not link its aid to conditions, which some observers describe as "no strings attached," some view it as conditional and a challenge to liberal democratic values.

Consequently, Chinese aid has been the subject of controversy in the media as well as in academic contributions, with a focus on the political economy of China's engagement in developing countries. One question from the public choice angle is whether an increase in Chinese aid will substitute democracy-promoting development aid given by the Development Assistance Committee (DAC) countries and therefore erode democratic values in the recipient countries. For many years, Chinese development aid in Africa has dominated the public discourse, and in recent years, China has also intensified its relations with Latin America. Argentina's recent application and accession to BRICS can be seen as an indication of the success of the strategy. Chinese efforts to gain favor and influence are mostly driven directly by the government or firms close to the government. Therefore, it seems appropriate to consider the engagement of China in Latin America in more detail. In this paper, we take stock and explore in particular the relationship between Chinese aid and support for democracy in Latin America.

The discussion in both the public realm and academia mainly suggests a negative relationship between Chinese aid and democratic support. The hypothesis most often taken is that Chinese aid crowds out Western official development assistance (ODA) and thus leads to decreasing support for democracies in the recipient countries. A similar argument is based on the idea that the donating country is a "governing role model." If China, as an autocratic country, is successful in providing effective development assistance, then individuals may change their attitude toward democratic systems and their role in development. This reasoning is based on four assumptions: (1) Chinese aid projects are effective, (2) before the Chinese engagement, most people had a positive view of democracy, (3) individuals are informed about Chinese aid projects in their countries, and (4) they are aware that China is an autocracy.

This hypothesis has been assessed in the literature on China's engagement in Africa, and the results are mixed. We test it for Latin America since it cannot be taken for granted that the public reaction to Chinese aid is the same across the world. The underlying institutional factors in the formation of an attitude towards a foreign actor may well be different between continents or even countries. Indeed, it seems that the political economy of foreign relations in Latin America is distinct from that of other continents, such as Asia and Africa. Many Latin American countries have a long democratic history, and the autocratic phases that have often interrupted this history have been overcome. Latin American leaders often follow populist agendas. Moreover, as Latin America has historically been regarded as the United States' (US) backyard, reactions to China and its activities on the sub-continent may well be idiosyncratic against the background of long-standing US–Latin American relations.

This history promises an interesting addition to the growing public choice literature on the institutional consequences of Chinese aid by testing whether aid has decreased public support for the concept of democracy as compared to autocracy. We can thus also assess whether there is a uniform reaction towards Chinese aid in the developing and emerging world. We use Latinobarometro representative survey data to construct a multi-level repeated cross-sectional analysis for 18 countries over the period 2004–2015 with two measures of democracies. Next, we introduce the literature and derive hypotheses. In Sect. 3 we describe the data and empirical strategy. Section 4 presents the



results. In Sect. 5, we investigate the effect of Chinese aid projects at a regional level, and in Sect. 6, we conduct a range of robustness tests. Finally, Sect. 7 concludes.

### 2 Literature and theoretical considerations

The topic of Chinese aid and its effects on societies, regarding welfare, governance structures, and public opinion, has attracted a great deal of interest. There is a growing body of literature on the institutional consequences of Chinese aid (Bader & Faust, 2014; Dreher et al., 2022), and many of these studies focus on Chinese engagement in Africa. China is a relatively new actor in development cooperation and not a member of the Organisation for Economic Co-operation and Development (OECD). Since its government does not adhere to standardized reporting of data on development aid, there is much suspicion that this lack of transparency is intended to conceal the aims of donating aid. The related public-choice literature can be divided into at least three groups. The first group comprises papers that look at the impact of Chinese aid and lending on the behavior of traditional lenders, such as the World Bank, or regional development banks, which mostly lend with conditions. A second group deals with the direct effects of Chinese aid on economic welfare and political governance, whereas a third group addresses the consequences of Chinese development aid on public opinion in the recipient countries. This paper contributes to the third group.

We start our brief overview of the literature by discussing the effects of a new donor on the behavior of traditional donors and, indirectly, of the borrowers. This is relevant since Western countries and international organizations, such as the World Bank, and regional development banks regularly combine lending or aid with conditions, for example, the demand to improve governance structures or to start policy reforms. Two main questions are asked in the literature: (1) Do Western lenders change their attitudes and demand fewer conditions or redirect resources as a response to Chinese activities? and (2) do borrowers change their compliance? The evidence is mixed for both questions. Humphrey and Michaelowa (2019) see no evidence for changes in the lending pattern of the World Bank or regional development banks, whereas Hernandez (2017) documents that World Bank loans come with fewer conditions as a response to Chinese aid. Zeitz (2021) shows that in reaction to Chinese infrastructure investments (not aid), World Bank projects also focus more strongly on investment, which can be interpreted as competition leading to higher consideration of the recipients' needs. As regards the second question, Watkins (2022) finds that recipient countries reduce compliance with the conditions imposed by international organizations. However, in the last few years, some borrowers have had to default on loans from China. Therefore, one can expect that effect to be reversed, as the paper by Kern et al. (2023) suggests. The authors look at the survival rate of autocratic governments in developing countries before and after default and argue that a bailout by international organizations reduces this rate.

To understand the direct effects of Chinese aid on governance (the second strand of the literature discussed here), a short comparison with Western ODA is necessary. Kersting and Kilby (2014) show that Western ODA can support economic reform and is often directed at democratic reform. As regards Chinese aid, Dreher et al. (2019) find significantly more regional favoritism than in World Bank projects, with Chinese ODA being allocated disproportionally to leaders' birthplaces. This situation seems to be in line with the "no-strings-attached" hypothesis, suggesting that Chinese donors do not care about the distributional effects of their aid payments. In addition, Isaksson and Kotsadam



(2018) show that corruption in Africa is increasing in regional proximity to Chinese aid project sites and conclude that Chinese aid is changing norms.

In a similar vein, Sardoschau and Jarotschkin (2019) argue that Chinese aid projects increase the likelihood of regional violence and civil conflict in sub-Saharan countries (see also Iacoella et al., 2021). In another paper dealing with the relationship between Chinese aid and conflict in Africa, Gehring et al. (2022) show that neither Chinese aid nor World Bank projects increase violence. However, World Bank projects are more likely to reduce violence and support democracy than Chinese engagement. Brazys and Vadlamannati (2021) show that countries that receive Chinese aid are less likely to implement economic reforms, indicating that an "aid curse" might be in play. Hess and Aidoo (2019) look at different hybrid regimes in African countries that have received substantial Chinese aid and conclude that there have been cases of democratic backsliding. This conclusion is in line with Li (2017), who finds that democratization became less likely in countries receiving large shares of Chinese aid. However, Bader (2015) finds that autocrats are not generally backed by Chinese aid. Only if the recipient country is export-dependent on China is autocratic survival more likely, and in this case, the risk of human rights abuses may even increase (Gamso, 2019).

For our study, the effects of Chinese aid on political attitudes are of relevance. A range of papers analyzes the international political economy of aid flows and confirms that Chinese foreign aid can buy support from the recipient's side in international politics (Brazys & Dukalskis, 2017; Strüver, 2016). We are interested in another question, namely, how Chinese aid changes the public perspective on democratic values. Eichenauer et al. (2021) investigate the impact of Chinese engagement, including aid, on support for China. Their results indicate that Chinese involvement does not improve the public opinion of China. However, there is a difference between age cohorts, as younger and more highly educated people view China more favorably. Wellner et al. (2022) maintain that public approval of the Chinese government is higher in countries hosting Chinese development projects. Moreover, they differentiate two time horizons: in the short run, this effect increases with the size of the government and the generosity of the financial commitments, while in the long run, the effect is smaller among people living close to completed Chinese development projects. Interestingly, moreover, the authors find that aid creates support for the Chinese government even in third countries that are not directly affected by, but politically aligned with, the recipient country (Wellner et al., 2022).<sup>2</sup>

Blair et al. (2021) study the impact of Chinese aid projects on public opinion of China and the US in Africa using geolocated Chinese projects. Their study shows that Chinese aid does not reduce support for Western values or the US; rather, it enhances the US's reputation while not increasing public support for China. This effect has already been reported by Hanauer and Morris (2014). Blair et al. (2021) also find that U.S. aid in Africa is increasing support for Western democratic values. By the same token, Bai et al. (2022)—investigating 47 developing countries over several continents—show that Chinese aid increased a positive attitude toward the organs of domestic governments. The analysis carried out by Bai et al. (2022) is similar to but differs from ours: they look at confidence levels in government, civil service, and the military and find that Chinese aid does not affect how individuals evaluate living in a democratic system. Our study differs regarding

<sup>&</sup>lt;sup>2</sup> This is something we could control for in the future as well.



<sup>&</sup>lt;sup>1</sup> Different time horizons are not considered in this paper, but doing so might be a promising avenue of future research, possibly with more periods covered.

the region we look at and the dependent variables as individuals, rather than officials, were asked to choose between democracy and autocracy.

These studies suggest that the Chinese administration is allocating aid payments strategically as a tool to improve China's image in foreign countries, although Glaser et al. (2009) do not see a coherent Chinese soft power strategy. As Blair et al. (2021) argue, if aid boosts the image of donor countries, it may align the values of the recipient with those of the donor. Thus, we would expect Western ODA to have a similarly positive effect on public attitudes towards Western values. The mechanism is based on the idea that aid contains a "role model" function. Another possible mechanism is based on the leveraging function of aid. If democracy-promoting aid is diluted by non-conditional aid, it will change attitudes. Both channels assume that individuals are informed about Chinese aid projects and aware of the donors' political principles.

As Blair et al. (2021) did in their analysis of Africa, we test the hypothesis for Latin America. It cannot be taken for granted that the public reaction to Chinese aid is the same across the world, as the underlying institutional factors that are instrumental in forming attitudes towards a foreign actor may well be different between continents or even countries. Focusing on Latin America has an additional advantage since Latin America has only recently seen an increase in China's economic presence in the last 30 years (Eichenauer et al., 2021), whereas many African countries have been exposed to this presence for decades (Dreher & Fuchs, 2015; Strange, 2019). Moreover, the Latinobarometer survey offers a comprehensive and consistent question catalog that allows researchers to control for many attitudes that correlate with support for democracy.<sup>3</sup>

Our analysis is thus based on the premise that aid shapes attitudes, an idea that policymakers have consistently presented. It generates the following hypothesis, which can be divided into two parts. The central hypothesis predicts (backed by most of the literature) that.

(H1) an increase in Chinese official aid flows decreases support for democracy.

However, as the empirical literature discussed above suggests, there is ample reason to be skeptical about the hypothesis. First, it is unclear whether individuals can correctly identify and attribute aid projects to donors (Blair et al., 2021). Second, while China is interested in demonstrating an alternative development model, it has not been overwhelmingly successful in promoting it. Third, there has been little empirical evidence that the Chinese economic presence has "moved the needle" on individual attitudes (Blair et al., 2021; Eichenauer et al., 2021). Fourth, empirical evidence shows that Chinese economic engagement has led to social unrest, as measured in local protests, and lowered trust in local governments (Iacoella et al., 2021). It may well also be the case that, depending on the general perception of the US, for example, in the respective Latin American country, aid from "Western" countries does not promote a better image of democratic values. Therefore, we posit the alternative hypothesis (which is not implausible, being backed by some of the papers discussed above), that:

(H2) an increase in Chinese official aid flows does not decrease support for democracy.

<sup>&</sup>lt;sup>3</sup> Although the topic is of relevance for geopolitics as well (see, e.g., Heath, 2021), we concentrate on the political economy of Chinese aid in Latin America and will not engage in a geopolitical or geostrategic discussion.



# 3 Data description and empirical strategy

We use data from the AidData TUFF project that tracks all Chinese aid projects (Bluhm et al., 2018). To enable comparison with the OECD's aid classification, AidData classifies each Chinese aid project into the categories of "Official Development Assistance-Like" (ODA) or "Other Official Flows-Like" (OOF) to match with OECD classifications. A third category is captured by "Vague," which includes all official finance projects that could not be classified as ODA or OOF. We use logged total official financial flows<sup>4</sup> in current US dollars per capita for each country.<sup>5</sup>

Between 2002 and 2013, Venezuela received the highest official Chinese flows, followed by Ecuador and Brazil. The Dominican Republic, Honduras, Paraguay, Panama, El Salvador, and Guatemala did not receive any commitments to aid between 2002 and 2013. Around 96% of project volume in current US dollars is either OOF or Vague; that is, they were probably given without a grant element of at least 25%. The 15 largest projects in Latin America were all OOF-like, and most were in the energy generation and supply sector. In terms of project size, this sector received the most commitments, followed by transportation and storage and other social infrastructure and services. The education sector received the largest aid commitment from China in terms of the number of projects.

Following Brazys and Vadlamannati (2021), we include the sum of total ODA commitments from 23 DAC countries. <sup>10</sup> Since Chinese aid data are based on commitments, we mirror these data by using DAC commitments. In our main specification, we focus on ODA. ODA is mainly given conditionally (see, e.g., Zanger, 2000) and is therefore a suitable indicator to measure the rivalry in unconditional development support. Since about 96% of Chinese commitments in terms of value come from OOF-like projects, which are clearly linked to energy and transportation, in a robustness check (presented in Table 5), we swap this metric to include OOF flows from DAC countries. In addition, we check for DAC disbursements and different donors to test the effect of different leverages. We use data on aid from DAC countries from the OECD (2020a).

The Latinobarometer household survey<sup>11</sup> provides our dependent variable on support for democracy. We code a binary indicator, which is one if people agree with the statement that "Democracy is preferable to any other kind of government" and zero otherwise. Alternatives to this statement are "In certain situations, an authoritarian government can be preferable to a democratic one" and "It doesn't matter to people like me whether we have

<sup>&</sup>lt;sup>11</sup> The Latinobarometer household survey is compiled by the non-profit NGO Latinobarometro Corporation.



<sup>&</sup>lt;sup>4</sup> As information on actual disbursements of these flows is largely unavailable, we use commitments.

<sup>&</sup>lt;sup>5</sup> To avoid the dropping of observations with zero aid flows, we employ the log+1 convention. We remove umbrella projects and exclude pledged, canceled, or suspended projects following Eichenauer et al. (2021).

<sup>&</sup>lt;sup>6</sup> See Table 8 in the appendix.

<sup>&</sup>lt;sup>7</sup> See Table 9 in the appendix.

<sup>&</sup>lt;sup>8</sup> See Table 10 in the appendix.

<sup>&</sup>lt;sup>9</sup> See Table 11 in the appendix.

Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, South Korea, Sweden, Switzerland, the United Kingdom, and the US.

a democratic government or a non-democratic government." Respondents who answer "I don't know" or "No answer" are excluded from the sample (in line with the approaches of Eichenauer et al. (2021), Mayda and Rodrik (2005), and Kleinberg and Fordham (2010)). Table 13 the appendix shows the samples available from Latinobarometer for each year and country.

The individual-level co-variables of key socio-economic indicators also come from the Latinobarometer household survey. We include household wealth, <sup>13</sup> gender, education, age, and employment status. In addition, we calculate the democratic capital of each individual according to Fuchs-Schündeln and Schündeln (2015). In the following step, we include a host of variables measuring the attitudes of respondents toward political and institutional factors that may influence how greater exposure to Chinese aid can shape their views on democracy. We include indicator variables that show whether individuals have a good opinion of China and the US, whether they approve of their own president, and whether they trust people.

Country-level controls comprise variables on economic development and economic integration with China and DAC countries, respectively. To account for the level of development, we include the log of GDP per capita in current US dollars, the GDP per capita growth rate, the urbanization rate, and the GDP deflator. All variables are sourced from the World Bank Development Indicators. We also include variables to control for economic integration with China and DAC countries, respectively. Import and export volumes come from World Trade Flows (2017). Outward foreign direct investment (FDI) positions are provided by the OECD (2020b) and MOFCOM (2010, 2018). <sup>14</sup> For all models, we include a control for the institutional environment of the country. We include a dummy if a country is an electoral or liberal democracy, according to the regime scoring from V-Dem (Coppedge et al., 2021). <sup>15</sup>

Our data structure is a mixed-level repeated cross-section for the years 2003–2011 and 2013. The baseline specification reads as follows:

$$dem_{i,j,t} = \alpha + \beta_{CHN} aid_{CHN,i,j,[t-1]} + \beta_{DAC} aid_{DAC,i,j,[t-1]} + X'_{j,[t-1]} \gamma + G'_{i,j,t} \delta + \phi_j + \mu_t + \in_{i,j,t}$$
(1)

where I is the individual living in country j in t. The regression includes country and year fixed effects to account for the trend of increasing Chinese engagement in Latin America and country-specific influence on democratic support, respectively. Country-level control variables,  $X'_{j,[t-1]}$ , are lagged one year, while individual control variables  $G'_{i,j,t}$  are contemporaneous. We assume a lag of 1 year between the aid flow and its impact on the region because it is reasonable that aid takes time to show its effect. The reasoning



<sup>&</sup>lt;sup>12</sup> The Latinobarometer household survey offers an alternative question on support for democracy, namely, whether respondents agree with the statement that "Democracy may have problems, but it is the best system." We do not include this question as our main dependent since, first, the question primes respondents to the flaws of democracy; second, the alternative system to democracy is unclear in this question; and third, the debate that motivates this exploration is centered around the system competition between democracy and autocracy.

<sup>&</sup>lt;sup>13</sup> An additive asset index, following Eichenauer et al. (2021), computes whether a household owns any of the following items: refrigerator, own home, computer, washing machine, telephone, car, drinking water, hot running water, and sewage system.

<sup>&</sup>lt;sup>14</sup> Summary statistics of the dependent, key variables, and controls can be found in Table 14.

<sup>&</sup>lt;sup>15</sup> Only Venezuela and Nicaragua for the years 2007–2013, and Honduras for the years 2006 and 2008–2013, are not considered to have free and fair multiparty elections.

<sup>&</sup>lt;sup>16</sup> Samples for each country and year are shown in Table 13.

behind this is that people react more strongly to physical output than to announcements or promises. Assuming a lag is also in line with the literature, and some of the authors even suggest longer lags. Papers have used t-2 (e.g., Bluhm et al., 2018) or even t-3 and more (Dreher et al., 2021). We control for this in the appendix<sup>17</sup> and find similar and confirming results for our main model.

Throughout the paper, our models assume linear probability. To account for potential endogeneity we employ an instrumental variable two-stage least squares approach. First, endogeneity may result from measurement errors of Chinese aid (Brazys & Vadlamannati, 2021). Second, the Chinese aid flows may be non-random. It may be the case that China supports countries where a sizable part of the society does not value democracy highly. The instrumental variable approach relies on using an exogenous time-varying instrument of the donor countries interacted with a recipient-fixed probability of receiving aid from that donor. This approach follows the work of Nunn and Qian (2014), Dreher and Langlotz (2020), Dreher et al. (2021), and Brazys and Vadlamannati (2021). The interaction of the time-varying and time-invariant components of the instrument leads to a first stage that is conceptually similar to a difference-in-difference estimator. The instrumental variable compares countries that receive aid regularly to countries with a below-median probability of receiving aid, dependent on the donor-specific exogenous time-varying instrument. As Christian and Barrett (2017) have pointed out, this difference-in-difference set-up relies on contemporaneous parallel trends. To check whether the instrumental variable complies with this assumption, we split the sample into countries with above-median and belowmedian probabilities of receiving aid.

In Fig. 1 in the Appendix, the second graph shows the diverging development of Chinese aid for both groups. The third graph shows the development in support for democracy for both groups over time. This graph exhibits largely parallel trends in the support for democracy in countries with above- and below-median probabilities of receiving Chinese aid. Following Bluhm et al. (2018), the probability of receiving aid is calculated as the fraction of years in which a Chinese development project was introduced in the respective region during the period 2000–2014. For example, if one project was underway each year from 2000 until 2004 and none afterward, the probability of receiving aid in this region would be 1/3. The probability is potentially an endogenous component of the instrument. However, since we include country fixed effects in both stages, the variation comes from the changes in expected aid (Dreher & Langlotz, 2020; Nunn & Qian, 2014).

The identifying assumption rests on the exogeneity of the donor-specific time-varying variable. We follow Bluhm et al. (2018) in using the production of steel as a proxy for physical aid input.<sup>18</sup> Steel production is likely to affect development aid, as an oversupply of strategic materials is exported preferentially to countries with Chinese official finance projects (Bluhm et al., 2018; Dreher et al., 2021). The exclusion restriction reads that steel production affects regions only through the channel of development aid. It seems unlikely that domestic steel production in China influences attitudes towards democracy in Latin American countries other than through the channel of aid. Following Dreher et al. (2021), we control for variables most likely related to steel production and attitudes towards democracy, namely Chinese FDI, trade flows with China, and foreign aid from OECD donors. Our results confirm that none of these variables violates the exclusion restriction, which would have been the case if they affected attitudes towards democracy differently in

<sup>&</sup>lt;sup>18</sup> See the third graph in Fig. 1 in the Appendix.



<sup>&</sup>lt;sup>17</sup> See Tables 25 and 26 the appendix.

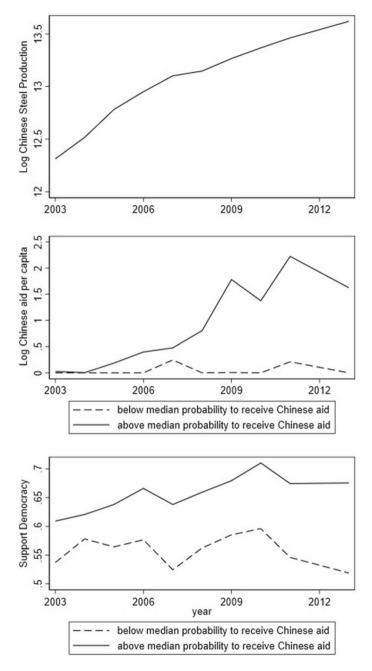


Fig. 1 Parallel trends, probability to receive aid and support for democracy

regions with high and low probabilities of receiving aid. To instrument Chinese aid, we follow Bluhm et al. (2018) and Brazys and Vadlamannati (2021) by interacting the probability of receiving Chinese aid  $p_{i,CHN}$  with Chinese steel production  $Steel_{CHN,t}$ .



The first stage of the instrument variable thus reads:

$$aid_{CHN,j,t} = \alpha + \beta_{IV} Steel CHN, t - 3 * p_{j,CHN} + \beta_{DAC} aid_{DAC,i,j,[t-1]} + X'_{i,[t-1]_V} + G'_{i,i,t} \delta + \phi_j + \mu_t + \zeta_{i,j,t}.$$

We lag steel production three years to allow two years to build up and re-purpose the oversupply of steel for development projects (Brazys & Vadlamannati, 2021).

#### 4 Results

Table 1 shows the IV results of five models with country and year fixed effects. Standard errors are clustered on a country-by-year basis. Model 1 shows the baseline with the instrumented log per capita aid flows that are lagged one year. As baseline control variables, we add the sum of the ODA commitments of 23 DAC countries and the dummy to show whether the country is considered an electoral democracy in the same year. The Kleibergen–Paap F statistic is strong with a test statistic at 27. The estimate of the first stage shows a positive relationship between the instrument and total official finance from China. Two years after the steel supply in China increases, countries that have a higher probability of receiving aid overall do in fact receive more aid than countries that have a lower probability of doing so.

The average marginal effect implies that higher aid flows from China increase support for democracy. Total ODA commitments from DAC countries are also associated with a positive impact on support for democracy. The positive impact of Chinese official finance flows on support for democracy counters the expectations of the relationship expressed in H1 and refutes the narrative that Chinese aid poses a threat to democracies by changing attitudes towards democracy. This positive and significant relationship stays stable over all successive models that include control variables at the individual and country levels. Model 2 adds individual-level co-variables to control for socio-economic background. The longer an individual lives under democratic regimes, the more likely it is that she prefers democracy. This is consistent with the literature on endogenous institutional preferences. Model 3 controls for individual attitudes. Interestingly, the correlation between attitudes toward China and democracy echoes results in aid flows: people who have a good opinion of China are also more likely to prefer democracy. This correlation and the main result on the relationship between official Chinese flows indicate that a "role model effect" that would promote autocratic development is not at play. Models 4 and 5 include country-level control variables. The results remain largely stable.

Analogous OLS results of our baseline specifications are reported in Table 15 in the appendix. They show for our variable of interest a positive and significant relationship between Chinese aid and support for democracy for all specifications. Judging by the lower point estimate for all OLS models, the instrument corrects for a downward bias. Since Chinese aid flows are volatile, Eichenauer et al. (2021) use the moving average of Chinese aid of one- and two-year lags. Using this approach, Table 16 in the appendix shows that the results remain stable. Another way of measuring Chinese aid is by using the new project count for each year (Table 17 in the appendix). The relationship for our variable of interest remains positive. The significance declines, which is unsurprising since there is less

We report the Kleibergen-Paap F-statistic as the standard errors are clustered on a country-year basis.



Table 1 IV main results

	(E)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	iic	Attitudes		Development		Integration	
Log total Chinese aid $pc_{-}t - 1$	0.067***	(0.018)	0.062***	(0.018)	0.065***	(0.017)	0.043***	(0.016)	0.053**	(0.022)
Log DAC ODA $pc_t - 1$	0.030*	(0.017)	0.027*	(0.016)	0.031*	(0.016)	0.024*	(0.013)	0.031**	(0.015)
Democracy	-0.047*	(0.027)	-0.050*	(0.026)	-0.053**	(0.027)	-0.061**	(0.026)	-0.064*	(0.034)
Age			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female			-0.030***	(0.003)	-0.026***	(0.003)	-0.026***	(0.003)	-0.025***	(0.003)
Highly educated			0.075***	(0.005)	0.074**	(0.005)	0.074***	(0.005)	0.077	(0.006)
Household wealth			0.013***	(0.001)	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed			-0.014**	(0.006)	-0.013**	(0.006)	-0.011**	(0.006)	-0.010*	(0.006)
Democratic capital			0.001**	(0.000)	0.001**	(0.000)	0.001**	(0.000)	0.001	(0.000)
Opinion China good					0.025***	(0.004)	0.026***	(0.004)	0.027***	(0.004)
Opinion USA good					-0.004	(0.000)	-0.005	(0.005)	-0.005	(0.005)
Approve own president					0.074***	(0.000)	0.074***	(0.006)	0.076***	(0.007)
Trust people					0.029***	(0.000)	0.029***	(0.000)	0.029***	(0.006)
$Log GDP pc_t - 1$							0.092***	(0.033)	0.108**	(0.049)
GDP growth $pc_{-}t - 1$							-0.054***	(0.020)	-0.125*	(0.065)
GDP deflator_ $t-1$							0.001	(0.001)	0.000	(0.001)
Urbanisation_ $t-1$							*600.0-	(0.005)	-0.010*	(0.000)
Log exports China_ $t-1$									-0.019**	(0.000)
Log exports DAC_ $t-1$									0.085***	(0.030)
Log imports China_ $t-1$									0.029	(0.032)
Log imports DAC $_t$ – 1									-0.111	(0.070)
Log OFDI stock China_ $t-1$									-0.006	(0.012)
Log OFDI stock DAC_ $t-1$									0.008	(0.016)



Table 1 (continued)

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic		Attitudes		Development		Integration	
First-stage estimates Aid probability x log Chinese steel production 1 – 3	2.437***	(0.467)	(0.467) 2.443***	(0.467)	(0.467) 2.435***	(0.466)	2.586***	(0.500)	2.539***	(0.694)
Observations	176863		176863		176863		176863		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes		Yes	
Cluster	Country-year		Country-year		Country-year		Country-year		Country-year	
Number of clusters	179		179		179		179		162	
$Adj. R^2$	0.0417		0.0535		0.0600		0.0649		0.0643	
Kleibergen–Paap F	27.35		27.23		27.31		26.79		13.39	

Dependent for all models is supports democracy. Model 5 includes years 2004–2011, 2013, as variable log OFDI stock China\_t – 1 is not available for the year 2003. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



variation in new projects over countries and years. Lastly, we report the results of our baseline specification based on country-year averages. Again, the results remain robust.<sup>20</sup>

While the results counter our third hypothesis, they are not inconsistent with results from the literature. Blair et al. (2021) find that planned Chinese aid projects initially reduce support for liberal democratic values while completed Chinese aid projects in Africa increase support for liberal democratic values. Since we do not have consistent information on completed projects, we cannot directly translate these findings to our setting.<sup>21</sup> However, the results give context for our finding of the non-negative effect of Chinese aid on support for democracy. Consistent with Blair et al. (2021), we find a positive relationship between Western aid and support for democracy. In this sense, we may initially speculate that the increase in support for democracy could be driven by a movement toward "Western values" per se and may indicate that a loss of aid leverage should be less of a concern. However, this interpretation has its limits as the main result, in conjunction with correlations between attitudes towards China and the US, respectively, do not support this mechanism. If there were a shift toward "Western values," we might expect a negative correlation between a good opinion of China and a positive relationship between a good opinion of the US and support for democracy, respectively. Moreover, work by Eichenauer et al. (2021) finds that neither Chinese nor U.S. aid impacts opinions on China and the US in Latin America. In this way, neither a "role model effect" nor a value realignment is likely to be at play here.

A potential explanation for the positive relationship between Chinese aid and democratic support is that Chinese aid could increase economic activity and thus enhance support for democracy. Dreher et al. (2021) find that Chinese aid projects increase per capita economic activity in Africa on a regional level. Similarly, Marchesi et al. (2021) show that Chinese aid projects help firms with electricity supply and overcome infrastructure constraints. Thereby, they increase regional firm performance. The study by Bai et al. (2022) suggests that an increase in welfare, through decreases in unemployment, is a potential mechanism. We will test the robustness of the results and this potential mechanism in the coming analysis. We will include an indicator to assess whether individuals are satisfied with democracy<sup>22</sup> and how they assess their current and future economic situations, respectively.<sup>23</sup> We focus on individuals to check for this potential mechanism, as their assessment of aid projects and opinion on the functioning of the economy and institutions are critical in determining individual support for democracy. We thus abstract from testing the actual efficacy of Chinese aid in Latin America.

In Table 2, we investigate the effect of Chinese aid on different concepts of support for democracy. In Model 1, we add the answer to the question of whether the respondent is satisfied with the functioning of the democracy. Thus, we aim to disentangle the relationship between support for the idea of democracy and satisfaction with the functioning of the respondent's democracy. Individuals may actually be more satisfied with the current functioning of institutions than the values behind the system. Including an indicator about respondents' satisfaction with democracy does not affect the positive relationship between Chinese aid and support for democracy.



<sup>&</sup>lt;sup>20</sup> See Tables 18, 19, and 20 in the appendix.

<sup>&</sup>lt;sup>21</sup> Due to a lack of data, we are unable to disentangle planned projects from completed ones.

<sup>&</sup>lt;sup>22</sup> See Tables 2 and 4.

<sup>&</sup>lt;sup>23</sup> See Table 6.

The survey question on which our dependent variable is based has three options: "Democracy is preferable to any other kind of government," "In certain situations, an authoritarian government can be preferable to a democratic one," and "It doesn't matter to people like me whether we have a democratic government or a non-democratic government." Since our dependent variable is zero when individuals have chosen "In certain situations, an authoritarian government can be preferable to a democratic one" and "It doesn't matter to people like me whether we have a democratic government or a non-democratic government," the dependent variable may mask a polarization of opinions on democracy. Our dependent variable does not preclude an increase in the number of people who may also support autocracies, given an increase in Chinese aid flows. For this reason, an alternative dependent variable is an indicator variable showing whether individuals agree with the statement that "In certain situations, an authoritarian government can be preferable to a democratic one" and zero otherwise. In Model 2, the estimate of our variable of interest is negative and insignificant, providing evidence that there is no polarization of opinions on democracy at play. Consistent with our baseline model, individuals who have a good opinion of China are less likely to support an authoritarian government.

In Models 3–5, the dependent variable is sourced from a different question in the survey. The dependent variable is coded as one if respondents agree with the Churchill quote, "Democracy may have problems but it is still the best form of government." The answer options are based on a scale of Strongly Agree, Agree, Disagree, and Strongly Disagree. There are several differences to the survey question on which the dependent variable of our baseline model is based. First, in the survey question from the baseline, respondents have the choice between two systems, while the Churchill quote offers no alternative form of government. Since the backdrop of this research question is the increasing system competition between democracies and autocratic China, the dependent variable from the baseline model seems to be a better fit. Second, the Churchill quote contains a specific negative priming towards democracy. Over all the years in our sample, more individuals responded to the question on the Churchill quote than on the democracy versus autocracy question.<sup>24</sup>

All three models using the alternative measure of support for democracy show an insignificant relationship between support for democracy and Chinese aid. DAC ODA commitments are similarly insignificant, indicating that the same explanation drives the change in results for both aid flows. There are several potential sources for this variation in results. The survey question from the baseline dependent variable implicitly asks respondents to order democracy versus autocracy, while the Churchill quote is an ordering on the preference of democracy alone. In this way, it may be easier for the respondent to answer the Churchill question. While only 62% of the respondents agree with the statement that "Democracy is preferable to any other kind of government," 77% of the same sample strongly agree or agree with the statement that "Democracy may have problems, but it is still the best form of government" (Model 5). This finding may indicate that a lack of variation drives the insignificant result. In Model 4, the dependent variable is one if and only if respondents strongly agree with the Churchill quote. While only 24% agree strongly that democracy has problems but is the best form of government, the estimated marginal effect remains insignificant. Overall, these results indicate that Chinese aid has a non-negative effect on support for democracy. Nonetheless, Chinese aid seems to affect support for democracy when framed as system competition positively. In sum, these findings imply that our H1 is not supported, unlike H2.

<sup>&</sup>lt;sup>24</sup> These results are robust to a specification with country-year averages, as seen in Table 21 in the appendix.



Table 2 Concepts of democratic support

	(1)		(2)		(3)		(4)		(5)	
	Support		Support autocracy	acy	Agree with Churchill	nurchill	Strongly agree with Churchill	e with	Agree with Churchill	nurchill
Log total Chinese aid $pc_{-}t - 1$	0.056***	(0.022)	-0.007	(0.012)	-0.027	(0.021)	-0.033	(0.027)	-0.024	(0.019)
Log DAC ODA $pc_t - 1$	0.035**	(0.015)	-0.012	(0.010)	-0.024*	(0.013)	-0.019	(0.017)	-0.020	(0.012)
Satisfaction with democracy	0.146***	(0.008)							0.129***	(0.005)
Democracy	-0.055	(0.034)	0.055*	(0.029)	-0.027	(0.022)	-0.074**	(0.037)	-0.018	(0.021)
Age	0.001***	(0.000)	-0.001***	(0.000)	0.000***	(0.000)	0.001***	(0.000)	0.000***	(0.000)
Female	-0.022***	(0.003)	0.023***	(0.002)	-0.020***	(0.002)	-0.020***	(0.003)	-0.018***	(0.002)
Highly educated	0.078***	(0.006)	-0.064**	(0.004)	0.037***	(0.004)	0.040***	(0.005)	0.039***	(0.004)
Household wealth	0.012***	(0.001)	-0.012***	(0.001)	0.011***	(0.001)	0.011***	(0.001)	0.010***	(0.001)
Unemployed	-0.007	(0.006)	*600.0	(0.005)	-0.008	(0.005)	-0.002	(0.005)	-0.005	(0.005)
Democratic capital	0.001	(0.000)	0.000	(0.000)	0.001***	(0.000)	0.002***	(0.000)	0.001***	(0.000)
Opinion China good	0.023***	(0.004)	-0.029***	(0.003)	0.041***	(0.003)	0.028***	(0.003)	0.037***	(0.003)
Opinion USA good	-0.008	(0.000)	0.004	(0.004)	0.041***	(0.004)	-0.001	(0.005)	0.039***	(0.004)
Approve own president	0.041***	(0.000)	-0.046***	(0.004)	0.110***	(0.000)	0.047	(0.000)	0.079***	(0.005)
Trust people	0.014**	(0.000)	-0.055***	(0.004)	0.025***	(0.005)	0.020***	(0.006)	0.012***	(0.005)
$Log GDP pc_t - 1$	0.100**	(0.051)	-0.086**	(0.038)	0.132***	(0.051)	0.064	(0.067)	0.125***	(0.048)
GDP growth $pc_{-}t - 1$	-0.134**	(0.066)	0.041	(0.048)	-0.084	(0.066)	0.067	(0.101)	-0.092	(0.064)
GDP deflator_ $t-1$	0.000	(0.001)	-0.000	(0.001)	-0.003**	(0.001)	-0.003*	(0.002)	-0.003***	(0.001)
Urbanisation_ $t-1$	-0.009	(0.000)	0.005	(0.004)	-0.007	(0.005)	0.005	(0.008)	-0.006	(0.004)
Log exports China_ $t-1$	-0.019**	(0.000)	-0.003	(0.007)	-0.000	(0.008)	-0.002	(0.011)	0.000	(0.008)
Log exports DAC $_t - 1$	0.084***	(0.030)	-0.030	(0.019)	0.010	(0.029)	-0.058	(0.045)	0.009	(0.027)
Log imports China_ $t-1$	0.045	(0.033)	-0.001	(0.020)	-0.093***	(0.035)	-0.108**	(0.044)	-0.079	(0.033)
Log imports DAC_ $t-1$	-0.139**	(0.070)	0.054	(0.042)	0.084	(0.072)	0.113	(0.099)	0.060	(0.067)
Log OFDI stock China_ $t-1$	-0.009	(0.011)	-0.001	(0.008)	0.009	(0.011)	0.033**	(0.013)	0.007	(0.010)
Log OFDI stock DAC $_{-}t - 1$	0.004	(0.016)	-0.023*	(0.012)	0.014	(0.017)	0.005	(0.019)	0.011	(0.017)
		(0.0.0)	0.0	(210.0)	1.70:0	(110:0)	200:0		(210.0)	



Table 2 (continued)

	(1)		(2)		(3)		(4)		(5)	
	Support		Support autocracy		Agree with Churchill	chill	Strongly agree with Churchill	vith	Agree with Churchill	ırchill
First-stage estimates										
Aid probability x log Chinese steel production $_t - 3$	2.540***	(0.694)	2.539*** (0.6	(0.694)	2.539***	(0.694)	2.539***	(0.694)	(0.694) 2.540***	(0.694)
Observations	160080		160080		160080		160080		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes		Yes	
Cluster	Country-year		Country-year		Country-year		Country-year		Country-year	
Number of clusters	162		162		162		162		162	
$Adj. R^2$	0.0823		0.0570		0.0596		0.0702		96200	
Kleibergen–Paap F	13.40		13.39		13.39		13.39		13.40	

Dependent variable displayed as model name. All models cover the years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.11, \*\*p < 0.05, \*\*\*\*p < 0.01)



## 5 Regional aid flows

Since Chinese aid is not distributed evenly over different regions for each country, it is plausible that individuals who live in the same administrative area as an aid project have a different reaction towards aid projects than individuals living in other regions. To control for this heterogeneity within a country, we consider the effect of Chinese aid on a regional level. The default hypothesis remains that we expect Chinese aid to reduce support for democracy and Western aid to increase it. To test the regional impact of Chinese aid, we match the regional location of each individual in the Latinobarometer to the first administrative division for each country<sup>25</sup> and allocate the geocoded aid flows from AidData on this level. Since DAC aid flows are only available at the country level, we use geocoded World Bank projects (AidData, 2017) to control for leverage effects.

As the probability of receiving aid is available at the regional level, we try to construct the instruments at this level. Nevertheless, doing so poses several practical problems. Variation within the aid flows at the regional level is lower than at the national level, and many observations are zero, which makes it nearly impossible to construct reliable instruments at the regional level. Consequently, we use the country-level instruments at the regional level.

Table 3 shows the relationship between regional Chinese aid flows and individual support for democracy in a linear probability model using OLS with different levels of fixed effects. Models 1-3 include country and year fixed effects, with an increasing number of individual-level controls. For all models, the marginal effect of Chinese aid flows is positive. However, in contrast to DAC ODA commitments, regional aid commitments from the World Bank project are insignificant. This situation is consistent with countrylevel flows, as seen below in Table 5, and is likely to be caused by the complicated history of relations between the World Bank and many Latin American countries (Brown, 2009; Tuozzo, 2004). We are aware that World Bank aid is endogenous. The current literature (e.g., Cohen, 2023; Dreher et al., 2021) suggests the use of liquidity measures as instruments. Unfortunately, data are publicly available only from 2008, which implies that we cannot instrument half of our period. Therefore, we chose to leave it as it is to control for the effect of World Bank aid but be cautious when it comes to the interpretation. Including country-year fixed effects in Model 4 and controlling for region fixed effects in Model 5 shows that this relationship is significant at the 10% and 5% levels, respectively. To summarize, breaking down Chinese aid at the regional level does not change the main results. However, the estimated marginal impact is smaller than in the baseline model.<sup>26</sup>

To test the robustness of the differential impact of Chinese aid flows on different measures of democratic support, we test the effect of regional disaggregation, as in Table 2. Table 4 shows that regional aid flows do not alter the results at the country level. Individuals in regions with Chinese aid flows are more likely to prefer democracy to autocracy but do not necessarily view it as the best system. In both Tables 3 and 4, we see that the positive relationship between a good opinion of China and support for democracy remains very strong. In contrast, the relationship between a good opinion of the US and democracy is only positive and significant when the outcome variable is "agree with the statement that democracy is the best system" (Model 3 in Table 4).



<sup>&</sup>lt;sup>25</sup> Data on the first administrative division are gathered from the GeoNames database and searched with the developed R API package "geonames" from Barry Rowlingson.

<sup>&</sup>lt;sup>26</sup> Compare to Table 15 in the appendix.

#### 6 Robustness

As a first robustness test, we replace the variable that controls for different leverages of conditional aid. The results are reported in Table 5. In Model 1, we use an instrumental variable approach to also instrument aid commitments from DAC countries. Since democracy-promoting aid payments are non-random, there may be a selection effect working, which may not only distort the estimate for DAC aid but also for total Chinese aid.<sup>27</sup> To instrument the sum of DAC aid, we follow Brazys and Vadlamannati (2021), Ahmed (2016), and Dreher and Langlotz (2020) and use the sum over all interactions between the probability of receiving aid from DAC country k with the government k's fractionalization of the legislature.<sup>2829</sup>

The instrument is weak, as the Kleibergen-Paap F-statistic is less than 10. Furthermore, we used the test of Olea and Pflueger (2013) on weak instruments and cannot reject the null hypothesis that the instrument is weak. Therefore, we also try alternative approaches to obtain reliable instruments, for example, estimating the first stage based on a larger sample. Unfortunately, this approach results in a weak instrument as well. Thus, we can conclude that there is little to be gained compared to the baseline model. In Model 2, we include ODA disbursements from DAC countries. The results show that the actual DAC disbursements are not positively correlated with higher support for democracy, other than commitments. Our variable of interest remains robust, indicating that this relationship is not affected when Chinese commitments are measured up against actual disbursements from DAC countries. To assess the leverage effect of DAC countries compared to our variable of interest, which captures all official financial commitments from China, we include OOF flows in Model 3. In Model 4, we include ODA commitments only from the US, and the relationship between Chinese aid flows and support for democracy remains unchanged. In contrast to Chinese aid flows, ODA commitments from the US are not associated with higher support for democracy. The insignificant estimator of U.S. aid mirrors the insignificant relationship between a good opinion of the US and support for democracy. Both are likely a result of the complicated history between the US and several Latin American countries. These results highlight the importance of reexamining the results of Blair et al. (2021) for the Latin American case: the positive relationship between Chinese aid and support for democracy is obviously not explained by an alignment with Western values but driven by something different. Model 4 includes aid volumes in current US dollars from World Bank projects at the country-year level with robust results. 3031 The effect of our variable of interest remains the same.

We control for additional country-level variables to account for the dynamic domestic political economy, which is shown in Table 22 of the appendix. We include an election

<sup>&</sup>lt;sup>31</sup> Geocoded data on World Bank projects come from AidData (2017).



<sup>&</sup>lt;sup>27</sup> The rationale is that aid granted by China and DAC, respectively, depends on the institutional environment. This is seen in Table 12. While socialist Venezuela receives the least DAC aid, it is one of the top recipients of Chinese aid. Since the institutional environment determines support for democracy, there is probably a distorting correlation between Chinese aid, DAC aid, and support for democracy.

<sup>&</sup>lt;sup>28</sup> aidDAC, j, t = Pk Frack, t \* pj, k.

<sup>&</sup>lt;sup>29</sup> This approach is equivalent to an approach where the instrumental variable is constructed by running a regression where bilateral flows are predicted for each DAC country and then averaged (Dreher & Langlotz, 2020).

<sup>&</sup>lt;sup>30</sup> In Models 3 and 4 of Table 5, only Chinese aid flows are instrumented, as in the Baseline Table.

Table 3 Regional aid flows

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	ic	Attiudes		Country-year FE	Æ	Region FE	
Log total Chinese aid $\_t - 1$	0.002*	(0.001)	0.001	(0.001)	0.001	(0.001)	0.002**	(0.001)	0.002**	(0.001)
Log world bank projects $_{-}t-1$	-0.001	(0.001)	-0.001	(0.001)	-0.001	(0.001)	-0.000	(0.001)	0.000	(0.001)
Democracy	- 0.006	(0.026)	-0.012	(0.025)	-0.013	(0.026)				
Age			0.001	(0.000)	0.001***	(0.000)	0.001	(0.000)	0.001***	(0.000)
Female			-0.030***	(0.003)	-0.026***	(0.003)	-0.027***	(0.003)	-0.026***	(0.003)
Highly educated			0.073***	(0.006)	0.072***	(0.000)	0.077***	(0.005)	0.076***	(0.005)
Household wealth			0.013***	(0.001)	0.013***	(0.001)	0.012***	(0.001)	0.013***	(0.001)
Unemployed			-0.011*	(0.000)	-0.010	(0.006)	- 0.008	(0.006)	-0.007	(0.006)
Democratic capital			0.001*	(0.000)	0.001**	(0.000)	0.001*	(0.000)	0.001	(0.000)
Opinion China good					0.027***	(0.004)	0.028***	(0.004)	0.030***	(0.004)
Opinion USA good					-0.003	(0.006)	-0.004	(0.005)	-0.002	(0.005)
Approve 0wn president					0.073***	(0.007)	0.073***	(0.006)	0.071***	(0.006)
Trust people					0.028	(0.006)	0.028***	(0.006)	0.027***	(0.006)
Observations	162399		162399		162399		162399		162399	
CountryFE	Yes		Yes		Yes		No		No	
RegionFE	No		No		No		No		Yes	
TimeFE	Yes		Yes		Yes		No		No	
Country-yearFE	No		No		No		Yes		Yes	
Cluster	Countr-year		Countr-year		Countr-year		Countr-year		Countr-year	
Number of clusters	167		167		167		167		167	
$Adj. R^2$	0.0505		0.0615		0.0683		0.0799		0.0887	

Dependent for all models is supports democracy. All models include years 2003–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 4 Regional aid flows and concepts of democratic support

o	•	11								
	(1)		(2)		(3)		(4)		(5)	
	Support democracy	racy	Support autocracy	cy	Agree with Churchill	ırchill	Strongly agree with Churchill	with	Agree with Churchill	ırchill
Log total Chinese aid $\underline{t} - 1$	0.002**	(0.001)	-0.001**	(0.000)	0.000	(0.001)	0.001	(0.001)	0.000	(0.000)
Log world bank projects $_{-}t-1$	0.000	(0.001)	0.000	(0.000)	0.001*	(0.000)	- 0.000	(0.000)	0.001	(0.000)
Satisfaction with democracy	0.141***	(0.007)							0.125***	(0.005)
Age	0.001***	(0.000)	-0.001***	(0.000)	0.000***	(0.000)	0.001***	(0.000)	0.000***	(0.000)
Female	-0.024***	(0.003)	0.025***	(0.002)	-0.022***	(0.002)	-0.019***	(0.003)	-0.020***	(0.002)
Highly educated	0.077***	(0.005)	-0.065***	(0.004)	0.044***	(0.004)	0.048***	(0.004)	0.045***	(0.004)
Household wealth	0.013***	(0.001)	-0.013***	(0.001)	0.011***	(0.001)	0.010***	(0.001)	0.011***	(0.001)
Unemployed	-0.003	(0.006)	0.004	(0.005)	-0.010**	(0.005)	-0.006	(0.005)	-0.007	(0.005)
Democratic capital	0.001	(0.000)	0.000	(0.000)	0.001**	(0.000)	0.002***	(0.000)	0.001**	(0.000)
Opinion China good	0.025	(0.004)	-0.032***	(0.003)	0.040***	(0.003)	0.022***	(0.003)	0.036***	(0.003)
Opinion USA good	-0.005	(0.006)	0.002	(0.004)	0.036***	(0.004)	-0.000	(0.004)	0.034***	(0.004)
Approve own president	0.039***	(0.006)	-0.046***	(0.004)	0.1111***	(0.005)	0.054***	(0.005)	0.082***	(0.004)
Trust people	0.014**	(0.005)	-0.048***	(0.004)	0.021***	(0.004)	0.015***	(0.005)	0.010***	(0.004)
Observations	162399		162399		162399		162399		162399	
CountryFE	No		No		No		No		No	
RegionFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	No		No		No		No		No	
Country-yearFE	Yes		Yes		Yes		Yes		Yes	
Cluster	Country-year		Country-year		Country-year		Country-year		Country-year	
Number of clusters	167		167		167		167		167	
$Adj. R^2$	0.105		0.0730		0.0785		0.104		0.0957	
Kleibergen–Paap F										

All models include years 2003–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 5 Leverage

	(1)		(2)		(3)		(4)	(5)	
	DAC IV		DAC disbursements	ements	DAC ODA+OOF	OOF	US aid	World bank projects	projects
Log total Chinese aid pc_ $t - 1$	0.051**	(0.024)	(0.024) 0.055**	(0.025)	(0.025) 0.051**	(0.022)	(0.022) 0.079***	(0.029) 0.057**	(0.026)
Log DAC ODA dishursements pc $t-1$	000	(0.000)	9000	(0.021)					
Log DAC ODA+OOF disbursements pc_ $t - 1$				•	0.015	(0.010)			
$Log ODA US aid pc_t - 1$							0.019	(0.020)	
Log world bank projects $pc_t - 1$								0.006	(0.000)
Democracy	-0.095**	(0.044)	-0.051	(0.035)	-0.054	(0.035)	-0.058	(0.036) -0.048	(0.035)
Age	0.001	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000) 0.001***	(0.000)
Female	-0.024***	(0.003)	-0.025***	(0.003)	-0.025***	(0.003)	-0.025***	(0.003) -0.025***	(0.003)
Highly educated	0.076***	(0.006)	0.077***	(0.006)	0.077***	(0.006)	0.077***	(0.006) 0.077***	(0.000)
Household wealth	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001) 0.012***	(0.001)
Unemployed	-0.010	(0.006)	-0.011*	(0.006)	- 0.009	(0.006)	-0.011*	(0.006) -0.011*	(0.000)
Democratic capital	0.000	(0.001)	0.001*	(0.000)	0.001**	(0.000)	0.001**	(0.001) 0.001*	(0.000)
Opinion China good	0.028***	(0.004)	0.027***	(0.004)	0.029***	(0.004)	0.027***	(0.004) 0.027***	(0.004)
Opinion USA good	-0.005	(0.006)	-0.005	(0.005)	-0.005	(0.006)	-0.006	(0.006) -0.004	(0.005)
Approve own president	***9200	(0.007)	***9200	(0.007)	0.078***	(0.007)	0.077***	(0.007) 0.076***	(0.007)
Trust people	0.029***	(0.000)	0.029***	(0.006)	0.031***	(0.006)	0.028***	(0.006) 0.029***	(0.000)
$Log GDP pc_{-}t - 1$	0.148**	(0.066)	0.088*	(0.049)	0.073	(0.053)	0.108*	*960.0 (090.0)	(0.052)
GDP growth $pc_t - 1$	-0.090	(0.083)	-0.140**	(0.070)	-0.138**	(0.069)	-0.116	(0.080) -0.147**	(0.072)
GDP deflator_ $t-1$	0.001	(0.001)	0.000	(0.001)	-0.001	(0.001)	0.001	(0.001) 0.000	(0.001)
Urbanisation_ $t-1$	-0.006	(0.007)	-0.012**	(0.006)	-0.013**	(0.006)	-0.010	(0.007) -0.013**	(0.000)
Log exports China_ $t-1$	-0.016*	(0.009)	-0.020**	(0.009)	-0.020**	(0.010)	-0.024**	(0.011) -0.019**	(0.000)
Log exports US_ $t-1$							0.002	(0.019)	
Log exports DAC_ $t-1$	***960.0	(0.033)	(0.033) 0.082**	(0.032)	(0.032) 0.088***	(0.031)		0.083***	(0.032)
Log imports China_ $t - 1$	0.005	(0.039)	0.042	(0.037) 0.041	0.041	(0.035)	0.026	(0.038) 0.038	(0.035)



◡	
a)	
=	
Ξ.	
$\overline{}$	
$\circ$	
$\circ$	
ຸບ,	
೨	
ಲ	
ဗ	
၁	
<u> </u>	
ပ	
ى 2	
-,	
-,	
e 5 (c	
ë	
<u>ن</u>	
<u>ن</u>	
<u>ن</u>	
흠	
ble!	
흠	
able!	
ble!	

	(1)		(2)		(3)		(4)	(5)		
	DAC IV		DAC disbursements	ments	DAC ODA+OOF	OOF	US aid	Mo Wo	World bank projects	ojects
Log imports $US_{-t} - 1$							-0.109**	(0.055)		
Log imports DAC_ $t-1$	-0.067	(0.085)	(0.085) -0.134*	(0.078)	(0.078) -0.123*	(0.072)		0-	-0.135*	(0.077)
Log OFDI stock China_ $t - 1$	-0.011	(0.012)	(0.012) -0.005	(0.012)	(0.012) - 0.006	(0.012)	(0.012) -0.003	(0.015) - 0.006	900.	(0.013)
Log OFDI stock $US_{-}t - 1$							-0.008	(0.009)		
$Log OFDI stock DAC_{-}t - 1$	-0.007	(0.020)	0.015	(0.017) 0.014	0.014	(0.017)		0.013	13	(0.018)
Aid probability x Log Chinese steel production $-1-3$	2.754***	(0.837)	2.355***	(0.745)	(0.745) 2.629***	(0.697)	(0.697) 2.157***	(0.656) 2.357***	57***	(0.730)
Aid probability x avrg. gov. fractionalization $t - 3$	-1.740	(3.395)								
Observations	160080		160080		155855		160080	160	160080	
CountryFE	Yes		Yes		Yes		Yes	Yes		
TimeFE	Yes		Yes		Yes		Yes	Yes		
Cluster	Country-year		Country-year		Country-year		Country-year		Country-year	
$Adj. R^2$	0.0625		0.0635		0.0631		0.0572	0.0	0.0633	
Kleibergen–Paap F	6.105		266.6		14.23		10.81	10.44	4	

Dependent for all models is supports democracy. All models include years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



year indicator<sup>32</sup> to account for swing elections (Anaxagorou et al., 2020, as cited by Dreher et al., 2021). Election years are also likely to affect how individuals assess democracy. While the election-year indicator has, as expected, a positive effect on the support for democracy, the core results remain unchanged. This holds when controlling for the Economic Freedom Index,<sup>33</sup> which is negatively impacted by Chinese aid (Brazys & Vadlamannati, 2021) and an index of ethnic fractionalization,<sup>34</sup> which can be a determinant of public goods provisions (Ejdemyr et al., 2018). Since Chinese aid is in large part devoted to the energy generation and supply sector, the positive aid effect we have seen could be due to large natural resource rents. While the effect of natural resource rents is positive, the positive relationship between Chinese aid and support for democracy remains unchanged.

Next, we control for additional individual characteristics and attitudes. Table 6 shows the results from our full baseline model for four additional individual controls. We include the self-reported individual positioning on the left-right political spectrum in Model 1, as individuals' political leanings may impact how they assess the consequences of aid from the Chinese government. In Model 2, we include the average number of days respondents self-report consuming the news through media such as newspapers, radio, and TV. We include this variable because we expect that individuals who consume news regularly are more likely to be aware of Chinese aid projects and more informed about the government at home and in China.

In Models 3 and 4, we control for the individuals' assessment of their current economic and life circumstances. As discussed above, Chinese aid has been found to increase local economic activity (Dreher et al., 2021; Marchesi et al., 2021). Since many Chinese projects focus on infrastructure and energy supply, Chinese aid may improve the assessment of the functioning of the economy and improve life quality, for example, by reducing traveling time to work or increasing the access to and reliability of electricity. We include an indicator of whether the individuals assess their current economic situation as bad. We expect that if Chinese aid is assessed as effective by citizens, fewer will state that their current economic situation is bad, and more will be more likely to support democracy. In Model 4, we control for the life satisfaction of individuals. This model tests whether the positive relationship between Chinese aid and support for democracy is channeled through life satisfaction. If Chinese aid projects increase the perceived quality of individuals' lives, enhancing life satisfaction, this may increase the probability of supporting democracy. However, including variables that control for the current personal situation of individuals does not impact the significance of the estimate.

It may be that the relationship between Chinese aid and support for democracy is impacted by the change in individuals' assessment of the future economic situation instead of their current one. In this way, Chinese aid would generate optimism about the personal and national economic future, increasing support for democracy. This is what we test in Models 5 and 6. In Model 5, we include an indicator of whether individuals state that they believe their future economic situation will be better; in Model 6, we include the variable that individuals stated that the country's future economic situation will be better. The inclusion of each variable does not alter the results.

<sup>&</sup>lt;sup>34</sup> Data come from the Historical Index of Ethnic Fractionalization Dataset (HIEF) by Dražanová (2020).



<sup>&</sup>lt;sup>32</sup> Data from the DPI (Cruz et al., 2018).

<sup>&</sup>lt;sup>33</sup> Data come from the Fraser Institute (Gwartney et al., 2020).

Lastly, we are interested in whether the experience of corruption interferes with the positive relationship. It has been well documented that Chinese aid has been linked to corruption (Isaksson & Kotsadam, 2018), and corruption is linked to an erosion of regime legitimacy (Seligson, 2002). Model 7 includes an indicator of whether individuals or their family members have witnessed corruption. The marginal effect is, as expected, negative. However, the variable of interest remains unchanged. The results are replicated at the regional level; see Table 23 in the appendix.

We include additional individual-level controls, not only to check the robustness of the positive and significant relationship between Chinese aid and support of democracy but also to learn about potential channels. It is of particular interest to find out whether Chinese aid has increased the number of individuals who have a positive outlook on the current and future economy or a positive evaluation of the current administration and institutions, increasing their support for democracy. The inclusion of these variables has not changed the positive relationship found in the baseline. We conclude that this mechanism is not at play at a national level. To check this conjecture, we replace our dependent variable with the following variables: support for the current president, satisfaction with democracy, current economic situation, life satisfaction, and beliefs on the personal future and economic situation. The results in Table 24 of the appendix provide further evidence that the positive relationship between Chinese aid and support for democracy is not explained by a change in satisfaction with current institutions or expectations for improvement in the future.

To better understand who supports democracy conditional on Chinese aid, we split the sample across different individual characteristics. Table 7 shows the results of eight sample splits based on the baseline model, including individual- and countrylevel controls. The first sample split is across age differences. We split the sample into individuals born before and after 1985. The underlying logic is that younger individuals will not have personal memories of the Cold War and may thus view donors differently. The sample split shows that the estimated marginal effect for younger individuals is positive but insignificant, while the sample based on older individuals is positive and significant. As the following sample split shows, individuals with above-mean democratic capital show a positive and significant effect of Chinese aid on support for democracy while individuals with below-average democratic capital do not. Along the urban/rural split, individuals living in cities with a population above 50,000 are more likely to support democracy than rural-based individuals. A sample split along education shows that more educated individuals exhibit a significant change in support for democracy with an increase in Chinese aid. Left-leaning individuals show a significant and positive relationship between Chinese aid commitments and their support for democracy while right-leaning individuals do not.

These differences in the significance of estimators hint that there may be heterogeneity in the reaction toward Chinese aid. However, all estimators of the sample split suggest a positive relationship between Chinese aid and support for democracy. In addition, overlapping confidence bands (at the 95% level) indicate that the estimators are not significantly different from each other. In the case of differences in wealth, news consumption, and experiences with corruption, neither confidence bands nor the significance of the positive estimator indicate any difference. Overall, the sample split suggests that a broad coalition of society in Latin America does not decrease its support for democracy in the face of increasing aid from China.



Table 6 Additional individual controls

	(1)		(2)		(3)		(4)		(5)		(9)		(7)	
	Left-right		News		Econ. bad		Life-satisfaction	tion	Future econ. better	better	Future econ. cty. better		Corruption	
Log total Chinese aid $t-1$	0.070***	(0.025)	(0.025) 0.053**	(0.026)	(0.026) 0.058**	(0.027)	(0.027) 0.050**	(0.022) 0.052**	0.052**	(0.022)	(0.022) 0.052**	(0.022) 0.055**	0.055**	(0.023)
$ \begin{array}{c} \text{Log DAC} \\ \text{ODA} \\ \text{pc}_{-}t - 1 \end{array} $	0.035*	(0.018)	(0.018) 0.037**	(0.019) 0.023	0.023	(0.016)	(0.016) 0.030**	(0.014) 0.030**	0.030**	(0.014)	(0.014) 0.030**	(0.014) 0.031**	0.031**	(0.015)
Democracy Left-right scale	-0.066* 0.004***	(0.037)	-0.086**	(0.042)	(0.042) -0.044	(0.038)	(0.038) -0.065*	(0.034)	(0.034) -0.065*	(0.033)	(0.033) -0.065**	(0.033) -0.064*	-0.064*	(0.035)
News consumption (days)			0.004***	(0.001)										
Personal economic situation					-0.033***	(0.006)								
Life satisfac-							0.044**	(0.004)						
Future econ.									0.027***	(0.004)				
better Future econ. cty.											0.040***	(0.004)		
betterr Corruption Age	0.002***	(0.000)	(0.000) 0.001***	(0.000)	(0.000) 0.001***	(0.000)	(0.000) 0.001***	(0.000)	(0.000) 0.001***	(0.000)	(0.000) 0.001***	(0.000)	-0.013** (0.000) 0.001***	(0.006)



ned)
contin
் 9
<u>•</u>
亙
ī

	(1)		(2)		(3)		(4)		(5)		(9)		(7)	
	Left-right		News		Econ. bad		Life-satisfaction	tion	Future econ. better	better	Future econ. cty. better	cty.	Corruption	
Female	-0.025***	(0.003)	- 0.024***	(0.003)	-0.026***	(0.003)	-0.024***	(0.003)	-0.025***	(0.003)	-0.024***	(0.003)	-0.026***	(0.003)
Highly educated	0.081***	(0.006)	0.071***	(0.006)	0.077***	(0.006)	0.075***	(0.006)	0.076***	(0.006)	0.077***	(0.006)	0.077***	(0.006)
Household wealth	0.012***	(0.001)	0.012***	(0.001)	0.011***	(0.001)	0.011***	(0.001)	(0.001) 0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed -0.009	-0.009	(0.007)	-0.008	(0.007)	- 0.009	(0.007)	-0.006	(0.006)	-0.010*	(0.006)	-0.010	(0.006)	-0.010*	(0.006)
Democratic 0.001 capital	0.001	(0.000)	0.001	(0.000)	0.001*	(0.000)	0.001	(0.000)	0.001	(0.000)	0.001	(0.000)	0.001	(0.000)
Opinion China good	0.030***	(0.004)	0.027***	(0.004)	0.026***	(0.004)	(0.004) 0.027***	(0.004)	(0.004) 0.027***	(0.004)	(0.004) 0.026***	(0.004)	0.027***	(0.004)
Opinion USA good	-0.014**	(0.006)	-0.008	(0.006)	-0.006	(0.006)	(0.006) - 0.006	(0.006) -0.005	-0.005	(0.006)	-0.005	(0.006)	-0.006	(0.005)
Approve own president	0.073***	(0.007)	0.072***	(0.008)	0.073***	(0.007)	0.072***	(0.007)	(0.007) 0.071***	(0.007)	0.068***	(0.007)	0.076***	(0.007)
Trust people	0.029***	(0.006)	0.023***	(0.006)	(0.006) 0.027***	(0.000)	(0.006) 0.027***	(0.006)	(0.006) 0.028**	(0.006)	(0.006) 0.027***	(0.006)	(0.006) 0.030***	(0.006)
$ Log GDP \\ pc_t - 1 $	0.125**	(0.055)	0.085	(0.052)	0.099**	(0.050)	0.106**	(0.049)	0.107**	(0.049)	0.112**	(0.049)	0.109**	(0.051)
GDP growth $pc_{-}t - 1$	-0.156**	(0.071)	-0.138**	(0.063)	(0.063) -0.146**	(0.070)	-0.124*	(0.065)	(0.065) -0.123*	(0.065)	(0.065) -0.128**	(0.065)	(0.065) -0.117*	(0.067)
1,	0.001	(0.001)	0.001	(0.001) 0.000	0.000	(0.001)	0.000	(0.001) 0.000	0.000	(0.001) 0.000	0.000	(0.001)	0.000	(0.001)



_
7
a)
⇉
$\overline{}$
.=
$^{\circ}$
્પ્
ಲ
ဗ
ၑ
ၑ
<u>ဗ</u>
<u>ပ</u>
<u>့</u>
_
၁ 9 e
ē
_
ĕ
ĕ
<u>p</u> e
<u>p</u> e
<u>p</u> e
<u>p</u> e

	(1)		(2)		(3)		(4)		(5)		(9)		(7)	
	Left-right		News		Econ. bad		Life-satisfaction	ion	Future econ. better	better	Future econ. cty. better	cty.	Corruption	
Urbanisa- tion_ $t-1$	-0.008	(0.006)	-0.010	(0.006)	-0.010	(0.006)	-0.010*	(0.006)	-0.010*	(0.006)	-0.010*	(0.006)	-0.010	(0.006)
Log exports $-0.016$ * China_ $t-1$	-0.016*	(0.010)	-0.021*	(0.011)	(0.011) -0.019*	(0.010)	(0.010) -0.018**	(0.009)	(0.009) -0.018**	(0.009)	(0.009) -0.018**	(0.000)	(0.009) -0.019**	(0.009)
Log exports $0.086***$ DAC_t - 1	***980.0	(0.033)	0.079**	(0.032)	0.084***	(0.029)	(0.029) 0.081***	(0.029)	0.083***	(0.030)	(0.030) 0.080***	(0.030)	0.085***	(0.031)
Log imports China $t-1$	0.034	(0.036)	0.027	(0.042)	0.036	(0.033) 0.029	0.029	(0.031)	0.030	(0.032)	0.031	(0.031) 0.027	0.027	(0.033)
Log imports DAC_ $t-1$	-0.137*	(0.074)	- 0.065	(0.087)	(0.087) -0.100	(0.076) -0.110	-0.110	(0.069) -0.112	-0.112	(0.069)	(0.069) -0.114*	(0.069) -0.114	-0.114	(0.071)
Log OFDI stock China_ $t - 1$	-0.011	(0.013)	- 0.005	(0.013)	-0.014	(0.012)	(0.012) -0.005	(0.012) -0.005	-0.005	(0.011) - 0.004	- 0.004	(0.011)	-0.006	(0.012)
Log OFDI stock DAC $_t - 1$	0.003	(0.018)	0.011	(0.018) 0.002	0.002	(0.016) 0.009	0.009	(0.016) 0.010	0.010	(0.016) 0.011	0.011	(0.016) 0.008	0.008	(0.017)
First-stage estimates Aid prob- 2.575* ability x log Chi- nese steel production _t-3	2.575***	(0.697)	2.182***	(0.755)	2.178***	(0.745)	(0.745) 2.538***	(0.694)	(0.694) 2.539***	(0.694)	(0.694) 2.538***	(0.694)	(0.694) 2.534***	(0.691)



ontinued)
၁
9 9
충
멸

	(1)	(2)	(3)	(4)	(5)	(9)	(7)
	Left-right	News	Econ. bad	Life-satisfaction	Future econ. better	Future econ. cty.	Corruption
Observations 128194	128194	121183	142119	160080	160080	160080	155918
CountryFE Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
limeFE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Country-	Country-	Country-	Country-	Country-	Country-	Country-
	year	year	year	year	year	year	year
Number of 162 clusters	162	144	144	162	162	162	162
$Adj. R^2$	0.0630	0.0647	0.0641	0.0662	0.0651	0.0657	0.0641
Kleibergen- 13.66	13.66	8.365	8.543	13.38	13.40	13.39	13.45
Paap F							

Dependent for all models is supports democracy. All models include years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 7 Sample splits

	Log total (	Log total Chinese aid $pc_{-}t - 1$	Log DAC	Log DAC ODA pc_t – 1	Observa- tions	Controls	CountryFE	TimeFE	Cluster	Number of clus- ters	Adj. $R^2$	Kleiber- gen-Paap F	Median
Birthyear after 1985	0.0443	[-0.00852,0.0972]	0.0382*	[0.00873,0.0677]	47585	Yes	Yes	Yes	Country- year	162	0.0513	11.78	
Birthyear before1985	0.0585*	[0.0134,0.104]	0.0277	0.00316,0.0586]	112495	Yes	Yes	Yes	Country- year	162	0.0688	13.61	
City	0.0854*	[0.0137,0.157]	0.0371	0.00147,0.0756]	97240	Yes	Yes	Yes	Country- year	162	0.0588	7.17	5.487
No city	0.0239	[-0.0181,0.0660]	0.0268	[-0.00764,0.0612]	62840	Yes	Yes	Yes	Country- year	161	0.0692	15.88	5.487
Highly educated	0.100**	[0.0260,0.174]	0.0646*	[0.0105,0.119]	28035	Yes	Yes	Yes	Country- year	162	0.0247	8.822	
Highly educated	0.0404	0.00291,0.0837]	0.0253	0.00165,0.0523]	132045	Yes	Yes	Yes	Country- year	162	0.064	14.2	
Wealth above median	0.0684*	[0.0160,0.121]	0.0411	[-0.00209,0.0843]	68051	Yes	Yes	Yes	Country- year	162	0.0581	9.639	5
Wealth below 0.0454* median	0.0454*	[0.00186,0.0889]	0.0295*	[0.00203,0.0569]	92029	Yes	Yes	Yes	Country- year	162	0.0567	14.06	5
DemCap above median	0.0625**	0.0625** [0.0150,0.110]	0.0579*	[0.0127,0.103]	82319	Yes	Yes	Yes	Country- year	129	0.0587	9.833	12.26
DemCap below median	0.085	[-0.00524,0.175]	0.0226	[-0.00817,0.0535]	77761	Yes	Yes	Yes	Country- year	142	0.0492	8.539	12.26
Right	0.0338	0.00996,0.0776]	0.0174	0.00861,0.0435]	78838	Yes	Yes	Yes	Country- year	162	0.0598	12.66	ς.
Left	0.0708**	[0.0182,0.123]	0.0440*	[0.00503,0.0829]	81242	Yes	Yes	Yes	Country- year	162	0.0737	13.82	S
News above median	0.0524*	[0.00297,0.102]	0.0264	[-0.00352,0.0562]	98378	Yes	Yes	Yes	Country- year	162	0.0685	14.66	4.5



3
t
1
)
)
2

	Log total Chinese aid	Chinese aid $pc_{-}t - 1$	Log DAC	$pc_{-}t - 1$ Log DAC ODA $pc_{-}t - 1$	Observa- tions	Controls	Coun- tryFE	Observa- Controls Coun- TimeFE Cluster Number Adj. R <sup>2</sup> Kleiber- Median tions tryFE of clus- fers F	Cluster	Number of clus- ters	Adj. $R^2$	Kleiber- gen-Paap F	Median
News below 0.0503* [0.00172] median	0.0503*	[0.00172,0.0990]	0.0354*	,0.0990] 0.0354* [0.00222,0.0686] 61702	61702	Yes Yes	Yes	Yes	Country- year	144	0.0589	0.0589 9.172 4.5	4.5
Witnessed corruption		0.0614** [0.0190,0.104]	0.035	0.035 [-0.00350,0.0735] 28444	28444	Yes	Yes	Yes	Country- 162 year	162	0.0632 17.47		0.187
Not witnessed corruption	0.0577*	0.0577* [0.00577,0.110]	0.0357*	0.0357* [0.00192,0.0695]	127474	Yes	Yes	Yes	Country- 162 year	162	0.0652	11.32	0.187

Dependent for all models is supports democracy. All models include years 2004-2011, 2013. Individual-level and country-level control-variables included. Confident intervals (95%) are presented in parenthesis (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



### 7 Conclusion

As the strategic competition of the US with China has become a foreign policy focus of the US, the debate around Chinese international economic engagement has become more centered around democratic values. This paper adds to the growing literature on the effects of Chinese foreign aid and attitudes. We find that for Latin America, Chinese aid has no negative effect on individuals' support for democracy. In fact, Chinese foreign aid positively affects individuals' attitudes toward democracy when they are asked a question directed at competition between democracy and autocracy. While ODA commitments from DAC countries are positively correlated with support for democracy, ODA disbursements from DAC countries, ODA commitments from the US, and World Bank projects are not.

This effect is mirrored in the relationship between individual-level attitudes towards China and the US and support for democracy, respectively. There is a strong, robust relationship between a positive opinion of China and support for democracy across all specifications. A positive opinion of the US does not translate into higher support for democracy. In conjunction with our main results, this evidence is a hint that there is no "role model effect" of China promoting an autocratic development strategy. Our results may provide relief for policymakers concerned about the current impact of Chinese aid on civil society and demonstrate the agency of civil society in recipient countries in forming citizens' opinions on democracy.

## **Appendix**

See Fig. 1 and Tables 8, 9, 10, 11, 12, 13, 14, 15, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 and 26.

**Table 8** Chinese aid in current million US \$ by country

Recipient	Sum m US \$	Number of projects
VEN	10206	23
ECU	6882.654	20
BRA	6458.395	15
ARG	1959.969	4
BOL	1506.413	28
CHL	1253	5
CRI	935.2	17
MEX	380	7
PER	192.7491	20
COL	79.69712	20
URY	48.89161	11
NIC	30	1

Includes years 2002–2013



Table 9	Chinese aid in current
million	US\$ by aid class

Aid class	Sum m US\$	Number of projects
OOFV-like	28930.35	94
ODA-like	1002.62	77

Includes years 2002-2013



Table 10	Top 15	Table 10 Top 15 Chinese aid projects	ects in current million US\$	illion US\$		
Recipient	Year	Intent	Amount m US\$	Class	Sector	Title
VEN	2013	2013 Commercial	4020	OOF-like	Energy generation and supply	CDB funds \$4 billion PDVSA and CNPC joint venture Sinovensa in Orinoco belt
VEN	2011	2011 Mixed	4000	OOF-like	Other social infrastructure and services	ICBC loans venezuela oil firm 4 billion USD for construction of housing projects (linked to #37,918)
BRA	2010	2010 Commercial	3500	OOF-like	Energy generation and supply	China development bank extends \$3.5 billion USD loan to Petrobras from \$5 billion line of credit
ECU	2011	Mixed	2000	OOF-like	Other multisector	Ecuador Signs \$2B loan with CDB for renewable energy purposes
ARG	2011	2011 Mixed	1500	OOF-like	Transport and storage	China provides \$1.5 bil to build the Cordoba Metro project
ECU	2013	Mixed	1400	OOF-like	General budget support	Ecuador receives \$1.4 billion from China for budget
BRA	2010	Commercial	1230	OOF-like	Transport and storage	\$1.23 bln Joint China exim bank and bank of China loan for shipbuilding in Brazil
ECU	2009	2009 Commercial	1200	OOF-like	Energy generation and supply	China invests \$1.2 billion in Ecuador's Ishpingo-Tambococha- Tiputini (ITT) oil field
ECU	2010	2010 Commercial	1000	OOF-like	Energy generation and supply	China Development Bank signs 1 billion USD loan for oil agreement with petroecuador
CHL	2012	Commercial	006	OOF-like	Energy generation and supply	China agrees to invest 900 million USD in solar energy projects in Chile
BRA	2008	Commercial	750	OOF-like	Energy generation and supply	CDB loans \$750 million USD for GASCAC Pipeline
VEN	2012	Mixed	691	OOF-like	Industry, mining, construction	China committed \$691M USD loan to venezuela for geological survey
BRA	2007	Commercial	577.7947	OOF-like	Energy generation and supply	China to finance construction of candiota 3 power plant in Brazil
ECU	2010	Mixed	571	OOF-like	Energy generation and supply	China Ex-Im bank loans Ecuador 621.7 million USD to build Sopladora hydroelectric plant
VEN	2013	2013 Development 391	391	Vague (official finance)	Transport and storage	EXIM Bank loans 391 million USD for construction of the paquiven maritime terminal

Includes years 2002-2013



**Table 11** Chinese aid per sector in current m US\$

Sector	Sum m US\$	Count
Energy generation and supply	13463.56	22
Transport and storage	4598.41	17
Other social infrastructure and services	4111.87	8
Other multisector	2145.70	12
Communications	1792.15	9
General budget support	1400.00	1
Industry, mining, construction	1278.50	13
Government and civil society	249.59	15
Agriculture, forestry and fishing	232.00	5
Business and other services	218.59	6
Unallocated/unspecified	214.31	3
Banking and financial services	200.00	1
Health	10.84	7
Emergency response	9.47	15
Water supply and sanitation	4.50	1
Education	3.47	34

Includes years 2002-2013

Table 12 Ranked countries by dependent and key variables

Support democracy	Agree with Churchill	Opinion China good	Opinion USA good	Log total Chinese aid per capita	Log DAC ODA per capita
URY (0.8)	URY (0.9)	HND (0.7)	DOM (0.9)	ECU (1.9)	NIC (4.4)
VEN (0.8)	VEN (0.9)	DOM (0.7)	SLV (0.8)	BOL (1.6)	BOL (4.1)
CRI (0.8)	DOM (0.8)	CHL (0.7)	HND (0.8)	VEN (1.6)	HND (3.7)
DOM (0.7)	ARG (0.8)	VEN (0.7)	PAN (0.8)	CRI (1.1)	SLV (3.6)
ARG (0.7)	CRI (0.8)	PER (0.6)	CRI (0.8)	BRA (0.8)	GTM (3.3)
BOL (0.7)	BRA (0.8)	CRI (0.6)	COL (0.8)	ARG (0.6)	COL (3.1)
PAN (0.6)	PAN (0.8)	PRY (0.6)	NIC (0.7)	URY (0.5)	PER (3.0)
NIC (0.6)	CHL (0.8)	NIC (0.6)	ECU (0.7)	CHL (0.5)	DOM (2.8)
CHL (0.6)	COL (0.8)	BRA (0.6)	PER (0.7)	PER (0.2)	CRI (2.8)
SLV (0.6)	BOL (0.8)	SLV (0.6)	GTM (0.7)	NIC (0.2)	PAN (2.8)
ECU (0.6)	NIC (0.8)	ECU (0.6)	CHL (0.7)	MEX (0.1)	ECU (2.8)
COL (0.6)	HND (0.7)	BOL (0.6)	BRA (0.6)	COL (0.1)	PRY (2.8)
PER (0.6)	ECU (0.7)	COL (0.6)	PRY (0.6)	DOM (0.0)	URY (2.3)
BRA (0.5)	SLV (0.7)	GTM (0.6)	MEX (0.6)	HND (0.0)	CHL (1.9)
HND (0.5)	MEX (0.7)	MEX (0.6)	BOL (0.5)	PRY (0.0)	MEX (1.5)
MEX (0.5)	PER (0.7)	URY (0.5)	URY (0.5)	PAN (0.0)	BRA (1.2)
PRY (0.5)	PRY (0.7)	ARG (0.5)	VEN (0.5)	SLV (0.0)	ARG (1.2)
GTM (0.4)	GTM (0.6)	PAN (0.5)	ARG (0.4)	GTM (0.0)	VEN (0.9)

Average for each country based on years 2003-2011, 2013



Table 13 Sample support for democracy

Recipient	Year										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2013	Total
ARG	1137	1125	1056	1133	1112	1146	1076	1150	1159	1133	11,227
BOL	1143	1018	1036	1066	11116	1041	1101	1077	1043	1064	10,705
BRA	1058	1012	952	1017	1030	1048	1077	1058	1043	1061	10,356
CHL	1124	1133	1074	1114	1108	1118	1120	1136	1158	1115	11,200
COL	1012	1055	1054	1095	1105	1091	1005	1001	1117	1127	10,752
CRI	941	904	895	848	268	877	905	068	877	898	8902
DOM	0	876	839	838	819	919	818	942	932	922	7905
ECU	1164	1138	929	1098	1126	1051	1066	1089	1123	1096	10,880
GTM	724	716	841	823	742	092	068	098	852	898	9208
HND	797	789	260	714	622	789	802	833	871	782	7559
MEX	1138	1143	1098	1024	1073	1047	1050	1089	1077	1070	10,809
NIC	862	770	836	820	910	862	870	841	811	873	8455
PAN	872	606	807	688	841	834	881	877	794	875	8579
PER	1108	1085	966	1063	1042	1015	1036	1052	1098	1060	10,555
PRY	579	571	1124	1085	1044	1135	1148	1089	1098	1144	10,017
SLV	856	771	851	872	962	848	844	859	926	865	8488
URY	1125	11115	1105	11118	11113	1120	1114	1057	1115	1131	11,113
VEN	1143	1142	11116	1095	1079	1130	1141	1122	1144	1173	11,285
Total	16,783	17,272	17,169	17,712	17,575	17,831	17,944	18,112	18,238	18,227	176,863



**Table 14** Summary statistics

Variables	Count	Mean	Sd	Min	Max
Support democracy	176863	0.618417	0.485777	0	1
Agree with Churchill	176863	0.76548	0.4237	0	1
Strongly agree with Churchill	176863	0.259031	0.438104	0	1
Log total Chinese aid $pc_{t-1}$	176863	0.415483	1.008409	0	4.662047
Log DAC ODA $pc_{t-1}$	176863	2.600677	1.072613	0.71133	5.529504
Age	176863	39.39818	16.18251	16	99
Female	176863	0.504882	0.499978	0	1
Highly educated	176863	0.174983	0.379954	0	1
Household wealth	176863	4.984904	2.330198	0	9
Unemployed	176863	0.061064	0.239449	0	1
Democratic capital	176863	13.11952	6.551363	0.78681	36.27732
Opinion China good	176863	0.598373	0.490229	0	1
Opinion USA good	176863	0.671118	0.469808	0	1
Approve own president	176863	0.509326	0.499914	0	1
Trust people	176863	0.193167	0.394784	0	1
$Log GDP pc_{t-1}$	176863	8.310623	0.698411	6.80708	9.638972
GDP growth $pc_{t-1}$	176863	0.065173	0.186452	-1.7795	0.363131
GDP deflator $_{t-1}$	176863	8.820304	7.772573	-2.4199	45.94327
Urbanisation $_{t-1}$	176863	72.1577	13.51266	46.005	94.739
Log exports $China_{t-1}$	176863	19.57169	2.667699	12.28568	24.6799
Log exports $DAC_{t-1}$	176863	22.87157	1.550427	19.37058	26.57549
Log imports China <sub>t-1</sub>	176863	20.97634	1.550556	17.71069	24.7652
Log imports $DAC_{t-1}$	176863	22.79611	1.376028	20.15886	26.42401
Log OFDI stock $China_{t-1}$	160080	0.8479	1.042125	0	4.256612
$Log\;OFDI\;stock\;DAC_{t-1}$	176863	5.972053	1.348064	2.048093	8.547034



Table 15 OLS main results

Log total Chinese aid $pc_{-}t - 1$ Cog DAC ODA $pc_{-}t - 1$										
	Baseline		Socio-economic	c	Attitudes		Country-level		Integration	
	0.019***	(0.005)	0.018***	(0.005)	0.020***	(0.005)	0.016***	(0.005)	0.016***	(0.005)
	0.009	(0.013)	0.008	(0.012)	0.011	(0.012)	0.010	(0.011)	0.015	(0.011)
Democracy	-0.016	(0.024)	-0.022	(0.023)	-0.024	(0.024)	-0.046*	(0.025)	-0.065**	(0.033)
Age			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female			-0.029***	(0.003)	-0.026***	(0.003)	-0.026***	(0.003)	-0.025***	(0.003)
Highly educated			0.073***	(0.005)	0.072***	(0.005)	0.073***	(0.005)	0.075	(0.006)
Household wealth			0.013***	(0.001)	0.013***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed			-0.014**	(0.006)	-0.013**	(0.000)	-0.011*	(0.006)	-0.010	(0.006)
Democratic capital			0.001*	(0.000)	0.001*	(0.000)	0.001**	(0.000)	0.001	(0.000)
Opinion China good					0.025***	(0.004)	0.026***	(0.004)	0.027***	(0.004)
Opinion USA Good					-0.003	(0.005)	-0.004	(0.005)	-0.003	(0.005)
Approve own president					0.072***	(0.000)	0.073***	(0.006)	0.074***	(0.007)
Trust people					0.029***	(0.000)	0.029***	(0.006)	0.029***	(0.006)
$Log GDP pc_t - 1$							0.093***	(0.031)	0.085*	(0.045)
GDP growth $pc_{-}t - 1$							-0.062***	(0.018)	-0.098*	(0.059)
GDP deflator_ $t-1$							-0.000	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$							-0.013***	(0.004)	-0.011**	(0.005)
Log exports China $_t - 1$									-0.011	(0.008)
Log exports DAC $_t - 1$									0.058**	(0.024)
Log imports China_ $t-1$									0.005	(0.024)
Log imports DAC $_t - 1$									-0.027	(0.043)
Log OFDI stock China_t - 1									0.002	(0.011)
Log OFDI stock DAC $_{-}t - 1$									0.015	(0.017)
Observations	176863		176863		176863		176863		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	



Table 15 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attitudes	Country-level	Integration
Number of clusters	Yes	Yes	Yes	Yes	Yes
limeFE	Country-year	Country-year	Country-year	Country-year	Country-year
Cluster	179	179	179	179	162
Adj. R <sup>2</sup>	0.0477	0.0584	0.0651	0.0667	0.0674
V) · Vr		10000	10000		0000

Dependent for all models is supports democracy. Model 5 include years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 16 IV moving average

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	nic	Attitudes		Development		Integration	
Log total Chinese aid pc_[ $t-1$ , $t-2$ ]	0.075***	(0.019)	0.070***	(0.019)	0.072***	(0.018)	0.051***	(0.018)	0.050***	(0.018)
Log DAC ODA $pc_{-}[t-1, t-2]$	0.052**	(0.021)	0.048**	(0.021)	0.047**	(0.021)	0.041**	(0.018)	0.052***	(0.016)
Democracy	-0.061**	(0.028)	- 0.063**	(0.028)	-0.064**	(0.028)	-0.075***	(0.028)	- 0.084**	(0.032)
Age			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female			-0.029***	(0.003)	-0.026***	(0.003)	-0.026***	(0.003)	-0.025***	(0.003)
Highly educated			0.074**	(0.005)	0.073***	(0.005)	0.073***	(0.005)	***9200	(0.006)
Household wealth			0.013***	(0.001)	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed			-0.015***	(0.006)	-0.013**	(0.000)	-0.012**	(0.006)	-0.011*	(0.006)
Democratic capital			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001*	(0.000)
Opinion China good					0.025***	(0.004)	0.026***	(0.004)	0.027***	(0.004)
Opinion USA good					-0.004	(0.005)	-0.005	(0.005)	-0.004	(0.005)
Approve own president					0.072***	(0.000)	0.073***	(0.006)	0.074***	(0.007)
Trust people					0.029***	(0.000)	0.030***	(0.006)	0.029***	(0.006)
$Log GDP pc_t - 1$							0.097***	(0.034)	0.122***	(0.045)
GDP growth $pc_{-}t - 1$							-0.061***	(0.021)	-0.140**	(0.060)
GDP deflator_ $t-1$							0.000	(0.001)	- 0.000	(0.001)
Urbanisation_ $t-1$							-0.006	(0.005)	-0.008*	(0.005)
Log exports China_ $t-1$									-0.013*	(0.007)
Log exports DAC $_t - 1$									0.101***	(0.029)
Log imports China_ $t-1$									0.012	(0.028)
Log imports DAC_ $t-1$									-0.088	(0.057)
Log OFDI stock China $_t - 1$									-0.008	(0.010)
Log OFDI stock DAC $_{-}t-1$									0.018	(0.014)



Table 16 (continued)

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	၂	Attitudes		Development		Integration	
First-stage estimates										
Aid probability x Log Chinese steel production $_{-}t - 3$	2.314***	(0.419)	(0.419) 2.304***	(0.418)	(0.418) 2.303***	(0.418)	(0.418) 2.314***	(0.444)	(0.444) 2.828***	(0.572)
Observations	176863		176863		176863		176863		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes		Yes	
Cluster	country-year		Country-year		Country-year		Country-year		Country-year	
Adj. $R^2$	0.0446		0.0559		0.0625		0.0657		0.0671	
Kleibergen–Paap F	30.53		30.38		30.39		27.18		24.43	

Dependent for all models is supports democracy. Model 5 includes years 2004–2011, 2013. Clustered standard errors are reported in parentheses ( $^*p < 0.11, ^{**}p < 0.05, ^{***}p < 0.01$ )



Table 17 Number of Chinese projects

Baseline rojects_f - 1									
ber Chinese projects $_{-}I = 0.007$ *  DAC ODA pc $_{-}I = 1$ ocracy  lue  ly educated  ehold wealth  nployed  coratic capital  ion China good  ion USA good  ove own president  people  3DP pc $_{-}I = 1$ growth pc $_{-}I = 1$		Socio-economic		Attitudes		Country-level		Integration	
DAC ODA $pct - 1$ 0.001  ocracy $-0.005$ ule ly educated ehold wealth aployed ocratic capital ion China good ion USA good ove own president people $DAC = 0.005$	(0.004)	*800.0	(0.004)	0.010**	(0.004)	0.010**	(0.005)	0.005	(0.004)
ocracy — 0.005  ule ly educated ehold wealth aployed ocratic capital ion China good ion USA good ove own president people 3DP pc_f - 1 growth pc_f - 1	(0.012)	0.000	(0.012)	0.002	(0.012)	0.003	(0.010)	0.008	(0.011)
Age Female Highly educated Household wealth Unemployed Democratic capital Opinion China good Opinion USA good Approve own president Trust people Log GDP pc_1 - 1 GDP growth pc_t - 1		-0.012	(0.024)	-0.013	(0.025)	-0.039	(0.026)	-0.065*	(0.033)
Female Highly educated Household wealth Unemployed Democratic capital Opinion China good Opinion USA good Approve own president Trust people Log GDP pc_t - 1 GDP growth pc_t - 1	•	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Highly educated Household wealth Unemployed Democratic capital Opinion China good Opinion USA good Approve own president Trust people Log GDP pc_t - 1 GDP growth pc_t - 1	•	-0.029***	(0.003)	-0.026***	(0.003)	-0.026***	(0.003)	-0.025***	(0.003)
Household wealth Unemployed Democratic capital Opinion China good Opinion USA good Approve own president Trust people Log GDP pc_t - 1 GDP growth pc_t - 1	J	0.072***	(0.005)	0.072***	(0.005)	0.073***	(0.005)	0.075***	(0.006)
Unemployed Democratic capital Opinion China good Opinion USA good Approve own president Trust people Log GDP pc_t - 1 GDP growth pc_t - 1	J	0.013***	(0.001)	0.013***	(0.001)	0.013***	(0.001)	0.012***	(0.001)
Democratic capital Opinion China good Opinion USA good Approve own president Trust people $Log\ GDP\ pc\_t-1$ $GDP\ growth\ pc\_t-1$	•	-0.015**	(0.006)	-0.013**	(0.006)	-0.011*	(0.006)	-0.010	(0.006)
Opinion China good Opinion USA good Approve own president Trust people $Log\ GDP\ pc\_t-1$ $GDP\ growth\ pc\_t-1$	•	0.001	(0.000)	0.001	(0.000)	0.001**	(0.000)	0.001	(0.000)
Opinion USA good Approve own president Trust people Log GDP $pct-1$ GDP growth $pct-1$				0.025***	(0.004)	0.026***	(0.004)	0.027***	(0.004)
Approve own president Trust people $\log GDP pc_t - 1$ $GDP growth pc_t - 1$				-0.002	(0.006)	-0.004	(0.005)	-0.003	(0.000)
Trust people $\label{eq:control} \begin{tabular}{ll} Log GDP pc t - 1 \\ GDP growth pc t - 1 \end{tabular}$				0.072***	(0.007)	0.072***	(0.007)	0.073***	(0.007)
$Log GDP pc\_t - 1$ $GDP growth pc\_t - 1$				0.029***	(0.006)	0.029***	(0.006)	0.029***	(0.006)
GDP growth pc_ $t - 1$						0.094***	(0.033)	*870.0	(0.047)
						-0.065***	(0.018)	-0.087	(0.062)
GDP deflator_ $t-1$						-0.001	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$						-0.016***	(0.004)	-0.012**	(0.005)
Log exports China_ $t-1$								-0.008	(0.000)
Log exports DAC_ $t-1$								0.043	(0.027)
Log imports China_ $t-1$								-0.005	(0.025)
Log imports DAC $_{-}t - 1$								0.005	(0.046)
Log OFDI stock China_t - 1								0.005	(0.012)
Log OFDI stock DAC $_{-}t - 1$								0.018	(0.018)
Observations 176863		176863		176863		176863		160080	



Table 17 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attitudes	Country-level	Integration
CountryFE	Yes	Yes	Yes	Yes	Yes
Number of clusters	Yes	Yes	Yes	Yes	Yes
TimeFE	Country-year	Country-year	Country-year	Country-year	Country-year
Cluster	179	179	179	179	162
Adj. $R^2$	0.0469	0.0576	0.0643	0.0663	0.0669

Dependent for all models is supports democracy. Model 5 include years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 18 BL IV country averages

	(I)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	lic	Attiudes		Development		Integration	
Log total Chinese aid pc_[ $t-1$ , $t-2$ ]	0.073***	(0.018)	0.072***	(0.021)	0.078***	(0.023)	0.065***	(0.020)	0.063***	(0.022)
$Log DAC ODA pc_[t-1, t-2]$	0.050**	(0.020)	0.041**	(0.018)	0.040**	(0.019)	0.037**	(0.017)	0.055***	(0.016)
Democracy	-0.063**	(0.027)	-0.087**	(0.028)	-0.098***	(0.030)	-0.103***	(0.031)	-0.099***	(0.034)
Age			0.002	(0.004)	0.002	(0.005)	0.002	(0.004)	0.000	(0.005)
Female			0.148	(0.270)	0.229	(0.275)	0.211	(0.260)	0.260	(0.302)
Highly educated			-0.065	(0.113)	-0.033	(0.121)	-0.014	(0.109)	0.077	(0.117)
Household wealth			0.036	(0.022)	0.041*	(0.022)	0.036*	(0.020)	0.035*	(0.021)
Unemployed			-0.385	(0.245)	-0.380	(0.246)	-0.185	(0.281)	0.057	(0.283)
Democratic capital			0.019***	(0.000)	0.021***	(0.006)	0.022***	(0.005)	0.016**	(0.007)
Opinion China good					-0.099	(0.072)	-0.049	(0.068)	-0.033	(0.065)
Opinion USA good					-0.012	(0.070)	-0.070	(0.066)	-0.120*	(0.073)
Approve own president					0.083**	(0.033)	0.082***	(0.030)	0.083**	(0.036)
Trust people					0.118	(0.114)	0.140	(0.107)	0.120	(0.106)
$Log GDP pc_t - 1$							0.092**	(0.038)	0.144***	(0.054)
GDP growth $pc_{-}t - 1$							-0.061***	(0.019)	-0.157**	(0.065)
GDP deflator_ $t-1$							-0.000	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$							-0.005	(0.004)	-0.012**	(0.005)
Log exports China_ $t - 1$									-0.013	(0.008)
Log exports DAC $_t - 1$									0.108***	(0.031)
Log imports China_ $t-1$									0.028	(0.034)
Log imports DAC_ $t-1$									-0.125*	(0.067)
Log OFDI stock China_ $t-1$									-0.014	(0.011)
Log OFDI stock DAC_ $t-1$									0.020	(0.015)



Table 18 (continued)

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	nic	Attiudes		Development	t	Integration	
First-stage estimates										
Aid probability x log Chinese steel production $_{-}^{-}t-3$	2.356***	(0.440)	2.067***	(0.471)	2.040***	(0.480)	2.232***	(0.490)	2.586***	(0.647)
Observations	179		179		179		179		162	
CountryFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes		Yes	
Cluster	No		No		No		No		No	
Adj. $R^2$	869.0		0.712		0.701		0.743		0.753	
Kleibergen–Paap F	28.61		19.25		18.10		20.78		15.97	

Dependent for all models is supports democracy. Model 5 include years 2004–2011, 2013. Robust standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 19 Number of projects country averages

6 1										
	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	mic	Attindes		Country-Level		Integration	
Number Chinese projects_t - 1	0.008	(0.005)	90000	(0.004)	*800.0	(0.005)	*600.0	(0.005)	0.004	(0.005)
$Log DAC ODA pc_t - 1$	0.004	(0.013)	0.005	(0.012)	900.0	(0.012)	0.004	(0.012)	0.012	(0.014)
Democracy	-0.013	(0.026)	-0.043	(0.028)	-0.055*	(0.030)	-0.058*	(0.030)	-0.079**	(0.036)
Age			0.003	(0.004)	0.002	(0.004)	0.002	(0.004)	0.002	(0.005)
Female			-0.109	(0.291)	-0.009	(0.286)	0.084	(0.282)	0.323	(0.318)
Highly educated			-0.134	(0.106)	-0.100	(0.106)	- 0.068	(0.105)	-0.013	(0.122)
Household wealth			0.072***	(0.018)	0.078***	(0.019)	0.065	(0.019)	0.053**	(0.020)
Unemployed			-0.281	(0.283)	-0.264	(0.283)	-0.007	(0.306)	0.346	(0.357)
Democratic capital			0.009	(0.008)	0.008	(0.000)	0.012	(0.007)	0.010	(0.010)
Opinion China good					-0.105	(0.082)	-0.043	(0.076)	-0.057	(0.085)
Opinion USA good					0.069	(0.067)	-0.018	(0.069)	-0.032	(0.078)
Approve own president					0.075**	(0.035)	0.072**	(0.033)	0.072	(0.044)
Trust people					0.083	(0.115)	0.142	(0.111)	0.125	(0.122)
$Log GDP pc_t - 1$							.0068	(0.040)	0.068	(0.063)
GDP growth $pc_{-}t - 1$							***L90.0-	(0.019)	-0.083	(0.075)
GDP deflator_ $t-1$							-0.001	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$							-0.015***	(0.004)	-0.014**	(0.006)
Log exports China_ $t-1$									-0.009	(0.011)
Log exports DAC_ $t-1$									0.045	(0.034)
Log imports China_ $t-1$									-0.000	(0.033)
Log imports DAC_ $t$ – 1									0.012	(0.058)
Log OFDI stock China_ $t-1$									0.003	(0.015)
Log OFDI stock DAC_ $t-1$									0.016	(0.020)
Observations	179		179		179		179		162	
CountryFE	Yes		Yes		Yes		Yes		Yes	



Table 19 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attiudes	Country-Level	Integration
TimeFE	Yes	Yes	Yes	Yes	Yes
Cluster	No	No	No	No	No
$Adj. R^2$	0.731	0.756	0.762	0.782	0.771
Kleibergen-Paap F					

Dependent for all models is supports democracy. Model 5 include years 2004–2011, 2013. Robust standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 20 Moving average country averages

	=		6		(3)		5		9	
	(I)		(7)		(6)		( <del>+</del> )		(c)	
	Baseline		Socio-economic	mic	Attiudes		Development	1	Integration	
Log total Chinese aid $pc_{-}[t-1, t-2]$	0.073***	(0.018)	0.071***	(0.021)	0.077***	(0.022)	0.064***	(0.020)	0.066***	(0.023)
(Mean) ml12_flog_commitments_dac_pc	0.050**	(0.020)	0.040**	(0.018)	0.039**	(0.018)	0.037**	(0.017)	0.055***	(0.016)
Democracy	-0.063**	(0.027)	-0.087***	(0.028)	-0.097***	(0.030)	-0.103***	(0.031)	-0.099***	(0.034)
Age			0.002	(0.004)	0.002	(0.005)	0.002	(0.004)	0.000	(0.005)
Female			0.146	(0.269)	0.226	(0.273)	0.210	(0.260)	0.257	(0.307)
Highly educated			990.0-	(0.112)	-0.033	(0.120)	-0.015	(0.108)	0.081	(0.119)
Household wealth			0.036*	(0.022)	0.041*	(0.022)	0.036*	(0.020)	0.034	(0.022)
Unemployed			-0.385	(0.244)	-0.379	(0.245)	-0.184	(0.280)	0.042	(0.286)
Democratic capital			0.019***	(0.006)	0.021***	(0.000)	0.022***	(0.005)	0.016**	(0.007)
Opinion China good					-0.099	(0.072)	-0.049	(0.068)	-0.032	(0.065)
Opinion USA good					-0.011	(0.070)	-0.069	(0.066)	-0.124*	(0.075)
Approve own president					0.083**	(0.033)	0.082***	(0.030)	0.084**	(0.036)
Trust people					0.118	(0.113)	0.140	(0.107)	0.120	(0.107)
$Log GDP pc_t - 1$							0.091**	(0.038)	0.147***	(0.055)
GDP growth $pc_{-}t - 1$							-0.061***	(0.019)	-0.161**	(0.066)
GDP deflator_ $t-1$							- 0.000	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$							-0.005	(0.004)	-0.012**	(0.005)
Log exports China_ $t-1$									-0.013*	(0.008)
Log exports DAC_ $t-1$									0.111***	(0.032)
Log imports China_ $t-1$									0.029	(0.034)
Log imports DAC $_{-}t - 1$									-0.131*	(0.070)
Log OFDI stock China_ $t - 1$									-0.014	(0.012)
Log OFDI stock DAC $_t$ – 1									0.020	(0.015)
First-stage estimates										
Aid probability x log Chinese steel production $t - 3$	2.215***	(0.412)	1.945***	(0.433)	1.928***	(0.442)	2.070***	(0.451)	2.323***	(0.600)



Table 20 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attiudes	Development	Integration
Observations	179	179	179	179	162
CountryFE	Yes	Yes	Yes	Yes	Yes
TimeFE	Yes	Yes	Yes	Yes	Yes
Cluster	No	No	No	No	No
Adj. $R^2$	0.698	0.713	0.703	0.744	0.746
Kleibergen–Paap F	28.94	20.19	18.99	21.03	15.00

Dependent for all models is Supports Democracy. Model 5 include years 2004–2011, 2013. Robust standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*\*p < 0.01)



Table 21 Concepts of democratic support country averages

	(1)		(2)		(3)		(4)	
	Support der	nocracy	Support auto	cracy	Agree with C	Churchill	Strongly ag Churchill	ree with
Log total Chinese aid $pc_t - 1$	0.060**	(0.024)	-0.008	(0.011)	-0.013	(0.017)	-0.014	(0.017)
$\begin{array}{c} \text{Log DAC ODA} \\ \text{pc}\_t - 1 \end{array}$	0.038**	(0.015)	-0.018**	(0.008)	-0.013	(0.010)	-0.012	(0.016)
(Mean) dem_ satisfaction	0.168*	(0.099)						
Democracy	-0.060*	(0.036)	0.039	(0.025)	-0.020	(0.021)	-0.075**	(0.031)
Age	0.003	(0.006)	-0.004	(0.003)	-0.007**	(0.004)	-0.007	(0.005)
Female	0.001	(0.486)	-0.116	(0.222)	0.301	(0.250)	-0.139	(0.301)
Highly educated	0.160	(0.138)	-0.018	(0.068)	-0.119	(0.090)	-0.222**	(0.101)
Household wealth	0.032	(0.022)	-0.056***	(0.011)	0.067***	(0.015)	0.050***	(0.018)
Unemployed	0.136	(0.324)	-0.352	(0.216)	-0.033	(0.222)	0.529*	(0.319)
Democratic capital	0.009	(0.009)	-0.003	(0.006)	0.012**	(0.005)	0.029***	(0.008)
Opinion China good	0.028	(0.081)	0.014	(0.046)	0.092	(0.060)	0.280***	(0.090)
Opinion USA good	-0.169*	(0.092)	0.138***	(0.048)	0.016	(0.065)	-0.112	(0.078)
Approve own president	0.052	(0.056)	-0.040	(0.025)	0.094***	(0.030)	-0.030	(0.034)
Trust people	0.038	(0.119)	-0.406***	(0.054)	0.142**	(0.071)	0.212**	(0.093)
$Log GDP pc_t - 1$	0.145**	(0.066)	-0.103***	(0.035)	0.113**	(0.049)	0.094	(0.058)
GDP growth pc_ $t - 1$	-0.150**	(0.074)	0.035	(0.049)	-0.084	(0.059)	0.118	(0.094)
GDP deflator_ $t - 1$	-0.000	(0.001)	0.000	(0.001)	-0.003***	(0.001)	-0.002**	(0.001)
Urbanisation_ $t - 1$	-0.013**	(0.006)	0.012***	(0.003)	-0.010***	(0.004)	-0.002	(0.005)
Log exports $China_t - 1$	-0.019**	(0.009)	-0.001	(0.006)	-0.000	(0.006)	0.003	(0.008)
Log exports DAC $_t - 1$	0.088***	(0.033)	-0.042**	(0.020)	0.018	(0.023)	-0.068*	(0.039)
Log imports China $_t - 1$	0.053	(0.037)	0.005	(0.019)	-0.079***	(0.028)	-0.072**	(0.036)
Log imports DAC $_t - 1$	-0.176**	(0.087)	0.058	(0.039)	0.050	(0.062)	0.023	(0.081)
Log OFDI stock China_t - 1	-0.015	(0.013)	0.006	(0.008)	-0.004	(0.010)	0.032***	(0.012)
Log OFDI stock DAC_t - 1	0.004	(0.017)	-0.019*	(0.011)	0.007	(0.014)	0.002	(0.016)
First-stage estimates								
Aid probability x log Chinese steel production $_{t} - 3$	2.582***	(0.781)	2.583***	(0.778)	2.583***	(0.778)	2.583***	(0.778)
Observations	162		162		162		162	
CountryFE	Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes	
Cluster	No		No		No		No	
Number of clusters								
Adj. $R^2$	0.688		0.820		0.730		0.779	
Kleibergen-Paap F	10.93		11.02		11.02		11.02	

Dependent for is shown as model name. All models include years 2004–2011, 2013. Robust standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 22 Additional country-level controls

	(1)		(2)		(3)		(4)	
	Election year		Economic freedom	mc	Ethnic fractionalization	ization	Resource rents	
Log total Chinese aid $pc_{-}f - 1$ Election year	0.052**	(0.022)	0.061**	(0.029)	0.049*	(0.028)	0.053**	(0.022)
Economic freedom index			-0.001	(0.001)				
Ethnic fractionalization					-0.571	(1.422)		
Natural resource rents							0.007*	(0.004)
Age	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female	-0.025***	(0.003)	-0.025***	(0.003)	-0.025***	(0.003)	-0.024***	(0.003)
Highly educated	0.076***	(0.006)	0.077	(0.006)	***9200	(0.006)	0.076***	(0.006)
Household wealth	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed	-0.011*	(0.006)	-0.010*	(0.006)	-0.010*	(0.006)	-0.010*	(0.006)
Democratic capital	0.001	(0.000)	0.001	(0.000)	0.001	(0.000)	0.001	(0.000)
Opinion China good	0.028***	(0.004)	0.028***	(0.004)	0.027***	(0.004)	0.028***	(0.004)
Opinion USA good	-0.005	(0.005)	-0.005	(0.005)	-0.004	(0.006)	-0.004	(0.006)
Approve own president	0.075***	(0.007)	***910.0	(0.007)	0.075***	(0.007)	0.075***	(0.007)
Trust people	0.029***	(0.006)	0.029***	(0.006)	0.029***	(0.006)	0.029***	(0.006)
$Log GDP pc_t - 1$	0.112**	(0.048)	0.109**	(0.051)	0.107**	(0.048)	0.114**	(0.049)
GDP growth $pc_{-}t - 1$	-0.094	(0.064)	-0.133*	(0.070)	-0.125**	(0.064)	-0.115*	(0.063)
GDP deflator_ $t-1$	0.000	(0.001)	0.001	(0.001)	0.000	(0.001)	-0.000	(0.001)
Urbanisation_ $t-1$	-0.009	(0.006)	-0.012**	(0.006)	+60000-	(0.005)	-0.012**	(0.005)
Log exports China_ $t-1$	-0.018**	(0.008)	-0.022**	(0.011)	-0.019**	(0.009)	-0.016**	(0.008)
Log exports DAC_ $t-1$	0.075**	(0.029)	0.094***	(0.035)	0.083***	(0.031)	0.065**	(0.027)
Log imports China_ $t-1$	0.022	(0.032)	0.033	(0.035)	0.035	(0.032)	0.043	(0.035)
Log imports DAC $_t$ – 1	-0.104	(0.069)	-0.137	(0.087)	-0.112	(0.069)	-0.126*	(0.074)
Log OFDI stock China_ $t-1$	-0.002	(0.011)	-0.005	(0.012)	-0.005	(0.013)	0.000	(0.011)
Log OFDI stock DAC_ $t-1$	0.013	(0.015)	0.008	(0.017)	0.008	(0.016)	0.004	(0.017)



Table 22 (continued)

	(1)	(2)	(3)	(4)
	Election year	Economic freedom	Ethnic fractionalization	Resource rents
Observations	160080	160080	160080	160080
CountryFE	Yes	Yes	Yes	Yes
TimeFE	Yes	Yes	Yes	Yes
Cluster	Country-year	Country-year	Country-year	Country-year
Adj. $R^2$	0.0650	0.0630	0.0649	0.0648
Kleibergen–Paap F	13.43	9.803	7.317	14.96

Dependent for all models is supports democracy. All models include years 2004–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



l level
್ಡ
regional
n
0
controls
-
-leve
Ė
individu
-
Additional
Table 23

	(1)		(2)		(3)		(4)		(5)		(9)		(7)	
	Left-right		News		Econ. bad		Life-satisfaction	tion	Future econ. better	better	Future econ. cty. better	cty.	Corruption	
Log Chinese aid $-t-1$	0.001*	(0.001)	0.002**	(0.001)	(0.001) 0.002**	(0.001)	(0.001) 0.002**	(0.001) 0.002**	0.002**	(0.001)	(0.001) 0.002**	(0.001)	(0.001) 0.002**	(0.001)
Log world bank projects $-t-1$	0.000	(0.001)	0.000	(0.001)	(0.001) -0.000	(0.001) 0.000	0.000	(0.001) 0.000	0.000	(0.001) 0.000	0.000	(0.001) 0.000	0.000	(0.001)
Left-right Scale	0.002*	(0.001)												
News consumption (days)			0.003***	(0.001)										
Personal economic situation bad					-0.025***	(0.005)								
Life satisfac- tion							0.039***	(0.004)						
Future econ. better									0.023***	(0.004)				
Future econ. cty. better											0.035***	(0.004)		
Corruption													-0.009	(0.005)
Age	0.002***	(0.000)	0.001***	(0.000)	(0.000) 0.001***	(0.000)	(0.000) $0.001***$	(0.000)	(0.000) 0.001***	(0.000)	(0.000) 0.001***	(0.000)	0.001	(0.000)
Female	-0.027***	(0.003)	-0.025***	(0.003)	-0.027***	(0.003)	(0.003) -0.025***	(0.003)	(0.003) 0.026***	(0.003)	-0.025***	(0.003)	-0.027***	(0.003)
Highly educated	0.079***	(0.005)	0.071***	(0.005)	(0.005) 0.075***	(0.006)	(0.006) 0.075***	(0.005)	(0.005) 0.076***	(0.005)	(0.005) 0.076***	(0.005)	(0.005) 0.077***	(0.005)



Table 23 (continued)

	(1)		(2)		(3)		(4)		(5)		(9)		(7)	
	Left-right		News		Econ. bad		Life-satisfaction	tion	Future econ. better	better	Future econ. cty. better	cty.	Corruption	
Household wealth	0.013***	(0.001)	0.013***	(0.001)	(0.001) 0.013***	(0.001)	(0.001) 0.012***	(0.001)	(0.001) 0.013***	(0.001)	(0.001) 0.013***	(0.001)	(0.001) 0.013***	(0.001)
Unemployed -0.005	-0.005	(0.007)	-0.006	(0.006)	(0.006) -0.005	(0.006)	(0.006) - 0.003	(0.006) - 0.007	-0.007	(0.006)	0.006) -0.006	(0.006)	-0.007	(900.0)
Democratic 0.001 capital	0.001	(0.000)	0.001	(0.000) 0.001*	0.001*	(0.000) 0.001	0.001	(0.000) 0.001	0.001	(0.000) 0.001	0.001	(0.000)	0.001	(0.000)
Opinion China good	0.031***	(0.004)	0.028***	(0.004)	(0.004) 0.029***	(0.004)	(0.004) 0.029***	(0.004)	(0.004) 0.029***	(0.004)	(0.004) 0.029***	(0.004)	0.029***	(0.004)
Opinion USA good	-0.011*	(0.006)	-0.006	(0.006)	(0.006) -0.002	(0.006)	(0.006) -0.003	(0.005) -0.003	-0.003	(0.005)	(0.005) -0.003	(0.005)	-0.003	(0.005)
Approve own president	0.071***	(0.007)	0.070***	(0.007)	(0.007) 0.072***	(0.007)	(0.007) 0.068***	(0.006)	(0.006) 0.068***	(0.006)	(0.006) 0.065***	(0.006)	(0.006) 0.071***	(0.006)
Trust people 0.027***	0.027***	(0.006)	0.024***	(0.006)	(0.006) 0.026***	(0.006)	(0.006) 0.025***	(0.006)	(0.006) 0.026***	(0.006)	(0.006) 0.025***	(0.006)	(0.006) 0.028***	(900.0)
Observations 129360	s 129360		125869		145413		162399		162399		162399		158591	
CountryFE	No		No		No		No		No		No		No	
RegionFE	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
TimeFE	No		No		No		No		No		No		No	
Country- yearFE	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Cluster	Countr-year		Countr-year		Countr-year		Countr-year		Countr-year		Countr-year		Countr-year	
Number of clusters	167		150		150		167		167		167		167	



(continued)
Table 23

	(1)	(2)	(3)	(4)	(5)	(9)	(7)
	Left-right	News	Econ. bad	Life-satisfaction	Future econ. better	Future econ. cty.	Corruption
Adj. R <sup>2</sup>	Adj. <i>R</i> <sup>2</sup> 0.0912	0.0886	0.0884	0.0899	0.0892	9680.0	0.0892
Kleibergen– Paap F	Д						

Dependent for all models is supports democracy. All models include years 2003–2011, 2013. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Table 24 Dependent change channels

	(1)		(2)		(3)		(4)		(5)	
	Approve own president	resident	Satisfaction democracy	mocracy	Econ. bad		Future econ. better	etter	Future econ. cty. better	ty. better
Log total Chinese aid $pc_{-}t - 1$	-0.005	(0.061)	-0.023	(0.026)	-0.012	(0.018)	0.026	(0.034)	0.033	(0.034)
Log DAC ODA $pc_t - 1$	-0.014	(0.044)	-0.032**	(0.016)	0.018	(0.012)	0.011	(0.020)	0.033*	(0.019)
Democracy	890.0	(0.093)	-0.065**	(0.027)	0.005	(0.025)	0.031	(0.045)	0.017	(0.035)
Age	0.000	(0.000)	0.000**	(0.000)	0.003***	(0.000)	-0.001***	(0.000)	-0.004***	(0.000)
Female	-0.009***	(0.003)	-0.017***	(0.002)	0.004*	(0.002)	-0.018***	(0.003)	-0.007***	(0.003)
Highly educated	-0.028***	(0.007)	-0.010*	(0.005)	-0.011***	(0.003)	0.002	(0.004)	0.010**	(0.005)
Household wealth	-0.006***	(0.002)	0.001	(0.001)	-0.027***	(0.001)	0.005***	(0.001)	0.013***	(0.001)
Unemployed	-0.022***	(0.006)	-0.026***	(0.005)	0.073***	(0.006)	-0.010**	(0.005)	0.002	(0.005)
Democratic capital	-0.001	(0.001)	0.001***	(0.001)	-0.002***	(0.001)	-0.000	(0.001)	0.000	(0.001)
Opinion China good	0.053***	(0.007)	0.030***	(0.004)	-0.017***	(0.003)	0.029***	(0.004)	0.035***	(0.004)
Opinion USA good	0.001	(0.016)	0.020***	(0.007)	-0.023***	(0.004)	0.004	(0.007)	0.014**	(0.006)
Trust people	***9L0.0	(0.000)	0.099***	(0.006)	-0.012***	(0.004)	0.044***	(0.005)	0.025***	(0.005)
$Log \ GDP \ pc_t - 1$	-0.085	(0.116)	0.053	(0.057)	-0.024	(0.030)	-0.096	(0.060)	0.023	(0.061)
GDP growth $pc_t - 1$	0.545***	(0.196)	0.063	(0.073)	0.024	(0.051)	0.093	(0.102)	-0.040	(0.102)
GDP deflator_ $t-1$	-0.003	(0.003)	-0.001	(0.001)	-0.001	(0.001)	0.001	(0.002)	0.001	(0.002)
Urbanisation_ $t-1$	-0.012	(0.017)	-0.007	(0.000)	0.005	(0.005)	-0.003	(0.007)	-0.002	(0.000)
Log exports China_ $t-1$	0.012	(0.026)	-0.001	(0.010)	0.009	(0.007)	-0.020	(0.013)	-0.012	(0.013)
Log exports DAC $_t - 1$	0.004	(0.078)	0.007	(0.035)	-0.075***	(0.025)	0.116***	(0.043)	*980.0	(0.048)
Log imports China_ $t-1$	-0.155*	(0.086)	-0.109***	(0.034)	0.012	(0.027)	-0.039	(0.047)	-0.019	(0.047)
Log imports DAC_ $t$ – 1	-0.004	(0.200)	0.186**	(0.082)	-0.027	(0.062)	0.074	(0.097)	0.029	(0.094)
Log OFDI stock China_ $t-1$	0.027	(0.034)	0.019	(0.016)	0.022**	(0.000)	-0.046**	(0.021)	-0.039*	(0.020)
Log OFDI stock DAC $_t$ – 1	-0.054	(0.051)	0.028*	(0.016)	-0.027***	(0.010)	-0.061**	(0.026)	-0.064***	(0.020)
Approve own president			0.240***	(0.010)	-0.094***	(0.005)	0.196***	(0.010)	0.175***	(0.007)



Table 24 (continued)

	(1)		(2)		(3)		(4)		(5)	
	Approve own president	sident	Satisfaction democracy	nocracy	Econ. bad		Future econ. better	etter	Future econ. cty. better	y. better
First-stage estimates				3		í I				9
Aid probability x log Chinese steel production $\_t - 3$	2.539***	(0.694)	(0.694) 2.539***	(0.694)	(0.694) 2.178***	(0.745)	(0.745) 2.539***	(0.694)	(0.694) 2.539***	(0.694)
Observations	160080		160080		142119		160080		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	
TimeFE	Yes		Yes		Yes		Yes		Yes	
Cluster	Country-year		Country-year		Country-year		Country-year		Country-year	
Number of clusters	162		162		144		162		162	
$Adj. R^2$	0.0587		0.140		0.0975		0.139		0.0903	
Kleibergen–Paap F	13.29		13.39		8.544		13.39		13.39	

Dependent for is shown as model name. All models include years 2004-2011, 2013. Clustered standard errors are reported in parentheses (\* $^p$  p < 0.1, \*\* $^p$  < 0.05, \*\*\* $^p$  < 0.01)



**Table 25** IV main results with <sub>t-2</sub>

Log total Chinese aid pc_t - 2 Log DAC ODA pc_t - 2 Democracy Age							(4)		(5)	
Log total Chinese aid $pc_{-}f - 2$ Log DAC ODA $pc_{-}f - 2$ Democracy Age	Baseline		Socio-economic	၂	Attiudes		Development		Integration	
Log DAC ODA pc_ $t - 2$ Democracy Age	0.074***	(0.021)	0.070***	(0.021)	0.070***	(0.021)	0.056**	(0.024)	0.043***	(0.016)
Democracy Age	0.058***	(0.019)	0.057***	(0.018)	0.052***	(0.018)	0.048***	(0.016)	0.046***	(0.014)
Age	-0.083**	(0.033)	-0.086***	(0.032)	-0.081**	(0.033)	-0.096***	(0.032)	-0.090***	(0.033)
þ			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female			-0.029***	(0.003)	-0.025***	(0.003)	-0.025***	(0.003)	-0.025***	(0.003)
Highly educated			0.074**	(0.006)	0.074***	(0.006)	0.074***	(0.006)	0.075***	(0.006)
Household wealth			0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)	0.012***	(0.001)
Unemployed			-0.015**	(0.006)	-0.013**	(0.006)	-0.011*	(0.000)	-0.011*	(0.006)
Democratic capital			0.001**	(0.001)	0.001***	(0.001)	0.001***	(0.001)	0.001**	(0.000)
Opinion China good					0.025	(0.004)	0.026***	(0.004)	0.026***	(0.004)
Opinion USA good					-0.002	(0.000)	-0.003	(0.005)	-0.004	(0.005)
Approve own president					***0100	(0.007)	0.072***	(0.006)	0.072***	(0.006)
Trust people					0.029***	(0.006)	0.029***	(0.006)	0.029***	(0.006)
$Log \ GDP \ pc\_t - 1$							**060.0	(0.042)	0.116**	(0.048)
GDP growth $pc_{-}t - 1$							-0.143**	(0.063)	-0.158**	(0.062) >
GDP deflator_ $t - 1$							-0.001	(0.001)	-0.001	(0.001)
Urbanisation_ $t-1$							-0.003	(0.007)	-0.008	(0.005)
Log Exports China_ $t-1$									-0.008	(0.008)
Log Exports DAC $_t - 1$									0.104***	(0.032)
Log imports China_ $t-1$									0.003	(0.031)
Log imports DAC $_t - 1$									-0.071	(0.055)
Log OFDI stock China_ $t-1$									-0.006	(0.010)
Log OFDI stock DAC $_t - 1$									0.031**	(0.016)
Observations	160080		160080		160080		160080		160080	
CountryFE	Yes		Yes		Yes		Yes		Yes	



Table 25 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attiudes	Development	Integration
TimeFE	Yes	Yes	Yes	Yes	Yes
Cluster	Country-year	Country-year	Country-year	Country-year	Country-year
Number of clusters	162	162	162	162	162
$Adj. R^2$	0.0413	0.0527	0.0591	0.0630	0.0664
Kleibergen–Paap F	23.73	23.64	23.61	16.19	23.17

The model is exactly the same as our main model, except for Chinese and DAC aid, both are applied with lag t-2. For the country controls we stay with t-1 because it seems feasible, that they affect attitudes towards democracy only by one lag. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



**Table 26** IV main results with <sub>1-3</sub>

	(1)		(2)		(3)		(4)		(5)	
	Baseline		Socio-economic	ic	Attindes		Development		Integration	
Log total Chinese aid $pc_t - 3$	0.046*	(0.026)	0.042*	(0.025)	0.044*	(0.025)	0.020	(0.028)	0.024	(0.021)
Log DAC ODA $pc_t - 3$	0.013	(0.014)	0.014	(0.013)	0.012	(0.013)	0.011	(0.013)	0.003	(0.013)
Democracy	-0.003	(0.028)	-0.008	(0.027)	-0.004	(0.031)	-0.017	(0.035)	-0.031	(0.042)
Age			0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Female			-0.028***	(0.003)	-0.024***	(0.003)	-0.024***	(0.003)	-0.024***	(0.003)
Highly educated			0.072***	(0.006)	0.071***	(0.006)	0.072***	(0.007)	0.072***	(0.006)
Household wealth			0.013***	(0.001)	0.013***	(0.001)	0.013***	(0.001)	0.013***	(0.001)
Unemployed			-0.014**	(0.007)	-0.012*	(0.007)	-0.011	(0.007)	-0.010	(0.007)
Democratic capital			0.001	(0.001)	0.001	(0.001)	0.001*	(0.001)	0.001	(0.000)
Opinion China Good					0.028***	(0.004)	0.028***	(0.004)	0.028***	(0.004)
Opinion USA good					-0.000	(0.000)	-0.002	(0.000)	-0.002	(0.006)
Approve own president					0.071***	(0.007)	0.073***	(0.007)	0.074***	(0.007)
Trust people					0.031***	(0.007)	0.031***	(0.007)	0.031***	(0.007)
$Log GDP pc_t - 1$							0.063	(0.064)	0.034	(0.066)
GDP growth $pc_{-}t - 1$							-0.009	(0.076)	0.042	(0.080)
GDP deflator_ $t-1$							-0.002	(0.001)	-0.002*	(0.001)
Urbanisation_ $t-1$							-0.021***	(0.005)	-0.017***	(0.006)
Log exports China_ $t-1$									-0.028***	(0.010)
Log exports DAC_ $t-1$									0.021	(0.028)
Log imports China_ $t-1$									0.032	(0.031)
Log imports DAC $_t - 1$									0.005	(0.048)
Log OFDI stock China_ $t-1$									0.004	(0.013)
Log OFDI stock DAC $_{-}t - 1$									0.036*	(0.022)
Observations	142808		142808		142808		142808		142808	
CountryFE	Yes		Yes		Yes		Yes		Yes	



Table 26 (continued)

	(1)	(2)	(3)	(4)	(5)
	Baseline	Socio-economic	Attiudes	Development	Integration
TimeFE	Yes	Yes	Yes	Yes	Yes
Cluster	Country-year	Country-year	Country-year	Country-year	Country-year
Number of clusters	144	144	144	144	144
Adj. $R^2$	0.0447	0.0559	0.0625	0.0668	0.0674
Kleibergen–Paap F	13.46	13.45	13.43	8.834	14.47

The model is exactly the same as our main model, except for Chinese and DAC aid, both are applied with lag t-3. For the country controls we stay with t-1 because it seems feasible, that they affect attitudes towards democracy only by one lag. Clustered standard errors are reported in parentheses (\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01)



Funding Open Access funding enabled and organized by Projekt DEAL.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

## References

- Ahmed, F. Z. (2016). Does foreign aid harm political rights? Evidence from US aid. *Quarterly Journal of Political Science*, 11(2), 183–217.
- AidData. (2017). WorldBank\_GeocodedResearchRelease\_Level1\_v1.4.2 geocoded dataset. Williamsburg, VA and Washington, DC: AidData. Accessed on 10 Jan 2022.
- Anaxagorou, C., Efthyvoulou, G., & Sarantides, V. (2020). Electoral Motives and the Subnational Allocation of Foreign Aid in Sub-Saharan Africa. European Economic Review, 127, 103430.
- Bader, J. (2015). China, autocratic patron? An empirical investigation of China as a factor in autocratic survival. *International Studies Quarterly*, 59(1), 23–33.
- Bader, J., & Faust, J. (2014). Foreign aid, democratization, and autocratic survival. *International Studies Review*, 16(4), 575–595.
- Bai, Y., Li, Y., & Wang, Y. (2022). Chinese aid and local political attitudes. Economic Modelling, 113, 105893.
- Blair, R. A., Marty, R., & Roessler, P. (2021). Foreign aid and soft power: Great power competition in Africa in the early twenty-first century. *British Journal of Political Science*, 52, 1–22.
- Bluhm, R., Dreher, A., Fuchs, A., Parks, B., Strange, A., & Tierney, M. J. (2018). Connective financing: Chinese infrastructure projects and the diffusion of economic activity in developing countries. Aid-Data working paper.
- Brazys, S., & Dukalskis, A. (2017). Canary in the coal mine? China, the UNGA, and the changing world order. *Review of International Studies*, 43(4), 742–764.
- Brazys, S., & Vadlamannati, K. C. (2021). Aid curse with Chinese characteristics? Chinese development flows and economic reforms. *Public Choice*, 188(3), 407–430.
- Brown, C. (2009). Democracy's friend or foe? The effects of recent IMF conditional lending in Latin America. *International Political Science Review*, 30(4), 431–457.
- Christian, P., & Barrett, C. B. (2017). Revisiting the effect of food aid on conflict: A methodological caution. World Bank Policy Research Working Paper (8171).
- Cohen, I. (2023). Crowd in or crowd out? The subnational fiscal response to aid. World Development, 164, 106180.
- Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Altman, D. (2021). V-dem codebook v11.
- Cruz, C., Keefer, P. & Scartascini, C. (2018). Database of Political Institutions 2017 (DPI2017). Inter-American Development Bank. Numbers for Development.
- Dražanová, L. (2020). Introducing the historical index of ethnic fractionalization (HIEF) dataset: Accounting for longitudinal changes in ethnic diversity. *Journal of Open Humanities Data*, 6, 6.
- Dreher, A., & Fuchs, A. (2015). Rogue aid? An empirical analysis of China's aid allocation. *Canadian Journal of Economics/revue Canadianne D'économique*, 48(3), 988–1023.
- Dreher, A., Fuchs, A., Hodler, R., Parks, B. C., Raschky, P. A., & Tierney, M. J. (2019). African leaders and the geography of China's foreign assistance. *Journal of Development Economics*, 140, 44–71.
- Dreher, A., Fuchs, A., Hodler, R., Parks, B. C., Raschky, P. A., & Tierney, M. J. (2021). Is favoritism a threat to Chinese aid effectiveness? A subnational analysis of Chinese development projects. World Development, 139, 105291.
- Dreher, A., Fuchs, A., Parks, B., Strange, A., & Tierney, M. J. (2022). Banking on Beijing: The aims and impacts of China's overseas development program. Cambridge University Press.
- Dreher, A., & Langlotz, S. (2020). Aid and growth: New evidence using an excludable instrument. *Canadian Journal of Economics/revue Canadianne D'économique*, 53(3), 1162–1198.
- Eichenauer, V. Z., Fuchs, A., & Brückner, L. (2021). The effects of trade, aid, and investment on China's image in Latin America. *Journal of Comparative Economics*, 49(2), 483–498.
- Ejdemyr, S., Kramon, E., & Robinson, A. L. (2018). Segregation, ethnic favoritism, and the strategic targeting of local public goods. *Comparative Political Studies*, 51(9), 1111–1143.



- Fuchs, A., & Rudyak, M. (2019). The motives of China's foreign aid. *Handbook on the international political economy of China* (p. 392ff). Massachusetts: Edward Elgar Publishing.
- Fuchs-Schündeln, N., & Schündeln, M. (2015). On the endogeneity of political preferences: Evidence from individual experience with democracy. *Science*, 347(6226), 1145–1148.
- Gamso, J. (2019). China's rise and physical integrity rights in developing countries. Review of International Political Economy, 26(4), 722–748.
- Gehring, K., Kaplan, L. C., & Wong, M. H. (2022). China and the World Bank—How contrasting development approaches affect the stability of African states. *Journal of Development Economics*, 158, 102902.
- Glaser, B. S., & Murphy, E., Melissa. (2009). Soft power with Chinese characteristics: The ongoing debate. Center for Strategic & International Studies, United States.
- Gwartney, J., Lawson, R., Hall, J., & Murphy, R. (2020). Economic Freedom Dataset, published in Economic Freedom of the World: 2020 Annual Report. Fraser Institute.
- Hanauer, L., & Morris, L. J. (2014). Chinese engagement in Africa: Drivers, reactions, and implications for US policy. Rand Corporation.
- Heath, T. R. (2021). US strategic competition with China. Rand Corporation.
- Hernandez, D. (2017). Are "new" donors challenging World Bank conditionality? World Development, 96, 529–549.
- Hess, S., & Aidoo, R. (2019). Democratic backsliding in Sub-Saharan Africa and the role of China's development assistance. Commonwealth & Comparative Politics, 57(4), 421–444.
- Humphrey, C., & Michaelowa, K. (2019). China in Africa: Competition for traditional development finance institutions? World Development, 120, 15–28.
- Iacoella, F., Martorano, B., Metzger, L., & Sanfilippo, M. (2021). Chinese official finance and political participation in Africa. European Economic Review, 136, 103741.
- Isaksson, A.-S., & Kotsadam, A. (2018). Chinese aid and local corruption. *Journal of Public Economics*, 159, 146–159.
- Kern, A., Reinsberg, B., & Shea, P. (2023). Why cronies don't cry? IMF programs, Chinese lending, and leader survival. *Public Choice*. https://doi.org/10.1007/s11127-023-01114-4
- Kersting, E., & Kilby, C. (2014). Aid and democracy redux. European Economic Review, 67, 125-143.
- Kleinberg, K. B., & Fordham, B. O. (2010). Trade and foreign policy attitudes. *Journal of ConflictResolution*, 54(5), 687–714.
- Li, X. (2017). Does conditionality still work? China's development assistance and democracy in Africa. Chinese Political Science Review, 2(2), 201–220.
- Marchesi, S., Masi, T., & Paul, S. (2021). Project aid and firm performance. *University of Milan Bicocca Department of Economics, Management and Statistics Working Paper*(479).
- Mayda, A. M., & Rodrik, D. (2005). Why are some people (and countries) more protectionist than others? *European Economic Review, 49*(6), 1393–1430.
- Ministry of Commerce, People's Republic of China (MOFCOM). (2010). *China OFDI Statistical Bulletin 2010*. Beijing, China: MOFCOM.
- Ministry of Commerce, People's Republic of China (MOFCOM). (2018). *China OFDI Statistical Bulletin 2018*. Beijing, China: MOFCOM.
- Nunn, N., & Qian, N. (2014). US food aid and civil conflict. American Economic Review, 104(6), 1630–1666.
- OECD. (2020a). Detailed aid statistics: ODA Official development assistance: disbursements. OECD International Development Statistics (database), Accessed on 19 June 2020.
- OECD. (2020b). OECD International Direct Investment Statistics 2019, OECD Publishing, Paris.
- Olea, J. L. M., & Pflueger, C. (2013). A robust test for weak instruments. *Journal of Business & Economic Statistics*, 31(3), 358–369.
- Sardoschau, S., & Jarotschkin, A. (2019). Chinese aid in Africa: Attitudes and conflict. Available at SSRN 3383978.
- Seligson, M. A. (2002). The impact of corruption on regime legitimacy: A comparative study of four Latin American countries. *Journal of Politics*, 64(2), 408–433.
- Strange, A. (2019). Seven decades of Chinese state financing in Africa: Tempering current debates. *Economic History of Developing Regions*, 34(3), 259–279.
- Strüver, G. (2016). What friends are made of: Bilateral linkages and domestic drivers of foreign policy alignment with China. *Foreign Policy Analysis*, 12(2), 170–191.
- Tuozzo, M. F. (2004). World Bank, governance reforms and democracy in Argentina. Bulletin of Latin American Research, 23(1), 100–118.



- Watkins, M. (2022). Undermining conditionality? The effect of Chinese development assistance on compliance with World Bank project agreements. *The Review of International Organizations*, 17(4), 667–690.
- Wellner, L., Dreher, A., Fuchs, A., Parks, B., & Strange, A. (2022). Can aid buy foreign public support? Evidence from Chinese development finance. *Economic Development and Cultural Change, forthcoming*. World Trade Flows. (2017). *The Center for International Data*, UC Davis.
- Zanger, S. C. (2000). Good governance and European aid: The impact of political conditionality. European Union Politics, 1(3), 293–317.
- Zeitz, A. O. (2021). Emulate or differentiate? Chinese development finance, competition, and world Bank infrastructure funding. *The Review of International Organizations*, 16(2), 265–292.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

