The Causal Effects of Trade, Aid and Investment on China's Image Abroad

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This version: April 2017

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Abstract: China's growing economic engagement in developing countries has provoked much criticism. However, to date no rigorous quantitative analysis has studied how these activities change the attitudes of citizens in China's partner countries towards China. Using repeated cross-sectional survey data from the Latinobarómetro, we analyze whether and how growing amounts of exports, foreign direct investments and aid flows from China to Latin America affect opinions on China across 18 Latin American countries over the 2002-2013 period. We employ a novel instrumental-variables (IV) strategy to account for the endogeneity of China's economic activities abroad. In contrast to the widespread criticisms and the previous literature, our IV regression results do not suggest that China's growing economic activities in the respective countries deteriorate attitudes towards China. In contrast to US aid and opinions, Chinese aid has no image-boosting effect—neither at the national nor local level.

JEL classification: F14, F15, F21, F35, F61, O54, P33

Keywords: bilateral opinion, exports, foreign direct investments, foreign aid, loans, China, Latin America, anti-Sinicism

Acknowledgements: We thank Axel Dreher, Kai Gehring, Arevik Gnutzmann-Mkrtchyan, Rubén Gonzalez-Vicente, Rajshri Jayaraman, Pierre-Guillaume Méon, Albert Park, and Maria D. Tito; seminar participants at Heidelberg University (January 2016), the National University of Singapore (March 2016), and the University of Zurich (September 2016); as well as participants at the Workshop on Foreign Direct Investment and Multinational Corporation at the University of Mainz (November 2015), the Annual Meeting of the European Public Choice Society at the University of Freiburg (March 2016), the Spring Meeting of Young Economists at the ISCTE-IUL Lisbon (March 2016), the Annual International Conference of the Research Group on Development Economics of the German Economic Association at Heidelberg University (June 2016), the Development Economics Conference "Göttinger Schule" at the University of Goettingen, the Beyond Basic Questions Workshop at the University of Salzburg (July 2016), and the International Political Economy Society Conference in Durham (November 2016) for helpful comments on earlier drafts of this paper. Lutz Brückner is grateful for support from the City University of Hong Kong and the Hong Kong University of Science and Technology, where part of this research was carried out. Vera Eichenauer and Andreas Fuchs are grateful for generous support from the German Research Foundation (DFG) in the framework of the project "The Economics of Emerging Donors in Development Cooperation" at Heidelberg University (DR 640/5-1 and FU 997/1-1). We further thank Jamie Parsons for proofreading earlier versions of this article.

"There is a misbalance in our relations with China. Brazil exports commodities and imports too many knick-knacks. I'm told that 80 percent of this year's Carnival costumes came from China."

Dilma Rousseff in 2011, the year in which she became the 36th President of Brazil

1. INTRODUCTION

Since the beginning of the new millennium, China is developing into a global economic superpower. The rapid rise of the Chinese economy is accompanied by its increasing demand for natural resources, mounting investments abroad, and a global pursuit of China's political interests. As part of its "going out" (zou chu qu, 走出去) policy, starting in 1999, China heavily expanded its economic engagement in developing countries in order to fuel its booming economy and to strategically position itself in a globalized world. The People's Republic's rapidly growing economic activities are visible in its bilateral trade, outward foreign direct investment (OFDI), and provision of foreign aid. Unsurprisingly, China's economic cooperation with the developing world has gained increasing scholarly attention (e.g., Cheung et al. 2012; Flores-Macías and Kreps 2013; Kersting and Kilby 2014; Bader 2015, forthcoming; Chen et al. 2015; Dreher and Fuchs 2015; Johnston et al. 2015; Strange et al. forthcoming).

The *growth* of China's influence over the last two decades is nowhere more pronounced than in Latin America.[1] Since the turn of the millennium, China has gone from being a minor actor with virtually no presence in the region to being one of the most important economic partners for Latin America. China's sudden arrival in Latin America stands in contrast to its sustained expansion in other developing regions of the world, where it has historically kept a stronger presence (Dreher and Fuchs 2015). This development in Latin America has generated polarizing statements from politicians and officials across the continent. For example, Carlos Zúniga, a Nicaraguan CAFTA negotiator, referred to China as "an awakening monster that can eat us" (Gallagher and Porzecanski 2010: 1). On the contrary, former Venezuelan President Hugo Chávez stated: "When Venezuela used to get financing, the IMF would come here and impose conditions and rules, and sometimes it would even dismantle our laws. But now, with China and Venezuela, we're on equal footing" (Molinski 2010: 1). Summarizing such opposing views and the expected effects from economic theory in a nutshell, one wonders whether, in the words of Santiso (2007: 45), China is an "angel or devil" for Latin America.

In this paper, we investigate how opinions on China change in response to the country's growing economic engagement in Latin America. Specifically, we analyze the effect of the amount of Chinese exports, foreign direct investments and aid flows on individual attitudes towards China. We also compare the effects of China's economic activities with those of the United States on Latin American attitudes towards the respective countries. To the best of our knowledge, we are the first to investigate the causal

[1] In accordance with Hardy (2013: 2), the term Latin America in this study refers to all Spanish- or Portuguese-speaking countries located in North, Central and South America as well as on the Caribbean Islands.

effects of China's economic activities on its public perception in developing countries. The study closest to ours is Hanusch (2012) who examines the conditional correlation between China's economic engagement and public opinion about China in African countries. He finds that Chinese imports correlate negatively with public opinion, while Chinese OFDI is associated with more positive views towards China. The study does not consider the Chinese aid presence and is confined to the analysis of a single cross-section, so that findings might be spurious. While Custer et al. (2015) analyze opinions on China's development cooperation held by leaders and bureaucrats, our paper focuses on the perceptions of common people that are representative of a country's population. The existing scholarly contributions that focus on Latin American attitudes towards China rely on anecdotal evidence only (e.g., Hearn 2012; Cornejo et al. 2013).[2]

Understanding the effects of China's economic activities on individual attitudes in developing countries is of importance in several ways. First, it augments our understanding how public opinion and economic cooperation are intertwined. Countries have reasons to care about their image abroad as positive opinions in partner countries pay off economically. Disdier and Mayer (2007) find that bilateral attitudes strongly impact international trade patterns between countries, while Guiso et al. (2009) suggest poor bilateral trust levels as one channel lowering levels of bilateral trade and investment. Rose (2016) finds that a one-percent increase in perceived positive influence translates into a 0.8 percent rise in exports. The findings from a recent series of papers on boycotts suggests that consumer reactions to bilateral tensions act as a channel linking individual attitudes towards countries and trade (e.g., Antoniades and Clerides 2015; Heilmann 2016; Pandya and Venkatesan 2016). These findings imply that negative Latin American views on China's growing influence could pose a major obstacle to closer economic cooperation, inhibiting potential opportunities for development on both sides of the Pacific. Negative views of China increase public sensitivity with respect to Chinese investment projects and may adversely affect domestic companies' and governments' risk evaluation of cooperating with China.

Sensitivity towards the Chinese economic presence is high among the Latin American public. The dramatic increases of Chinese imports to Latin America have given rise to concerns about potential adverse effects such as the competitive pressure on local companies and the potentially negative implications for domestic employment (e.g., Jenkins et al. 2008; Sargent and Matthews 2009; Jenkins 2012; Kotschwar 2014).[3] Gallagher and Porzecanski (2010: 51) have calculated that in 2009, 92 percent of all Latin American manufactures exports were threatened by China in the sense that their market share

[2] Hearn (2012) investigates resentment towards Chinese communities in Mexico and Cuba. He concludes that the frequent public reservations towards China have prevented these two countries from strengthening their bilateral ties with Beijing. Cornejo et al. (2013) focus on Mexican perceptions and conclude that, although opinions regarding the People's Republic are heterogeneous, the general lack of trust towards China represents an obstacle for closer cooperation.

[3] In fear of a flood of low-cost products from the People's Republic, policy-makers across Latin America have reacted by imposing trade restrictions for some Chinese imports. According to Kotschwar (2014), between 2008 and 2013, Latin American countries in total launched 75 trade restrictions against China. This accounts for 70 percent of Latin America's total trade restrictions that were introduced against foreign products during that time period.

is increasing at a slower rate than China's (or even decreasing). Chinese goods are often perceived as being associated with bad quality as well as with poor safety standards. Mildler (2010: 1) even refers to the label 'Made in China' as a "mark of shame." Chinese investors have a reputation of holding low labor and environmental standards. In some instances, this has led to protests.[4] Reports have indeed uncovered environmental violations by Chinese firms (Bräutigam 2009: 227f). Bräutigam (2009: 227f) also notes the massive number of Chinese workers coming to work in Latin America substituting for domestic labor. These developments provoked statements such as "We do not want to be China's next Africa," made by the then president of Mexico's federal agency for the promotion of foreign commerce and investments, Neil Dávila (Fumento 2014: 1). According to Kotschwar (2014: 216), China's economic aid is driven by political aspects and "tilted toward natural resources," especially in Latin America. If such negative perceptions and experiences with China dominate among the citizens throughout Latin America, we would expect a deterioration of attitudes towards China as Chinese economic presence rises.

On the other hand, China's economic engagement might translate into an improvement of attitudes towards China over time because of the economic benefits associated with international exchanges. China's engagement may provide a unique boost to Latin American economies by offering a "helping hand" (Santiso 2007: 10). Regarding trade, economic theory suggests that consumers benefit as imports expand the variety of available products and yield lower prices (Krugman 1979; Feenstra and Kee 2009: 245f). According to the IMF, the strong increases of raw commodities exports to China were associated with significant terms-of-trade improvements for countries such as Brazil and Chile (Elson 2014), contributing to their robust GDP growth during the past decade.[5] Economists have argued that foreign investments can generally enlarge the existing stock of knowledge via training, skill diffusion and other forms of knowledge transfer (DeMello 1997). Such human capital development and potential spillovers from higher salaries paid by foreign firms to the work force employed locally would yield benefits for the domestic economy (Blomström and Kokko 1998; Zhang 2001; Görg and Greenaway 2004). Ultimately, it is an empirical question whether positive or negative effects dominate in the formation of individuals' opinions.

Using representative repeated cross-sectional survey data from the Latinobarómetro, we analyze the extent to which the growing amount of exports, foreign direct investments and aid flows from China to Latin America affect individuals' opinions on China across 18 countries over the 2002-2013 period. To account for potential confounding factors, our regression specification includes standard individual-level parameters, time-varying country-specific economic and political characteristics, and year- and country-

[4] A recent example is a Chinese plan to build a 278 km-long canal through Nicaragua for US$50 billion. It is reported that this ambitious project might impair the livelihoods of thousands of local residents and destroy the country's largest domestic water reservoir (The Economist 2014). To provide another example, Latin American workers protested against the labor standards of Chinese firms and against the hiring of migrant workers from China, such as at the Shougang Hierro mine in Peru (Romero 2010; Parish Flannery 2012).

[5] On the other hand, concerns about a potential overreliance of Latin American countries on their raw commodity exports to China loom large (Jenkins 2012; Kotschwar 2014). With the fall of commodity prices since 2014, the vulnerability of Latin America's industries has become visible (Gruss 2014).

fixed effects. The relationship between public perceptions and economic cooperation is likely to be reciprocal: economic cooperation can influence perceptions and vice versa. To account for the potential endogeneity of China's economic activities abroad, we employ an instrumental-variables strategy by exploiting exogenous variation that affects the supply of Chinese goods to foreign markets and the supply of Chinese aid to foreign countries, respectively.

Our analysis of how individual perceptions of China respond to its economic engagement allows us to draw indirect inference on the effects of China's economic activities on the ground. While the previous literature mainly focuses on the distribution of Chinese investment and aid projects across recipient countries and provinces (e.g., Cheung et al. 2012; Dreher and Fuchs 2015; Johnston et al. 2015; Dreher et al. 2016, forthcoming), there is little research of the economic consequences of China's economic engagement in developing countries.[6] To the extent that perceived and actual effects are positively correlated, our analysis contributes to a better understanding of China's developmental impact in the developing world.

To foreshadow our findings, average effects suggest that China's growing economic activities in the respective countries do not affect attitudes towards China. It thus appears that lingering concerns about the adverse consequences of China's economic activities for domestic economies are exaggerated. Analyzing winners and losers of Chinese activities, our findings are more nuanced. The analysis of heterogeneous effects shows that Chinese aid and OFDI contribute to the formation of a more positive image among the wealthy and urban population rather than the poor and rural. More educated people appear to benefit from trade and OFDI from China. In contrast to Chinese aid and opinions on China, we find that US aid is positively associated with opinions on the United States.

In the remainder of the paper, we proceed as follows: Section 2 introduces the data and explains our instrumental-variables approach to estimate causal effects of China's economic activities on the attitudes towards China held by citizens in Latin American. In Section 3, we present the empirical results of our analysis. We conclude and highlight the implications from our findings in Section 4.

3. DATA AND EMPIRICAL STRATEGY

3.1 Dependent variable

In order to empirically test how attitudes towards China change in response to the country's growing economic engagement in Latin America, we employ data drawn from eleven waves of the representative survey Latinobarómetro, covering the years 2002 to 2011 and the year 2013 (Corporación Latinobarómetro 2015). The data consists of eleven repeated cross-sections with individual respondent

[6] Exceptions include Busse et al. (2016) and Dreher et al. (2016).

data nested in 178 different clusters at the country-year level.[7] This public opinion survey is conducted via face-to-face interviews on an (almost) annual basis in 18 Latin American countries.[8] Each country is represented by a randomly drawn national probability sample in which every adult citizen has an equal chance of being included. The sample size at the country-year level varies between 438 and 1066 respondents during the time period under analysis.[9]

Our dependent variable is based on the following question: "*Do you have a very good, good, bad, or very bad opinion of {x}?*," where "*{x}*" is replaced by either China or—for comparison—the United States.[10] Following common practice (e.g., Mayda and Rodrik 2005), we exclude all respondents who answered "Don't know" and "No answer" when asked about their opinion on China. For our baseline specification below, we recode respondents' answers on the four-step scale in a binary variable *ChinaOpinion*, which takes the value of one when the respondent's opinion on China is very good or good, and zero if it is bad or very bad. This procedure is in line with other empirical papers analyzing individual-level survey data (e.g., Mayda and Rodrik 2005) and takes into account that participants' answers tend to center around the median as they prefer moderate responses to extreme ones.[11]

The average probability of Latin American respondents holding a favorable opinion about China is 77 percent. Favorability rates for China are highest in Honduras, followed by Paraguay and Nicaragua (see column 1 of Table 1). This is surprising as these three countries recognize the government in Taipei (Taiwan) rather than the one in Beijing. However, this does not appear to be a systematic pattern as the "Taiwan recognizer" Uruguay figures only on the 14th position. Venezuela ranks on the 4th position of the China sympathizers, which is in line with expectations in light of the country's socialist stance. Comparing Latin Americans' perceptions of China to the region's hegemon, the United States, Figure 1 shows that the average opinion on China is often as good as or even slightly better than that on the United States. The United States enjoys the best image among the citizens of the Dominican Republic, followed by Panama, Honduras, and El Salvador. Overall, the Central American countries seem to be more sympathetic to both China and the United States than their fellow South Americans.

[7] A panel structure would be preferable for this kind of analysis but such data are not available at the individual level. Yet, since the samples in each country-year cluster are drawn randomly from the respective cluster sample population, the independence assumption about the data distribution holds (Wooldridge 2010: 146). Note also that there are no survey data available for the Dominican Republic in 2002 and 2003. Thus we obtain 178 instead of 180 clusters.

[8] Figure 1 shows the 18 Latin American countries in our sample. Note that there are no survey data for the Dominican Republic in 2002 and 2004. Data for 2012 are not available.

[9] Future versions of this paper will use different weighting methods to correct for the unequal sample size across countries and years.

[10] Some survey waves also include questions about the respondents' opinion on certain other countries, such as Japan and Spain (both included 10 times), and the European Union (also10 times). However, apart from China and the United States, no entity is covered in all waves.

[11] Below we test the robustness of our results to this decision by altering the definition of our dependent variable.

3.2 Variables of interest

We measure China's economic presence using three variables: exports, OFDI, and aid flows from China to Latin American countries. Data on *Chinese exports* in US dollars are obtained from UN Comtrade (2015) via the World Bank's World Integrated Trade Solution (WITS) database. Data on *Chinese OFDI* stocks in US dollars come from the annual Statistical Bulletin of China's Outward Foreign Direct Investment published by the Ministry of Commerce (MOFCOM 2010, 2012, 2013). Data on *Chinese aid* in US dollars originate from AidData (Strange et al. forthcoming). Since comprehensive official data on Chinese aid to Latin America are not available, the aid dataset is constructed using an open-source data collection procedure. It covers Chinese projects that would comply with either OECD standards on either Official Development Assistance (ODA) or Other Official Flows (OOF).[12] We include only projects that have at least reached the commitment stage, i.e., we exclude pledged, canceled and suspended projects (see Dreher et al. forthcoming for a similar approach). The bulk of China's aid flows to Latin America comes in the form of loans (97.8 percent of the financial value).[13]

We divide all three variables of interest by the GDP of the respective Latin American country to relate China's economic activities to the size of the economies (see Hanusch 2012 for a similar approach; GDP data from World Bank 2015). We use the average of the one- and two-year lag of the respective variables for three reasons. First, by using lags, we account for the fact that the Latinobarómetro survey on the perception of China is usually conducted in May or June and thus avoid that the survey predates China's economic activities that occurred later during that year. Second, the usage of lags allows us to smooth our variables of interests as all three, and aid commitments in particular, are very volatile. Third, new Chinese OFDI and aid projects are agreed upon several months before the actual project starts and it takes time until the population can experience the effects. Hence, it might take a while until the benefits and repercussions of investment and aid projects trickle down to and are felt by the local population.[14] In

[12] The OECD's Development Assistance Committee (DAC) defines ODA as "those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are: (i) provided by official agencies, including state and local governments, or by their executive agencies; and (ii) each transaction of which: (a) is administered with the promotion of the economic development and welfare of developing countries as its main objective; and (b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent)." OOF is defined by the DAC as "Transactions by the official sector with countries on the DAC List of ODA Recipients which do not meet the conditions for eligibility as Official Development Assistance, either because they are not primarily aimed at development, or because they have a grant element of less than 25 per cent." See http://www.oecd.org/dac/dac-glossary.htm (accessed 1 March 2016).

[13] The data are highly correlated with data on economic loans from Gallagher and Myers (2014). The correlation between the averages of the one- and two-year lags of the respective variables as a share of GDP is 76 percent. Since their loan data are less comprehensive than a general aid database and only available since 2005, we use the AidData data instead.

[14] At the same time, the lag length should not be too long as opinions might already be affected by announcements of investment and aid projects. We look at various lag lengths in our robustness check section.

analogy to the China case, we also construct corresponding variables on *US exports*, *US OFDI* and *US aid*. While trade data come again from UN Comtrade (2015), FDI and aid data come from the OECD (2016).[15]

Table 1 also ranks the Latin American countries by the absolute amount of Chinese and US exports, OFDI, and aid, respectively, and shows the associated financial values (in millions of constant 2010 US dollars). Brazil heads the lists of Chinese exports, aid flows and investments, while Mexico is the most important destination of US exports and aid and Colombia of US investments.

3.3 Control variables

We include control variables both at the country and at the individual level. Starting with the country level, we employ three variables to capture the economic situation of China's partner countries: a country's logged *GDP per capita*, *unemployment* rate (both from World Bank 2015), and logged *inflation* rate (data from IMF 2014). Moreover, we include *trade openness*, i.e., the sum of exports and imports as share of GDP (World Bank 2015), to account for a country's dependence on international trade.

In addition, we include three political variables at the country level. First, we add a binary variable *left government* that takes a value of one if the chief executive's party is communist, socialist, social democratic, or other type of left-wing (data from Beck et al. 2001, own update). This variable aims to capture that individuals living in countries governed by a left-wing government might develop more favorable views on communist China. Second, we add a country's level of *democracy* using data from the Polity IV Project (Marshall et al. 2013). Fuchs-Schündeln and Schündeln (2015) find that individuals' support for democracy increases the longer they live in a democracy. Accordingly, Latin Americans living in more democratic societies might thus develop a less favorable view on autocratic China. Third, we add a binary variable *Chinese leader visit*, which takes a value of one in the years of a visit of at least one of the incumbents of the following Chinese leadership positions: President, Vice President, Premier, Vice Premier, Chairman of the National People's Congress, Standing Member of the Politburo of the Communist Party, State Councilor, Trade Minister, and Foreign Minister. Chinese leader visits are often associated with huge investment and financing deals and typically receive a lot of media coverage (see Fuchs forthcoming; Lin et al. forthcoming). These visits may influence individual opinions on top of the sheer financial transactions, for which we control directly, and potentially affect attitudes in a different direction.[16]

[15] To closely follow our Chinese aid measure, we use US commitment data. However, this comes with the downside that we cannot include OOF data which are only available as disbursements. This problem should be negligible since US OOF amounts are tiny compared to US ODA amounts (Strange et al. forthcoming). However, we will also show a robustness test that compares US ODA with Chinese ODA only.

[16] We collect these data from various sources, including the Chinese government, academic articles, and media sources (see Appendix 1).

Turning to the individual level, we account for a set of variables that are commonly employed in analyses of individual perceptions (see, for example, Mayda and Rodrik 2005; Hanusch 2012; Bjørnskov et al. 2013; data from Corporación Latinobarómetro 2015). *Age* is a continuous variable that measures the respondent's age in years. *Female* is a binary variable coded one if the respondent is a woman. *Employed* is a binary variable coded one if the respondent is currently employed or self-employed. Students' perceptions of China might differ from the average non-employed citizens and we thus include a binary variable *student*. The variable *education* proxies for the respondent's educational level on a seven-point scale. It ranges from zero for illiterate respondents to six for those with a completed university degree.[17] *Wealth* is a continuous variable based on the respondent's ownership or access to nine basic goods, including drinking water, a refrigerator, and television. Finally, *urban* is a binary value coded one if the respondent lives in a city with more than 50,000 inhabitants. In addition to those commonly included socio-demographic variables, we include a number of supplementary controls, which are potentially relevant for the Latin Americans' perceptions of China (see also Hanusch 2012). First, we create an index variable based on respondents' evaluation of the *current economic situation* of their country on a five-point scale. Second, we gauge respondents' political attitude by constructing the variable *left orientation* that ranges from zero for individuals considering themselves to be at the far right to ten for those at the far left.[18] Third, we incorporate *democracy support* in a binary variable that is one if respondents strongly prefer democracy to other forms of governance.

The resulting sample includes up to 154,278 observations. Appendix A lists detailed definitions and sources of all variables used. Table 2 shows the corresponding descriptive statistics. The average respondent is 38 years old, lives in an urban area (63 percent), supports democracy (63 percent), is slightly right-leaning (4.70), and has access to five of nine assets in our wealth index. She or he is almost equally likely to be a man or woman as well as to be employed or not. 77 percent of respondents express a favorable opinion on China, which is slightly larger than the corresponding value for the United States (74 percent).

3.4 Regression models

We estimate our binary dependent variable *ChinaOpinion* using a linear probability model to facilitate the interpretation of coefficients.[19] Our regression analysis proceeds in three steps. First, we run the following model specification using ordinary least squares (OLS):

$$ChinaOpinion_{ijt} = \beta ChinaActivity_{j[t-1,t-2]} + \gamma C_{jt-1} + \delta X_{ijt} + \eta_t + \varepsilon_{ijt} \qquad (1)$$

[17] Mayda and Rodrik (2005) apply a similar approach. The number of items slightly differs between survey waves. See Appendix 1 for details.

[18] The survey question on political views allowed for the answer "none," which received the second most responses from the survey participants. In order to not lose these observations, we replace the "none" answers by the average political view in a given country-year.

[19] Results using logit or probit are very similar as we discuss below.

where *ChinaOpinion* is the opinion of individual i about China in country j in the survey conducted in year t; $ChinaActivity$ refers to the averages of the once-lagged and twice-lagged values for Chinese exports, OFDI and aid flows, respectively;[20] C_{jt-1} represents the country-level controls, which are all lagged by one year; and X_{ijt} captures the individual-level controls. Moreover, year-fixed effects, denoted by η_t, are included to account for year- and survey-wave-specific events, including those shocks common to all Latin American countries.[21] Regressions based on equation (1) exploit between-country variation, which will enable us to compare our results with cross-sectional evidence in Hanusch (2012). Standard errors are cluster-robust at the country-year level.

Second, we add country-fixed effects since unobserved country-level variables might bias our results. The regression equation thus becomes

$$ChinaOpinion_{ijt} = \beta ChinaActivity_{j[t-1,t-2]} + \gamma C_{jt-1} + \delta X_{ijt} + \zeta_j + \eta_t + \varepsilon_{ijt} \quad (2)$$

where ζ_j refers to country-fixed effects. The inclusion of fixed effects allow us to mitigate the potential omitted variables biases.

Third, we address the potential endogeneity inherent in our models. The use of fixed effects does not solve the omitted variable bias caused by unobserved variables that vary over countries and time. For example, respondents in one country might come to view China more positively for reasons unrelated to China's economic engagement (e.g., due to the success of their countries in the 2008 Beijing Olympics) and thus increase their consumption of Chinese goods. This implies that, although better opinions on China are observed, this finding should not be attributed to an intensification of Chinese economic activities. Moreover, the causal direction might also run from opinions to economic engagement. To provide some examples, individuals might be more likely to buy Chinese goods as they feel affinity towards China (see again Disdier and Mayer 2007), China might invest more in countries where it is welcomed by the local population, or China might purposely aid a country whose individuals have relatively negative attitudes towards China to improve its image. It is thus important to note that we can only interpret the coefficients on the *ChinaActivity* variables in regression models (1) and (2) as conditional correlations rather than causal effects.

To obtain causal effects of China's economic activities on attitudes towards China, we construct instrumental variables and estimate Two-Stage Least Squares (2SLS) models. We follow a growing number of scholars that construct time- and country-varying instrumental variables from the interaction between an exogenous variable, which varies either along the time-series or the cross-sectional dimension, with an endogenous variable, which varies along the other dimension.[22] Controlling for the main effect of the exogenous and endogenous variables, the resulting country- and time-variant interaction term is

[20] Results are similar when using different lag specifications as we discuss below.
[21] Note that we cannot use country-year fixed effects because our variables of interest are defined at this level.
[22] See, among others, Werker et al. (2009), Nunn and Qian (2014), Dietrich and Wright (2015), Dreher and Langlotz (2015), Ahmed (2016), and Lang (2016).

excludable under one assumption: The correlation between the endogenous variable and the outcome variable may not depend on the exogenous variable. In other words, the exclusion restriction is violated if the "degree of endogeneity" depends on the exogenous variable (Bun and Harrison 2014: 5; see also Nizalova and Murtazashvili 2016).

We run 2SLS models for *Chinese exports* and *Chinese aid*, the two variables of interest for which we are able to construct valid instruments. Our instrument for *Chinese exports* to Latin America is inspired by Autor et al. (2013) who instrument growth in US imports from China with Chinese import growth in high-income markets other than the United States. By doing so, they aim to identify the supply-driven component of Chinese trade, i.e., the component that is exogenous from the perspective of the penetrated market. Analogously, we use the import penetration of non-Latin American developing countries with Chinese goods as time-varying exogenous variable. The import penetration is then interacted with the shipping distance between Shanghai, China's largest harbor, and the capital of the respective Latin American country, a country-varying exogenous variable. We expect a negative effect for the interaction variable in the first stage because Chinese goods should penetrate markets in geographically close countries, ceteris paribus, to a larger extent than those in more remote countries as the supply of Chinese goods increases.[23]

To instrument *Chinese aid*, we again use an interaction of a time-varying variable and a variable that varies across countries. As exogenous time-varying variable, we use the number of deaths from natural disasters within China (data from Guha-Sapir et al. 2016). We expect China to cut foreign aid funds when domestic aid needs rise. The disaster variable is then interacted with the number of aid projects a particular country received during the Cold War (data from Dreher and Fuchs 2015). Although China is likely to cut aid in times it needs resources domestically to fund disaster relief, countries with long-term aid relationships should suffer from less severe aid cuts. We thus expect a positive coefficient in the first stage. The second stage of our third analysis equation is then

$$ChinaOpinion_{ijt} = \beta \widehat{ChinaActivity}_{j[t-1,t-2]} + \gamma C_{jt-1} + \delta X_{ijt} + \zeta_j + \eta_t + \varepsilon_{ijt} \quad (3)$$

where $\widehat{ChinaActivity}_{j[t-1,t-2]}$ refers to the fitted values for Chinese imports and aid, respectively, that result from our first-stage regressions.

[23] We also experimented with an interaction of the import penetration variable with China's Cold War trade with a particular country. Specifically, we use the average historic trade during the leadership of Mao Zedong (1955-76) as share of the partner country's GDP as an exogenous country-varying variable (data from Barbieri et al. 2009; Barbieri and Keshk 2012). For this alternative instrumental variable, we expect a positive coefficient in the first stage as countries with long-term trade relationships, and thus a more intimate understanding of China, should be more capable of reaping benefits from increased Chinese wealth. Since our results are qualitatively similar to those obtained with the interaction of the import penetration variable with shipping distance, we do not report these results in detail but they are available upon request.

4. RESULTS

4.1 Main results

As a starting point, Panel A of Table 3 presents regression results for equation (1), i.e., when we exclude the country-fixed effects. This comes with the advantage that we can also analyze the variation in attitudes *between* China's partner countries in Latin America. While the results in columns 1 and 2 for *Chinese exports* and *Chinese aid* respectively are based on the full sample period (2002-2013), the remaining columns are based on a shorter time period since *Chinese OFDI* can only be constructed for the 2005-2013 period.[24] The results show a consistent picture: all three coefficients of interest are negative and statistically significant at the one-percent level. While the negative coefficient on *Chinese exports* is in line with earlier findings in Hanusch (2012) for African countries, the negative coefficient on *Chinese OFDI* contrasts Hanusch's positive finding for investments. In dollar terms, the relationship of Chinese OFDI with opinions about China is the most pronounced. An increase of Chinese OFDI per unit of GDP by one percentage point is associated with a decrease in the probability of a favorable opinion of China of 15.3 percentage points (column 3). The corresponding decrease for exports amounts to only 0.5 percentage points.

Next, we include all three variables of interest simultaneously (column 4). The coefficients on *Chinese exports* and *Chinese aid* remain negative and statistically significant at the one-percent level, while *Chinese OFDI* does not reach statistical significance anymore. This is not surprising given that Chinese aid, trade and investment are related as they often come in packages (Bräutigam 2009). Column 5 adds the respondent's opinion about the United States as additional control. The variable is defined in analogy to our main dependent variable. Kim et al. (2016) show that perceptions of China and the United States are positively rather than negatively correlated. The inclusion of *US opinion* may thus be useful to account for a respondent's cosmopolitan stance as Latin Americans might simply view China as a powerful foreign actor among several. Although the coefficient on *US opinion* in column 5 is large and highly significant, our variables of interest are largely unaffected by its inclusion.[25]

Our finding of a significantly negative correlation between China's economic activities and attitudes towards China across Latin American countries could be spurious and simply reflect that certain countries have more positive perceptions of China for reasons unrelated to Chinese trade, aid or investment activities that we do not control for in our models. Potential factors include the economic structure or the cultural and historical background of countries. By adding country-fixed effects, panel B of Table 3 exploits variation within countries over time exclusively and thus addresses this concern. We can thus test whether changes over time in the intensity of China's economic activities affect opinions

[24] Note that data on Chinese OFDI starts in 2003, but since we use the moving average of the first and second lag, we can compute this variable of interest only for the time period 2005-2013.

[25] The reduced number of observations is due to a lack of answers by some respondents regarding their perception of the U.S.

about China. Indeed, we find that China's economic activities are no longer negatively related to opinions on China once we control for unobserved country characteristics. Specifically, none of the variables of interest reaches statistical significance at conventional levels in any of our specifications. This finding suggests that China's growing economic activities are not perceived negatively on the ground as the widespread criticisms seem to suggest.

The use of country-fixed effects does not solve the omitted variable bias caused by unobserved, time-variant variables. To obtain causal estimates, we follow the 2SLS estimation strategy outlined above. The instrumental variables for *Chinese exports* (the interaction between the shipping distance to Shanghai and the import penetration of developing countries outside Latin America) and the one for *Chinese aid* (the interaction between the number of Chinese Cold War aid projects to a particular country and the number of deaths from natural disasters in China) are both relevant as indicated by the Kleibergen-Paap F statistics in panel C of Table 3. With values of 12 in column 1 and 39 in column 2, the F statistics are clearly above the rule-of-thumb threshold of ten (Staiger and Stock 1997). As expected, we find a negative coefficient on the interaction variable in the first-stage exports regression, which is in line with the idea that geographically close countries should become penetrated to a larger extent with Chinese goods than more remote countries as the supply of Chinese goods increases (results available on request). Also in line with expectations is our finding of a positive effect for the interaction variable in the first-stage aid regression, suggesting that the Chinese government is more likely to cut foreign aid to which it maintains long-term aid relationships in times it needs resources domestically to fund disaster relief.

Column 1 in panel C of Table 3 shows the second-stage results for Chinese exports, while column 2 in the same panel presents the corresponding results for Chinese aid using the respective instrumental variable. In both specifications, we find no significant causal effect on public opinion about China. Our results from above thus hold when controlling for the endogeneity of Chinese exports and Chinese aid.

Turning to the results for our control variables at the country level (see Appendices B1-B3), we find that favorable opinions about China significantly decrease with a country's income per capita but increase with inflation. This suggests that individuals in countries in economic distress perceive China more favorably on average. The same holds for more open countries, as indicated by the highly significant positive coefficient on *trade openness* but the coefficient loses its statistical significance once we control for country-fixed effects. The often significantly negative coefficient in regressions that exclude country-fixed effects on democracy can be interpreted as weak evidence that individuals living under an increasingly democratic government have a worse perception of China. In addition, we find that respondents governed by a left-wing chief executive develop more positive views about China over time. The remaining country-level variables, i.e., *unemployment*, and *Chinese leader visit*, do not reach statistical significance in any of the regressions.

Most individual-level controls are significantly related to the respondent's opinion about China. Students, more educated and better-off individuals are more likely to hold positive views about China, while females have view China more negatively on average.[26] Respondents that judge the current economic situation more optimistically, controlling for the actual macro-economic environment, hold more positive opinions about China. Surprisingly, people that are more favorable towards democracy perceive China more positively on average, controlling for the level of democracy of their home country. *Left orientation* shows only the expected statistically significant negative coefficient once we control for *US opinion*, our proxy for cosmopolitism. Finally, age, employment status and urban residence do not appear to play a role in attitudes towards China.

We estimate variants of the models in Panel B of Table 3 to test the robustness of our findings (detailed results available on request). First, our results are robust to alterations of the lag structure of our variables of interest. Specifically, we find similar results when we use the one-year lag of the economic activities of interest or the three-year moving average of the first, second and third lag of each variable. Second, results are similar when we replicate the regressions for the shorter 2005-2013 sample, which we have used for the OFDI regressions due to data availability. Third, we arrive at the same qualitative conclusions when we use a four-point measure of whether the respondent's opinion on China is very good or good, and zero if it is bad or very bad instead of the simple binary variable. Fourth, results using logit or probit are very similar. Fifth, our conclusions remain the same when we replace Chinese OFDI stocks by OFDI flows. Sixth, our findings hold when we substitute Chinese exports by total trade with China and Chinese imports from Latin American countries. Seventh, we replicate our regressions but exclude all country-level control variables. One might argue these are outcomes rather than controls, which would make them "bad controls" in the terminology of Angrist and Pischke (2008). Finally, our results are similar when we cluster at the country- rather than at the country-year level. The robustness of our findings makes us confident in our conclusion that China's growing economic activities in the respective countries do indeed not deteriorate attitudes towards China.

4.2 Heterogeneous effects

While we have so far analyzed average effects, China's growing economic engagement is bound to create winners and losers within Latin American countries. According to Jenkins et al. (2008), for example, employment cuts in the textile industry affect poor and rather low-skilled workers in particular. They further point out that cheap basic consumer products from China can reduce the cost of living for Latin American citizens, of which low-income households should benefit the most.

[26] *Wealth* loses statistical significance at conventional levels in columns 3 and 5 of panel A in Table 3 (see Appendix B1).

In order to get at these heterogeneous effects, we explore how the individuals' characteristics interact with the three economic activities of interest, respectively. The regression results in Table 4 build on panel B from Table 3 and thus include both year- and country-fixed effects.[27] We find that the effect of Chinese OFDI on attitudes towards China is significantly more positive among students. Similarly, the effect of Chinese exports, aid flows and OFDI on attitudes towards China increases with individuals' level of education. Richer individuals are also more likely to hold a more favorable opinion towards China in response to incoming aid and OFDI. The finding for aid flows is worrisome from a development perspective as aid should be targeted at the needy if it follows humanitarian goals. Finally, the average urban respondent perceives Chinese aid and OFDI more positively than his rural counterpart, as evidenced by the significantly positive interaction terms. We do not find heterogeneous effects for the interactions with the other individual characteristics tested. The coefficients on the individuals' age, gender, employment status, perception of the current economic situation, political ideology, and support for democracy do not reach statistical significance at conventional level for none of the measures of China's economic engagement.

To shed light on the mechanisms underlying perceptions about Chinese aid flows, we also explore in more detail which types of Chinese aid flows are related to opinions about China. While our main specifications include all official flows, Table 6 disaggregates these official flows by the type of aid and by sector. Specifically, we consider separately ODA-like flows, other official flows (i.e., excluding ODA-like flows), and aid in the sectors of social infrastructure and services, economic infrastructure and services, and production. For example, Chinese aid for social infrastructure and services, such as theaters, stadiums, or hospitals, are often highly visible and provide tangible benefits for a country's population upon completion. Running models with time- and country-fixed effects, we find that the insignificant coefficient on *Chinese aid* in panel B of Table 3 was the result of aggregating different aid types, which obscured heterogeneous relationships between the type of Chinese aid projects and opinion about China. While Chinese support for economic infrastructure and services, such as energy, transport, and storage, is negatively related to perceptions about China, financial flows into the production sectors, which include construction, mining and agriculture, is associated with a higher likelihood of them having a positive opinion.

4.3 Opinion on China and local Chinese aid

While we have so far estimated the effects of China's economic activities at the national level on attitudes towards China, we now allow for subnational variation in the intensity of China's engagement. Previous research shows that China's development activities are distributed unequally across provinces within countries. According to the results in Dreher et al. (2016), significantly more Chinese aid ends up in the

[27] We plan to estimate 2SLS regressions on heterogeneous effects in a later version of this paper.

birth regions of African leaders, which are typically already among the richer areas of countries. Using per-capita nighttime light emissions of provinces and districts as a measure of development at the subnational level, their results also suggest that Chinese aid is indeed successful in promoting regional development. One might thus hypothesize that those individuals living in areas experiencing Chinese aid locally develop more positive attitudes towards China. On the contrary, there are also reasons to expect that China's image deteriorates in exactly those areas. Subnational analyses of Chinese aid suggest, for example, that Chinese aid raises the level of corruption in areas where Chinese development projects are carried out (Isaksson and Kotsadamm 2016; Kelly et al. 2016). Moreover, scholarly work hints at the possibility of adverse environmental consequences, albeit with mixed results (see BenYishay et al. 2016 on forest loss).

It could thus be that the effects of China's economic activities are localized and thus do not lead to a significant changes in attitudes towards China at the national level. BenYishay et al. (2016) have constructed a subnationally georeferenced dataset on China's development projects in the Tropical Andes in South America (and other ecological hotspots in Africa and Asia). This allows us to test for an effect of Chinese aid to subnational regions on the perception of China within five countries: Bolivia, Colombia, Ecuador, Peru, and Venezuela. 30 of a total of 88 projects could be traced to 73 locations in these five countries. In total, US$ 11.7 billion (constant 2014 values) have been committed to 33 of 116 provinces between 2001 and 2013.[28] Roughly each eighth respondent (2,577) in the regions in five countries was exposed to Chinese aid in their home region. We construct the financial amount of aid projects per province. The map in Figure 2 displays the location of China's project sites across the Andes region. The largest aid amounts were provided to Junín (Peru), followed by Bolívar (Venezuela) and Napo (Ecuador).[29] Figure 3 provides an overview of the subnational variation in attitudes towards China.

We augment the analysis in Table 3 by adding *Chinese aid (local)*, defined as the financial amount of aid to the respondent's home region divided by regional GDP, to our regression specification. Regional GDP per capita come from Gennaioli et al. (2013) and end in 2010, which limits our estimation period for the subnational analysis to the 2002-2011 period. We calculate regional GDP by multiplying regional GDP per capita with domestic population from CIESIN (2005) and accessed via Goodman et al. (2016). We also add a variable *GDP per capita (ln, local)*, which measures the per-capita income in the respondent's home region, as a further control.

Table 6 presents our results. We gradually estimate our model with stricter sets of fixed effects. We start with year-fixed effects (column 1), add country-fixed effects (column 2), use country-year-fixed

[28] We follow BenYishay et al. (2016) and use the first subnational administrative region (GADM1), which is a *departemento*, *provincia*, *region*, *comisaria*, or *intendencia* depending the specific country. In line with our treatment of aid entries at the national level, we exclude projects whose status is coded as "Pipeline/identification," "Cancelled," or "Suspended." We also exclude projects if the information on the geolocation was not precise enough to allocate it to a province. We also drop projects with information about committed or disbursed amounts.

[29] If a project has project locations in several provinces, we divide the financial amount by the number of provinces involved. This approach is in line with previous work with georeferenced aid data.

effects (column 3), and add region-fixed effects (column 4). In none of these specifications the coefficient on *Chinese aid (local)* reaches statistical significance at conventional levels. In line with our results for Chinese aid at the national level, Chinese aid activities in the respondent's region are not associated with significant changes in attitudes towards China.

4.4 Comparison with the United States

Does China perform better or worse than the United States? In contrast to our findings on China, experimental evidence in Dietrich et al. (2015) on Bangladesh suggests small positive effects of US aid on perceptions of the United States. In a large field experiment in Uganda, Findley et al. (2014) find that citizens are more likely to support US aid projects than their Chinese counterparts. To put our findings into perspective, we contrast the effect of Chinese economic activities on Latin American views with the corresponding effect of the U.S.' economic activities. We do so by investigating respondents' opinion about the United States using the same specifications but replace the dependent variable and the respective economic flows from China with their US counterparts. The dependent variable *US opinion* is a dummy that equals one when the respondent's opinion about the United States is very good or good, and zero if it is bad or very bad. We employ the same control variables with the exception of *Chinese leader visit*, which we replace by a binary variable *US leader visit*, which takes a value of one in years in which the US President or Secretary of State visits a given country (data from Lebovic and Saunders forthcoming).

Table 7 shows results from seemingly unrelated estimations with country- and time-fixed effects.[30]Wald tests allow checking for significant differences in the variables of interest between the China and U.S. regressions. According to columns 1a and 1b, opinions about neither of these countries are related to the exports from the respective country, nor do these coefficients differ significantly (columns 1a and 1b). The same holds for OFDI (columns 3a and 3b). For aid flows, we find that US aid relates positively to opinions held about the North American 'neighbor.' Specifically, a one-percentage-point increase in US aid as share of GDP is associated with an almost three-percentage-point increase in each individual's probability of having a favorable opinion about the U.S. The difference in the coefficients on Chinese and US aid is statistically significant. This suggests that Chinese aid has not (yet) helped increase its public image abroad, while the American aid does such a job for the U.S.

This contrasts with the praise of Chinese aid for being faster and less bureaucratic (Bräutigam 2009). Empirical evidence also shows that Chinese aid helps fill the void created by sudden cuts in Western aid, thereby reducing the likelihood of civil conflict (Strange et al. forthcoming). On the other hand, Chinese aid is more prone to misappropriation for the sake of the political or personal interests of recipient leaders than 'traditional' aid (Dreher et al. 2015). This could help explaining why the effects of

[30] Specifically, we run generalized least squares models using Stata's *suest* command.

China's development activities on Latin American's opinions are less positive than those resulting from US aid.

5. CONCLUSIONS

China has strongly expanded its global economic presence in the developing world since the turn of the millennium. This growth is particularly pronounced in Latin America where China has become a major actor within a decade. While economic theory suggests net benefits of increased competition and global integration, Chinese economic activities are frequently criticized for their potential adverse consequences on Latin America and its citizens. In this study, we analyze the public perceptions of China in 18 Latin American economies using individual-level survey data from the Latinobarómetro for the years 2002-2011 and 2013. We measure China's increasing economic presence through the Asian giant's exports, OFDI and aid flows to Latin America, and exploit temporal variation and an instrumental-variables strategy to identify its causal effect on attitudes towards China in its partner countries over time.

In contrast to the widespread criticisms and the previous literature on opinion about Chinese economic activities in developing countries, our more rigorous analysis does not suggest that China's growing economic activities in the respective countries deteriorate attitudes towards China. However, skilled and wealthy citizens appear to benefit more than the uneducated and poor. Moreover, in contrast to China, US aid and opinions about the United States show a positive association. China will have to improve its aid program if it wants to create the goodwill that it seeks to create as China's White Paper on Foreign Aid suggests (State Council 2014). It is promising that a new emphasis on impact and aid effectiveness is already visible in Beijing's reform plans (Rudyak 2014).

REFERENCES

Ahmed, Faisal Z., 2016, Does Foreign Aid Harm Political Rights?: Evidence from U.S. Aid, *Quarterly Journal of Political Science* 11(2): 118-217.

Angrist, Joshua D., and Jörn-Steffen Pischke, 2008, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton, NJ: Princeton University Press.

Antoniades, Alexis, and Sofronis Clerides, 2015, Market Response to Firm-Specific Shocks: The Arab Boycott of Danish Dairy Products, *Mimeo*, available at https://sites.google.com/site/alexisantoniades/research (accessed 30 November 2015).

Autor, David H., David Dorn, and Gordon H. Hanson, 2013, The China Syndrome: Local Labor Market Effects, *American Economic Review* 103(6): 2121–2168.

Bader, Julia, 2015, China, Autocratic Patron? An Empirical Investigation of China as a Factor in Autocratic Survival, *International Studies Quarterly* 59(1): 23-33.

Bader, Julia, forthcoming, Propping up Dictators? Economic Cooperation from China and its Impact on Authoritarian Persistence in Party and Non-party Regimes, *European Journal of Political Research*.

Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh, 2001, New Tools in Comparative Political Economy: The Database of Political Institutions, *World Bank Economic Review* 15, 1: 165–176.

BenYishay, Ariel, Bradley Parks, Daniel Runfola, and Rachel Trichler, 2016, Forest Cover Impacts of Chinese Development Projects in Ecologically Sensitive Areas, AidData Working Paper 32, December, 2016.

Bjørnskov, Christian, Axel Dreher, Justina A.V. Fischer, Jan Schnellenbach, and Kai Gehring, 2013, Inequality and Happiness: When Perceived Social Mobility and Economic Reality Do Not Match, *Journal of Economic Behavior and Organization* 91, 1: 75–92.

Blomström, Magnus, and Ari Kokko, 1998, Multinational Corporations and Spillovers, *Journal of Economic Surveys* 12, 3: 247–277.

Bräutigam, Deborah, 2009, *The Dragon's Gift: The Real Story of China in Africa*, Oxford; New York: Oxford University Press

Bun, Maurice, and Teresa Harrison, 2014, OLS and IV Estimation of Regression Models Including Endogenous Interaction Terms, University of Amsterdam discussion paper No. 2014-02.

Busse, Matthias, Ceren Erdogan, and Henning Mühlen, 2016, China's Impact on Africa–The Role of Trade, FDI and Aid, *Kyklos* 69, 2: 228-262.

Chen, Weihua, 2014, Forum to Elevate China-Latin America Ties, *China Daily USA*, 02.01.2015, available at: http://www.chinadaily.com.cn/world/2015-01/02/content_19222365.htm (accessed March 2015).

Chen, Wenjie, David Dollar, and Heiwai Tang, forthcoming, Why is China Investing in Africa? Evidence from the Firm Level, *World Bank Economic Review*.

Cheung, Yin-Wong, Jakob de Haan, Xingwang Qian, and Shu Yu, 2012, China's Outward Direct Investment in Africa, *Review of International Economics* 20(2): 201-220.

Chinese Embassy in Argentina, 2012, Visita de Premier Chino Mejora Cooperación y Lazos Entre China y América Latina, available at: http://ar.chineseembassy.org/esp/zagx/zzgx/t947076.htm (accessed February 2016).

Chinese Embassy in Brazil, 2013, China e Brasil Prometem Fortalecer Cooperação do BRICS. Chinadaily.org, available at: http://br.china-embassy.org/por/zbgx/t1096977.htm (accessed February 2016).

CIESIN, 2005, Gridded Population of the World, Version 3 (GPWv3): Population Count Grid. Center for International Earth Science Information Network, Columbia University, United Nations Food and Agriculture Programme - FAO, and Centro Internacional de Agricultura Tropical – CIAT. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC).

Cornejo, Romer, Francisco Javier Haro-Navejas, and José Luis León-Manríquez, 2013, Trade Issues and Beyond: Mexican Perceptions on Contemporary China, *Latin American Policy* 4, 1: 57–75.

Corporación Latinobarómetro, 2015, Latinobarómetro, available at: http://www. latinobarometro.org/lat.jsp (accessed June 2015).

Custer, Samantha, Zachary Rice, Takaaki Masaki, Rebecca Latourell, and Bradley Parks, 2015, Listening to Leaders: Which Development Partners Do They Prefer and Why? Williamsburg, VA: AidData. http://aiddata.org/listening-to-leaders.

DeMello, Luiz R., 1997, Foreign Direct Investment in Developing Countries and Growth: A Selective Survey, *Journal of Development Studies* 34(1): 1–34.

Dietrich, Simone, and Joseph Wright, 2015, Foreign Aid Allocation Tactics and Democratic Change in Africa, *Journal of Politics* 77: 1, 216-234.

Dietrich, Simone, Minhaj Mahmud, and Matthew S. Winters, 2015, Foreign Aid, Foreign Policy, and Domestic Government Legitimacy: Experimental Evidence from Bangladesh, AidData Working Paper 16. Williamsburg, VA: AidData.

Disdier, Anne-Célia, and Thierry Mayer, 2007, Je t'aime, Moi Non Plus: Bilateral Opinions and International Trade, *European Journal of Political Economy* 23, 4: 1140-1159.

Dreher, Axel, and Sarah Langlotz, 2015, Aid and Growth, New evidence using an excludable instrument, CEPR Discussion Paper No. DP10811.

Dreher, Axel, and Andreas Fuchs, 2015, Rogue Aid? An Empirical Analysis of China's Aid Allocation, *Canadian Journal of Economics* 48(3): 988-1023.

Dreher, Axel, Andreas Fuchs, Bradley Parks, Austin M. Strange, and Michael J. Tierney, forthcoming, Apples and Dragon Fruits: The Determinants of Aid and Other Forms of State Financing from China to Africa, *International Studies Quarterly*.

Dreher, Axel, Andreas Fuchs, Roland Hodler, Bradley C. Parks, Paul A. Raschky, and Michael J. Tierney, 2016, Aid on Demand: African Leaders and the Geography of China's Foreign Assistance, AidData Working Paper 3 (revised). Williamsburg, VA: AidData.

Dreher, Axel, Andreas Fuchs, Roland Hodler, Bradley C. Parks, Paul Raschky, and Michael J. Tierney, 2015, Aid on Demand: African Leaders and the Geography of China's Foreign Assistance, CEPR Discussion Paper No. 10704, London, UK: Centre for Economic Policy Research.

Elson, Anthony, 2014, Dragon among the Iguanas, *IMF Finance & Development* 51, 4, December: 44–46.

Feenstra, Robert C., and Hiau Looi Kee, 2009, Trade Liberalization and Export Variety: A Comparison of Mexico and China, in: Lederman, Daniel, Marcelo Olarreaga and Guillermo E. Perry (eds.), *China's and India's Challenge to Latin America: Opportunity or Threat?* Washington, D.C.: The World Bank.

Findley, Michael G., Helen V. Milner, and Daniel L. Nielson, 2014, The Effects of Multilateral vs. Bilateral Aid on Recipient Behavioral Support, draft, Available at http://www.princeton.edu/~hmilner/working%20papers/EffectofMLvsBLAidonRecipientBehaviorallSupport.pdf (accessed 4 February 2017).

Flores-Macías, Gustavo A., and Sarah Kreps, 2013, The Foreign Policy Consequences of Trade: China's Commercial Relations with Africa and Latin America, 1992—2006, *Journal of Politics* 75(2): 357-371.

Fuchs, Andreas, forthcoming, China's Economic Diplomacy and the Politics-Trade Nexus, in: Handbook of Economic Diplomacy Research, edited by Peter A.G. van Bergeijk and Selwyn Moons), Edward Elgar Publishing UK.

Fuchs-Schündeln, Nicola, and Matthias Schündeln, 2015, On the Endogeneity of Political Preferences: Evidence from Individual Experience with Democracy, *Science* 347(6226): 1145-1148.

Fumento, Michael, 2014, As The U.S. Sleeps, China Conquers Latin America, *Forbes*, 15.10.2014, available at: http://www.forbes.com/sites/realspin/2014/10/15/as-the-u-ssleeps-china-conquers-latin-america/ (accessed May 2015).

Gallagher, Kevin P., and Roberto Porzecanski, 2010, *The Dragon in the Room: China and the Future of Latin America*, Stanford: Stanford University Press.

Gallagher, Kevin P., Amos Irwin, and Katherine Koleski, 2012, The New Banks in Town: Chinese Finance in Latin America, Inter-American Dialogue Report, Washington, D.C.: Inter-American Dialogue.

Gallagher, Kevin P., and Margaret Myers, 2014, China-Latin America Finance Database, Washington, D.C.: Inter-American Dialogue, available at: http://thedialogue.org/map_list (accessed March 2015).

Gennaioli, Nicola, Rafael LaPorta, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2013, Human Capital and Regional Development, *Quarterly Journal of Economics* 128 (1): 105-164.

Goodman, Seth, Ariel BenYishay, and Daniel Runfola, 2016, Overview of the geo Framework, AidData.
Görg, Holger, and David Greenaway, 2004, Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? *World Bank Research Observer* 19, 2: 171-197.
Gruss, Bertrand, 2014, After the Boom–Commodity Prices and Economic Growth in Latin America and the Caribbean, IMF Working Paper 14/154.
Guha-Sapir, Debarati, Regina Below, and Philippe Hoyois, 2016, EM-DAT: The CRED/OFDA International Disaster Database, Brussels, Belgium: Université Catholique de Louvain, available at www.emdat.be (accessed February 2016).
Guiso, Luigi, Paola Sapienza, and Luigi Zingales, 2009, Cultural Biases in Economic Exchange? *Quarterly Journal of Economics* 124, 3: 1095–1131.
Hanusch, Marek, 2012, African Perspectives on China-Africa: Modeling Popular Perceptions and their Economic and Political Determinants, *Oxford Development Studies* 40, 4: 492–526.
Hardy, Alfredo Toro, 2013, *The World Turned Upside Down: The Complex Partnership between China and Latin America*, Series on Contemporary China 34, Singapore: World Scientific Publishing.
Hearn, Adrian H., 2012, Harnessing the Dragon: Overseas Chinese Entrepreneurs in Mexico and Cuba, *The China Quarterly* 209, March: 111–133.
Heilman, Kilian, 2016, Does Political Conflict Hurt Trade? Evidence from Consumer Boycotts, *Journal of International Economics* 99: 179-191.
IMF, 2014, World Economic Outlook Database, Washington, D.C., available at: http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/index.aspx (accessed May 2015)
Isaksson, Ann-Sofie, and Andreas Kotsadam, 2016, Chinese Aid and Local Corruption, Working Papers in Economics No. 667, University of Gothenburg, Department of Economics.
Jenkins, Rhys, 2010, China's Global Expansion and Latin America, *Journal of Latin American Studies* 42, 4: 809–837.
Jenkins, Rhys, Enrique Dussel-Peters, and Mauricio Mesquita Moreira, 2008, The Impact of China on Latin America and the Caribbean, *World Development* 36, 2: 235–253.
Johnston, Lauren A., Stephen L. Morgan, and Yuesheng Wang, 2015, The Gravity of China's African Export Promise, *World Economy* 38, 6: 913–934.
Kelly, Gina, Samuel Brazys, and Johan A. Elkink, 2016, The Dragon's Curse? China, the World Bank, and Perceptions of Corruption in Tanzania, AidData Working Paper 26, Williamsburg, VA: AidData.
Kim, Soo Yeon, Sophie Meunier, and Zsolt Nyiri, 2016, Yin and Yank: Relations between Public Opinion towards China and the U.S. in Europe, draft.
Kotschwar, Barbara, 2014, China's Economic Influence in Latin America, *Asian Economic Policy Review* 9, 1: 202–222.
Krugman, Paul R., 1979, Increasing Returns, Monopolistic Competition and International Trade, *Journal of International Economics* 9, February: 469-479.
Lang, Valentin, 2016, The Democratic Deficit and its Consequences: The Causal Effect of IMF Programs on Inequality, Paper presented at the 2016 Political Economy of International Organizations Conference, Salt Lake City, Utah (January 12-14).
Lebovic, James H., and Elizabeth N. Saunders, forthcoming, The Diplomatic Core: How the United States Employs High-Level Visits as a Scarce Resource, *International Studies Quarterly*, available at http://home.gwu.edu/~esaunder/DiplomaticCore.pdf (accessed 21 June 2016).
Lin, Faqin, Wenshou Yan, and Xiaosong Wang, forthcoming, The Impact of Africa – China's Diplomatic Visits on Bilateral Trade, *Scottish Journal of Political Economy*.
Marshall, Monty G., Tedd R. Gurr, and Keith Jaggers, 2013, Polity IV: Regime Authority Characteristics and Transitions Datasets, CIDUM: University of Maryland, available at: http://www.systemicpeace.org/inscrdata.html (accessed May 2015).
Mayda, Anna Maria, and Dani Rodrik, 2005, Why are Some People (and Countries) More Protectionist Than Others? *European Economic Review* 49, 1: 1393–1430.
Mayer, Thierry, and Soledad Zignago, 2011, Notes on CEPII's Distances Measures: the GeoDist Database, CEPII Working Paper 2011-25, Paris, France: Centre d'Etudes Prospectives et d'Informations Internationales.

Mildler, Paul, 2010, Why "Made in China" is a Mark of Shame, *The Telegraph*, 10.01.2010, available at: http://www.telegraph.co.uk/finance/comment/6962703/Why-Made-in-China-is-a-mark-of-shame.html (accessed May 2015).

MOFA, 2001a, President Jiang Zemin Met With Argentine Friends, Ministry of Foreign Affairs of the People's Republic of China, available at: http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/ldmzs_664952/gjlb_664956/3453_664968/3455_664972/t17335.shtml (accessed February 2016).

MOFA, 2001b, President Jiang Zemin Held Talks with Brazilian President Fernando Enrique Cardoso, Ministry of Foreign Affairs of the People's Republic of China, available at: http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/ldmzs_664952/gjlb_664956/3473_665008/3475_665012/t17345.shtml (accessed February 2016).

MOFA, 2001c, President Jiang Zemin Held Talks with Brazilian President Fernando Enrique Cardoso, Ministry of Foreign Affairs of the People's Republic of China, available at: http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/ldmzs_664952/gjlb_664956/3473_665008/3475_665012/t17345.shtml (accessed February 2016).

MOFA, 2001d, President Jiang Zemin Held Talks with Brazilian President Fernando Enrique Cardoso, Ministry of Foreign Affairs of the People's Republic of China, available at: http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/ldmzs_664952/gjlb_664956/3473_665008/3475_665012/t17345.shtml (accessed February 2016).

MOFA, 2001e, President Jiang Zemin Held Talks with Venezuelan President Hugo Chavez, Ministry of Foreign Affairs of the People's Republic of China, available at: http://www.fmprc.gov.cn/mfa_eng/wjb_663304/zzjg_663340/ldmzs_664952/gjlb_664956/3538_665158/3540_665162/t17412.shtml (accessed February 2016).

MOFA, 2004, Foreign Minister Li Zhaoxing Comments on the Fruitful Results of President Hu Jintao's Trip to Latin America, China's Ministry of Foreign Affairs, 26.11.2004, available at: http://www.fmprc.gov.cn/mfa_eng/topics_665678/huvisit_665888/t172349.shtml (accessed March 2015).

MOFCOM, 2010, *2009 Statistical Bulletin of China's Outward Foreign Direct Investment*, Beijing: China Statistics Press.

MOFCOM, 2012, Chen Deming Led a Chinese Delegation to Visit Colombia, 08.10.2012, available at: http://chendeming2.mofcom.gov.cn/article/activity/201210/20121008378819.shtml (accessed March 2015).

MOFCOM, 2013, *2012 Statistical Bulletin of China's Outward Foreign Direct Investment*, Beijing: China Statistics Press.

Molinski, Dan, 2010, Chávez, Shunning IMF, Gushes About China Oil-for-Credit Deal, *The Wall Street Journal*, 04.03.2010, available at: http://www.wsj.com/articles/SB10001424052748704541304575100003251066776 (accessed March 2015).

Mu, Chunshan, 2013, China's Leaders Abroad: What the First Visit Tells Us, *The Diplomat*, 19.05.2013, available at: http://thediplomat.com/2013/05/chinas-leaders-abroad-what-the-first-visits-tell-us/ (accessed March 2015).

Nizalova, Olena, and Irina Murtazashvili, 2016, Exogenous Treatment and Endogenous Factors: Vanishing of Omitted Variable Bias on the Interaction Term, *Journal of Econometric Methods*, 5(1): 71-77.

Nunn, Nathan, and Nancy Qian, 2014, U.S. Food Aid and Civil Conflict, *American Economic Review* 103, 3: 86-92.

OECD, 2016, OECD Statistics, Organization for Economic Cooperation and Development, Paris, available at: http://stats.oecd.org/ (accessed January 2016).

Pandya, Sonal S., and Rajkumar Venkatesan, 2016, French Roast: International Conflicts and Consumer Boycotts — Evidence from Supermarket Scanner Data, *Review of Economics and Statistics* 98(1): 42-56.

Parish-Flannery, Nathaniel, 2012, Are Chinese Companies in Latin America Paying Attention to Corporate Social Responsibility? *Forbes*, 24.02.2012, available at: http://www.forbes.com/sites/nathanielparishflannery/2012/02/24/are-chinese-companies-in-latin-america-paying-attention-to-corporate-social-responsibility/ (accessed May 2015).

PRC, 2010a, Yang Jiechi Talks about Outcome of Visit to Austria and Three Latin American Countries, 08.03.2010, available at: http://www.china-embassy.org/eng/zgyw/t721801.htm (accessed March 2015).

PRC, 2010b, State Councilor Liu Yandong to Visit Four Latin-American and Caribbean Countries, 14.12.2010, available at: http://www.china-embassy.org/eng/zgyw/t779364.htm (accessed March 2015).

Romero, Simon, 2010, Tensions Over Chinese Mining Venture in Peru, *New York Times*, 14.08.2010, available at: http://www.nytimes.com/2010/08/15/world/americas/15chinaperu.html (accessed April 2015).

Rose, Andrew K., 2016, Like Me, Buy Me: The Effect of Soft Power on Exports, *Economics & Politics* 28(2): 216-232.

Rudyak, Marina, 2014, MOFCOM Issues the Draft "Measures for the Administration of Foreign Aid", China Aid Blog, available at http://china-aid-blog.weebly.com/blog/mofcom-issues-the-draft-measures-for-the-administration-of-foreign-aid (accessed 1 March 2016).

Santiso, Javier, 2007, The Visible Hand of China in Latin America, OECD Development Centre Studies, Geneva: OECD.

Sargent, John, and Linda Matthews, 2009, China versus Mexico in the Global EPZ Industry: Manquiladoras, FDI Quality, and Plant Mortality, World Development 37(6): 1069-1082.

Song, Mioh, 2014, Top Chinese lawmaker wraps up fruitful Latin America tour, *Xinhua*, 28.11.2014, available at: http://news.xinhuanet.com/english/china/2014-11/28/c_133821035.htm (accessed March 2015).

Song, Shutao, 2008, Chinese vice premier to visit four Latin American countries, *Xinhua*, 28.04.2008, available: http://news.xinhuanet.com/english/2008-04/28/content_8066718.htm (accessed March 2015).

Staiger, Douglas, and James H. Stock, 1997, Instrumental Variables Regression with Weak Instruments, *Econometrica* 65, 3: 557-586.

Strange, Austin M., Bradley Parks, Michael J. Tierney, Andreas Fuchs, and Axel Dreher, forthcoming, Tracking Under-Reported Financial Flows: China's Development Finance and the Aid-Conflict Nexus Revisited, *Journal of Conflict Resolution*.

The Economist, 2014, Nicaragua's Canal – Digging for Truth, 20.12.2014, available at: http://www.economist.com/news/americas/21636794-chinese-construction-due-startbut-what-digging-truth (accessed April 2015).

UN Comtrade, 2015, World Integrated Trade Solution (WITS), available at: http://wits.worldbank.org/ (accessed May 2015).

Werker, Eric D., Faisal Z. Ahmed, and Charles Cohen, 2009, How is Foreign Aid Spent? Evidence from a Natural Experiment, *American Economic Journal: Macroeconomics* 1, 2: 225-244.

Wooldridge, Jeffrey M., 2010, *Econometric Analysis of Cross Section and Panel Data*, 2nd Edition, Cambridge: MIT Press.

World Bank, 2015, World Development Indicators, Washington, D.C., available at: http://data.worldbank.org/data-catalog/world-development-indicators (accessed June 2015).

Yan, Yangtze, 2006, Top legislator, Latin American Parliament Chief Meet on Ties, Politics, *Xinhua*, 02.09.2006, available at: http://www.gov.cn/english/2006-09/02/content_376031.htm (accessed March 2015).

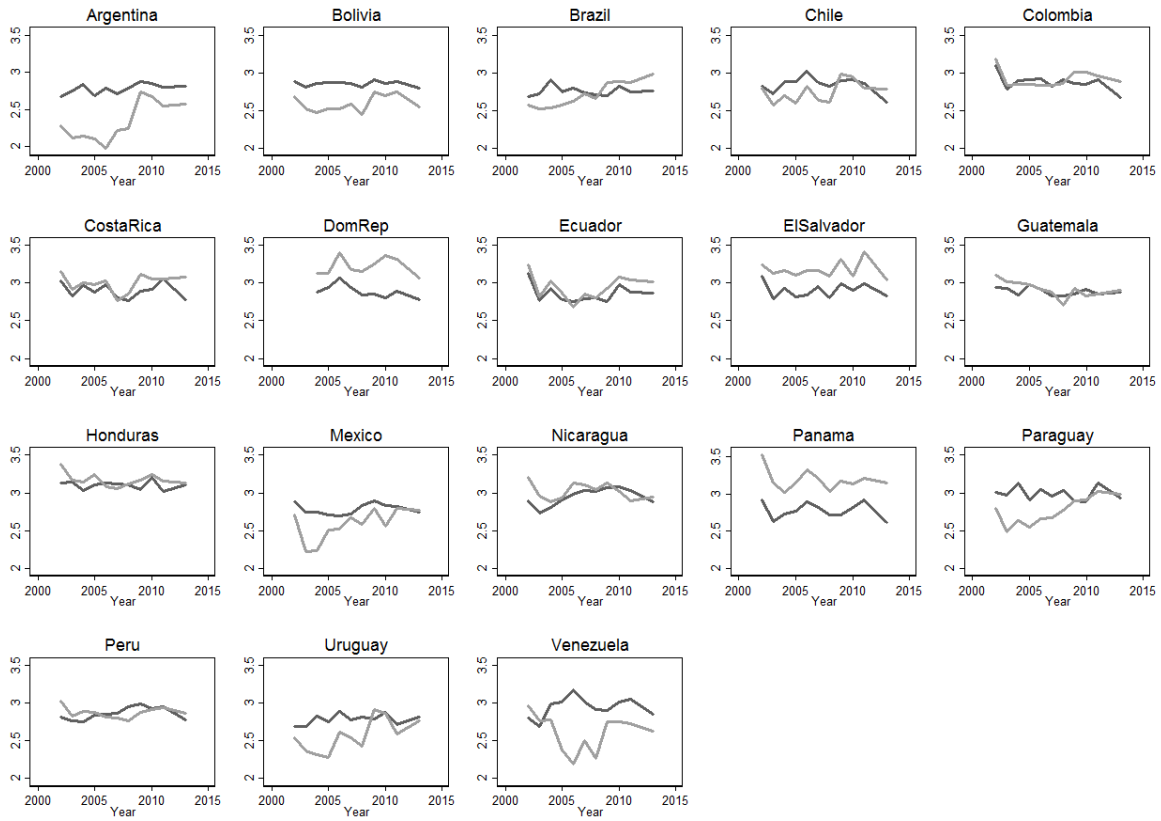
Yan, Zhonghua, 2007, China-Venezuela Bilateral Relations, *Xinhua*, 16.03.2007, available at: http://news.xinhuanet.com/english/2007-03/16/content_5857909.htm (accessed March 2015).

Yu, Zhixiao, 2011, China and L. America, on Paths of Development, Eye Closer Win-Win Ties, *Xinhua*, 04.06.2011, available at: http://china-wire.org/?p=13693 (accessed March 2015).

Zhang, Kevin H., 2001, Does Foreign Direct Investment Promote Economic Growth? Evidence from East Asia and Latin America, *Contemporary Economic Policy* 19, 2: 175–185.

Zhu, Zhiqun, 2013, *China's New Diplomacy: Rationale, Strategies and Significance*, Farnham: Ashgate Publishing.

Figure 1: Individual attitudes towards China and the United States by country over time (2002-2013)



Note: The dark grey (light grey) line represents the average opinion about China (the United States).

Figure 2: Total Chinese aid to Latin American subnational regions (in 2014 US$)

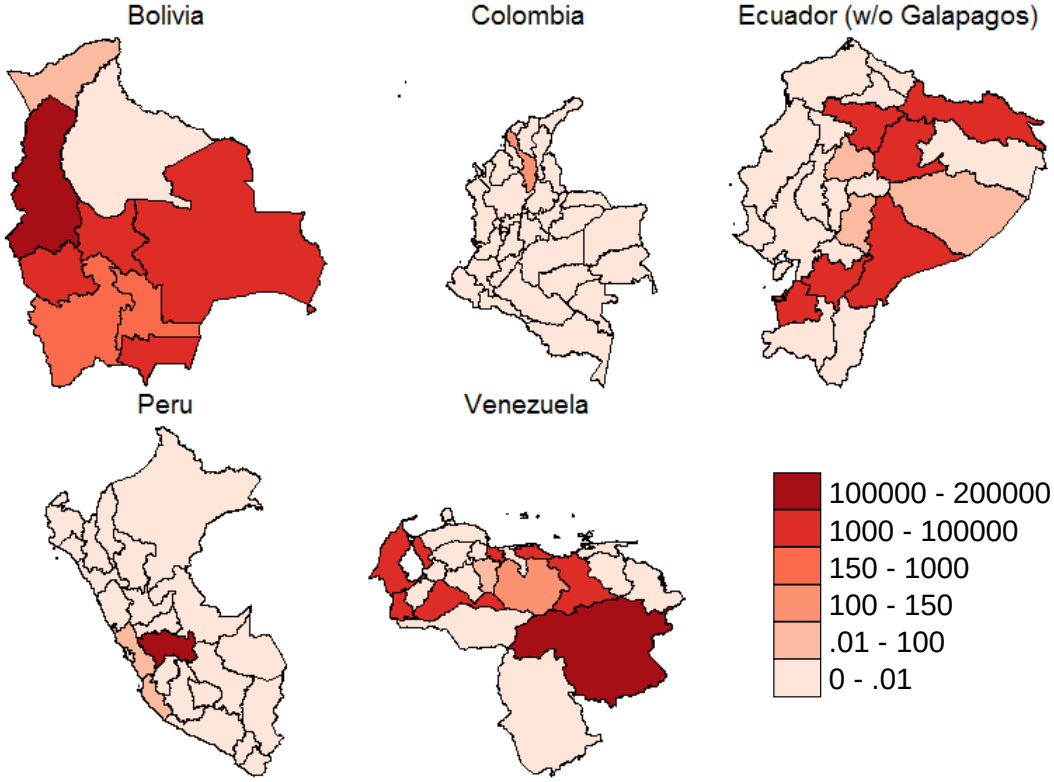


Figure 3: Average opinion on China in Latin American subnational regions

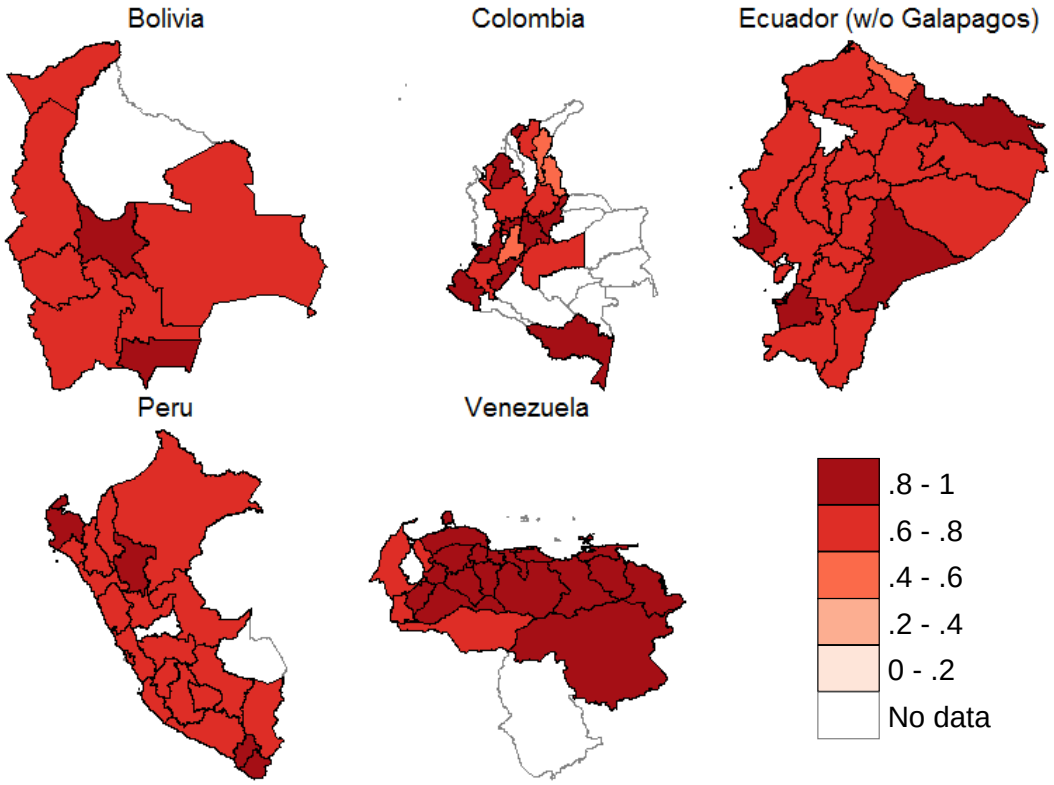


Table 1: Latin American countries ranked by attitudes towards China and the United States and by Chinese and US economic activities (2002-2013 average)

	Dependent variables		**Variables of interest**					
	China opinion	***US opinion***	***Chinese exports***	***US exports***	***Chinese OFDI***	***US OFDI***	***Chinese aid***	***US aid***
1	Honduras (0.9)	Dom. Rep. (0.9)	Brazil (13709.8)	Mexico (149920.6)	Brazil (1992.0)	Colombia (674.0)	Brazil (561.5)	Mexico (79080.1)
2	Paraguay (0.8)	Panama (0.9)	Mexico (11878.1)	Brazil (26174.2)	Venezuela (1802.2)	Mexico (208.6)	Venezuela (534.2)	Brazil (47848.5)
3	Nicaragua (0.8)	El Salvador (0.9)	Panama (6309.0)	Venezuela (9253.0)	Argentina (924.1)	Peru (202.3)	Peru (380.6)	Chile (18859.6)
4	Venezuela (0.8)	Honduras (0.9)	Chile (5094.9)	Colombia (8944.7)	Ecuador (555.5)	Bolivia (152.6)	Argentina (327.4)	Argentina (13859.5)
5	Costa Rica (0.8)	Costa Rica (0.8)	Argentina (3534.2)	Chile (8795.5)	Peru (165.5)	El Salvador (119.1)	Mexico (201.3)	Venezuela (11624.6)
6	El Salvador (0.8)	Nicaragua (0.8)	Venezuela (2781.8)	Argentina (6065.3)	Bolivia (142.8)	Guatemala (105.3)	Ecuador (171.5)	Peru (6102.7)
7	Guatemala (0.8)	Guatemala (0.8)	Colombia (2459.1)	Dom. Rep. (5879.1)	Chile (137.6)	Honduras (89.1)	Panama (135.5)	Panama (5734.2)
8	Dom. Rep. (0.8)	Colombia (0.8)	Peru (2081.1)	Costa Rica (4725.8)	Mexico (106.5)	Nicaragua (82.2)	Colombia (75.5)	Colombia (4884.6)
9	Peru (0.8)	Ecuador (0.8)	Ecuador (1072.5)	Peru (4636.4)	Costa Rica (75.8)	Ecuador (68.7)	Chile (63.7)	Costa Rica (2040.8)
10	Colombia (0.8)	Peru (0.8)	Uruguay (875.9)	Panama (4406.0)	Colombia (6.0)	Dom. Rep. (48.6)	Bolivia (47.8)	El Salvador (1689.8)
11	Bolivia (0.8)	Paraguay (0.7)	Guatemala (717.9)	Honduras (4125.6)	Uruguay (0.8)	Brazil (32.4)	Paraguay (17.0)	Dom. Rep. (1137.8)
12	Chile (0.8)	Chile (0.7)	Paraguay (568.6)	Guatemala (3836.1)	Panama (0.0)	Paraguay (22.5)	Uruguay (6.7)	Ecuador (1044.9)
13	Ecuador (0.8)	Brazil (0.7)	Dom. Rep. (504.4)	Ecuador (3506.8)	Guatemala (0.0)	Panama (20.8)	Honduras (2.7)	Uruguay (952.8)
14	Uruguay (0.7)	Uruguay (0.6)	Costa Rica (450.1)	El Salvador (2401.3)	El Salvador (0.0)	Venezuela (14.1)	Costa Rica (1.0)	Guatemala (778.2)
15	Argentina (0.7)	Mexico (0.6)	Honduras (298.7)	Paraguay (1166.1)	Dom. Rep. (0.0)	Costa Rica (6.6)	Nicaragua (0.2)	Honduras (690.4)
16	Brazil (0.7)	Bolivia (0.6)	El Salvador (292.6)	Nicaragua (796.1)	Honduras (0.0)	Argentina (5.3)	Dom. Rep. (0.2)	Bolivia (395.5)
17	Panama (0.7)	Venezuela (0.6)	Nicaragua (213.2)	Uruguay (754.5)	Paraguay (0.0)	Chile (4.1)	Guatemala (0.0)	Nicaragua (262.6)
18	Mexico (0.7)	Argentina (0.4)	Bolivia (142.3)	Bolivia (408.5)	Nicaragua (0.0)	Uruguay (0.6)	El Salvador (0.0)	Paraguay (179.4)

Note: Values in parentheses for the variables of interest (exports, OFDI, and aid) are in millions of constant 2010 US dollars.

Table 2: Descriptive statistics

Variables	Mean	Std. dev.	Minimum	Maximum
Dependent variables				
China opinion	0.77	0.42	0	1
US opinion	0.74	0.44	0	1
Variables of interest				
Chinese exports	3,322	5,625	11	34,042
US exports	15,089	35,850	212	214,396
Chinese aid	460.3	2,182.2	0.0	20,547.9
Chinese ODA	2.1	12.2	0.0	107.0
Chinese OOF	458.2	2,182.4	0.0	20,547.9
Chinese aid for social infrastructure and services	6.1	60.6	0.0	729.5
Chinese aid for economic infrastructure and services	276.3	1,416.2	0.0	11,613.0
Chinese aid for production sectors	104.3	824.9	0.0	10,122.1
US aid	107.0	182.1	0.2	1,344.2
Chinese OFDI	134.9	308.3	0.0	2,241.3
US OFDI	12,464.7	22,041.5	96.1	94,679.4
Country-level controls				
GDP per capita	4,324.43	2,272.43	987.67	9,773.16
Unemployment	7.36	3.47	1.80	18.40
Inflation	7.48	6.99	0.06	51.46
Trade openness	66.31	28.57	22.11	158.35
Left government	0.44	0.50	0.00	1.00
Democracy	7.81	2.01	-3.00	10.00
Chinese leader visit	0.21	0.41	0.00	1.00
Individual-level controls				
Age	38.43	15.85	16.00	99.00
Female	0.48	0.50	0.00	1.00
Employed	0.51	0.50	0.00	1.00
Student	0.08	0.27	0.00	1.00
Education	3.02	1.71	0.00	6.00
Wealth	5.18	2.21	0.00	9.00
Urban	0.63	0.48	0.00	1.00
Current economic situation	1.68	0.94	0.00	4.00
Left orientation	4.70	2.45	0.00	10.00
Democracy support	0.63	0.48	0.00	1.00

Note: The descriptive statistics are based on the sample used in Table 3, panel A, column 1.

Table 3: Chinese exports, aid and OFDI to Latin American countries: OLS and 2SLS (2002-2013)

	(1)	(2)	(3)	(4)	(5)
Panel A: OLS regressions					
Chinese exports	-0.0054***			0.0061***	-0.0060***
	[0.001]			[0.001]	[0.001]
Chinese aid		-0.0201***		-0.0215***	-0.0228***
		[0.006]		[0.007]	[0.007]
Chinese OFDI			-0.1533***	0.0393	0.045
			[0.047]	[0.060]	[0.052]
US opinion					0.2115***
					[0.010]
Control variables	Country-level controls, Individual-level controls, Year FE				
Adjusted R-squared	0.018	0.016	0.017	0.019	0.064
Number of observations	154,278	154,278	116,313	116,313	114,750
Number of clusters	178	178	144	144	144
Panel B: OLS regressions					
Chinese exports	-0.0007			-0.0006	0.002
	[0.002]			[0.002]	[0.002]
Chinese aid		-0.0063		0.0021	0.0008
		[0.006]		[0.006]	[0.005]
Chinese OFDI			-0.0414	-0.035	-0.0714
			[0.057]	[0.074]	[0.072]
US opinion					0.2163***
					[0.010]
Control variables	Country-level controls, Individual-level controls, Year FE, Country FE				
Adjusted R-squared	0.021	0.021	0.023	0.023	0.068
Number of observations	154,278	154,278	116,313	116,313	114,750
Number of clusters	178	178	144	144	144
Panel C: 2SLS regressions					
Chinese exports	0.0091				
	[0.006]				
Chinese aid	-0.0019				
	[0.007]				
Control variables	Country-level controls, Individual-level controls, Year FE, Country FE				
IV type	*Distance * Import penetration*	*Chinese Cold War aid * Deaths*			
Kleibergen-Paap F stat.	12.08	39.1			
Kleibergen-Paap LM stat.	9.105	3.106			
K-P LM stat. p-val.	0.00255	0.078			
Number of observations	154,278	141,672			
Number of clusters	178	178			

Notes: The dependent variable is a binary variable equal to 1 if the individual has a positive perception of China (good or very good). The regression covers the survey waves 2002-2013 in columns 1-2 and, due to the reduced availability of Chinese OFDI data, 2005-2013 in columns 3-5. The instrumental variable in column 1 is the interaction of the shipping distance between Shanghai and the capital of the respective Latin American country and the import penetration of developing countries outside Latin America in a particular year. The instrument in column 2 is the interaction between the number of Chinese Cold War aid projects to a particular country and the number of deaths from natural disasters in China in a particular year. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01.

Table 4: Chinese exports, aid and OFDI to Latin American countries: OLS with country- and year-fixed effects (2002-2013): Interactions with individual characteristics

	Age	Female	Employed	Student	Education	Wealth	Urban	Current economic situation	Left ideology	Democracy support
Chinese exports	0.000	-0.001	-0.001	-0.001	-0.004*	-0.001	-0.001	0.000	-0.001	-0.002
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.003]	[0.002]	[0.003]	[0.002]	[0.002]
Chinese exports * characteristic	0.000	0.001	0.000	0.001	0.001***	0.000	0.000	0.000	0.000	0.001
	[0.000]	[0.000]	[0.000]	[0.001]	[0.000]	[0.000]	[0.001]	[0.001]	[0.000]	[0.001]
Chinese aid	0.003	-0.004	-0.008	-0.006	-0.014*	-0.019**	-0.012*	-0.01	-0.012	-0.013
	[0.009]	[0.006]	[0.007]	[0.006]	[0.008]	[0.009]	[0.007]	[0.010]	[0.010]	[0.010]
Chinese aid * characteristic	0.000	-0.002	0.005	0.009*	0.003	0.003**	0.010*	0.003	0.001	0.012
	[0.000]	[0.004]	[0.004]	[0.005]	[0.002]	[0.001]	[0.005]	[0.005]	[0.001]	[0.010]
Chinese OFDI	-0.018	-0.069	-0.054	-0.067	-0.238***	-0.205**	-0.111*	-0.098	-0.081	-0.105
	[0.079]	[0.063]	[0.062]	[0.060]	[0.076]	[0.097]	[0.063]	[0.106]	[0.064]	[0.068]
Chinese OFDI * characteristic	-0.001	0.019	-0.013	0.092***	0.052***	0.026***	0.076**	0.017	0.004	0.071
	[0.001]	[0.029]	[0.020]	[0.031]	[0.010]	[0.010]	[0.037]	[0.030]	[0.006]	[0.048]

Notes: The dependent variable is a binary variable equal to 1 if the individual has a positive perception of China (good or very good) and covers the survey waves 2002-2013 for regressions including the export and the official flows variables and 2005-2013 for regressions including Chinese OFDI data. All regressions include country-level controls, individual-level controls, year-fixed effects, and country-fixed effects. Columns including Chinese exports include 154,278 observations, those with Chinese aid 136,385, and those with OFDI stocks 116,313 observations. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01.

Table 5: Chinese aid to Latin American countries by flow type and sector: OLS with country- and year-fixed effects (2002-2013)

	(1)	(2)	(3)	(4)	(5)	(6)
Chinese aid	-0.004					
	[0.006]					
Chinese ODA		-0.085				
		[0.100]				
Chinese OOF			-0.004			
			[0.006]			
Chinese aid (social)				-0.072		
				[0.145]		
Chinese aid (economic)					-0.009*	
					[0.005]	
Chinese aid (production)						0.074***
						[0.019]
Country-level controls	Yes	Yes	Yes	Yes	Yes	Yes
Individual-level controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.021	0.021	0.021	0.021	0.021	0.021
Number of observations	136,385	136,385	136,385	136,385	136,385	136,385
Number of clusters	159	159	159	159	159	159

Notes: The dependent variables is a binary variable equal to 1 if the individual has a positive perception of China (good or very good) and covers the survey waves 2002-2013. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01

Table 6: Chinese aid to Latin American subnational regions (2002-2011)

	(1)	(2)	(3)	(4)
Local Chinese aid	0.000	0.000	0.000	0.000
	[0.000]	[0.000]	[0.000]	[0.000]
Chinese aid	0.010*	0.006		
	[0.006]	[0.008]		
GDP per capita (ln, local)	Yes	Yes	Yes	Yes
Controls (national level)	Yes	Yes		
Controls (individual level)	Yes	Yes	Yes	Yes
Year FE	Yes	Yes		
Country FE		Yes		
Country-year FE			Yes	Yes
Region FE				Yes
Adjusted R-squared	0.020	0.020	0.020	0.020
Number of observations	20,364	20,364	20,364	20,364
Number of clusters	28	28	28	28

Notes: The dependent variables is a binary variable equal to 1 if the individual has a positive perception of China (good or very good) and covers the survey waves 2002-2011 rather than 2002-2013 due to availability of subnational GDP data. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01

Table 7: Comparison of Chinese and US exports, aid and OFDI to Latin American countries: Seemingly unrelated estimations (2002-2013)

	(1a) China	(1b) United States	(2a) China	(2b) United States	(3a) China	(3b) United States
Chinese exports	-0.001					
	[0.002]					
US exports		0.001				
		[0.003]				
Chinese aid			-0.007			
			[0.005]			
US aid				0.031***		
				[0.012]		
Chinese OFDI					-0.040	
					[0.058]	
US OFDI						0.001
						[0.002]
Country-level controls		Yes		Yes		Yes
Individual-level controls		Yes		Yes		Yes
Year FE		Yes		Yes		Yes
Country FE		Yes		Yes		Yes
Wald p-value		0.773		0.005		0.475
Number of observations		152,351		152,351		137,604
Number of clusters		178		178		167

Notes: The dependent variables in columns 1a, 2a and 3a is a binary variable equal to 1 if the individual has a positive perception of China (good or very good). The dependent variables in columns 1b, 2b and 3b is a binary variable equal to 1 if the individual has a positive perception of the United States (good or very good). The dependent variable covers the survey waves 2002-2013 for regression including the export and the official flows/aid variables and 2005-2013 for columns including Chinese OFDI data or US OFDI stocks. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01.

ONLINE APPENDIX (for online publication only)

Appendix A: Sources and definitions of variables used

Variable	**Definition**	**Source**
Dependent variables		
China opinion	Binary variable equal to 1 if the individual has a positive attitude towards China (good or very good) based on the question *"I would like to know your opinion about the following countries and powers. Do you have a very good, good, bad or very bad opinion of China?"* (note that the introductory sentence slightly varies between survey waves)	Corporación Latinobarómetro (2015)
US opinion	Binary variable equal to 1 if the individual has a positive attitude towards the United States (good or very good) based on the question *"I would like to know your opinion about the following countries and powers. Do you have a very good, good, bad or very bad opinion of the United States?"* (note that the introductory sentence slightly varies between survey waves)	Corporación Latinobarómetro (2015)
Variables of interest		
Chinese exports	Exports from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	UN Comtrade (2015) via WITS and GDP from World Development Indicators (World Bank 2015)
Chinese OFDI	Outward foreign direct investment (OFDI) stocks from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	MOFCOM (2010, 2012, 2013)
Chinese OFDI flows	Outward foreign direct investment flows (OFDI) from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	MOFCOM (2010, 2012, 2013)
Chinese aid	Official finance, i.e., official development assistance (ODA) and other official flows (OOF) from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	AidData (Strange et al. forthcoming)
Chinese ODA	Official development assistance (ODA) from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	AidData (Strange et al. forthcoming)
Chinese OOF	Other official flows (OOF) from China to a particular country (% of partner	AidData (Strange et al. forthcoming)

	country's GDP), average of the one-year and two-year lags	
Chinese aid (social)	ODA and OOF in the sector "Social Infrastructure & Services" from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	AidData (Strange et al. forthcoming)
Chinese aid (economic)	ODA and OOF in the sector "Economic Infrastructure & Services" from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	AidData (Strange et al. forthcoming)
Chinese aid (production)	ODA and OOF in the sector "Production Sectors" from China to a particular country (% of partner country's GDP), average of the one-year and two-year lags	AidData (Strange et al. forthcoming)
US exports	Exports from the United States to a particular country (% of partner country's GDP), average of the one-year and two-year lags	UN Comtrade (2015) via WITS
US OFDI	Outward foreign direct investment (OFDI) stocks (Benchmark definition 3rd Edition, BMD3) from the United States to a particular country (% of partner country's GDP), average of the one-year and two-year lags	OECD (2016) via OECD.Stat
US OFDI flows	Outward foreign direct investment (OFDI) flows (Benchmark definition 3rd Edition, BMD3) from the United States to a particular country (% of partner country's GDP), average of the one-year and two-year lags	OECD (2016) via OECD.Stat
US aid	Commitments of Official Development Assistance (ODA) from the United States to a particular country (% of partner country's GDP), average of the one-year and two-year lags	OECD (2016) via OECD.Stat
Country-level controls		
GDP per capita (ln)	Logged GDP per capita of partner country (constant 2005 US$) [NY.GDP.PCAP.KD], one-year lag	World Development Indicators (World Bank 2015)
Unemployment	Unemployment, total (% of total labor force) of partner country (modeled ILO estimate) [SL.UEM.TOTL.ZS], one-year lag	World Development Indicators (World Bank 2015)
Inflation (ln)	Logged average consumer price inflation rate of partner country, one-year lag	IMF (2015)
Left government	Binary variable equal to 1 if the chief executive's party of the partner country is defined as communist, socialist, social democratic or left-wing, one-year lag	Beck et al. (2001), authors' update

Democracy	Regime authority on a 21-point scale ranging from -10 (hereditary monarchy) to +10 (consolidated democracy), one-year lag	Marshall et al. (2013)
Trade openness	Trade (% of GDP) [NE.TRD.GNFS.ZS], one-year lag	World Development Indicators (World Bank 2015)
Chinese leader visit	Binary variable equal to 1 in years following a visit of at least one of the incumbents of the following Chinese leadership positions: President, Vice President, Premier, Vice Premier, Chairman of the National People's Congress, Standing Member of the Politburo of the Communist Party, State Councilor, Trade Minister and Foreign Minister	Barcena and Rosales (2010); Chen (2014); MOFA (2001a,b, 2004, 2001a, b, c, d, e); MOFCOM (2012); Chinese Embassies in Argentina (2012) and Brazil (2013), Mu (2013); PRC (2010a); PRC (2010b); Song (2008); Song (2014); Yan (2006); Yan (2007); Yu (2011); Zhu (2013)
US leader visit	Binary variable equal to 1 in years following a visit of the US President or Secretary of State	Lebovic and Saunders (forthcoming)
Individual-level controls		
Age	Stated age of the respondent	Corporación Latinobarómetro (2015)
Female	Binary variable equal to 1 if the respondent is female	Corporación Latinobarómetro (2015)
Employed	Binary variable equal to 1 if the respondent states to be employed or self-employed in response to the question *"What is your current employment situation?"*, where possible answers include "Self-employed," "Salaried employee in a state company," "Salaried employee in a private company," "Temporarily out of work, retired/pensioner," "Don't work/responsible for shopping and housework," and "Student"	Corporación Latinobarómetro (2015)
Student	Binary variable equal to 1 if the respondent states to be a student in response to the question *"What is your current employment situation?"*	Corporación Latinobarómetro (2015)
Education	Respondent's educational attainment on an 7-point index from 0 to 6 (coded based on the respondent's answer at which age full-time education was completed; larger values correspond to higher levels of education)	Corporación Latinobarómetro (2015)
Wealth	Asset index defined as the number of affirmative answers to the following question *"Do you or any member of your family have any of the following goods?"*, where we count nine items (i.e., those that are included in all survey waves): refrigerator, own home, computer, washing machine, telephone, car, drinking water, hot running water, and sewage system	Corporación Latinobarómetro (2015)

Urban	Binary variable equal to 1 if the respondent lives in a city with more than 50,000 inhabitants	Corporación Latinobarómetro (2015)
Current economic situation	Respondent's assessment of the current economic situation on a 5-point scale based on the response to the question *"In general, how would you describe the country's present economic situation? Would you say it is…?"*, where possible answers include "Very good" (4); "Good" (3); "About average" (2); "Bad" (1), and "Very Bad" (0)	Corporación Latinobarómetro (2015)
Left orientation	Respondent's self-assessed political orientation on an 11-point scale based on the response to the question *"In politics, people normally speak of "left" and "right". On a scale where 0 is left and 10 is right, where would you place yourself?* (larger values represent more leftist views)	Corporación Latinobarómetro (2015)
Democracy support	Binary variable equal to 1 if the respondent expresses strong support for democracy in response to the question: *"Which of the following statements do you agree with most?"*, where possible answers include "Democracy is preferable to any other kind of government;" "Under some circumstances, an authoritarian government can be preferable to a democratic one;" and "For people like me, it does not matter whether we have a democratic or non-democratic regime"	Corporación Latinobarómetro (2015)

Notes: The GDP data to calculate shares in GDP of various variables has been obtained from the World Development Indicators (defined at market prices in current US$ [NY.GDP.MKTP.CD], World Bank 2015).

Appendix B1: Chinese exports, aid and OFDI to Latin American countries: OLS with year-fixed effects (2002-2013)

	(1)		(2)		(3)		(4)		(5)	
	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.
Chinese exports	-0.0054***	[0.001]					-0.0061***	[0.001]	-0.0060***	[0.001]
Chinese aid			-0.0201***	[0.006]			-0.0215***	[0.007]	-0.0228***	[0.007]
Chinese OFDI					-0.1533***	[0.047]	0.0393	[0.060]	0.045	[0.052]
GDP per capita (ln)	-0.0389***	[0.007]	-0.0539***	[0.007]	-0.0518***	[0.008]	-0.0383***	[0.009]	-0.0311***	[0.008]
Unemployment	0.0006	[0.001]	-0.0003	[0.001]	0.0015	[0.001]	0.0026**	[0.001]	0.0008	[0.001]
Inflation (ln)	0.0235***	[0.006]	0.0283***	[0.006]	0.0205**	[0.009]	0.0147*	[0.008]	0.0349***	[0.009]
Trade openness	0.0011***	[0.000]	0.0005***	[0.000]	0.0008***	[0.000]	0.0014***	[0.000]	0.0010***	[0.000]
Left government	0.0036	[0.009]	0.0131	[0.010]	0.0095	[0.011]	0.0064	[0.011]	0.0191*	[0.010]
Democracy	-0.0018	[0.002]	-0.0044**	[0.002]	-0.0046**	[0.002]	-0.0054**	[0.003]	-0.0062**	[0.002]
Chinese leader visit	0.0014	[0.009]	0.0052	[0.010]	0.0107	[0.011]	0.0126	[0.010]	0.0134	[0.010]
Age	0	[0.000]	0	[0.000]	-0.0001	[0.000]	-0.0001	[0.000]	0.0002	[0.000]
Female	-0.0125***	[0.003]	-0.0126***	[0.003]	-0.0141***	[0.003]	-0.0140***	[0.003]	-0.0191***	[0.003]
Employed	-0.0013	[0.003]	-0.0015	[0.003]	0.0008	[0.003]	0.0005	[0.003]	0.0017	[0.003]
Student	0.0113**	[0.004]	0.0115**	[0.004]	0.0145***	[0.005]	0.0132**	[0.005]	0.0157***	[0.005]
Education	0.0083***	[0.001]	0.0077***	[0.001]	0.0093***	[0.001]	0.0086***	[0.001]	0.0102***	[0.001]
Wealth	0.0024**	[0.001]	0.0031***	[0.001]	0.0017	[0.001]	0.0021*	[0.001]	0.0019	[0.001]
Urban	-0.0027	[0.004]	-0.003	[0.004]	-0.0036	[0.004]	-0.0043	[0.004]	-0.001	[0.004]
Current economic situation	0.0191***	[0.002]	0.0176***	[0.002]	0.0187***	[0.003]	0.0194***	[0.003]	0.0178***	[0.003]
Left orientation	-0.0004	[0.001]	-0.0005	[0.001]	-0.0001	[0.001]	0.0001	[0.001]	0.0050***	[0.001]
Democracy support	0.0255***	[0.003]	0.0272***	[0.003]	0.0304***	[0.004]	0.0295***	[0.004]	0.0302***	[0.004]
US opinion									0.2115***	[0.010]
Year FE	Yes		Yes		Yes		Yes		Yes	
Country FE	No		No		No		No		No	
Adjusted R-squared	0.018		0.0164		0.0169		0.0187		0.0637	
Number of observations	154278		154278		116313		116313		114750	
Number of clusters	178		178		144		144		144	

Notes: The dependent variable is a binary variable equal to 1 if the individual has a positive perception of China (good or very good). The regression covers the survey waves 2002-2013 in columns 1-2 and, due to the reduced availability of Chinese OFDI data, 2005-2013 in columns 3-5. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01

Appendix B2: Chinese exports, aid and OFDI to Latin American countries: OLS with country- and year-fixed effects (2002-2013)

	(1)		(2)		(3)		(4)		(5)	
	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.	Coef.	Std. err.
Chinese exports	-0.0007	[0.002]					-0.0006	[0.002]	0.002	[0.002]
Chinese aid			-0.0063	[0.006]			0.0021	[0.006]	0.0008	[0.005]
Chinese OFDI					-0.0414	[0.057]	-0.035	[0.074]	-0.0714	[0.072]
GDP per capita (ln)	-0.1388*	[0.077]	-0.1558**	[0.073]	-0.2288***	[0.087]	-0.2191**	[0.096]	-0.2352**	[0.093]
Unemployment	-0.0012	[0.002]	-0.0014	[0.002]	-0.0003	[0.003]	-0.0001	[0.003]	0.0011	[0.003]
Inflation (ln)	0.0297***	[0.009]	0.0282***	[0.009]	0.0274**	[0.012]	0.0280**	[0.012]	0.0261**	[0.011]
Trade openness	0.0003	[0.000]	0.0003	[0.000]	0	[0.001]	0	[0.001]	0.0001	[0.000]
Left government	0.0283**	[0.013]	0.0299**	[0.012]	0.0408**	[0.016]	0.0400**	[0.016]	0.0419***	[0.015]
Democracy	-0.0029	[0.003]	-0.0042	[0.003]	0.0004	[0.002]	0.0009	[0.002]	0.0021	[0.003]
Chinese leader visit	0.0058	[0.008]	0.0063	[0.008]	0.0123	[0.008]	0.0123	[0.008]	0.0097	[0.008]
Age	0	[0.000]	0	[0.000]	-0.0001	[0.000]	-0.0001	[0.000]	0.0001	[0.000]
Female	-0.0127***	[0.003]	-0.0127***	[0.003]	-0.0140***	[0.003]	-0.0140***	[0.003]	-0.0193***	[0.003]
Employed	-0.0014	[0.003]	-0.0014	[0.003]	0.0006	[0.003]	0.0006	[0.003]	0.002	[0.003]
Student	0.0116***	[0.004]	0.0116***	[0.004]	0.0122**	[0.005]	0.0122**	[0.005]	0.0135***	[0.005]
Education	0.0082***	[0.001]	0.0082***	[0.001]	0.0082***	[0.001]	0.0082***	[0.001]	0.0088***	[0.001]
Wealth	0.0030***	[0.001]	0.0031***	[0.001]	0.0031***	[0.001]	0.0030***	[0.001]	0.0025**	[0.001]
Urban	-0.0048	[0.003]	-0.0048	[0.003]	-0.0051	[0.004]	-0.005	[0.004]	-0.0035	[0.004]
Current economic situation	0.0197***	[0.002]	0.0196***	[0.002]	0.0205***	[0.002]	0.0205***	[0.003]	0.0182***	[0.003]
Left orientation	0.0001	[0.001]	0.0001	[0.001]	0	[0.001]	0	[0.001]	0.0048***	[0.001]
Democracy support	0.0279***	[0.003]	0.0280***	[0.003]	0.0315***	[0.004]	0.0314***	[0.004]	0.0317***	[0.004]
US opinion									0.2163***	[0.010]
Year FE	Yes		Yes		Yes		Yes		Yes	
Country FE	Yes		Yes		Yes		Yes		Yes	
Adjusted R-squared	0.0212		0.0212		0.0229		0.0229		0.0683	
Number of observations	154278		154278		116313		116313		114750	
Number of clusters	178		178		144		144		144	

Notes: The dependent variables is a binary variable equal to 1 if the individual has a positive perception of China (good or very good) and covers the survey waves 2002-2013 in columns 1-2 and 2005-2013 in columns 3-5 due to availability of Chinese OFDI data. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01

Appendix B3: Chinese exports and aid to Latin American countries: Two-stage least squares estimations (2002-2013)

	(1)		(2)	
Chinese exports	0.0091	[0.006]		
Chinese aid			-0.0019	[0.007]
GDP per capita (ln)	-0.3084***	[0.109]	-0.1654**	[0.079]
Unemployment	-0.0004	[0.003]	-0.0030	[0.003]
Inflation (ln)	0.0208**	[0.010]	0.0263***	[0.010]
Trade openness	-0.0004	[0.001]	0.0002	[0.000]
Left government	0.0422***	[0.014]	0.0313**	[0.013]
Democracy	-0.0049	[0.003]	-0.0017	[0.003]
Chinese leader visit	0.0079	[0.009]	0.0122	[0.008]
Age	0.0000	[0.000]	0.0000	[0.000]
Female	-0.0127***	[0.003]	-0.0124***	[0.003]
Employed	-0.0015	[0.003]	-0.0006	[0.003]
Student	0.0118***	[0.004]	0.0120***	[0.005]
Education	0.0085***	[0.001]	0.0082***	[0.001]
Wealth	0.0030***	[0.001]	0.0030***	[0.001]
Urban	0.0195***	[0.002]	-0.0047	[0.004]
Current economic situation	0.0003	[0.001]	0.0205***	[0.002]
Left orientation	0.0287***	[0.003]	0.0000	[0.001]
Democracy support	-0.0064*	[0.003]	0.0299***	[0.004]
Year FE	Yes		Yes	
Country FE	Yes		Yes	
IV type	*Distance * Import penetration*		*Chinese Cold War aid * Deaths*	
Kleibergen-Paap F stat.	12.08		39.1	
Kleibergen-Paap LM stat.	9.105		3.106	
K-P LM stat. p-val.	0.00255		0.078	
Number of observations	154278		141672	
Number of clusters	178		178	

Notes: The dependent variable is a binary variable equal to 1 if the individual has a positive perception of China (good or very good). The dependent variable covers the survey waves 2002-2013 for regression. The instrument in column 1 is the interaction between the shipping distance between Shanghai and the capital of the respective Latin American country and the import penetration of developing countries outside Latin America in a particular year. The instrument in column 2 is the interaction between the number of Chinese Cold War aid projects to a particular country and the number of deaths from natural disasters in China in a particular year. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01.

Appendix B4: Comparison of Chinese and US exports, aid/ODA and OFDI to Latin American countries: Seemingly unrelated estimations (2002-2013)

	(1a) China		(1b) United States		(2a) China		(2b) United States		(3a) China		(3b) United States	
Chinese/US exports	-0.001	[0.002]	0.001	[0.003]								
Chinese/US aid					-0.007	[0.005]	0.031***	[0.012]				
Chinese/US OFDI									-0.04	[0.058]	0.001	[0.002]
GDP per capita (ln)	-0.142*	[0.076]	-0.077	[0.127]	-0.157**	[0.072]	-0.088	[0.122]	-0.230***	[0.086]	0.054	[0.171]
Unemployment	-0.001	[0.002]	0.001	[0.004]	-0.001	[0.002]	0.001	[0.004]	0	[0.003]	0.006	[0.005]
Inflation (ln)	0.030***	[0.009]	0.004	[0.012]	0.029***	[0.009]	0.001	[0.012]	0.028**	[0.012]	0.011	[0.017]
Trade openness	0	[0.000]	-0.001	[0.001]	0	[0.000]	0	[0.001]	0	[0.001]	-0.001	[0.001]
Left government	0.029**	[0.013]	0.006	[0.016]	0.030**	[0.012]	0.01	[0.015]	0.041***	[0.016]	0.004	[0.018]
Democracy	-0.003	[0.003]	0	[0.005]	-0.004	[0.003]	0	[0.005]	0.001	[0.002]	-0.002	[0.006]
Chinese/US leader visit	0.006	[0.008]	-0.002	[0.012]	0.006	[0.008]	-0.001	[0.012]	0.012	[0.008]	-0.004	[0.013]
Age	0	[0.000]	-0.001***	[0.000]	0	[0.000]	-0.001***	[0.000]	0	[0.000]	-0.001***	[0.000]
Female	-0.012***	[0.003]	0.026***	[0.003]	-0.012***	[0.003]	0.026***	[0.003]	-0.013***	[0.003]	0.025***	[0.003]
Employed	-0.001	[0.003]	-0.007**	[0.003]	-0.001	[0.003]	-0.008***	[0.003]	0.001	[0.003]	-0.007**	[0.003]
Student	0.012***	[0.004]	-0.012**	[0.005]	0.012***	[0.004]	-0.012**	[0.005]	0.012**	[0.005]	-0.013**	[0.006]
Education	0.008***	[0.001]	-0.002	[0.001]	0.008***	[0.001]	-0.002	[0.001]	0.008***	[0.001]	-0.001	[0.001]
Wealth	0.003***	[0.001]	0.001	[0.001]	0.003***	[0.001]	0.002	[0.001]	0.003**	[0.001]	0.001	[0.001]
Urban	-0.005	[0.003]	-0.005	[0.005]	-0.005	[0.003]	-0.005	[0.005]	-0.005	[0.004]	-0.006	[0.005]
Current economic situation	0.020***	[0.002]	0.015***	[0.005]	0.020***	[0.002]	0.015***	[0.005]	0.021***	[0.002]	0.012**	[0.006]
Left orientation	0	[0.001]	-0.021***	[0.002]	0	[0.001]	-0.021***	[0.002]	0	[0.001]	-0.021***	[0.002]
Democracy support	0.028***	[0.003]	-0.004	[0.004]	0.028***	[0.003]	-0.004	[0.004]	0.031***	[0.004]	-0.006	[0.005]
Year FE	Yes				Yes				Yes			
Country FE	Yes				Yes				Yes			
Wald p-value	0.773				0.005				0.475			
Number of observations	152351				152351				137604			
Number of clusters	178				178				167			

Notes: The dependent variables in columns 1a, 2a and 3a is a binary variable equal to 1 if the individual has a positive perception of China (good or very good). The dependent variables in columns 1b, 2b and 3b is a binary variable equal to 1 if the individual has a positive perception of the United States (good or very good). The dependent variable covers the survey waves 2002-2013 for regression including the export and the official flows/aid variables and 2005-2013 for columns including Chinese OFDI data or US OFDI stocks. Standard errors are robust and clustered at the country-year level. * p<0.10, ** p<0.05, *** p<0.01.