Remaking China's Global Image with the Belt and Road Initiative: Is the Jury Out?

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ABSTRACT

In this paper, we investigate how foreign economic policy may affect a country's global image or soft power. Our empirical work focuses on China's Belt and Road Initiative (BRI), one of the most ambitious international economic policies in modern times, that covers more than 70 countries across the globe. We find evidence that international opinions on China are diverse but not polarized. We also find that the BRI has curried favor for China in the related countries. On average, the BRI increases net public approval rating of the Chinese leadership in these countries by more than 15 percentage points. Interestingly, the BRI arouses approving foreign opinions more than quietens disapproving voices. Finally, countries that have stronger trade, foreign direct investment or political ties with China do not necessarily respond to the BRI more favorably, while those contracting more infrastructure projects with Chinese firms do.

Keywords: Global image, Public approval, Belt and Road Initiative, China

JEL classification: F02 F42 R11

1. Introduction

Global public approval is a key indicator of a country's foreign image or soft power (Fishbein and Ajzen, 1975; Nye, 2004; Shambaugh, 2015; Rose, 2016, 2019). Countries strive for a positive global image because it is considered indispensable for achieving a range of objectives, such as promoting cross-border trade and investment, encouraging human communication and travel, and enhancing international cooperation (Goldsmith and Horiuchi, 2012; Goldsmith et al., 2014). Countries that have won global public approval could reap direct and indirect economic benefits even without any organized intervention (Rose, 2016, 2019).

Some scholars hypothesize that the global public's perception of a country is developed through their direct experiences with its products and brands (e.g. Disney movies, Samsung mobile phones, BMW cars) (Han, 1989; Roth and Romeo, 1992; Pappu et al., 2007; Lopez, 2011). However, Nye (2004, 2008), who coined the term 'soft power', argues that intangible assets such as culture, political values and institutions, and policies, are more important to foster a country's soft power. Nye's viewpoint is echoed by other scholars like Goldsmith et al. (2014).

As far as global approval is concerned, it is logical to expect that a country's foreign economic initiatives are particularly relevant, given that they could yield tangible outcomes in the host countries. However, research in this area remains scarce. In fact, as Chilton et al. (2020) commented, the literature has largely ignored whether individuals care about praising or denouncing a foreign country for its policies on the flows of goods, labor, and capital. In this paper, we attempt to fill this research gap by looking at one of the most ambitious foreign economic policies in modern times: China's Belt and Road Initiative (BRI). As an indication of its sheer scale, China's investments in the BRI countries from 2013 to June 2020 were estimated to total

about $755 billion.[1] In comparison, the US' contributions to the Marshall Plan during 1948–1952 was $135 billion in today's money (Steil and Rocca, 2018).

With the dramatic increase in China's global reach, its foreign economic policies have attracted more attention and scrutiny than ever before. For instance, China's foreign aid programs and outward foreign direct investment (FDI) in developing countries have been a subject of investigation for years (e.g., Chen et al., 2016; Cheng and Smyth, 2016; Shapiro et al., 2018). Among China's recent foreign policies, the BRI is the most prominent and strategic (Russel and Berger, 2019; Zhai, 2018). The BRI was advocated by President Xi Jinping soon after he came into power in 2013. The official aim of the policy is to improve regional cooperation and connectivity on a trans-continental scale.[2] However, Banerjee (2016) argues that the BRI is not exclusively an economic policy in that it aims at converting China's economic power into geopolitical influence.

With billions of dollars being pumped in the infrastructure along the Belt and Road routes, China's efforts have been welcome in some quarters (Huang, 2016). However, the initiative has also drawn criticisms since its launch. For instance, Russel and Berger (2019) state that projects under the BRI have produced a litany of problems for participating countries in terms of debt sustainability, environmental damage, labor practice, competition, transparency, and corruption. Hallgren and Ghiasy (2017) investigate the security implications of the BRI in Belarus, Myanmar, and Uzbekistan. They argue that many BRI projects might not be profitable in the long run, and that could result in local or cross-border security problems and exacerbate institutional weakness

[1] Data are obtained from the website of the International Institute of Green Finance (IIGF) at the Central University of Finance and Economics, China (https://green-bri.org/belt-and-road-initiative-quick-info; accessed on 4 August 2020). However, the IIGF also warns that many aspects of the BRI, including data, remain imprecise.

[2] Officially, the five pillars of the BRI are: (1) coordinating development strategies and policies; (2) improving infrastructure connectivity along a number of transport corridors; (3) facilitating trade to ensure unimpeded trade; (4) strengthening financial linkage; and (5) building closer people-to-people ties.

in the host countries. Furthermore, Garcia-Herrero and Xu (2019) find that the differences in reactions across countries are marked: some countries have positive views of the BRI, while others are very negative. In short, opinions on the BRI are mixed at best.

Against this background, in this paper we use a large dataset that is representative of the whole world's population outside China to evaluate how the BRI had affected China's global image before the unfolding of the COVID-19 pandemic. The focus on the pre-pandemic period is crucial. The pandemic has put China under the spotlight, especially during the early time when the city of Wuhan was still the epicenter of the crisis.[3] However, the global situation has evolved rapidly and is still evolving at the time of writing. Therefore, using pre-COVID data will help avoid the signal from any BRI impact being drowned out by the noise of the pandemic. We apply difference-in-differences (DID) estimation to the individual-level survey data of the Gallup World Polls (GWP) to assess how the BRI affects foreign public approval of the Chinese leadership, and how individual and country characteristics may shape the effects. We also conduct an array of robustness tests to verify the key findings, including a placebo test and instrumental variable (IV) estimations to address potential endogeneity issues.

We show that world opinions about China are very diverse but far from being polarized. The GWP survey respondents who held a positive view of China only marginally outnumber those who held a negative view, with almost one-third of the respondents being undecided or undeclared. At the same time, we find that implementation of the BRI has improved China's foreign approval rating among the countries covered by the BRI. This finding is robust to different BRI policy measures, alternative estimation methods, various data subsamples, and different definitions of

[3] Data from Google's Global Database of Events, Language, and Tone (GDELT) Project shows that the worlds public opinion on China declined precipitously from 19 January 2020 (-0.0575) and reached its worst on 26 January 2020 (-2.5894). With the improvement of the situation in China, the world's public opinion has gradually bounced back.

BRI countries. Furthermore, individual heterogeneity plays a more important role than country heterogeneity in shaping the BRI effects. Respondents who are older, better educated, with a higher income, and living in urban areas, as well as those residing in countries contracting more infrastructure projects with Chinese firms, viewed China more favorably after the launch of the BRI. However, we find no evidence that bilateral political, trade, and foreign direct investment relationships with China matter for the effects of the BRI.

Our paper contributes to two strands of the literature. Firstly, to the best of our knowledge, the impact of the BRI on China's foreign image has not been explored before. This is in great contrast to the numerous examinations of its macroeconomic impacts on trade (Kohl, 2019; Li et al., 2019; Mao et al., 2019; Bastos, 2020; Baniya et al., 2020), FDI (Chen and Lin, 2018, 2020; Du and Zhang, 2018; Luo et al., 2019), fiscal and environmental risk (Losos et al., 2019; Maliszewska and van der Mensbruggbe, 2019; Bandiera and Tsiropoulos, 2020), and economic growth (Chen and Lin, 2018; Zhai, 2018). Given that public approval is important in determining trade and FDI flows (Bao et al., 2017), the effects on global public approval could be an important channel through which the BRI promotes trade and FDI.

Secondly, our study contributes to the literature on the relationship between foreign policy and public attitudes. Since the pioneering work of Almond (1950), the relationship between public opinion and foreign policy has been studied extensively (Holsti, 1992; Powlick and Katz, 1998; Tomz, 2007; Eichenberg, 2009). While there are studies investigating the domestic consequences of foreign policy (Isernia et al., 2002; Davies and Johns, 2016) and the role of public attitudes in influencing foreign policy (Otter, 2003; Goldsmith and Horiuchi, 2012; Clements, 2018), there is less systematic research on how foreign policies shape public attitudes in other countries, and research on foreign economic policies is even rarer. The current paper complements this strand of

studies by providing evidence on how China's BRI affects public opinions outsides its borders.

The closest studies to ours are those by Goldsmith et al. (2014), Bodenstein and Kemmerling (2016), and Garcia-Herrero and Xu (2019). The first two examine whether foreign aid affects the donor country's image in the recipient countries, and their findings are affirmative. Our paper differs in that it focuses on foreign economic policy rather than foreign aid, and it is concerned with an emerging power instead of advanced countries, which dominate the donor sphere of foreign aid. Garcia-Herrero and Xu (2019) evaluate perceptions of the BRI in different countries and regions using a very different dataset—the Global Database of Events, Language and Tone (GDELT). They find that the BRI is generally positively received, but there is no significant difference between countries that participate in the BRI and those that do not. However, using data from only one period, they are unable to relate differences between BRI participating and non-BRI participating countries to the BRI policy. Furthermore, their measure of perception is based on the tone of foreign media coverage of the BRI. Although the tone of media reports may reflect or even influence their audience's opinion, this is an indirect measure. By using a more direct measure of public opinion employed by the GWP survey, we find very different results.

Furthermore, previous studies mostly rely on within-country case studies and draw their conclusions from smaller sample analyses. In comparison, the GWP data used in this paper have extensive coverage of both countries and years. Our dataset covers 153 countries and more than 1,400,000 individuals over 2005–2018. These 153 countries represent over 97 percent of the world's population outside China. Together with the fact that the samples are weighted to match the national demographics, this large country coverage allows us to draw general inferences from our findings.

The rest of the paper is structured as follows. Section 2 presents the data used in our study.

Section 3 introduces the empirical strategy. Section 4 reports the results for the baseline model and a range of robustness tests. Section 5 extends the baseline analysis to investigate the heterogeneity of the BRI effects. Section 6 concludes.

2. Data

2.1 BRI countries

Promoted by the Chinese government as "originated in China, but belonging to the world", the BRI is in principal an open arrangement in which any country can participate. Among all the countries, two groups of countries are considered to be more important and have higher potential of yielding a successful outcome. The first group is those sitting along the original land-based Silk Road economic belt, including Russia and countries in Central Asia, as well as Central and Eastern European countries. The second group is those oceangoing countries located on the maritime Silk Road, which covers Southeast Asia, the Gulf region, and onward to Europe.

To construct a list of BRI countries, we focused on 65 countries located along the Silk Road economic belt and maritime Silk Road. These 65 countries are defined as our BRI countries regardless of whether they have actually taken part in the BRI. This definition enhances the exogeneity of our BRI_j variable. However, ten countries had to be dropped because of data availability problems, leaving 55 BRI countries in the dataset. We also used two alternative definitions of BRI countries proposed by Garcia-Herrero and Xu (2019) for robustness checks. Table A1 in the Appendix lists the countries included in this study and their BRI/non-BRI country classifications.

2.2 BRI policy

A dummy variable, $Policy_t$, was created to record the implementation of the BRI policy. In September and October 2013, Chinese President Xi Jinping proposed the cooperative initiatives of the New Silk Road Economic Belt and the Marine Silk Road of the 21st Century, respectively. As the BRI policy did not actually start until 2014, the dummy BRI policy variable takes a value of 1 from 2014 onwards and 0 otherwise.

The policy dummy measure indicates whether the BRI policy is deployed, but not its intensity. To address this limitation, a continuous policy intensity variable, $Intensity_t$, was constructed using the number of BRI relevant reports in the *People's Daily*, a flagship newspaper of the Chinese government and a key outlet for the government to publicize opinions and policies. Therefore, the volume of BRI-related reports in the paper is an authentic indicator of the Chinese government's intensity in pushing the BRI agenda. We searched the *People's Daily* database during the sample period for articles with "Belt and Road" in their titles. The result is shown in Fig. 1. The number of reports on Belt and Road was equal to just one in 2013 and none before. However, from 2014 onward, this number increased steadily and reached a peak of over 600 articles in 2017. This result implies that, with the lack of official promotion before 2014, it is very unlikely that foreign respondents to the Gallop survey could anticipate the launch of BRI and adjust their opinions toward China before the launch. Therefore, in constructing the policy variable $Intensity_t$, we set its value to zero before 2014[4] and then rescaled the number of relevant articles such that the value of the variable lies within [0,1]. That is, the intensity is equal to 0 before 2014 and 1 in 2017.

[Insert Fig. 1 about here]

[4] We disregard the only article in 2013 for simplicity.

2.3 Public approval

Since 2005, Gallup has surveyed citizens in more than 160 countries regarding some of the most important issues worldwide. These countries cover 99 percent of the world's adult population. The database has been widely used in a variety of researches, such as residents' happiness, investors' expectation of risk, and countries' soft power (Deaton and Stone, 2013; Amromin and Sharpe, 2014; Guriev and Melnikow, 2018; Rose, 2019).

Gallup asks the same set of questions in each of these countries, allowing us to conduct a worldwide analysis at the individual level by pooling all the individual responses across all countries and years into a pooled cross-section dataset. Also, although Gallup does not follow the same group of respondents from each country over time, we can still trace any change in public attitude at the country level, given the data are representative of national populations.

To measure public approval toward China, we follow the studies by Goldsmith et al. (2014) and Rose (2019) and use the responses to the following GWP question: "Do you approve or disapprove of the job performance of the leadership of China?" The possible responses to this question are "approve", "disapprove", "I don't know", and declined to answer. For example, in 2018, 36.4 percent and 32.5 percent of the respondents outside China claimed to "approve" and "disapprove" of China's leadership respectively, while the remaining 31.1 percent replied "I don't know" or declined.

For individual-level analysis, most of the literature using approval rating data tends to include only the responses of "approve" and "disapprove", dropping all the "I don't know" responses and declinations from the sample. However, a response of "I dont know " or declined could still provide some information regarding public attitude *per se*. Hence, we follow the study by Bao et al. (2017) and set the value of the dependent variable ($Approval_{ijt}$) as 1 for "approve", 0 for "I don't know"

or declined, and -1 for "disapprove".

For the country-level analysis, following Rose (2016, 2019), we use the percentages of approving and disapproving respondents in a country, as well as their net value, to measure the country's overall public attitude toward China. Panels (A) to (C) of Fig. 2 show the distributions of these three measures after pooling all the country-level observations in our dataset. The distributions of both "approve" and "disapprove" are right-skewed. The mean values of "approve" and "disapprove" are 36.1 percent and 30.7 percent, respectively. Given the two variables are of comparable distribution, it is not surprising that the distribution of the net approval rate is not far away from 0 percent (5.4 percent, to be exact). Lastly, panel (D) shows a scatter plot of the approval rate versus the disapproval rate. If most respondents either approve or disapprove of the Chinese leadership, then the scatter plot will resemble a 45-degree downward sloping line. The finding that the observations scatter everywhere beneath the 45-degree line suggests that respondents are far from being polarized. Overall, over the whole sample period and across all sample countries, the global public opinion on China's leadership is found to be very diverse but not polarized. Also, positive views only marginally edge out the negative ones, while almost one-third of the respondents remain undecided or undeclared. In other words, there is still plenty of room for the Chinese government to improve in the game of soft power.

[Insert Fig. 2 about here]

To take an initial look at the effects of the BRI on public attitudes, Fig. 3 compares the net approval rate of individual countries between 2013 and 2018.[5] The further up the 45-degree line a country is, the more positive its residents felt about China's leadership, on average. It is shown

[5] Because some countries do not have data for either one or both of these specific years, the number of countries in Fig. 3 is limited to 111.

that African countries such as Mali, the Republic of Guinea, and Cote d'Ivoire view China in the most favorable light. In contrast, the further down the 45-degree line a country is located, the more negatively its residents viewed China, on average. Countries on the far-left lower quarter include Spain, Austria, Germany, the US, and Japan. These findings are fairly consistent with the geographical allocation of China's BRI investments outside Asia. Investment data from the International Institute of Green Finance (IIGF) for 2013 to June 2020[6] show that outside Asia, sub-Saharan Africa (20.4 percent) and the Arab Middle East and North Africa (14.7 percent) had the largest share of China's BRI investment. In contrast, Europe (10.1 percent), South America (6.6 percent), and North America (1 percent) were way down the ranking. On the other hand, although East Asia and West Asia have the two largest investment shares of 26 percent and 21.3 percent respectively, only Pakistan and, to a lesser extent, Nepal appear far up the 45-degree line. Japan and South Korea are clearly in the negative territory in 2018. The results for these Asian countries reflect their historical relationship with China.

Furthermore, if a country is located above (below) the 45-degree line, its residents' attitude toward China has deteriorated (improved) in 2018 compared to 2013. We find that 43.2 percent of the countries are located above the diagonal line and 56.8 percent below. If we separate BRI and non-BRI countries, then 32 percent of the BRI countries are above and 68 percent are below, while the corresponding figures for non-BRI countries are split equally at 50–50. This means that, in general, China's net approval rates have improved among BRI countries but gone backward among non-BRI countries. The (non-weighted) average change in net approval rate is equal to 4.6 percent for all BRI countries a whole, while that for non-BRI countries is -0.9 percent.

[6] Data are obtained from the website of the IIGF (https://green-bri.org/belt-and-road-initiative-quick-info, accessed on 4 August 2020).

[Insert Fig. 3 about here]

2.4 Control variables

In the empirical analysis, we control for several individual characteristics for which the GWP has data, including:

(1) *Age*: This is measured on a continuous scale.

(2) *Gender*: This takes a value of 1 for male and 0 for female.

(3) *Marriage:* This takes a value of 1 if the respondent is married or has a domestic partner, and 0 when they are single, have never been married, or are separated, divorced, or widowed.

(4) *Education*: Gallup has harmonized education variables and created a worldwide dataset with standardized individual-level education data. The variable takes a value of 1 if the respondent has primary education or less, 2 for secondary education, and 3 for tertiary education or above.

(5) *Urban*: This takes a value of 1 if the respondent lives in a large city or a suburb of a large city, and 0 if they live in a rural area, a farm, or a small town or village.

We also control for the unemployment rate of the surveyed countries, as well as their natural log GDP and log GDP per capita based on the 2010 US dollar. All these data are sourced from the World Bank Development Indicators database. To control for the bilateral political relationships between China and each of the surveyed countries, we adopt the ideal points similarity measure developed by Bailey et al. (2017). The variable measures the distance between two countries' foreign policies and is based on a pairwise comparison of countries' votes in the United Nations General Assembly. The closer a country is to China in terms of foreign policy, the smaller is the value of its *Relationship* variable. We expect a better bilateral relationship to be associated with a more favorable public attitude toward China.

After dropping observations with missing data, 1,400,174 individual observations are

retained, covering 153 countries[7] and spanning over 14 years from 2005 to 2018. About 43 percent of the observations are from BRI countries. Table 1 reports the summary statistics of the data.

[Insert Table 1 about here]

3. Empirical Strategy

In this paper, we use the DID approach to evaluate the impact of the BRI on China's foreign public approval rating. The DID approach is typically applied to panel data, but it can also be applied to repeated cross-sectional data (Wooldridge and Imbens, 2007). In this paper, we mostly use individual-level repeated cross-sectional data, but also use country-level panel data for robustness checks.[8]

In using individual-level data, we take the respondents in BRI countries as the treatment group and those in the other countries as the control group. In applying the DID approach to cross-sectional, individual-level data, conceptually we firstly compare the attitudes of people in a representative sample of a country in one period (before the treatment) with the attitudes of people in another representative sample of the same country in another period (after the treatment), after controlling for an array of individual characteristics, and then compare these within-country, cross-time differences between BRI and non-BRI countries. If the BRI can affect public attitudes, then it is expected to have more impact on BRI respondents, as the initiative is thought to bestow bigger benefits for their countries.

[7] Our dataset does not cover Mainland China, Hong Kong, and Taiwan. Due to missing data, it also excludes Kosovo, the Maldives, Nagorno Karabakh, Northern Cyprus, Oman, Palestine, Puerto Rico, Romania, Serbia, Somalia, Somaliland, and Syria.

[8] The structure of our dataset is very similar to that of Huang et al. (2020), where the DID approach and unrepeated individual data are used to evaluate the impact of China's universal salt iodization policy on individual educational outcomes.

Our baseline model is as follows:

$$Approval_{ijt} = \alpha + \delta BRI_j \times Policy_t + \mathbf{X}_{ijt}\boldsymbol{\beta} + \mathbf{Z}_{jt}\boldsymbol{\theta} + u_j + v_t + u_j \times trend + \varepsilon_{ijt} \quad (1)$$

Here, $Approval_{ijt}$ is the attitude of respondent i in country j toward China in year t, and its value spans the range of [-1, 1], a larger value meaning a higher level of approval. BRI_j is a dummy variable that takes the value of 1 if country j is a BRI country and 0 otherwise. As explained in Section 2.2, $Policy_t$ is a dummy variable that indicates whether the BRI policy has been implemented at time t, and it can be substituted by a continuous variable, $Intensity_t$, which measures how strongly the BRI policy was promoted at time t. $\mathbf{X}_{ijt}$ is a vector of individual characteristics such as age, gender, income, education level, and urban residence. $\mathbf{Z}_{jt}$ is a vector of time-varying country characteristics variables, such as the natural log of real GDP and real GDP per capita, the unemployment rate, and a measure of the bilateral political relationship with China; u_j is country fixed effects to capture unobserved time-invariant country heterogeneity such as culture and institutional environment. The $u_j \times trend$ interaction term is to control for country-specific trends in public attitudes and other factors; v_t is the time fixed effects to capture unobservable time-variant shocks such as global political and economic events; ε_{ijt} is a stochastic disturbance term, which is assumed to be correlated at the country-year level.

The variable of interest is the interaction term $BRI_j \times Policy_t$ (or $BRI_j \times Intensity_t$) whose coefficient δ captures the difference in the impact of the BRI on China's approval ratings among BRI and non-BRI countries, respectively. A positive (negative) δ suggests that the implementation of the BRI has improved (damaged) China's foreign approval rating among BRI countries relative to their non-BRI counterparts.

We first estimate Eq. (1) using the ordinary least square (OLS) technique and then run a

battery of robustness tests to address several potential threats to our baseline estimation. Among these robustness tests, we conduct (a) a test to verify the parallel trends assumption of the DID approach; (b) a placebo test for omitted variables; (c) an IV approach to address potential endogeneity problems associated with the variables of interest, $BRI_j \times Policy_t$ and $BRI_j \times Intensity_t$; and (d) different estimate methods to address potential measurement errors.

Furthermore, in Eq. (1), we assume that the effects of the BRI are homogeneous within the BRI countries. However, BRI country respondents with different backgrounds and conditions might react to the BRI differently. For example, individual characteristics such as age and income level, and country characteristics such as the economic and political relationship with China, could affect the perceived benefits and costs of the BRI, and therefore individual attitudes toward China. As an extension, we investigate both individual and country heterogeneity of the reaction in the BRI countries. To that end, we modify the baseline model as follows:

$$Approval_{ijt} = \alpha + \delta BRI_j \times Policy_t + \theta BRI_j \times Policy_t \times M + \eta M + \mathbf{X}_{ijt}\boldsymbol{\beta} + \mathbf{Z}_{jt}\boldsymbol{\theta} + u_j + v_t + u_j \times trend + \varepsilon_{ijt} \quad (2)$$

where M is an individual or country characteristic variable, and the coefficient θ captures the role of an individual or country heterogeneity in shaping the effects of the BRI.

4. Baseline Results and Robustness Checks

4.1 Baseline results

Table 2 presents the baseline results for Eq. (1) from the OLS estimation.[9] Given that regressing individual variables on aggregate variables can lead to seriously downward-biased

[9] In all regressions using individual-level data, the Gallup sampling weights are used to correct the potential sampling bias.

standard errors (Moulton, 1990), we corrected the Moulton bias by clustering all regressions at the country-year level. Columns (1) and (2) report the results using the BRI dummy policy variable, while columns (3) and (4) correspond to using the BRI policy intensity variable. In all regressions, the coefficients of the BRI_j interaction terms are positive and statistically significant at the 1 percent level. The results indicate that respondents in the BRI countries have more positive attitudes toward China since the implementation of the BRI. Specifically, the coefficient on $BRI_j \times Policy_t$ is equal to 0.10 in column (2) when country time trend and year fixed effects are controlled for. This finding suggests that implementation of the BRI has improved public attitudes in BRI countries by approximately 0.12 (0.10/0.82) standard deviations. Likewise, in column (4), the coefficient on $BRI_j \times Intensity_t$ is equal to 0.08, meaning that a one standard deviation change in policy intensity is associated with a 0.033 (0.328×0.08/0.82) standard deviation change in public attitudes between BRI and non-BRI countries.

[Insert Table 2 about here]

4.2 Threats to identification

4.2.1 Verify parallel trends assumption

One of the requirements for applying the DID approach is that the treatment and control groups are well identified and have similar long-term trends before the treatment. To verify the parallel trends assumption, we replace the BRI policy variables in Eq. (1) with dummies for 2005–2018[10]. The assumption is considered to be valid if the coefficients of the interaction terms between the BRI_j variable and year dummies are statistically insignificant before 2014.

Fig. 4 illustrates the findings by showing the time trend of the differences in approval rate

[10] The base year is 2013. We do not control country-trend fixed effects to avoid multicollinearity problems.

between BRI and non-BRI countries; the full results are presented in Table A2 of the Appendix. The differences are significantly larger than zero after the launch of the BRI, but not before. The results confirm that our data satisfy the common trends assumption. In other words, the relative improvement in public approval among the BRI countries compared to their non-BRI counterparts after the launch of the BRI is not due to pre-existing differences in time trends between the two groups.

[Insert Fig. 4 about here]

4.2.2 Placebo test: Random sampling results

There is a possibility that our baseline results are driven by omitted variables or some random factors. If these omitted factors rather than the BRI policy lead to the significant differences in global public attitudes, the BRI_j interaction terms would remain significant even when we use random samples and placebo BRI countries. Therefore, to eliminate the possibility of omitted variables, we conduct a placebo test using random sampling.

We randomly select 55 out of 153 countries, so that the proportion of BRI countries is the same as in the baseline sample. We then re-estimate the baseline model using the placebo BRI and non-BRI countries. We repeat this exercise 1,000 times. Since the BRI countries are generated randomly, we would expect that most of these 1,000 estimates for the coefficient of the BRI_j interaction term have values close to zero and they are overall not systematically different from zero.[11]

Fig. 5 shows the density and p-value distribution of the 1,000 estimates, where the x-axis indicates the size of the estimate, the left y-axis indicates the probability, and the right y-axis

[11] There is a possibility that some coefficient estimates are significantly larger than zero, as true BRI countries would be selected during random sampling.

corresponds the p-value. We find that 87.6 percent of the coefficients lie within the range of [-0.05, 0.05], and the average magnitude of the coefficients is equal to -0.000035. By comparison, when using the true BRI countries, our baseline results are beyond the 99 percent quantile of these 1,000 placebo estimates. The average p-value of the coefficients in the placebo test is above 0.36, and 71.0 percent of the estimates are associated with a p-value larger than 0.10. In conclusion, randomly generated countries do not exhibit the same pattern of attitude change as the real BRI countries, and thus our baseline findings are not a result of coincidence.

[Insert Fig. 5 about here]

4.2.3 Accounting for the effects of the AIIB

The Asian Infrastructure Investment Bank (AIIB) program was launch in December 2015, approximately two years after the BRI. The AIIB included 44 regional members and 30 non-regional members at the end of 2018; Table A1 in the Appendix lists the AIIB countries. The AIIB shares similar objectives with the BRI in terms of forging infrastructure development in Asia and beyond. Besides, some AIIB members are also BRI countries. To test if our baseline findings are driven by the effects of the AIIB, we add another interaction term, $AIIB_j \times Policy_t^{AIIB}$, to the baseline model. The new interaction term is constructed in the same way as $BRI_j \times Policy_t$. Considering the AIIB began operations in January 2016, we set the value of $Policy_t^{AIIB}$ to be 1 from 2016 onward, and 0 before.

The results are reported in Table 3. We consider both the AIIB members of the Asia-Pacific region only, and all its members. Our baseline findings remain unchanged in all four estimations. It can also be seen from the all-AIIB members estimations that the BRI effect is about 1.5 to 2 times as large as the AIIB effect. In short, we can be confident that the BRI effect identified in the baseline estimation is not a result of the AIIB.

[Insert Table 3 about here]

4.2.4 Further robustness tests

We conducted three other robustness tests. Firstly, we restrict our analysis to respondents aged 25 to 64. This group of respondents is economically active and most likely have completed their education (Aksoy et al., 2018); therefore, they may behave differently from other respondents. Secondly, given there is no official list of BRI countries, we use two alternative lists suggested by Garcia-Herrero and Xu (2019). After dropping countries with missing data, the first list has 66 countries and the second list 72 countries (see Table A1 for details); both lists include the 55 countries in our baseline sample. Thirdly, to ensure that our baseline results are not driven by countries with extreme public attitude values, we remove the country-year groups below the 5th percentile or above the 95th percentile in terms of the share of approving respondents. The estimation results are listed in Table A3 of the Appendix, and the results of all three robustness tests are very close to the baseline one.

4.3 Instrumental variable approach

As mentioned previously, the BRI was launched soon after President Xi came to power. Therefore, the timing of the BRI launch, and thus $Policy_t$, could be considered exogenous as far as individual foreign respondents are concerned. However, the Silk Road economic belt and maritime Silk Road identified by China may not be drawn at random; for example, China may be more likely to draw up the routes to cover more China-friendly countries. As a result, BRI_j could be endogenous, and so, therefore, is $BRI_j \times Policy_t$. Furthermore, the policy intensity variable, $Intensity_t$, could also be affected by the attitudes of respondents in foreign countries. The *People's Daily* could mention the BRI more often if it is better received in foreign countries, and less if it

is not, making $Intensity_t$, and thus $BRI_j \times Intensity_t$, endogenous.

To address these potential endogeneity problems, we deploy an IV method. We use exogenous factors to predict the probability of a country being selected as a BRI country, and then use the interaction of the predicted probability and $Policy_t$ as an instrument for $BRI_j \times Policy_t$ and $BRI_j \times Intensity_t$, respectively. It should be noted that the same instrument is used for both interaction terms in their respective models. For $BRI_j \times Intensity_t$, there could be a weak instrument concern because $Policy_t$ is a step function while $Intensity_t$ is not; however, results show that the instrument is sufficiently strong.

We specify the probability function as follows:

$$Pr(Y_j=1)=a + \alpha DISC_j + \beta DISU_j + \omega_j \quad (3)$$

where $Pr(Y_j=1)$ is the probability of country j being selected as a BRI country; Y_j is a dummy variable which takes a value of 1 if country j has been selected as the BRI country and 0 otherwise; and $DISC_j$ and $DISU_j$ denote the natural log geodesic distances between country j and China and the US, respectively.[12]

The logic behind Eq. (3) is as follows. The geographical distance between a certain country and China should determine its benefits and costs of trading with China, and therefore its chance of being covered by the BRI routes. Furthermore, given the importance of multilateral resistance in international trade (Anderson and van Wincoop, 2003), the distance between a country and the world (proxied by the US) could be important.[13]

[12] The geodesic distance is calculated by applying the latitudes and longitudes of capital cities to the great circle formula. Its measurement unit is 1,000 kilometers. We obtain the distance data from the Centre dEtudes Prospectives et dInformations Internationales (CEPII) database.

[13] Furthermore, the variable can capture the effect of possible geopolitical competition.

Table A4 in the Appendix presents the results for Eq. (3). In all estimations, the *DISC* variable has the expected negative sign, and the *DISU* variable has the expected positive sign. In the full model of column (3), *DISC* has a much higher level of significance and a much bigger coefficient (in absolute terms) than *DISU*. The result implies that the closeness of a country to China rather than its distance from the US is the dominating factor for it to be covered by the BRI routes and therefore, selected as a BRI country. Using the estimated coefficients in column (3) of Table A4, we obtain a predicted probability for each country in our dataset, and then use it to construct our instrument by interacting it with $Policy_t$.[14]

Table 4 presents the two-stage least squares estimation results. The Kleibergen-Paap Wald rk statistic F value are well above 10 in all specifications, suggesting that the IV is sufficiently strong. All the BRI_j interaction variables are significant and positive, reaffirming our baseline finding that the BRI has curried favor for China among the respondents in BRI countries.

[Insert Table 4 about here]

4.4 Threats to measurements

4.4.1 Modeling the choice of different attitude categories

In the baseline estimation, the dependent variable, $Approval_{ijt}$, is assigned a value of 1, 0, or -1, but these assigned values are arbitrary. To address this issue, we first use the multinomial logit model to investigate whether the BRI has affected the choice of different attitude categories. In using the multinomial logit model, the assigned value has no effect on the estimation results. Table 5 presents the results using, respectively, the "neutral" and "disapprove" responses as the baseline category.

[14] Results were similar when we use the estimated coefficients in column (1) or (2) to construct the IV.

Among the eight estimations, the BRI_j interaction terms are significant at the 1 percent level and have the expected positive sign for the choice of "approve" regardless of the baseline category. For example, in column (2), the odds ratio of $BRI_j \times Policy_t$ is 1.39 (exp (0.33)), meaning that the probability of choosing "approve" over that of choosing "neutral" is 39 percentage points higher among respondents in BRI countries. In contrast, the interaction terms are insignificant for the choice of "disapprove" or "neutral".

Given the three possible responses have a natural order in terms of positivity (i.e., approval > unknown or neutral > disapproval), we also considered the ordered logit model. The results are reported in Table A5 of the Appendix. The key conclusions remain that the launch of the BRI has increased the relative probability of respondents among the BRI countries approving of China's leadership.

[Insert Table 5 about here]

4.4.2 Using country-level data

Another method to address the arbitrary codification of individual approval responses is to use aggregated country-level data. Furthermore, in using country-level data, we can avoid the results being dominated by large countries.[15] We aggregate the 1.4 million individual-level observations into 1,411 country-level observations, with 39 percent of the observations from BRI countries.

For the country-level data, we re-specify Eq. (1) as follows:

[15] As can be seen in Table A1 in the Appendix, the distribution of the number of respondents across countries is uneven. For instance, while there are more than 27,000 respondents in Russia, there are fewer than 1,000 respondents in small countries such as Suriname, Guyana, Sudan, and Belize. As a result, large countries easily dominate the estimation results when we use individual-level data, and country-level analysis could ensure that our findings are not entirely driven by large countries.

$$y_{jt} = \alpha + \delta BRI_j \times Policy_t + \mathbf{Z}_{jt}\boldsymbol{\theta} + u_j + v_t + u_j \times trend + \varepsilon_{jt} \quad (4)$$

where y_{jt} is either the gross approval rate, or the gross disapproval rate, or the net approval rate in country j at year t; $\mathbf{Z}_{jt}$ denotes a set of country-level control variables like before, plus the mean values of the individual variables used in Eq. (1)—i.e., age, gender, marriage, education, and urban residence.

The estimation results are reported in Table 6. In all estimations of the gross approval rate or the net approval rate, the coefficients of the BRI_j interaction terms are positive and significant. Specifically, when using the policy dummy variable, the BRI has led to a 9.1 percentage point increase in the gross approval rate and a 15 percentage point increase in the net approval rate. Furthermore, when the gross disapproval rate is used as the dependent variable, the coefficient of the BRI_j interaction term is negative, but it is only significant at the 10 percent level for the policy dummy measure.

The findings from the country-level analysis are therefore consistent with the results from the individual-level analysis. However, the country-level analysis reveals something new. It shows that the BRI promotes China's international image mainly by shoring up support from foreigners rather than by defusing the pre-existing enmity among them.

[Insert Table 6 about here]

5. Heterogeneity Effects: Who Approves of China More?

5.1 Individual heterogeneity

We first investigate whether individual characteristics are important in determining the size of the BRI effect. We do so by adding another inaction term, $BRI_j \times Policy_t \times M$, to the baseline model,

where M is an individual characteristic variable: the coefficient on this new interaction term captures the role of M in shaping the effects of BRI. The individual characteristics to be examined include age, education level, individual income level, and urban residence status. However, only one characteristic variable was added at a time to the baseline model to avoid multicollinearity problems. The results are visualized in the upper half of Fig. 6. For example, on the left panel, the solid triangles and circles denote the coefficients of $BRI_j \times Policy_t \times M$ and $BRI_j \times Policy_t$, respectively, and the lines passing through them represent the 95% confidence intervals.

All the interaction variables with individual characteristics in Fig. 6 are positive and significant at the 1 percent or 5 percent level, indicating that individual heterogeneity is important in affecting how the general public in BRI countries regard China. BRI country respondents who are older, better educated, with a higher income, and living in urban areas approve China more since the launch of the BRI. A possible explanation is that this group of respondents is more likely to be skilled workers, and therefore more likely to benefit from better infrastructure[16] and a stronger global connection, with more means to cope with any potential shocks brought by the BRI.

5.2 Country heterogeneity

We next turn to investigate if BRI country respondents' attitudes toward China are related to their country's relationship with China, including a bilateral political relationship, bilateral trade, bilateral FDI, and infrastructure projects contracted with Chinese firms. A bilateral political relationship with China is measured as before. Bilateral trade is measured by the share of total imports and exports with China as a proportion of a country's GDP. Bilateral FDI is

[16] According to the IIGF data, over the period 2013–2020, the energy sector accounted for the largest share of BRI investment at 39.3 percent, followed by the transport sector at 24.5 percent.

measured by the ratio of FDI flow from China to the GDP of the host country. Chinese infrastructure projects are measured by the ratio of the value of infrastructure projects contracted with Chinese firms to the GDP of the host country.[17]

The results for the impact of country heterogeneity are presented in the lower half of Fig. 6. The results show that a bilateral political relationship, bilateral trade, and bilateral FDI are not correlated with the size of the BRI effect. The only significant result is that infrastructure projects amplify the effects of the BRI. This finding accords well with the fact that infrastructure construction contracted with Chinese firms has soared in terms of the number and value of contracted projects in countries along the BRI route since its implementation,[18] and these projects have helped improve the infrastructure and promote local economic growth in the host countries.[19] As such, it is not surprising that the improvement of infrastructure conditions helps boost the approval rate within BRI countries.

[Insert Fig. 6 about here]

6. Conclusions

This paper takes the Belt and Road Initiative as a case study to investigate a relatively unexplored dimension of the effects of foreign economic policy on global public approval. Using the individual survey data from the Gallup World Polls, we show that global opinions on China

[17] The trade data are from UNCTAD, and the FDI and infrastructure project data are obtained from the Ministry of Commerce of the Peoples Repub lic of China (MOFCOM). The regression sample using the infrastructure project as a characteristic variable covers only the period 2005–2016.

[18] According to the MOFCOM, the accomplished Chinas overseas contracted projects with BRI countries are $64.71 billion in 2014, and reached $87.28 billion in 2019.

[19] We have also used the ratio of 2013 infrastructure projects contracted with Chinese firms to the GDP of the host country as an independent variable to test if those BRI countries with fewer projects with China prior to the launch of the BRI would welcome China more. If that was the case, then we would expect to find a negative coefficient on the infrastructure interaction term. However, the coefficient is found to be positive, meaning that it is the people in BRI countries with more infrastructure projects with China that welcome China more.

are very diverse but not polarized. The GWP data show that positive, negative, and undecided/undeclared views on China have roughly equal shares. This result suggests that the 'China brand' has not been fully established yet, and could therefore be enhanced by appropriate actions or tarnished by missteps.

Against this background, we find that implementation of the BRI has made China more popular among people in BRI countries. Specifically, the net share (gross share) of respondents who approve of China has increased by 15 percent (9.1 percent) in BRI countries compared with non-BRI countries. This finding is robust to a battery of robustness checks. The country-level analysis further reveals that the BRI improves China's foreign image mainly because it arouses more approving opinions rather than quietens disapproving voices.

We also find that individual and country heterogeneity is important in determining the size of the BRI effect. Respondents who are older, better educated, with a higher income, and living in urban areas, as well as those in countries contracting more infrastructure projects with Chinese firms, tend to approve of China more following the implementation of the BRI. However, we find no evidence that the effects of the BRI are strengthened by such countries' political, trade, and FDI relationships with China.

Our findings have important implications. Although public attitudes may seem to be intangible, there have been many episodes where negative public sentiment towards a foreign country resulted in a consumer boycott of its exports or stronger scrutiny of its direct investment. China is no stranger to this kind of situation and has been on both sides of the table.[20] As such, the impacts of a country's foreign economic policy on its global public approval could have important consequences for its economic fortune. Furthermore, while direct political or militarized

[20] For example, in 2017, China boycotted South Korean products over the country's decision to install a US anti-missile system, and in 2020, India boycotted Chinese products over a border conflict in the Himalayas.

competition are costly to carry out and the results are difficult to predict, courting favor from the global public through (non-confrontational) foreign economic policies could be an efficient way to boost a country's global influence and competitiveness. Lastly, foreign policies of large economies like China inevitably attract more global attention and scrutiny. A better understanding of the effect of a country's foreign economic policy will at least help it prepare to manage such scrutiny.

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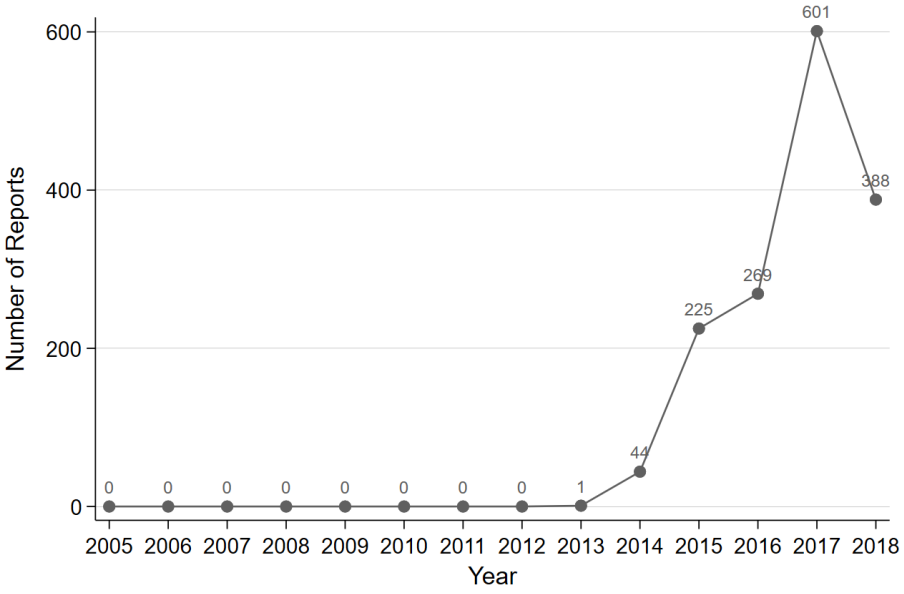

Fig. 1. Number of reports about the BRI policy from *People's Daily* during 2005-2018.

Data Source: *People's Daily Database*. http://data.people.com.cn/rmrb/

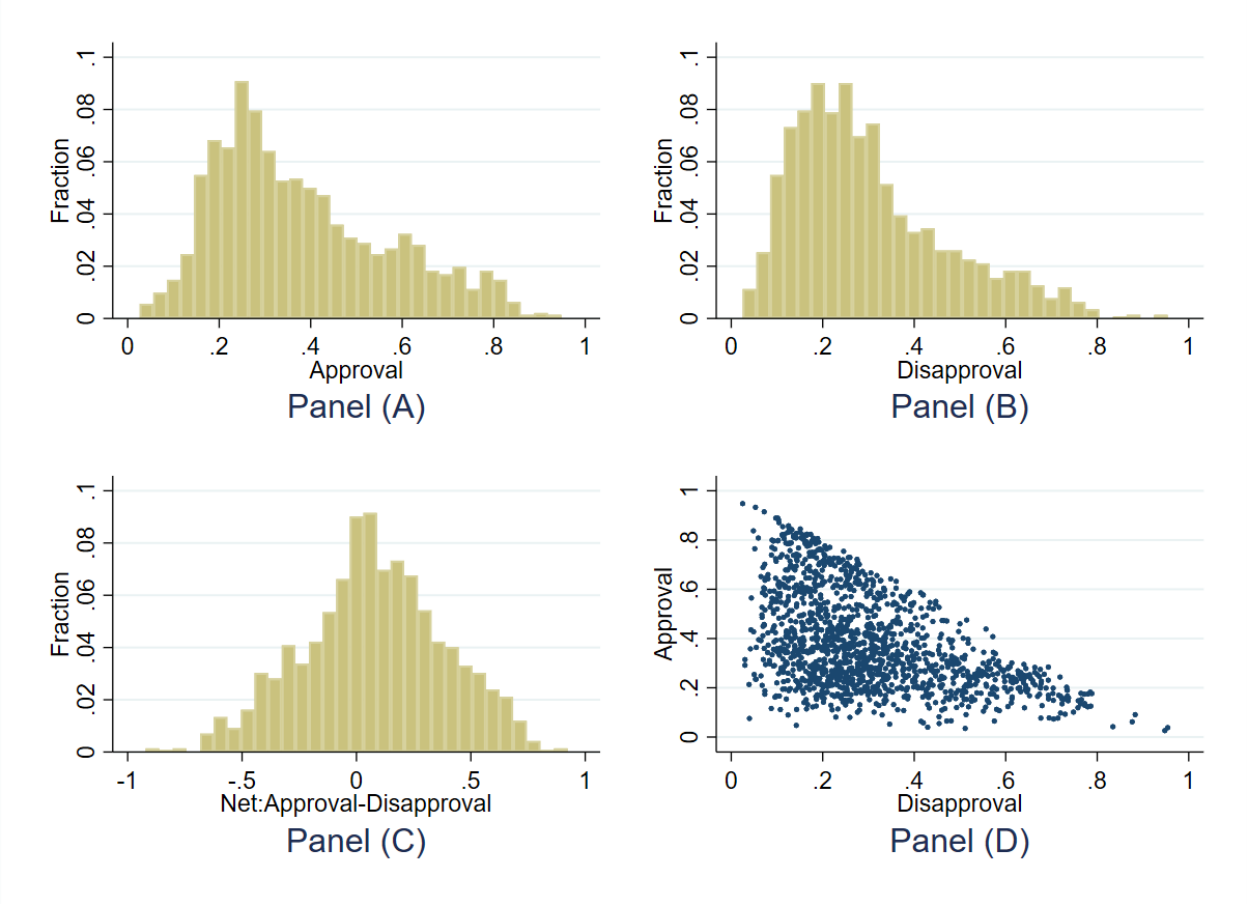

Fig. 2. Histogram and scatter plot of China's image during the sampled period.

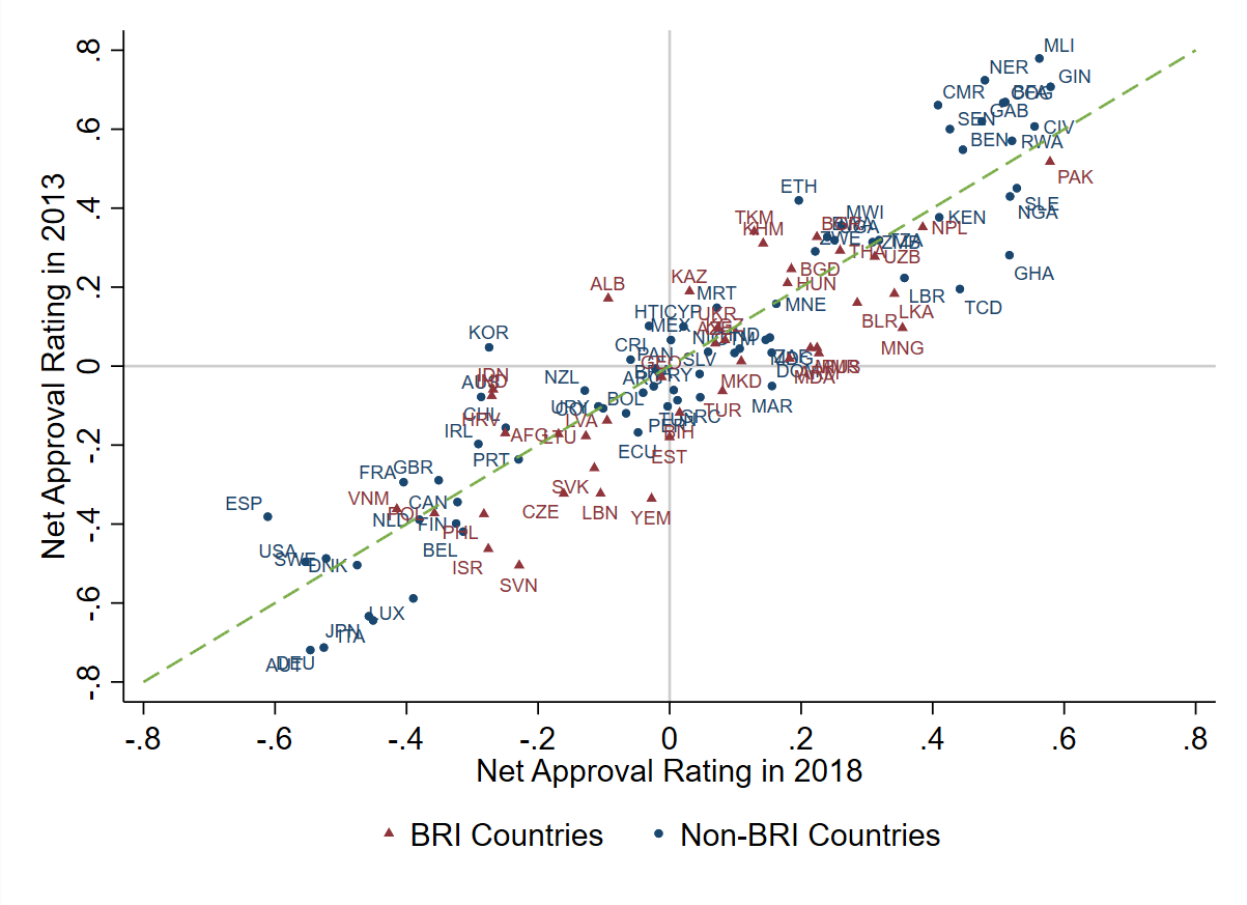

Fig. 3. China's net approval rating by countries in 2013 and 2018.

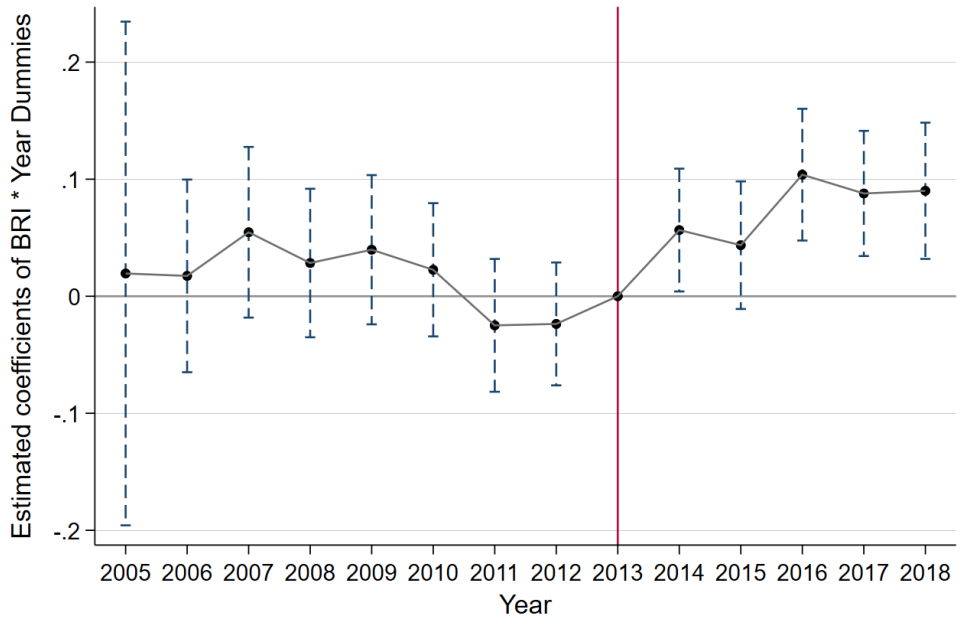

Fig. 4. Annual treatment effect.

Notes: Setting the year of 2013 as the baseline. The solid line captures the time course of the approval rate difference between BRI and non-BRI countries. The dashed line represents the 95% confidence intervals of the estimated effect.

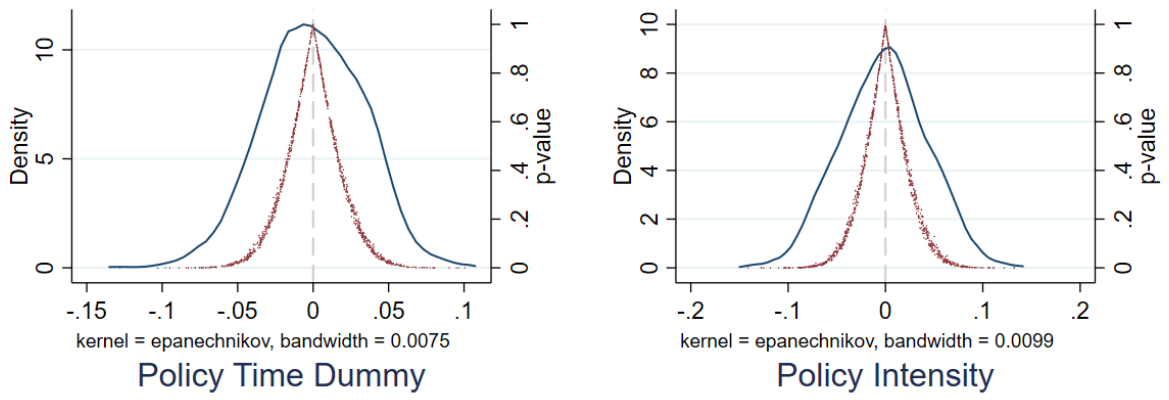

Fig. 5. Distribution of estimated coefficients with placebo countries of BRI.

Notes: The left and right panel stand for the results with the explanatory variable being policy time dummy and policy intensity respectively. The solid line represents the Epanechnikov kernel function with the optimal width, and the points are scatterplots of coefficients and p-value.

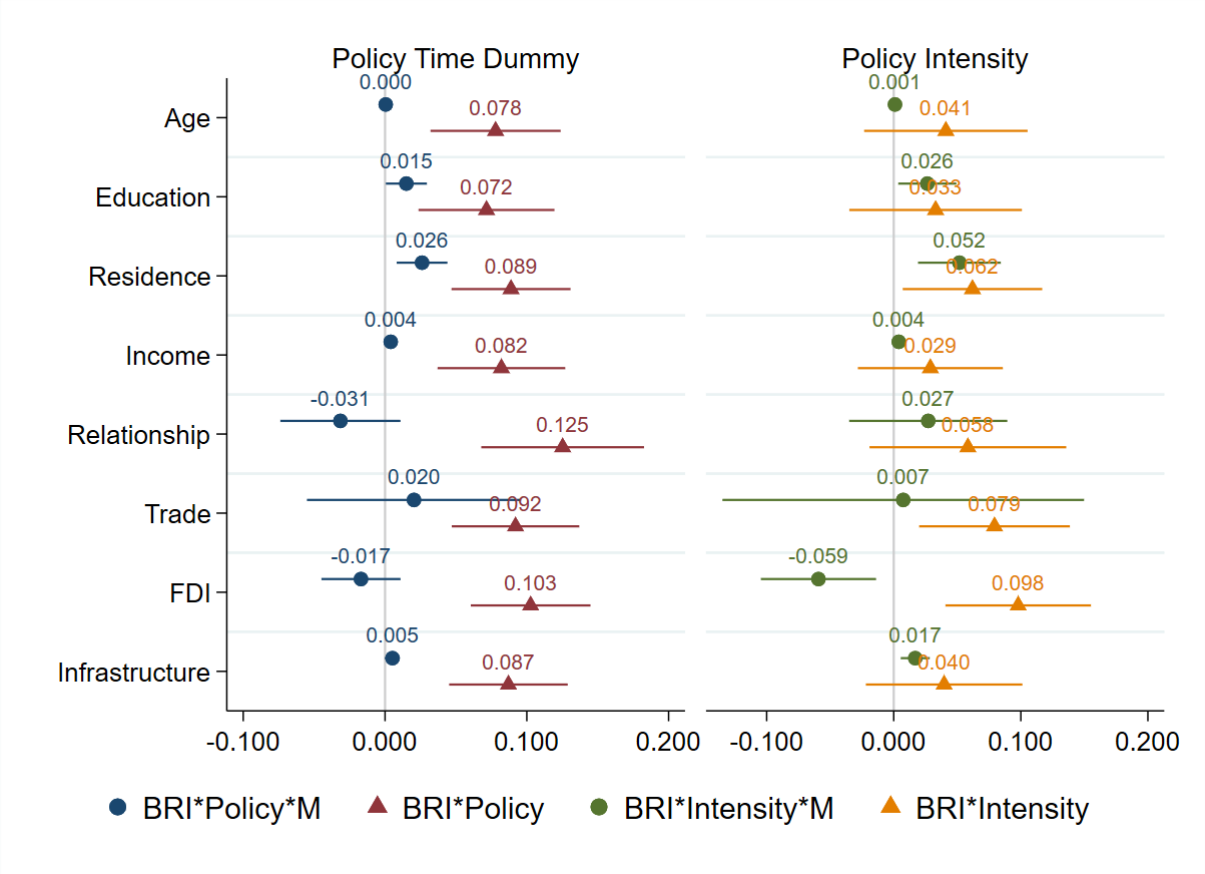

Fig. 6. Summary of heterogeneous effects estimates with the 95% confidence intervals.

Notes: The solid triangles and circles denote the coefficients δ and θ in Eq. (2), respectively, and the lines represent the 95% confidence intervals of the estimated coefficients.

TABLE 1 Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Approval	1,400,174	0.075	0.816	-1	1
BRI country	1,400,174	0.427	0.495	0	1
BRI Policy (dummy)	1,400,174	0.447	0.497	0	1
BRI Intensity	1,400,174	0.228	0.328	0	1
Individual Variables					
Age	1,400,174	40.598	17.497	15	101
Gender	1,400,174	0.463	0.499	0	1
Marriage	1,400,174	0.567	0.495	0	1
Education	1,400,174	1.803	0.669	1	3
Urban	1,400,174	0.383	0.486	0	1
Country Variables					
ln*GDP (2010 USD)*	1,400,174	25.085	1.933	20.588	30.513
ln*GDP per capita (2010 USD)*	1,400,174	8.430	1.449	5.434	11.585
Unemployment(%)	1,400,174	7.398	5.639	0.273	34.935
Relationship	1,400,174	0.766	0.695	0.002	3.505

TABLE 2 Baseline results

	Policy Time Dummy		**Policy Intensity**	
	(1)	(2)	(3)	(4)
BRI×Policy	0.069***	0.098***		
	(0.014)	(0.021)		
BRI×Intensity			0.096***	0.081***
			(0.021)	(0.028)
Age	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Gender	0.062***	0.061***	0.062***	0.061***
	(0.003)	(0.003)	(0.003)	(0.003)
Marriage	-0.016***	-0.017***	-0.016***	-0.017***
	(0.002)	(0.002)	(0.002)	(0.002)
Education	0.027***	0.027***	0.027***	0.027***
	(0.003)	(0.003)	(0.003)	(0.003)
Urban	0.010***	0.010***	0.011***	0.010***
	(0.003)	(0.003)	(0.003)	(0.003)
ln*GDP*	0.171**	-0.365	0.156*	-0.180
	(0.081)	(0.537)	(0.080)	(0.527)
ln*GDP per capita*	-0.145	0.298	-0.128	0.107
	(0.094)	(0.539)	(0.092)	(0.529)
Unemployment	0.003	-0.001	0.003	-0.002
	(0.002)	(0.003)	(0.002)	(0.003)
Relationship	0.005	0.002	0.004	0.002
	(0.016)	(0.017)	(0.016)	(0.017)
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	No	Yes	No	Yes
Obs.	1,400,174	1,400,174	1,400,174	1,400,174
R-squared	0.114	0.120	0.114	0.120

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%.

TABLE 3 Accounting for the effect of AIIB

	Policy Time Dummy		**Policy Intensity**	
	Regional Members	**All Members**	**Regional Members**	**All Members**
	(1)	(2)	(3)	(4)
BRI×Policy	0.097***	0.095***		
	(0.021)	(0.021)		
BRI×Intensity			0.081***	0.064**
			(0.029)	(0.029)
$AIIB \times Policy^{AIIB}$	0.017	0.047***	-0.001	0.041**
	(0.022)	(0.018)	(0.023)	(0.018)
Controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes
Obs.	1,400,174	1,400,174	1,400,174	1,400,174

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%. All regressions have controlled for the same set of standalone country and individual variables as in Table 2.

TABLE 4 Results from IV estimates

	Policy Time Dummy		**Policy Intensity**	
	First stage	**Second stage**	**First stage**	**Second stage**
	(1)	(2)	(3)	(4)
*Predicted Probability*Policy*	1.126***		0.263***	
	(0.026)		(0.033)	
*BRI*Policy*		0.068**		
		(0.027)		
*BRI*Intensity*				0.293**
				(0.127)
Age	0.000	-0.001***	0.000*	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Gender	0.000***	0.061***	0.000	0.061***
	(0.000)	(0.003)	(0.000)	(0.003)
Marriage	-0.000	-0.016***	-0.000	-0.016***
	(0.000)	(0.002)	(0.000)	(0.002)
Education	-0.000	0.028***	0.001***	0.027***
	(0.000)	(0.003)	(0.000)	(0.003)
Residence	0.002**	0.010***	-0.002*	0.010***
	(0.001)	(0.003)	(0.001)	(0.003)
ln*GDP*	1.355***	-0.287	0.250	-0.268
	(0.460)	(0.539)	(0.486)	(0.535)
ln*GDP per capita*	-1.435***	0.215	-0.184	0.171
	(0.464)	(0.541)	(0.490)	(0.536)
Unemployment	-0.005**	-0.002	-0.004	-0.001
	(0.002)	(0.003)	(0.002)	(0.003)
Relationship	-0.005	0.002	0.035**	-0.008
	(0.013)	(0.017)	(0.015)	(0.019)
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Linear Time Trends	Yes	Yes	Yes	Yes
KP First Stage F-Stat		1830		64
Obs.	1,395,078	1,395,078	1,395,078	1,395,078
R-squared	0.961	0.003	0.848	0.002

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%.

TABLE 5 Multinomial logit model results

Baseline category	**Neutral**		**Disapprove**	
	Disapprove	*Approve*	*Neutral*	*Approve*
	(1)	(2)	(3)	(4)
Policy Time Dummy				
BRI×Policy	0.021	0.332***	-0.021	0.312***
	(0.100)	(0.095)	(0.100)	(0.073)
Controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes
Obs.	1,400,174	1,400,174	1,400,174	1,400,174
Policy Intensity				
BRI×Intensity	-0.057	0.210*	0.057	0.267***
	(0.124)	(0.114)	(0.124)	(0.095)
Controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes
Obs.	1,400,174	1,400,174	1,400,174	1,400,174

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%. All regressions have controlled for the same set of standalone country and individual variables as in Table 2.

TABLE 6 Results using country-level data

	Policy Time Dummy			Policy Intensity		
	Approve (gross)	**Disapprove (gross)**	**Net approval**	**Approve (gross)**	**Disapprove (gross)**	**Net approval**
	(1)	(2)	(3)	(4)	(5)	(6)
BRI×Policy	0.091***	-0.059*	0.150***			
	(0.024)	(0.030)	(0.049)			
BRI×Intensity				0.075***	-0.044	0.118***
				(0.028)	(0.029)	(0.043)
Age	-0.001	-0.003	0.002	-0.001	-0.003	0.002
	(0.002)	(0.003)	(0.005)	(0.003)	(0.003)	(0.005)
Gender	0.517***	-0.258**	0.775***	0.530***	-0.268**	0.798***
	(0.142)	(0.128)	(0.248)	(0.147)	(0.133)	(0.260)
Marriage	-0.066	0.076	-0.143	-0.066	0.075	-0.141
	(0.053)	(0.063)	(0.102)	(0.053)	(0.062)	(0.101)
Education	0.123**	0.099	0.024	0.129**	0.094	0.035
	(0.060)	(0.062)	(0.107)	(0.061)	(0.063)	(0.110)
Urban	0.040	-0.018	0.058	0.048	-0.022	0.070
	(0.029)	(0.029)	(0.044)	(0.029)	(0.030)	(0.045)
lnGDP	-0.565	1.175	-1.739	-0.435	1.089	-1.524
	(0.532)	(0.876)	(1.315)	(0.492)	(0.854)	(1.256)
lnGDP per capita	0.458	-1.218	1.676	0.320	-1.127	1.447
	(0.540)	(0.886)	(1.333)	(0.503)	(0.864)	(1.278)
Unemployment	-0.001	0.001	-0.002	-0.001	0.001	-0.002
	(0.003)	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)
Relationship	0.003	-0.012	0.015	0.003	-0.013	0.016
	(0.013)	(0.014)	(0.023)	(0.013)	(0.014)	(0.023)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	1,411	1,411	1,411	1,411	1,411	1,411
R-squared	0.864	0.838	0.854	0.862	0.836	0.851

Notes: Results using robust standard errors clustered at the country level. ***, ** and * denote significance levels of 1%, 5% and 10%.

Appendix

Table A1 Sample countries

BRI Country				Non-BRI Country					
ISO country code	Number of respondents	ISO country code	Number of respondents	ISO country code	Number of respondents	ISO country code	Number of respondents	ISO country code	Number of respondents
AFG★Δ	11,911	MKD★⁜	10,702	AGO	3,731	FIN⁜	6,680	NAM	3,877
ALB★	10,450	MMR★Δ	7,674	ARG	8,642	FRA⁜	9,175	NER	12,733
ARE★Δ	2,914	MNG★Δ	9,868	AUSΔ	11,361	GAB	7,725	NGA	13,639
ARM★	12,355	MYS★Δ	9,856	AUT★⁜	5,845	GBR⁜	10,559	NIC	11,010
AZE★Δ	12,066	NPL★Δ	12,033	BDI	3,901	GHA	12,777	NLD⁜	8,121
BGD★Δ	13,139	PAK★Δ	16,628	BEL⁜	10,698	GIN★⁜	7,876	NOR⁜	5,239
BGR★	10,721	PHL★Δ	14,085	BEN	8,775	GMB	1,945	NZL★Δ	9,908
BHR●Δ	1,043	POL★⁜	12,577	BFA	9,891	GRC⁜	10,746	PAN★	10,242
BIH★	11,572	QAT★Δ	947	BLZ	893	GTM	11,361	PER	11,621
BLR★⁜	12,687	RUS★Δ	27,610	BOL★	11,288	GUY★	477	PRT⁜	11,645
BTN●	2,005	SAU★Δ	3,103	BRA	12,097	HND	11,156	PRY	7,748
CZE★	11,655	SGP★Δ	8,702	BWA	9,874	HTI	5,169	RWA★	10,419
EGY★⁜	12,410	SVK★	9,786	CAF	4,841	IRL⁜	10,192	SDN⁜	609
EST★	10,990	SVN★	10,313	CAN⁜	8,973	ISL⁜	3,081	SEN★	12,875
GEO★Δ	12,349	THA★Δ	11,824	CHE⁜	5,748	ITA⁜	10,083	SLE	9,896
HRV★	10,629	TJK★Δ	5,594	CHL	11,667	JAM	2,476	SLV	9,239
HUN★⁜	11,818	TKM●	7,871	CIV	6,916	JPN	7,697	SSD	2,910
IDN★Δ	13,237	TUR★Δ	12,791	CMR	11,805	KEN★	12,080	SUR	465
IND●Δ	46,156	UKR★	12,251	COD	7,905	KOR★Δ	13,002	SWE⁜	5,837
IRN★Δ	12,520	UZB★Δ	11,925	COG	8,727	LBR	8,819	SWZ	1,959
IRQ●	10,555	VNM★Δ	8,304	COL	12,647	LBY	2,759	TCD	12,865
ISR★Δ	12,678	YEM●	9,916	COM	4,965	LSO	2,979	TGO	7,826
JOR★Δ	981			CRI	10,243	LUX⁜	6,468	TTO★	2,428
KAZ★Δ	10,904			CUB	959	MAR★	10,859	TUN★	11,990
KGZ★Δ	12,362			CYPΔ	9,316	MDG★	9,824	TZA	10,907
KHM★Δ	12,400			DEU⁜	6,137	MEX	9,736	UGA	10,866
KWT★	989			DJI	996	MLI	11,881	URY	10,142
LAO★Δ	2,273			DNK⁜	7,858	MLT⁜	4,912	USA	5,096
LBN★	12,649			DOM	7,588	MNE★	10,350	VEN	7,181
LKA★Δ	11,197			DZA	8,852	MOZ	6,836	ZAF★	12,773
LTU★	11,390			ECU	9,905	MRT	12,714	ZMB	10,791
LVA★	10,781			ESP⁜	11,807	MUS	4,836	ZWE	9,903
MDA★	12,303			ETH★⁜	7,980	MWI	8,904		

Notes: ★ denotes BRI countries in the first list of Garcia-Herrero and Xu (2019); ● denotes additional BRI countries in the second list of Garcia-Herrero and Xu (2019); all countries in the first list is on the second list. Δ denotes regional AIIB member; ⁜ denotes non-regional AIIB members.

Table A2 Annual treatment effects

Annual Treatment Effects			
Before BRI		*After BRI*	
BRI×Year2005	0.019	*BRI×Year2014*	0.057**
	(0.110)		(0.027)
BRI×Year2006	0.017	*BRI×Year2015*	0.044
	(0.042)		(0.028)
BRI×Year2007	0.055	*BRI×Year2016*	0.104***
	(0.037)		(0.029)
BRI×Year2008	0.028	*BRI×Year2017*	0.088***
	(0.032)		(0.027)
BRI×Year2009	0.040	*BRI×Year2018*	0.090***
	(0.033)		(0.030)
BRI×Year2010	0.023		
	(0.029)		
BRI×Year2011	-0.025		
	(0.029)		
BRI×Year2012	-0.024		
	(0.027)		
Controls		Yes	
Year fixed effects		Yes	
Country fixed effects		Yes	
Obs.		1,400,174	

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%. Regression has controlled for the same set of standalone country and individual variables as in Table 2.

TABLE A3 Other robustness tests

	Aged between 24-65	**First alternative BRI country list**	**Second alternative BRI country list**	**Delete 5% at top and bottom**
	(1)	(2)	(3)	(4)
Policy Time Dummy				
BRI×Policy	0.086***	0.091***	0.106***	0.054**
	(0.022)	(0.021)	(0.021)	(0.021)
Controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes
Obs.	986,541	1,400,174	1,400,174	1,258,315
Policy Intensity				
BRI×Intensity	0.075***	0.092***	0.070***	0.063**
	(0.028)	(0.026)	(0.026)	(0.028)
Controls	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Country-specific Time Trends	Yes	Yes	Yes	Yes
Obs.	986,541	1,400,174	1,400,174	1,258,315

Notes: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%. All regressions have controlled for the same set of standalone country and individual variables as in Table 2. The two alternative BRI country lists are given in Table A1 of the Appendix. The second list is longer and covers the first list.

Table A4 Construction of IV

	Prediction of BRI		
	(1)	(2)	(3)
DISC (Distance to China)	-5.641***		-5.455***
	(0.995)		(1.023)
DISU (Distance to US)		2.264***	0.619
		(0.558)	(0.777)
Cons.	10.996***	-5.447***	9.303***
	(2.042)	(1.251)	(2.821)
Obs.	153	152	152
Pseudo R-squared	0.442	0.120	0.444

Notes: ***, ** and * denote significance levels of 1%, 5% and 10%. In column (2) and (3), the U.S. is excluded from the sample.

Table A5 Ordered *logit* results

	(1)	(2)
BRI×Policy	0.290***	
	(0.054)	
BRI×Intensity		0.233***
		(0.071)
Age	-0.001***	-0.001***
	(0.000)	(0.000)
Gender	0.157***	0.157***
	(0.007)	(0.007)
Marriage	-0.047***	-0.047***
	(0.005)	(0.005)
Education	0.074***	0.075***
	(0.007)	(0.007)
Urban	0.025***	0.025***
	(0.007)	(0.007)
ln*GDP*	-0.969	-0.463
	(1.370)	(1.337)
ln*GDP per capita*	0.702	0.177
	(1.370)	(1.340)
Unemployment	-0.004	-0.005
	(0.007)	(0.007)
Relationship	-0.000	0.001
	(0.043)	(0.043)
Constant cut1	-19.036	-10.503
	(23.541)	(22.973)
Constant cut2	-17.481	-8.948
	(23.542)	(22.973)
Year fixed effects	Yes	Yes
Country fixed effects	Yes	Yes
Country-specific Linear Time Trends	Yes	Yes
Obs.	1,400,174	1,400,174

Note: Results using the Gallup sampling weights and robust standard errors clustered at the country–year level. ***, ** and * denote significance levels of 1%, 5% and 10%.