Xinhua, Diplomacy, and Chinese Foreign Aid

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Abstract

Absent formal avenues of transparency, how do China's efforts at gaining international recognition and promoting good relations with aid recipients play out in Beijings foreign aid giving? We bring a novel perspective to this issue by considering Chinese media coverage of developing countries intended for foreign audiences and China's bilateral diplomatic activities. These measures capture two distinct but related aspects of China's foreign policy: status/legitimacy in the eyes of a foreign (predominantly Western) audience and south-south diplomacy. To the extent that China's development finance complements these goals, we expect greater coverage of a developing country in a Chinese media outlet directed to foreign readers and greater bilateral diplomatic activity to correlate with greater Chinese foreign aid giving. To test this expectation we merge AidData's Chinese development finance dataset with two newly available datasets: (1) AidData's compiled yearly counts of bilateral official diplomatic visits from China and (2) millions of English edition Xinhua news articles from 2000 to 2014 scraped by the Cline Center for Advanced Social Research. We find that greater media coverage of developing countries targeted at a foreign audience via the English version of Xinhua and the number of diplomatic visits to a developing country predict greater receipt of Chinese aid. Our results support the view that Chinese aid allocation patterns map to China's broader diplomacy and legitimacy seeking objectives on the world stage.

1 Introduction

China neither reports its foreign aid spending to international organizations, as do Development Assistance Committee (DAC) members to the OECD, nor does China publish its aid expenditures in a public database, as does the United States in USAID's *Greenbook*. Fuchs and Rudyak (2019) cite this fact as a reason Western governments assume Beijing deliberately keeps its international development finance a secret.

However, many observe an unmistakable connection between China's version of Official Development Assistance (ODA) and its political and material goals. These ambitions include international recognition and closer diplomatic ties with recipients in what China calls "south-south cooperation." While distinct, these objectives have one thing in common: they are difficult to accomplish *in secret*. They require visibility. So, absent traditional modes of transparency, *how does China's foreign aid relate to Beijing's efforts at public diplomacy and international recognition?*

We tackle this question by considering Chinese media coverage of developing countries intended for foreign audiences and China's bilateral diplomatic activities. These measures capture two distinct but related aspects of China's foreign policy: status/legitimacy in the eyes of a foreign (predominantly Western) audience and south-south diplomacy. To the extent that China's development finance complements these goals, we expect greater coverage of a developing country in a Chinese media outlet directed to foreign readers and greater bilateral diplomatic activity to correlate with greater Chinese foreign aid giving. To test this expectation we merge AidData's Chinese development finance dataset with two newly available datasets: (1) AidData's compiled yearly counts of bilateral official diplomatic visits from China and (2) millions of English edition *Xinhua* news articles from 2000 to 2014 scraped by the Cline Center for Advanced Social Research. We find that greater media coverage of developing countries targeted at a foreign audience via the English version of *Xinhua* and the number of diplomatic visits to a developing country predict greater receipt of Chinese aid. Our results support the view that Chinese aid

allocation patterns map to China's broader diplomacy and legitimacy seeking objectives on the world stage.

This work further helps in dispelling the notion that China purposely engages in development finance in secret. Much to the contrary, China complements its aid giving with visible diplomatic envoys and greater external-facing media coverage.

2 Motivations behind Chinese Foreign Aid

China's motivations for giving foreign aid to developing countries mirror, in many ways, the motivations of Western donors. While recipient needs, in part, predicate Chinese assistance, so do Beijing's political and economic interests. Evidence suggests that China targets more finance toward poorer countries and does not systematically favor authoritarian over democratic recipients (Dreher et al. 2018). At the same time, China gives more aid to countries that import more goods from China, while it gives less aid to those that officially recognize Taiwan (Dreher and Fuchs 2015). Further, China's Official Financing disproportionately goes to countries with more natural resources, greater UN General Assembly voting alignment with Beijing, and with more capacity to repay loans (Dreher et al. 2021).

Two waves of surveys conducted by AidData of policymakers in 126 countries demonstrate the diplomatic impact that these investments have had.¹ Compared to a first survey wave in 2014, responses in 2017 showed an increase in evaluations of China's influence with policymakers in developing countries. It would be naive to suppose this is a side-effect, rather than a goal, of China's development finance and other investments.

If its diplomatic motives for giving aid parallel those of other donor governments, visibility is surely a major concern for Beijing. Visual branding of aid has emerged as a growing concern among donors. The United States Agency for International Development

¹Reported by AidData "China's Financial Statecraft: Winning Africa one Yuan at a Time?" on March 22, 2018. Accessed March 3, 2022

(USAID), for example, cited its "new 'brand identity'" as instrumental in promoting the visibility of 2004-2005 tsunami relief to Indonesia.² A US State Department report from 2004 further claims that better branding contributed to a doubling of favorable attitudes toward the US. Pew Research supports this view, finding that nearly 80% of Indonesians surveyed "said that post-tsunami aid from the US had improved their impression of America."³

Given the diplomatic uses of foreign aid, the obscurity that surrounds Beijing's development finance is all the more puzzling. Unlike Western donors, China does not report its financing activities to an international organization or make its activities visible in an online database. To say transparency is out of character for Beijing is an understatement, but foreign aid is one issue area where transparency would arguably serve China's interests. So why the secrecy?

As Fuchs and Rudyak (2019) point out, the obscurity of China's development finance creates the perception among Western donors that China purposefully keeps its aid giving a secret. But as several scholars note, lack of transparency may have more to do with capacity and logistics than intention.⁴ For many decades, a complex and fractured bureaucracy has orchestrated Beijing's development financing. Only in the past few years, as its goals have become ever loftier, did China establish its first true bilateral aid agency—the China International Development Cooperation Agency (CIDCA). However, while established in 2018, much work remains to consolidate the operation and management of China's bilateral aid.⁵

Absent transparency in reporting, there are other tools at Beijing's disposal that may complement the diplomatic objectives behind its foreign aid. In this study, we explore the connections between China's bilateral development finance and other, *visible*,

²See USAID's resource page on branding: usaid.gov/branding.

³"Does humanitarian aid improve America's image?" Published by Pew Research March 6, 2012. Accessed March 3, 2022.

⁴See Fuchs and Rudyak (2019) for several related citations.

⁵See this excellent summary entitled "The Logic Behind China's Foreign Aid Agency" by the Carnegie Endowment for International Peace published May 21, 2019. Accessed March 10, 2022.

activities linked to diplomatic and legitimacy-seeking objectives. We focus in particular on two factors: (1) diplomatic visits from China to developing countries and (2) coverage of developing countries in external-facing media (that is, media coverage intended for foreign, rather than domestic, audiences). We summarize these factors in greater detail in the following sections.

3 Media

3.1 First-level Agenda-setting

Media coverage of a foreign country measures how important a country is to its reporting country, in particular, to the public. That is, the public learns the importance of objects based on the amount of coverage that those objects receive. Agenda-setting theory suggests that mass media serve as one of the key sources for public perception of important issues (McCombs & Shaw, 1972). More specifically, as Lang and Lang (1966) observe, "The mass media force attention to certain issues. They build up public images of political figures. They are constantly presenting objects suggesting what individuals in the mass should think about, know about, have feelings about" (p. 468). Since their seminal work, hundreds of studies have examined this media effect on the public. The vast majority support this agenda-setting notion (need some more extension or citations here).

Over decades of rich research in agenda-setting, patterns show that the media affects what the public thinks about. That is, the salience of news media reports transfers to the perception of issue salience to the public (McCombs & Shaw, 1972). Extensive media coverage provides news consumers with salience cues regarding the importance of the political figures or issues (***). (transition to media objects such as nations)

To extend this logic, media salience indicates significance for foreign countries named in media. Wanta et al. (2004) show coverage of foreign nations in the news relates to the perception of the importance of the countries: the more coverage a state received, the more

likely respondents think the state was vitally important to the U.S. The media coverage of the countries will lead to the countries as a whole becoming more salient among the public.

3.2 Selective Media Attention

[Need some transition from the public to the news editors; in this story, we take news outlets as strategic actors here.]

From the perspectives of news outlets, limited by time and space, editors can only select a handful of stories while leaving dozens of new stories off the air. News selection is at the heart of the agenda-setting process since the issues that fail to pass through the gatekeepers of the news also fail to give salience cues regarding the relative importance of the issues.

Also, previous findings show the strategic consideration of news editors on considering what international news gets media cover. Not all countries in the world receive equal coverage. In fact, only a small portion of international events can get through the media gatekeepers and get media coverage. While most powerful core states consistently receive higher amounts of coverage from newscasts, small peripheral states remain largely uncovered. Golan and Wanta (2003)'s study examines how 138 elections held between 1998 and 2000 were covered by the U.S. network television newscasts (ABC, CBS, NBC and CNN). They found that elections in Europe, Asia or the Middle East received substantial coverage than those in Latin America and Africa. A large body of literature has examined the determinants of international news coverage and has identified variables such as geographic locations, cultural proximity, geopolitical position in the world system as key predictors of coverage (Chang, 1998; Sheafer et al. 2013).

Hence, if foreign countries receive more media coverage, the increased media salience suggests the salience of the foreign countries to the audiences and their newsworthiness to the news editors.

3.3 Second-level Agenda-setting

In addition to swaying people's attention, media agenda is also critical in building states' image to international audiences.

Recent research in the explication of second-level agenda-setting connects the concept of framing and suggests that news media attention can influence how people think about a topic by placing emphasis on certain attributes than others (Kiousis & Wu, 2008; ***). This entails a deeper media influence on shaping public attitudes. Improving one's image to foreign audiences is the core of mediated public diplomacy.

As a state-controlled media platform, *Xinhua* News Agency is often considered more than a news media platform. It is a public relations platform that government invests in altering its public relations with other countries. As such, scholars often focus on China's mediated public diplomacy efforts through *Xinhua*. That is, to study how government-sponsored international broadcasting contributes to influencing the public or elite opinion among foreign countries (Entman, 2008; Manheim, 1994; Sheafer & Gabay, 2009). Governments attempt to shape the global narrative positively regarding their leaders and foreign policies. The more *Xinhua* highlights positive Chinese influence on other countries, the higher potential for the news outlet to cultivate a positive foreign nation image.

4 Diplomacy

5 Hypotheses

6 Data and Methods

To assess complementarities between China's bilateral diplomatic visits and *Xinhua* coverage of developing countries with Beijing's bilateral development finance, we combine data from multiple sources. We merge AidData's Chinese development finance dataset with

two newly available datasets: (1) AidData's compiled yearly counts of bilateral official diplomatic visits from China and (2) millions of English edition *Xinhua* news articles from 2000 to 2014 scraped by the Cline Center for Advanced Social Research. The full dataset consists of unique recipient-year observations from 2000 to 2014.

To normalize bilateral aid data, counts of country mentions, and the number of diplomatic visits, we apply the inverse hyperbolic sine transformation (ihs). We opt for this rather than the natural log because ihs is defined at zero (there are many zero observations for each of these variables) but is close enough in form to the natural log that estimates may still be interpreted as eslasticities or percent changes.

We include several controls in analysis to adjust for sources of confounding and also to improve the precision of our estimates. Prior research points to a number of covariates that are relevant.

The first set of controls consist of aid recipient characteristics. From the Penn World Table (version 9.1), we use real gross domestic product (GDP) in millions of 2011 USD. This serves as a proxy for the size of a recipient's economy. From the Penn World Table we also use population in millions and the number of people employed in millions. We normalize values using ihs to keep the transformation of the data consistent with that of the response. From the Institute for Health Metrics and Evaluation we use a yearly count of the number of individuals killed by natural disasters, and we again apply the ihs transformation. From PRIO/UCDP we use a binary measure of the presence of civil war, coded as 1 for each year where there is armed violence between two or more parties where one of the parties is the government and at least 25 battle-related deaths occur. To capture political and civil liberties we use Freedom House and adjust values so that higher values denote greater levels of freedom. We use this measure instead of Polity to avoid collinearities with civil war.

We further control for bilateral characteristics between China and aid recipients. To account for economic ties we use total bilateral trade (imports plus exports) in millions of dollars. From ATOP we use a binary measure of alliances between recipients and China. This measure is coded as 1 if there is at least one of either a formal offensive, defensive, non-aggression, or neutrality agreement. Finally, form CEPII we use a measure of bilateral distance in kilometers between recipients and China. Both trade and distance are transformed using ihs.

For our empirical strategy, we estimate models of the form

$$ihs(aid_{rt}) = \tau_t + \beta_1 ihs(coverage_{rt}) + \beta_2 ihs(visits_{rt}) + X_{rt}^{\top} \gamma + \epsilon_{rt}.$$
 (1)

In the above, subscript r indexes the aid recipient and t the year. The vector of parameters τ_t denotes fixed year intercepts, the vector X_{rt} is the set of recipient and bilateral controls, and ϵ_{rt} is a zero-centered stochastic term.

We estimate the parameters of equation 1 using a variety of techniques to ensure the robustness of our estimates. First, because coverage and diplomatic visits may be endogenous to aid, we lag each by one year (along with all time-varying covariates). We then estimate the model via OLS and report robust standard errors clustered by recipient.

However, because there are a significant number of zero observations in the outcome, OLS may yield downward biased estimates of the parameters of interest. We thus additionally estimate equation 1 using the Tobit maximum likelihood estimator. To account for unobserved heterogeneity between, and dependence within, recipients we include random recipient intercepts in the model.

In the event that the process that determines whether countries receive aid from China differs from the process that determines the amount of aid given, we further separate the estimation into selection and level equations as outlined by Cragg (1971). The selection equation is estimated using mixed effects logit with random recipient intercepts and the level equation is estimated using OLS with cluster-robust standard errors.

Finally, because within-year coverage and visits may have greatest relevance for

predicting the response, using the lag of each variable in model estimation may underestimate the complementarities between coverage and visits with aid. However, estimating the models using same-year coverage and visits poses a challenge due to likely endogeneity between them and the response. Unable to find a satisfactory set of instruments, we take two different approaches. For one, we leverage the variation in the one year lag of each predictor to instrument for in-year values of each. This approach has been applied elsewhere in the literature when dealing with time-series data (see Braumoeller 2008). For the second approach, we use the internal instruments approach outlined by Lewbel (2012), which leverages heteroskedasticity in the data to synthesize instrumental variables.

We present results from each of these approaches in the following analysis. Further, in the Appendix we break down the sample by geographic region in the event that different dynamics govern decisions within different sets of aid recipients.

7 Results

Results are shown for 1,946 unique recipient-year observations from 2001 to 2014. Multiple imputation for missing values in covariates was done via chaining random forests combined with predictive mean matching, which ensures imputed values do not differ from values already present in the data (such as in the case of a binary variable) and that the conditional distributions have realistic variances.⁶ Summary statistics are shown the Appendix.

Table 1 reports the regression coefficients for equation 1 using each of the estimation techniques outlined in the previous section. Estimates for the controls comport with prior research, save that the coefficients for democracy using the Freedom House measure reach conventional levels of statistical significance in the selection and level estimates. Contra Dreher et al. (2018), these estimates suggest China disproportionately targets

⁶For multiple imputation we used the missRanger R package. See Stekhoven and Bühlmann (2011) for more on the method and its robustness relative to other approaches.

Table 1: Model Estimates

| _ | OLS | ML Tobit | Selection | Level | IV Lag | IV Lewbel |
|-----------------------------|-----------------|-------------------|---------------|-----------------|-----------------|-----------------|
| Coverage (lag) | 0.63* | 1.29** | 0.18*** | 0.11 | | |
| | (0.28) | (0.43) | (0.05) | (0.14) | | |
| Coverage (in-year) | | | | | 0.67^{*} | 0.51 |
| - | | | | | (0.31) | (0.29) |
| Diplomatic Visits (lag) | 0.93** | 1.54 ⁻ | 0.21** | 0.36^{*} | | |
| | (0.34) | (0.83) | (0.07) | (0.15) | | |
| Diplomatic Visits (in-year) | | | | | 1.08** | 1.38** |
| | | | | | (0.41) | (0.45) |
| Freedom House | -0.36 | -0.58 | -0.08^{*} | -0.20^{*} | -0.36 | -0.39 |
| | (0.28) | (0.40) | (0.04) | (0.09) | (0.28) | (0.29) |
| GDP | -2.71*** | -4.83*** | -0.77^{***} | 0.01 | -2.73*** | -2.68*** |
| | (0.36) | (0.48) | (0.06) | (0.17) | (0.36) | (0.34) |
| Population | 2.52*** | 5.26*** | 0.69*** | 0.27 | 2.51*** | 2.56*** |
| | (0.35) | (0.76) | (0.06) | (0.17) | (0.35) | (0.36) |
| Unemployment | 0.18 | 0.84 | 0.13 | -0.05 | 0.19 | 0.20 |
| | (0.47) | (0.95) | (0.08) | (0.19) | (0.47) | (0.47) |
| Disaster Deaths | 0.18 | 0.14 | 0.04 | 0.02 | 0.18 | 0.17 |
| | (0.17) | (0.27) | (0.03) | (0.05) | (0.17) | (0.16) |
| Civil War | -1.62° | -2.77^{*} | -0.38* | -0.75° | -1.62° | -1.57° |
| | (0.91) | (1.25) | (0.15) | (0.39) | (0.92) | (0.91) |
| Trade | 0.14 | -0.18 | 0.04 | 0.03 | 0.14 | 0.14 |
| | (0.15) | (0.18) | (0.03) | (0.05) | (0.15) | (0.15) |
| Alliance | 0.36 | 2.00 | 0.29 | -0.64 | 0.07 | -0.32 |
| | (0.94) | (2.75) | (0.22) | (0.47) | (0.94) | (1.00) |
| Distance | 1.84^{*} | 4.12 | 0.49^{***} | 0.55 | 1.94^{*} | 2.21* |
| | (0.83) | (2.34) | (0.15) | (0.37) | (0.87) | (0.87) |
| Adj. R ² | 0.19 | | | 0.11 | 0.20 | 0.20 |
| Num. obs. | 1932 | 1932 | 1932 | 982 | 1932 | 1932 |
| Deviance explained | | | 0.15 | | | |

^{***}p < 0.001; **p < 0.01; *p < 0.05; 'p < 0.1

its development finance to authoritarian regimes. While this result is not statistically significant for the alternative estimators, the coefficient remains consistently negative across all estimation techniques.

Consistent with other studies, China prioritizes recipients with smaller economies and larger populations. Depending on the estimation strategy, greater distance is related to *more* aid, which is a finding that runs contrary to patterns observed for DAC donors. This result likely is driven by China's prioritization of aid giving in Sub-Saharan Africa. Finally, China seems to have a bias against giving aid in the context of ongoing conflict. Across estimation strategies, the coefficient on civil war is negative and marginally significant (p < 0.1) in four of the models and statistically significant (p < 0.05) in two.

China does not appear to discriminate on the basis of other measures of need, such as unemployment and natural disaster deaths. Further, trade and alliances, measures of material and strategic importance to Beijing, show no significant relationship with aid.

Turning to the estimates of interest, across specifications the coefficients on media coverage in *Xinhua* and the number of diplomatic visits run in the expected direction. Expressed as elasticities, the range of estimates suggest that one percent greater yearly instances of coverage in one recipient relative to another are associated with more than half a percent to over one percent greater aid received by that aid recipient. Further, one percent greater diplomatic visits is related to almost one percent to one and a half percent greater aid to that recipient relative to another. This finding is consistent with the view that China's development finance has public diplomacy and international legitimacy functions.

8 Conclusion

Does Beijing intentionally keep its development finance a secret (Fuchs and Rudyak 2019)? Or, does it use foreign aid as a public tool of diplomacy and to promote its own international legitimacy?

In this study, we tackle this question by considering complementarities between where China gives aid with Chinese media coverage of developing countries intended for foreign audiences and China's bilateral diplomatic activities. These measures capture two distinct but related aspects of China's foreign policy: status/legitimacy in the eyes of a foreign (predominantly Western) audience and south-south diplomacy. To the extent that China's development finance complements these goals, we expect greater coverage of a developing country in a Chinese media outlet directed to foreign readers and greater bilateral diplomatic activity to correlate with greater Chinese foreign aid giving. To test this expectation we merge AidData's Chinese development finance dataset with two newly available datasets: (1) AidData's compiled yearly counts of bilateral official diplomatic visits from China and (2) millions of English edition Xinhua news articles from 2000 to 2014 scraped by the Cline Center for Advanced Social Research. We find that greater media coverage of developing countries targeted at a foreign audience via the English version of *Xinhua* and the number of diplomatic visits to a developing country predict greater receipt of Chinese aid. Our results support the view that Chinese aid allocation patterns map to China's broader diplomacy and legitimacy seeking objectives on the world stage.

This work further helps in dispelling the notion that China purposely engages in development finance in secret. Much to the contrary, China complements its aid giving with visible diplomatic envoys and greater external-facing media coverage.

9 Appendix

Table A.1 shows summary statistics for the data sample used in the main analysis.

A.1: Summary Statistics (2000-2014)

| | Mean | Median | SD | Min. | Max. |
|------------------------------|-------------|------------|-------------|---------|---------------|
| Aid (millions) | 168.170 | 0.000 | 969.470 | 0.000 | 35,465.060 |
| Article Mentions (thousands) | 1.100 | 0.480 | 1.680 | 0.000 | 17.290 |
| Government Visits | 2.120 | 0.000 | 5.230 | 0.000 | 77.000 |
| Freedom House | 4.120 | 4.000 | 1.730 | 1.000 | 7.000 |
| GDP (in 100 millions) | 112,941.450 | 16,622.790 | 281,256.480 | 32.110 | 2,423,270.000 |
| Population (in millions) | 30.760 | 8.240 | 105.320 | 0.010 | 1,295.600 |
| Unemployment Rate | 8.470 | 6.900 | 6.400 | 0.210 | 37.250 |
| Disaster Deaths | 403.200 | 1.000 | 7,080.940 | 0.000 | 222,658.310 |
| Civil War | 0.180 | 0.000 | 0.380 | 0.000 | 1.000 |
| Distance (in kilometers) | 9,223.130 | 9,104.000 | 3,925.110 | 809.540 | 19,297.470 |
| Trade (in millions) | 1.710 | 0.210 | 4.710 | 0.000 | 44.290 |
| Allies | 0.150 | 0.000 | 0.360 | 0.000 | 1.000 |

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