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To cite this article: Bob Jurriaan Van Grieken & Jaroslaw Kantorowicz (2019): Debunking Myths about China: The Determinants of China's Official Financing to the Pacific, *Geopolitics*, DOI: [10.1080/14650045.2019.1654459](https://doi.org/10.1080/14650045.2019.1654459)

To link to this article: <https://doi.org/10.1080/14650045.2019.1654459>



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Published online: 01 Sep 2019.



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## Debunking Myths about China: The Determinants of China's Official Financing to the Pacific

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### ABSTRACT

With China rapidly expanding its aid programme in the Pacific Islands region, there is a growing concern among established powers about China's sway over the aid-dependent Pacific Island states. Systematic studies of China's development finance to the small island countries are, however, rare and generally limited to mapping Chinese finance flows in the Pacific. This study seeks to contribute to the literature on China's development efforts in the Pacific Islands region. Drawing on project-level data from AidData for the period 2000–2014, this paper disaggregates China's official financing into its constituent parts and systematically explores the determinants of China's Official Development Assistance (ODA) and its commercially-oriented finance flows to the Pacific. The panel data analysis finds that, contrary to popular belief, China does not reward voting compliance in the United Nations nor is its allocation of financing to the Pacific influenced by the countries' level of indebtedness.


### Introduction

China's growing role in the development landscape is a topic of increasing interest among academics, journalists, and policy-makers alike. The literature on China's development role in Africa, in particular, has proliferated rapidly in the last two decades (see, among others, Bräutigam 2009, 2011; Dreher et al. 2018).<sup>1</sup> This is perhaps unsurprising given that the majority of China's aid targets African states (Zhang and Smith 2017, 2333). Among the top ten recipients of Chinese Official Development Assistance (ODA), seven are located on the African continent (Dreher et al. 2017, 9).

Yet since 2006, Beijing has significantly expanded its development footprint in the Pacific Islands region, which contains several of the most aid-dependent countries in the world. On a per capita basis, ODA in the Pacific is higher than in any other region. Seven of the world's 15 most aid-dependent states (based on ODA as a proportion of Gross National Income (GNI) between 2012–2014) are situated in the Pacific Islands region

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 Supplemental data for this article can be accessed on the [publisher's website](#)

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(Dornan and Pryke 2017). Although it is difficult to ascertain the exact scope of China's development finance activities in the Pacific region, as Beijing does not disclose the details of its financing flows to recipient countries, recent estimates suggest that China is bound to overtake Australia as the largest donor to the Pacific. This may be attributed in part to the US\$4 billion in development finance which China pledged to the region last year (Lowy Institute 2018; Lyons 2018).

In parallel, China's foreign aid policy – with 'no strings attached' – is a 'lightning rod of criticism' (Dreher et al. 2018, 182). The debate on China's engagement in the Pacific centres around (1) the wastefulness of Chinese aid projects (Graue and Dziedzic 2018);<sup>2</sup> (2) the increasing indebtedness of the Pacific Island Countries (PICs) to Beijing as a result of Chinese concessional loans, which, in effect, leaves open the possibility of Chinese political economic leverage over recipient PICs (Brant 2015);<sup>3</sup> (3) the destabilising effect of Chinese financial assistance, supposedly exploiting and encouraging corruption and instability in the region and impeding the PICs' economic and political development (Henderson and Reilly 2003); and (4) the geopolitical competition in the Pacific, a region that has traditionally been regarded as within Australia's and the United States' 'sphere of influence' (Brant 2015; Wallis 2017; Wesley-Smith 2013).<sup>4</sup>

The latter point is especially important given that, although China is financing a wide array of development projects across Africa, the Caribbean, Latin America, Eastern Europe, and South Asia, the Pacific in particular is considered a geopolitical bellwether. As China continues to increase its official financing to the PICs, there is a growing concern that Beijing – as it has done previously in the South China Sea – may attempt to secure access to infrastructure of the Pacific Island states which could be used to militarise the strategic waterway.<sup>5</sup> China's potential sway over the indebted PICs, as well as the seemingly waning influence of the established powers in the Pacific, has purportedly prompted Australia, New Zealand and the United States to not only expand their military prowess, but also to coordinate and enlarge their aid budget to the Pacific Islands region. This shift in policy, exemplified by a swell of new investments in 2018, follows years of successive foreign aid budget retrenchments by these countries (Department of Foreign Affairs and Trade 2018; McCulloch 2018; U.S. Department of State 2017). As Beijing and the established powers contend for influence over the PICs, the Pacific Islands region is believed to increasingly take the shape of 'the stage for a new cold war of strategic competition' (Cave 2018).

Despite the heated rhetoric, relatively little systematic academic work exists investigating Beijing's development efforts in the Pacific. Notable exceptions are Brant (2015) and the Lowy Institute (2018) which revolve around mapping Chinese 'aid' flows to the PICs. In contrast to these studies which fixate on *where* Chinese development finance is given, this paper focuses specifically on *why* Beijing allocates development finance to the

PICs. Whilst China's motivations behind its provision of financial assistance to the PICs have been analysed within a growing literature, there is considerable disagreement among scholars whether China's official financing is driven by Beijing's foreign policy goals, Chinese economic interests, or the institutional quality of recipient countries. Even though there exists a plethora of qualitative research on this issue, the topic has received less attention in quantitative studies.

The main question this paper addresses reads as follows: *What are the determinants of China's official financing to the Pacific Island Countries?* In answering this research question, this study builds on a recent influential paper by Dreher et al. (2018). In their paper, Dreher et al. (2018) explore the determinants of Chinese state financing to African countries, differentiating between ODA and commercial-oriented flows – i.e. Other Official Flows (OOF). As a further step into the analysis of China's development efforts in the Pacific Islands region, it is crucial to disaggregate and separately analyse the constituent parts of China's official financing to the PICs. This is particularly important as the practice of lumping together China's different financing flows under the label 'aid' has both reinforced misperceptions of China's economic engagement with developing countries and fostered skewed discussions about China's development intentions. That being said, it should be noted that the PICs are more subject to ODA than OOF. This is not only due to the PICs' aid dependency, but also, and perhaps by extension, because there are fewer commercial opportunities in the Pacific than, for instance, in Africa. This is further reiterated by the two China-Pacific Island Countries Economic Development and Cooperation Forums at which China pledged concessional loans and other forms of development financing to the Pacific region (see Section 3.1 for a more detailed description of both forums).

Therefore, as a logical extension of the recent surveys of Brant (2015) and the Lowy Institute (2018), this paper applies Dreher et al.'s (2018) differentiation of different flow types to the Pacific Islands region for the time period 2000–2014 to assess whether each flow type is driven by Beijing's foreign policy interests, their economic interests, or the institutional quality of potential recipient PICs. The plan of this paper is as follows: the next section presents a review of the existing literature and outlines the theoretical underpinnings for how the different flow types correspond to different interests. The paper then introduces the data and empirical strategy used to test the hypotheses, thereby describing and justifying the case selection, data collection, and method of analysis. Following a description of the results, the final section discusses the wider implications of the findings.

## Existing Literature and Theoretical Underpinnings

In spite of an emerging consensus that the allocation of development finance is not driven by humanitarian needs per se, but instead for both strategic and political purposes (see, for instance, Alesina and Dollar 2000; Keohane 1967; Maizels and Nissanke 1984), China's allocation of official financing remains surrounded by 'myths' and 'misconceptions' (Bräutigam 2009). Scholars, policy-makers, and journalists have claimed that Beijing's provision of grants and loans is directed towards securing access to natural resources, creating exclusive economic opportunities for Chinese firms, and gaining diplomatic recognition from its recipients at the expense of Taiwan. Additionally, China is believed to focus its development efforts on undemocratic countries.

Taken together, it follows that Beijing has earned the dubious reputation of a 'rogue donor' as its financial assistance is seemingly guided by self-interest instead of recipient need (Naím 2007; see also Bräutigam 2009). However, much of the controversy surrounding Beijing's development activities stems from a recurring issue in the literature on China's development finance, which is the tendency to lump the different types of state financing together under the label 'aid' (Brant 2013; Dreher et al. 2018). In other words, following the work of Dreher et al. (2018), it is expected that the different drivers – i.e. Beijing's foreign policy, their economic interests, and the institutional quality of potential recipients – have distinctive effects on the allocation of the two separate flow types to the Pacific, namely ODA and OOF, that are analysed in this paper.

### *Foreign Policy Interests*

There exists an extensive literature in the field of political economy emphasising that development assistance is frequently provided for political reasons (Alesina and Dollar 2000; Kuziemko and Werker 2006; Vreeland and Dreher 2014). According to this view, foreign aid is used to maintain or gain alliances, punish political defiance, and influence foreign public opinion about the donor. Although most of the literature in this field revolves around the United States and other major European donors, one can expect that China, like its Western counterparts, uses development finance to advance its foreign policy interests. This claim has been supported by both anecdotal and statistical evidence. With regard to the former, it has been indicated that China uses foreign aid packages to gain the backing of African recipients in different multilateral settings with the aim of building 'coalitions to shield Beijing from Western criticism' (Tull 2006, 460–461). Similarly, China's ambassador to Vanuatu, Liu Quan, recently declared that Beijing required support at the United Nations in return for Chinese provided development assistance, stating 'there is no free lunch' (Klan 2018).

Furthermore, in line with a large body of systematic research connecting vote outcomes in both the United Nations Security Council (UNSC) and the United Nations General Assembly (UNGA) to aid allocation decisions of Western donor countries (Alesina and Weder 2002; Dreher, Sturm, and Vreeland 2009a, 2009b), recent studies on China's foreign aid policy show that Beijing likewise uses development assistance to influence voting behaviour in the United Nations. Both Dreher and Fuchs (2015) and Dreher et al. (2018) indicate that recipient states which vote with Beijing in the UNGA are rewarded with greater levels of Chinese financing. The magnitude of this effect is substantial, to the extent that an increase in voting coincidence by 10 percentage points increases grant funding by 51 per cent (Dreher et al. 2018, 188–189). In contrast, Dreher et al. (2018) do not find that recipients' increased levels of voting similarity with Beijing is rewarded with increased commercial flows, i.e. OOF.

Whilst China rewards its allies with increased ODA, it also punishes its adversaries in terms of the likelihood of and extent to which development finance is provided. More explicitly, Beijing punishes those that recognise Taiwan as an independent state, as its allocation of official financing is tied to the recipient country's stance on the 'One-China policy' (Bräutigam 2009; Zhang and Smith 2017).<sup>6</sup> This has also been established in recent quantitative research that shows that countries which recognise Taiwan receive less ODA from China (Dreher and Fuchs 2015; Dreher et al. 2018).

The dominant view in the political economy literature is that development finance helps advance the donor state's political interests. Given that ODA flows are more concessional in nature than OOF, it is expected that China uses such financing to buy policy concessions from recipient states in the UNGA (Dreher, Nunnenkamp, and Thiele 2008, 144). Or, put differently, 'for any given financial commitment, the larger the grant element, the more the recipient government will value the transfer and thus the larger the "[favour]" a donor can expect in return' (Dreher et al. 2018, 184). As such, donor countries are likely to resort to ODA packages as a means to achieve foreign policy goals.

This is reiterated by the domestic context in which China's foreign aid policy is shaped. Due to the lack of an independent foreign aid agency, line ministries, such as the Ministry of Commerce (MOFCOM) and the Ministry of Foreign Affairs (MFA), are the primary government actors that determine the allocation of ODA flows (Dornan and Brant 2014; Varrall 2016; Zhang and Smith 2017). Although economic interests are thus prominent in the decision-making process of aid allocation, China's distribution of development assistance ultimately must adhere to its foreign policy goals as the 'MFA has "veto power" over whether aid serves China's foreign policy interests' (Zhang and Smith 2017, 2335). Hence, in line with the findings of Dreher et al. (2018), it is expected that:

**Hypothesis 1:** China's official financing to the Pacific Island Countries is driven by foreign policy interests, with ODA being more affected by foreign policy interests than OOF.

### ***Economic Interests***

As it is hypothesised that foreign policy interests play a prominent role in directing ODA flows, it follows that, conversely, commercial-oriented flows are guided to a greater extent by commercial incentives. In comparison to ODA, OOF are less concessional forms of state financing and their allocation should, in theory, be more market-based and thus aligned closely with Beijing's economic interests (Dreher et al. 2018, 184). This is, first of all, demonstrated by the main agencies involved in allocation decisions of OOF. Whereas the aforementioned line ministries of MOFCOM and MFA are the key decision makers in the allocation of ODA flows, China's policy banks – e.g. China Exim Bank and China Development Bank – play a central role in the allocation of OOF, and are primarily guided by generating favourable financial returns on issued loans (Dornan and Brant 2014, 351; Varrall 2016, 33–34).

The allocation of OOF in the Pacific region is also likely to be guided by China's interest of gaining access to natural resources, including fisheries, minerals, gold, copper, lumber, timber, and hydrocarbons. Although it would be mistaken to assume that securing access to natural resources is the overriding focus of China's OOF allocation, recent research nevertheless suggests that China's distribution of official financing is at least to some extent driven by China's resource needs (Varrall 2016, 34; Zhang and Smith 2017, 2334).<sup>7</sup> Beijing's trade and investment activities in the region also converge on those PICs – Papua New Guinea in particular – that are rich in raw materials and natural resources (Meick, Ker, and Chan 2018, 7).

Finally, China's official financing is also expected to be driven by the economic interest of enhancing the business performances of Chinese companies by securing future access to export markets (Bräutigam 2009, 2011). This is part of China's 'Go Global Strategy' in which Chinese firms are encouraged to explore trade, future investment, and market access opportunities overseas (Davies et al. 2008). Specifically, 'the tied nature of Chinese aid fits with its idea that aid should be "win-win", with Chinese companies, suppliers, and workers also benefiting from the provision of assistance' (Dornan and Brant 2014, 352). China's official financing is an important element of this strategy as it helps Chinese companies to gain a foothold in new markets, thus enabling them to enhance the exports of goods and services as well as to secure future contracts (Zhang and Smith 2017). All in all, these considerations imply that the distribution of less concessional financing should be based on China's economic interests.

**Hypothesis 2:** China's official financing to the Pacific Island Countries is guided by economic interests, with OOF being influenced by economic interests to a larger extent than ODA.

### ***Institutional Quality***

China's principle of non-interference into countries' internal affairs implies that Beijing's provision of financial assistance is unhampered by the recipients' regime type and institutional quality (Dreher and Fuchs 2015, 994). Critics, however, argue that China's financial assistance – with 'no strings attached' – allows it to engage with countries with bad governance (Kurlantzick 2006). More explicitly, it is believed that 'Chinese aid will weaken democracy, governance and human rights, fail to promote development, weaken social and environmental standards and increase corruption' (Dreher and Fuchs 2015, 995).<sup>8</sup> The literature on China's official financing has, however, indicated that there is mixed support for the hypothesis that Beijing allocates projects to countries with low levels of institutional quality – i.e. undemocratic, politically unstable, and corrupt countries (see, for instance, Bräutigam 2011; Dreher and Fuchs 2015; Isaksson and Kotsadam 2018; Tull 2006).

Similar to China's foreign policy interests and economic interests, it is anticipated that the institutional quality of potential recipient countries has distinctive effects on the type of financing provided, i.e. ODA versus OOF. Regarding China's financial flows of a less concessional nature, it is assumed that they are motivated by economic considerations. For China's OOF it is thus expected that the institutional quality of recipient PICs plays an important role as it impacts both loan repayment capacity and loan profitability, which pertain to the guiding principle of generating strong financial returns on loans issued by China's policy banks. Or, as emphasised by the China Exim Bank (2011), 'the borrowing country shall have sound diplomatic relations with the Chinese Government, and shall be politically stable and economically sound, with debt servicing capacity and reliable contract performance record' (as quoted in Dornan and Brant 2014, 351–352). On the other hand, if China would adhere to the principle of non-interference, there should not be any relation between the institutional quality variables and the allocation of the distinct flows of official financing. The hypothesis below corresponds with the 'rogue donor' narrative.

**Hypothesis 3:** China's official financing to the Pacific Island Countries is directed by the institutional quality of potential recipient states, with ODA converging on Pacific Island Countries with lower levels of institutional quality and OOF concentrating on those with higher.

## Data

### *China's Official Financing to the Pacific*

Although China's development efforts have a traditional aid component that adheres to the criteria stipulated by the OECD-DAC, China's development financing extends well beyond its official aid programme (Xu and Carey 2014). In fact, the lion's share of Beijing's official financing is not actually ODA, but instead export credits, non-concessional loans, or financing used to foster Chinese investment (Bräutigam 2011). As such, in line with AidData's methodology Tracking Underreported Financial Flows (TUFF), China's official or development financing is defined here as any type of state financing – ODA or OOF – from the donor (or lender) country, China, to a recipient (or borrower), PIC. The term ODA will be used in case a reference is made to the narrower DAC definition of development finance, in which aid flows must have a development intent and a minimum level of concessionality (set at a 25 per cent or higher grant element). If reference is made to finance flows which are lacking development intent or are characterised by higher interest rates and lower grant elements – hence lacking the minimum level of concessionality that is necessary to be classified as ODA – the term OOF is used (Dreher et al. 2017, 2–4).

Given that China neither reports systematic project-level data nor releases official figures on its annual bilateral official financing flows abroad (including the Pacific Islands region), quantitative data on China's official financing flows is scarce and generally unreliable. It should thus be treated with caution (Swedlund 2017, 397). To measure China's state financing to the PICs, this paper relies on AidData's Global Chinese Official Finance Dataset (version 1.0), which covers 328 country-specific ODA and OOF projects to recipient PICs over the 2000–2014 time period – accounting for a total amount of development financing approximating US\$2.9 billion (Dreher et al. 2017).<sup>9</sup>

AidData's figures on Chinese ODA and OOF are based on the TUFF methodology, which draws from open-source, project-specific information produced by various (non-)governmental organisations, including media outlets (Dreher et al. 2017, 7). Of course, collecting data through media reports is not without its problems, as such reports may be biased or incomplete. In addition, the use of crowdsourcing techniques to gather data is likely to lead to overestimations of China's financing flows. Nonetheless, AidData's method of triangulating open-source information is deemed rigorous enough to draw reliable conclusions (see Strange et al. 2017). At present, the database provides the most complete comparative data on China's financing flows.

From AidData's database, this paper has selected all of China's bilateral ODA and OOF projects allocated to the PICs of Timor-Leste, Papua New Guinea, Vanuatu, the Solomon Islands, Kiribati, Tuvalu, Fiji, Tonga, Nauru,

the Marshall Islands, Palau, the Federated States of Micronesia, and Samoa, between the years of 2000 and 2014.<sup>10</sup> For the purposes of this research, the PICs Niue and the Cook Islands are excluded from analysis, as these island states are not formal members of the United Nations and thus not eligible to vote in the UNGA. In effect, the first hypothesis cannot be tested for either of these island countries.

Only projects that are coded as ‘recommended for research’ are included in the analysis, which implies the exclusion of umbrella projects, pledges, and cancelled or suspended projects. This approach ensures that double counting is avoided, as well as mitigates overestimations of the allocation of Chinese state financing to the region by ruling out projects that have never been fully committed or implemented. Projects allocated by Beijing to the broader Pacific Islands region, instead of bilaterally, are not included in this research’s dataset because they would not directly measure the country-specific determinants of the distribution of Chinese official financing in which this study is interested.<sup>11</sup>

The baseline regressions only deal with those finance flows that are quantified in monetary terms. Thus, projects which are not expressed in monetary terms are given the value of 0. However, given that around 38% of the projects lack information about their respective financial value, examining only those projects with financial value would provide an incomplete picture of China’s allocation of development financing. As such, the analysis is expanded to include the total number of projects allocated to a specific PIC.

The dependent variable is the (logged) aggregated sum of (deflated) ODA and OOF received by a recipient PIC in any given year, which represents the total amount of bilateral state financing per year allocated by Beijing to each respective PIC. In order to adequately test whether China’s official financing flows are guided by its foreign policy interests, economic interests, or the institutional quality of potential recipients (Hypotheses 1–3), the determinants of China’s allocation of ODA and OOF are compared, as well as the flow types of grants and loans. Like the primary outcome variable, the values of ODA, OOF, grants, and loans are deflated and logarithmatised. Overall, if only the financial flows that are recommended for research are considered, ODA was recorded for 32% of the country-years under investigation, whereas OOF only accounts for 5%. Since this may have some implications on how reliable the estimations are for OOF (see further discussion in the results section), additional regressions are performed that employ different categorisations of the dependent variable, i.e. grants and loans. In this case, grants account for 31% of the country-years whereas loans are recorded for 12% of the country-years.

Figure 1 reveals two noteworthy patterns regarding the development of Chinese official financing to the Pacific Islands region. On the one hand, although there are some dips likely because of the economic recessions,

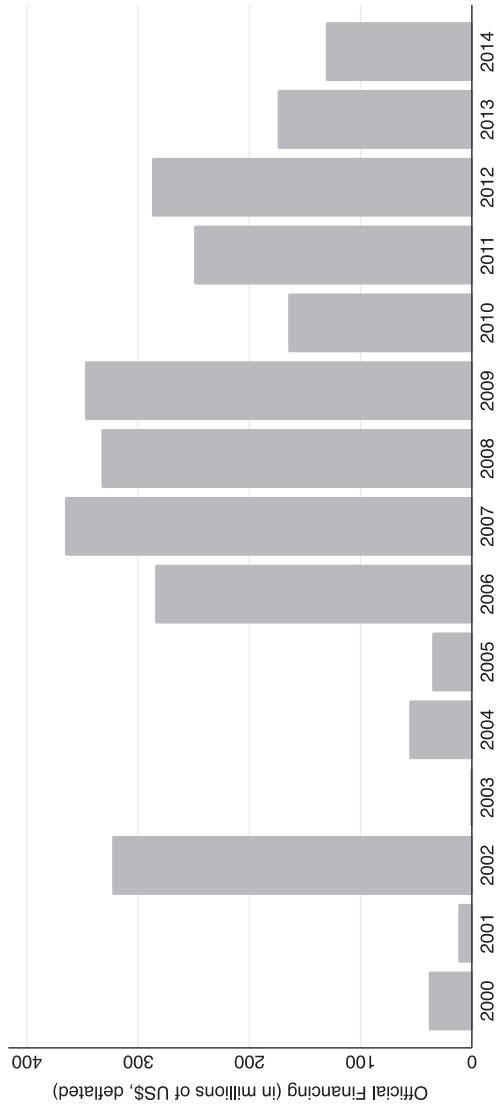


Figure 1. Aggregation of China's official financing to the Pacific Island countries, 2000–2014.

from 2006 onwards there has been generally a stable trend in the distribution of development financing to the PICs. The data reveals that in 2006 there was a sharp increase in state financing to the region. This can be explained by China organising the 1<sup>st</sup> China-Pacific Island Countries Economic Development and Cooperation Forum in 2006, announcing US\$492 million in concessional loans to the island states (Dornan and Brant 2014, 349). In the following years, Chinese financing flows to the PICs has remained relatively stable. The figure shows a downwards trend in development financing to the Pacific from 2013 onwards. However, it is important to mention that China announced a new assistance package to the region in 2013 at the 2<sup>nd</sup> China-Pacific Islands Countries Forum, pledging US\$2 billion in concessional loans and support for infrastructure development in the Pacific (Zhang and Lawson 2017, 199).

### ***Explanatory Variables***

To assess whether Beijing utilises development finance to pursue its foreign policy objectives (Hypothesis 1), the next step of this analysis examines the voting behaviour of recipient PICs in the UNGA. The literature on aid allocation has mainly resorted to indicators of UNGA voting coincidence to gauge the political alignment between states (Alesina and Dollar 2000; Carter and Stone 2015; Dreher et al. 2018; Dreher, Nunnenkamp, and Thiele 2008; Hosli et al. 2010; Strüver 2016). UNGA votes are, however, often criticised for their mere symbolic relevance, given that they are not legally binding and thus arguably insufficient for deducting meaningful conclusions as to the degree of states' convergence in foreign policies. Furthermore, given that UNGA resolutions often relate to matters of international security and human rights instead of economic development, the UNGA does not necessarily reflect the full range of foreign policy concerns and the overall balance of foreign policy goals of those countries participating in the UNGA (Ferdinand 2014).

Nonetheless, it is exactly their symbolic nature that make UNGA votes a true expression of a state's normative preferences (Hosli et al. 2010; Voeten 2000). The nonbinding nature of such votes makes strategic voting a less prevalent feature in the UNGA than, for instance, the UNSC (Bailey, Strezhnev, and Voeten 2017, 436–437). Assessing the voting behaviour of the PICs in the UNGA over an extended period of time and across a wide range of issues should thus demonstrate fluctuations in both voting patterns and, by extension, the degree of convergence between states' foreign policies (Voeten 2000, 185–186). Hence, UNGA voting patterns can be used to determine whether China uses its official financing to pursue its foreign policy objectives, with those countries voting along with China in the UNGA being rewarded with increased flows of Chinese state financing.

This study draws on UNGA voting records, which have been documented by Erik Voeten (2013), to assess the PICs' voting patterns in the UNGA. Specifically, Lijphart's Index of Agreement, also referred to as the Index of Voting Cohesion (IVC), is used to capture a voting similarity score that ranges between 0 and 1 (Lijphart 1963). The IVC considers three different voting alternatives: (1) state A and state B are in full agreement, either by both voting yes, both voting no, or both abstaining; (2) both countries are in complete disagreement, i.e. state A votes yes and state B votes no, or vice versa; (3) both nations are in partial agreement if either state A or state B votes yes or no, and the other abstains. Votes in agreement with the state of interest are coded as 1, votes in disagreement as 0, and abstentions as 0.5. The resulting numbers are then divided by the overall number of votes cast each year (Lijphart 1963).

To check the robustness of the IVC, Gartzke's (2006) UNGA Affinity of Nations S-score ('s2un') and the ideal point distance measurement developed by Bailey, Strezhnev, and Voeten (2017) are employed. Gartzke's (2006) s2un index assesses the voting similarity of a dyad of countries based on votes in agreement and votes in disagreement. The ideal point distance measurement assesses state preferences by calculating the ideal point distance of a dyad, or the extent to which a country's ideal point in UNGA resolutions differs from the ideal point of the country of interest (Bailey, Strezhnev, and Voeten 2017).

Another point of contention lies in which votes should be analysed. Based on previous research indicating that states may only be interested in buying votes which they consider salient, the preferred approach may be focusing on a sub-set of important resolutions (Carter and Stone 2015; Wang 1999). However, the drawback of this approach is that, unlike U.S. designated important votes, there is no publicly available data concerning which resolutions Beijing might consider vital to its national interests. Several studies on China have concentrated on resolutions that concern norms presumed to be important to Beijing, such as human rights, sovereignty, international order, non-interference, and democracy (Brazys and Dukalskis 2017; Flores-Macías and Kreps 2013). Yet labelling votes as being relevant to China is highly subjective (Dreher, Nunnenkamp, and Thiele 2008; Dreher and Sturm 2012). Thus, fixating only on sub-sets of votes is likely to provide an incomplete picture of the degree of political alignment between the PICs and Beijing. Therefore, this paper will not limit its focus to such a sub-set, but will rather examine all UNGA resolutions between the years of 2000 and 2014.

To test the role of a state's stance on the One-China policy, this research employs a dichotomous variable that takes the value of one if a PIC maintains formal diplomatic relations with Taiwan, and zero if a PIC recognises China.<sup>12</sup> The data on Taiwan recognition is drawn from Rich (2009) and has been updated for the period 2010 to 2014.<sup>13</sup> Based on the coding of the Taiwan variable, only two observations – Nauru and Kiribati – shifted

recognition from Taiwan to China between, or vice versa, between 2000 and 2014. As such, whether or not shifts in recognition lead to a bump in financing cannot be reliably estimated, although the anecdotal evidence suggests that changing diplomatic recognition coincides with increased flows from either Taiwan or China.<sup>14</sup>

Regarding Hypothesis 2, this paper includes two distinct indicators to ascertain whether China's economic interests influence the allocation of its finance flows to the Pacific, with a focus on Chinese OOF. As a proxy for China's potential interest of securing access to raw materials and natural resources, this paper includes a composite indicator variable that accounts for whether or not the PICs produced natural resources in any given year (British Geological Survey 2019).<sup>15</sup>

In addition, the debt-to-GDP ratio is included as it accounts for a state's creditworthiness. More explicitly, if the likelihood of repayment is an element factored into Beijing's provision of state financing, then one would expect to find a negative correlation between the ratio of debt-to-GDP and the receipt of Chinese OOF (Dreher et al. 2018, 187). The data on the PICs' indebtedness is taken from the International Monetary Fund's Historical Public Debt Database (Abbas et al. 2010).

This paper employs two variables to measure the potential effects of recipient institutional quality on the development finance allocation decisions made by China. First, the Freedom House's Political Rights (FHPR) index is employed, ranging from 1 (high level of political rights) to 7 (political rights absent or virtually non-existent) (Freedom House 2018). The level of a state's institutional quality is often captured by using the Polity scores in the Polity IV dataset (see, among others, Dreher et al. 2018; Rich 2009). However, Polity does not include any nation with a population of less than five hundred thousand, which affects the majority of this research's units of analysis (Marshall, Gurr, and Jagers 2017). Therefore, this paper relies on the FHPR index. If Beijing would indeed maintain strict adherence to the principle of non-interference, one would expect to observe allocation of ODA and OOF irrespective of the recipient's institutional quality. If, however, the 'rogue donor' argument holds true, then ODA flows should target PICs with lower levels of institutional quality. In addition, OOF, considered to be guided by loan profitability and countries' loan repayment capacity, should be designated to PICs with higher levels of institutional quality. This is related to the fact that high institutional quality, in terms of political stability and rule-based governance, is a direct contributor to the profitability of OOF. The second variable which this analysis employs is the Control of Corruption Index – which ranges from –2.5 to 2.5, with lower values representing more corruption – as it is an often-used indicator for institutional quality (Dreher and Fuchs 2015; Dreher et al. 2018; World Bank 2018a).

Finally, this research controls for potentially influential alternative explanations. To control for recipient need, logged population size is used (taken from World Bank 2018b). Arguably, larger countries need more resources to develop, thus one would anticipate a strong positive correlation between population size and distributed development flows (Dreher and Fuchs 2015; Dreher et al. 2018; Thorvaldsdottir 2015). More specifically, it is expected that population size not only influences the allocation of ODA, but also of OOF, as larger countries have larger markets and thus draw in more commercial flows.

As an additional proxy for recipient need, per capita income is included (taken from World Bank 2018c). Empirical studies have repeatedly indicated that per capita income shapes the distribution of development finance (Dreher and Fuchs 2015; Dreher et al. 2018; Thorvaldsdottir 2015). Therefore, one would expect there to be a strong, negative association between Chinese ODA flows and the per capita income of recipient states. For an overview of the variables and their respective sources, see Table S1 via Supplementary Materials<sup>16</sup>.

## Statistical Analysis

### Econometric Analysis

To test the hypotheses put forth in Section 2, the following regression model is estimated:

$$of_{it} = \beta_0 + \beta_1 political_{it-1} + \beta_2 economic_{it-1} + \beta_3 institutional_{it-1} + \beta_4 control_{it-1} + a_t + \varepsilon_{it}$$

where  $of_{it}$  represents the dependent variable: China's official financing to a recipient country  $i$  in year  $t$ . The dependent variable is log-transformed; a standard procedure in situations where the outcome variable is positively skewed and contains a substantial portion of zeros.<sup>17</sup> The other explanatory variables consist of four vectors that have been outlined above. More explicitly,  $political_{it-1}$  captures the political variables of UNGA voting coincidence and recognition of Taiwan;  $economic_{it-1}$  comprises the economic variables, consisting of a country's natural resources index and its debt-to-GDP ratio; and  $institutional_{it-1}$  covers the institutional quality variables, including the FHPR index score and the Control of Corruption score. Lastly,  $control_{it-1}$  stands for the two control variables, i.e. a country's population size and per capita income.

All variables are measured with a temporal lag of one year because it is assumed that the interstate political and economic linkages, as well as the institutional quality characteristics, have to precede the outcome of interest. Subscript  $a_t$  stands for year-fixed effects, and  $\varepsilon_{it}$  represents a stochastic error

term. The main regression that is used to test the hypotheses is pooled OLS, to primarily account for cross-country variation. In the actual regressions, this equation will be expanded by separately examining the effects of the explanatory variables on the logarithmatised outcome variables  $oda_{it}$ ,  $oof_{it}$ ,  $grants_{it}$ , and  $loans_{it}$ . Summary statistics can be found in [Table 1](#).

## Results

[Table 2](#) shows the results when using the logged transformation of both the amount and number of China's financing flows to the Pacific Islands region as the paper's dependent variables. The models illustrate that, contrary to the expectation set out in Hypothesis 1, Beijing does not use state financing as a reward by providing more official financing to PICs that vote with China in the UNGA. This finding remains constant even if the number of Chinese projects is used as the dependent variable instead of the amount of China's

**Table 1.** Summary statistics.

Variable	Mean	Std. Dev.	Min.	Max.	N
<i>Dependent variables</i>					
OF (log)	5.326	7.586	0	19.551	192
OF Number (log)	0.561	0.739	0	2.485	192
OF/Vague (log)	5.464	7.694	0	19.551	192
OF/Vague Num. (log)	0.575	0.749	0	2.565	192
OF/All (log)	6.177	7.934	0	19.576	192
OF/All Num. (log)	0.635	0.795	0	2.773	192
ODA (log)	5.108	7.521	0	19.551	192
ODA Number (log)	0.541	0.726	0	2.485	192
ODA/All (log)	5.868	7.869	0	19.576	192
ODA/All Num. (log)	0.613	0.782	0	2.773	192
Grants (log)	4.598	6.999	0	18.725	192
Grants Number (log)	0.439	0.629	0	2.197	192
OOF (log)	0.571	2.823	0	18.541	192
OOF Number (log)	0.045	0.179	0	1.099	192
OOF/Vague (log)	0.953	3.802	0	19.313	192
OOF/Vague Num. (log)	0.076	0.239	0	1.386	192
OOF/All (log)	0.724	3.170	0	18.541	192
OOF/All Num. (log)	0.053	0.190	0	1.099	192
Loans (log)	2.136	5.816	0	19.366	192
Loans Number (log)	0.110	0.294	0	1.792	192
<i>Explanatory variables</i>					
IVC China	0.568	0.247	0	1	192
s2un	0.481	0.610	-1	1	192
Ideal-points distance	1.265	0.851	0.069	3.615	192
Taiwan recognition	0.432	0.497	0	1	192
Debt	35.823	16.979	7.523	86.986	130
Resources index	0.087	0.158	0	0.8	192
FHPR	2.229	1.497	1	6	192
Corruption	-0.275	0.404	-1.340	0.768	177
Population (log)	4.998	1.787	2.353	8.956	192
Per capita income	3024.076	2423.518	419.622	11682.770	185
English	0.0678	0.252	0	1	192

**Table 2.** Pooled OLS regression models of China's official financing determinants.

	Model 1	Model 2	Model 3	Model 4
	<b>OF (log)</b>	<b>OF (log)</b>	<b>OF Number (log)</b>	<b>OF Number (log)</b>
IVC China $t - 1$	0.588 (2.461)	3.336 (2.729)	-0.000806 (0.216)	-0.0302 (0.266)
Taiwan recognition $t - 1$	-8.800 (1.206)***	-6.912 (1.804)***	-0.991 (0.106)***	-0.815 (0.176)***
Resources index $t - 1$	9.462 (5.311)*	-2.982 (8.296)	0.828 (0.466)+	0.614 (0.810)
FHPR $t - 1$	0.585 (0.411)	-0.603 (0.666)	0.0245 (0.036)	-0.0291 (0.065)
Corruption $t - 1$	0.525 (1.346)	-1.288 (2.275)	-0.293 (0.118)*	-0.233 (0.222)
Population (log) $t - 1$	-0.00681 (0.633)	2.292 (1.102)*	-0.00729 (0.055)	0.102 (0.108)
Per capita income $t - 1$	0.453 (0.327)	1.901 (1.068)+	-0.0185 (0.029)	0.0634 (0.104)
Debt $t - 1$		0.0181 (0.041)		0.00104 (0.004)
Constant	4.740 (4.025)	-10.59 (6.769)	0.479 (0.353)	-0.170 (0.661)
Time fixed effects	Yes	Yes	Yes	Yes
<i>N</i>	164	121	164	121
<i>R</i> <sup>2</sup>	0.538	0.634	0.634	0.630

(Notes. Standard errors in parentheses. + $p < 0.1$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .)

official financing. Even though the IVC measurement is deemed to be more robust as it includes partial convergence as a voting alternative, whilst simultaneously excluding absences that may lead to overestimated levels of voting similarity, the robustness of the results is further tested by employing alternative voting indices. Yet, the results do not show significantly different results from those employing the IVC measurement (see Tables S2-S7 in Supplementary Materials). Although the models employing Gartzke's S-score (Tables S2-S4) occasionally yield statistically significant results, in particular concerning the correlation between *s2un* and China's official financing, the overall inconsistency of these findings strengthens the conclusion that there is no relationship between voting at the UNGA and China's financial flows. Tables S5-S7 replace the UNGA voting alignment indicators with the ideal point estimates. Besides one regression, however, this variable does not reach conventional levels of statistical significance.

The main regression models in Table 2 substantiate the expectation that China punishes those that recognise Taiwan in terms of the likelihood and extent to which official financing is received from Beijing, a finding that is significant across all four models at the .001 level of significance. Moreover, the distribution of official financing seems to be guided by China's resource needs, as Models 1 and 3 indicate that those PICs that produce more natural resources receive more financing. Furthermore, an increase in the Control of Corruption index (ranging from -2.5 to 2.5) is associated with receiving fewer projects from China, meaning that less corrupt PICs receive less official financing from China. However, this finding is limited to Model 3 because the other three corruption estimates employed in the different models fail to reach statistical significance.

Whilst these findings apply only to the aggregated value and number of China's financing activities in the Pacific, it is important to turn to the hypotheses in order to test if these aggregate results are directed by either

China's concessional finance flows (ODA) or by less concessional state financing (OOF). In Models 1–4 of [Table 3](#), China's official financing is disaggregated in the amount of ODA flows and the number of ODA projects. The findings largely overlap with [Table 2](#). The PICs' voting behaviour in the UNGA does not seem to influence China's ODA distribution, whereas the importance of recognition of Taiwan is reiterated in the aid allocation decisions of China ([Bräutigam 2009](#); [Dreher and Fuchs 2015](#); [Dreher et al. 2018](#); [Rich 2009](#)). The coefficient on the binary Taiwan recognition variable is negative and statistically significant at the .001 level for the measurement of China's ODA flows and grants. In addition, the models demonstrate that the production of natural resources is positively related with ODA and grant allocation decisions, albeit at various significance levels and only if the PICs' level of indebtedness is excluded from the regression analysis. Similarly, the Control of Corruption variable is only statistically significant in those models that include the number of ODA projects or grants and exclude the debt-to-GDP ratio variable. Finally, the coefficients of the explanatory variables do not show any noteworthy difference in the models that employ either ODA or grants as the main dependent variable.

Regarding the determinants of China's OOF distribution, [Table 4](#) indicates that most explanatory variables are not correlated with the outcome variables. This is especially surprising in relation to the economic variables – i.e. the resources index variable and the debt-to-GDP ratio variable. Somewhat unexpected is the role of Taiwan recognition, which seems to not only influence the designation of ODA flows, but also the allocation of OOF. Although the relation is only significant in Model 3, in the other OOF models the coefficients nevertheless move in a negative direction. Additionally, in line with the findings of [Dreher et al. \(2018\)](#), the voting behaviour of the PICs does not appear to influence China's decision-making as to the distribution of OOF. Finally, the FHPR index shows some correlation, albeit merely in relation to Model 3 and at the .1 significance level. More interesting is the FHPR's impact on the issuing of loans (Models 5 and 7), as the coefficients highlight that loans are primarily issued to PICs with lower levels of institutional quality, a finding that is significant at the .01 threshold. This finding seems to run counter to the presumption that OOF flows are guided by the principle of generating strong financial returns on issued loans.

If additional robustness checks are run by treating 'vague' flows as OOF projects, following the practice of [Dreher et al. \(2018\)](#), the relationship between the FHPR index and OOF becomes somewhat less ambiguous. As seen in [Table S9](#) in [Supplementary Materials](#), the FHPR index is strongly correlated with OOF/Vague flows, at the .01 level across all four models, which implies that PICs with lower levels of institutional quality receive more and larger amounts of OOF/Vague projects. Although this seems



**Table 3.** Pooled OLS regression models of China's ODA determinants.

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	ODA (log)	ODA (log)	ODA (log)	ODA Num. (log)	ODA Num. (log)	ODA Num. (log)	ODA Num. (log)	ODA Num. (log)	Grants (log)	Grants (log)	Grants (log)	Grants (log)	Grants Num. (log)	Grants Num. (log)	Grants Num. (log)	Grants Num. (log)
IVC China $t-1$	0.363 (2.524)	2.271 (2.829)	2.271 (2.829)	0.0107 (0.214)	-0.0664 (0.264)	-0.0664 (0.264)	-0.0664 (0.264)	-0.0664 (0.264)	-0.296 (2.333)	1.488 (2.594)	1.488 (2.594)	1.488 (2.594)	-0.0360 (0.194)	-0.0360 (0.194)	-0.0360 (0.194)	-0.0381 (0.233)
Taiwan recognition $t-1$	-8.599 (1.236)***	-7.182 (1.869)***	-7.182 (1.869)***	-0.965 (0.105)***	-0.809 (0.175)***	-0.809 (0.175)***	-0.809 (0.175)***	-0.809 (0.175)***	-7.391 (1.143)***	-6.316 (1.714)***	-6.316 (1.714)***	-6.316 (1.714)***	-0.787 (0.095)***	-0.787 (0.095)***	-0.787 (0.095)***	-0.640 (0.154)***
Resources index $t-1$	9.517 (5.445)+	0.878 (8.599)	0.878 (8.599)	0.806 (0.462)+	0.843 (0.804)	0.843 (0.804)	0.843 (0.804)	0.843 (0.804)	12.49 (5.035)*	0.418 (7.885)	0.418 (7.885)	0.418 (7.885)	1.057 (0.419)*	1.057 (0.419)*	1.057 (0.419)*	0.793 (0.707)
FHPR $t-1$	0.604 (0.421)	-0.518 (0.690)	-0.518 (0.690)	0.0156 (0.036)	-0.0350 (0.064)	-0.0350 (0.064)	-0.0350 (0.064)	-0.0350 (0.064)	0.297 (0.389)	-0.153 (0.633)	-0.153 (0.633)	-0.153 (0.633)	-0.0101 (0.032)	-0.0101 (0.032)	-0.0101 (0.032)	-0.0417 (0.057)
Corruption $t-1$	0.0549 (1.380)	-0.755 (2.358)	-0.755 (2.358)	-0.317 (0.117)**	-0.185 (0.220)	-0.185 (0.220)	-0.185 (0.220)	-0.185 (0.220)	0.783 (1.276)	-2.337 (2.162)	-2.337 (2.162)	-2.337 (2.162)	-0.237 (0.106)*	-0.237 (0.106)*	-0.237 (0.106)*	-0.220 (0.194)
Population (log) $t-1$	-0.112 (0.649)	1.749 (1.143)	1.749 (1.143)	-0.00648 (0.055)	0.0780 (0.107)	0.0780 (0.107)	0.0780 (0.107)	0.0780 (0.107)	0.164 (0.600)	1.634 (1.048)	1.634 (1.048)	1.634 (1.048)	-0.00356 (0.050)	-0.00356 (0.050)	-0.00356 (0.050)	0.0854 (0.094)
Per capita income $t-1$	0.345 (0.336)	1.247 (1.107)	1.247 (1.107)	-0.0223 (0.028)	0.0287 (0.103)	0.0287 (0.103)	0.0287 (0.103)	0.0287 (0.103)	0.346 (0.310)	1.460 (1.015)	1.460 (1.015)	1.460 (1.015)	-0.0100 (0.026)	-0.0100 (0.026)	-0.0100 (0.026)	0.0477 (0.091)
Debt $t-1$		0.0375 (0.042)	0.0375 (0.042)		0.00216 (0.004)	0.00216 (0.004)	0.00216 (0.004)	0.00216 (0.004)		0.00330 (0.039)	0.00330 (0.039)	0.00330 (0.039)				0.0000483 (0.003)
Constant	5.413 (4.127)	-7.107 (7.016)	-7.107 (7.016)	0.485 (0.350)	-0.00835 (0.656)	-0.00835 (0.656)	-0.00835 (0.656)	-0.00835 (0.656)	2.950 (3.815)	-6.222 (6.434)	-6.222 (6.434)	-6.222 (6.434)	0.426 (0.317)	0.426 (0.317)	0.426 (0.317)	-0.0398 (0.577)
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	164	121	121	164	121	121	121	121	164	164	121	121	164	164	121	121
R <sup>2</sup>	0.507	0.599	0.599	0.626	0.617	0.617	0.617	0.617	0.518	0.619	0.619	0.619	0.597	0.597	0.597	0.618

Standard errors in parentheses. + $p < 0.1$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**Table 4.** Pooled OLS regression models of China's OOF determinants.

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	OOF (log)		OOF (log)		OOF Num. (log)		OOF Num. (log)		Loans (log)		Loans (log)		Loans Num. (log)		Loans Num. (log)	
IVC China $t-1$	-0.921 (1.280)		0.135 (1.750)		-0.0453 (0.080)		0.0196 (0.104)		-0.167 (2.397)		3.336 (2.935)		-0.0412 (0.125)		0.101 (0.159)	
Taiwan recognition $t-1$	-0.679 (0.627)		-0.562 (1.156)		-0.0661 (0.039)+		-0.0832 (0.069)		-3.390 (1.174)**		-2.703 (1.939)		-0.165 (0.061)**		-0.209 (0.105)*	
Resources index $t-1$	2.362 (2.761)		-5.008 (5.320)		0.0553 (0.172)		-0.426 (0.315)		-5.412 (5.172)		-19.61 (8.921)*		-0.0330 (0.270)		-0.786 (0.482)	
FHPR $t-1$	0.254 (0.214)		0.490 (0.427)		0.0238 (0.013)+		0.0376 (0.025)		1.164 (0.400)**		0.483 (0.716)		0.0589 (0.021)**		0.0627 (0.039)	
Corruption $t-1$	1.140 (0.699)		-1.581 (1.459)		0.0708 (0.044)		-0.0941 (0.086)		1.199 (1.310)		-1.482 (2.446)		0.0560 (0.068)		-0.175 (0.132)	
Population (log) $t-1$	0.0770 (0.329)		0.456 (0.707)		-0.00200 (0.021)		0.0191 (0.042)		0.0912 (0.616)		1.865 (1.185)		0.00195 (0.032)		0.0444 (0.064)	
Per capita income $t-1$	0.111 (0.170)		0.889 (0.685)		0.00386 (0.011)		0.0306 (0.041)		0.424 (0.319)		1.795 (1.149)		0.0199 (0.017)		0.0596 (0.062)	
Debt $t-1$			-0.0358 (0.026)				-0.00171 (0.002)				-0.0106 (0.044)				-0.000689 (0.002)	
Constant	-0.427 (2.092)	Yes	-3.269 (4.341)	Yes	0.00136 (0.131)	Yes	-0.133 (0.257)	Yes	-0.632 (3.919)	Yes	-13.43 (7.279)+	Yes	-0.0335 (0.205)	Yes	-0.417 (0.393)	Yes
Time fixed effects	Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N	164		121		164		121		164		121		164		121	
R <sup>2</sup>	0.145		0.211		0.154		0.233		0.301		0.369		0.262		0.344	

Standard errors in parentheses. + $p < 0.1$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

counterintuitive, Model 1 indicates that OOF/Vague flows are nonetheless directed towards less corrupt PICs, which suggests that the institutional quality of recipient does play a role in the distribution of less-concessional finance.

Two additional robustness checks are carried out as can be seen in Tables S10-S13 in Supplementary Materials. The models indicate that if all financial flows to the PICs are included, thus not conditioning only on the flows that are recommended for research, the results stay largely the same. Secondly, by controlling for whether English is an official language, possible underreporting of financial to the PICs that do not officially use English is adjusted for. This is, however, not a recurring issue in the Pacific sample because only one country – Timor Leste – does not have English as an official language. Regardless, after controlling for this the results remain the same (see Tables S10-S11).

Taken together, these findings yield mixed support for this paper's hypotheses. Firstly, with regards to China's foreign policy interests, the analysis indicates that for the aid-dependent PICs, respecting the One-China policy is more important than voting alignment for the extent and likelihood of receiving official financing, ODA, OOF, grants, and loans. This finding is somewhat different from the results of recent studies on the determinants of China's development financing, such as those of Dreher and Fuchs (2015) and Dreher et al. (2018).

Secondly, the analysis provides limited support for the hypothesis that, as opposed to ODA, OOF flows are influenced to a greater extent by China's economic interests (H2). More explicitly, the evidence suggests that, instead of OOF, official financing flows and particularly ODA projects are driven by China's need to gain access to the PICs' natural resources.

Thirdly, the regressions provide limited evidence that the distribution of China's ODA is contingent on the institutional quality of its potential recipients. On the one hand, an increase in the Control of Corruption index (ranging from  $-2.5$  to  $2.5$ ) reduces the number of official financing projects, which, by extension, is particularly driven by the number of ODA projects and grants. On the other hand, the FHPR index appears to be statistically significant in models looking at the relationship between OOF projects and the number of loans. This latter conclusion supports, albeit to a limited extent, the rogue donor argument.

Lastly, although the explanatory variables fail to adequately explain the distribution of China's OOF, the lack of correlation between the economic variables and the different outcome variables employed across the various models is nevertheless a valuable insight. More specifically, the regressions demonstrate the lack of influence of the PICs' level of indebtedness on either the aggregate value and number of China's development projects or its disaggregated parts: ODA, OOF, grants, and loans. This reveals that the

allocation of China's OOF may not necessarily be driven by the creditworthiness of recipient countries. Most importantly, in line with the findings of Fox and Dornan (2018), the lack of a statistically significant relationship between the types of official financing and the PICs' debt-to-GDP ratio suggests that China does not engage in aggressive lending to the insolvent PICs who are unable to pay back the loans, which, in effect, leaves them vulnerable to China's influence. This mirrors a phenomenon known as 'debt-trap diplomacy' in which Beijing converts economic loss into geopolitical gain (Parker and Chefitz 2018; see also Dornan and Brant 2014; Zhang 2018a, 2018b). However, it is important to note that there were only 10 OOF-type transfers from China to these PICs in the time period under consideration; hence, the model may fail to estimate the precise causes of such rare events.

## Conclusion

With China continuing to expand its development footprint in the Pacific, Australia, New Zealand, and the United States have increasingly abandoned the region. Additionally, concern among traditional donors about their waning influence over the aid-dependent PICs, alongside China's heightened economic engagement with the island states, has sparked a number of vigorous debates. In spite of a burgeoning qualitative literature on the allocation of China's development finance to the PICs, to date there have been few quantitative attempts to examine China's official financing to the Pacific Islands region. Although this is primarily the result of Beijing's reluctance to disclose its overseas development activities, the current literature on China's distribution of state financing also tends to fixate on African recipients of Chinese development projects. This study has attempted to deepen existing research on China's development efforts by investigating the determinants of Beijing's financing flows to the PICs.

Following previous work by Dreher et al. (2018), this paper differentiates between China's different official financing flow types: ODA versus less-concessional forms of state financing, OOF. In line with the conclusions reached by Dreher et al. (2018), it was hypothesised that the allocation of ODA is primarily guided by Beijing's foreign interests, whilst OOF is largely driven by China's economic interests. It was also expected that the institutional quality of potential recipient PICs influences China's distribution of official finance, with the allocation of ODA being largely motivated by lower levels of institutional quality and of OOF by higher levels. To test these hypotheses, this paper has systemically explored the connections between Chinese state financing flows to thirteen Pacific Island states over the 2000–2014 period and different clusters of possible motivations behind China's official provision of financing, including: Beijing's foreign policy interests, Chinese economic interests, and the institutional quality of potential recipients.

In contrast to previous studies on Western foreign aid allocation and on China's distribution of development finance, this paper has found no evidence in support of the assumption that China either rewards or punishes countries based on their voting behaviour. Rather than demonstrate the salience of the PICs' voting compliance in the UNGA, the results reiterate the importance of state recognition of Taiwan. PICs with formal ties with the Chinese mainland were thus rewarded with official financing, in terms of likelihood and amount. To some extent, this analysis also indicates that natural resources are considered as part of China's development finance allocation process, as the PICs producing natural resources receive increased official financing, ODA in particular. On the other hand, this analysis has provided mixed support at best for the hypothesis that China acts as a 'rogue donor' by targeting PICs with lower levels of institutional quality. There is only weak evidence supporting the claim that the number of Chinese ODA projects and grants are concentrated on those PICs with higher levels of corruption, which goes against China's principle of non-interference.

In contrast, despite determining the drivers of China's official financing flows and particularly Beijing's allocation of ODA, this analysis has fallen short in convincingly demonstrating the particular motivations behind China's distribution of OOF. The only somewhat consistent evidence found was for the relationship between the quality of institutional setup and OOF, whereby PICs with lower institutional quality attract more OOF. Importantly however, and contrary to popular belief, China does not seem to engage in debt-trap diplomacy through practices of aggressive lending to the PICs, as neither the allocation of China's aggregate of official financing nor its disaggregated flows of ODA and OOF seem to be related to the PICs' level of indebtedness.

Given the scarce number of statistical studies on China's development efforts in the Pacific, this analysis calls attention to the need for more quantitative research on China's financing activities in the Pacific. Further research into the disaggregation of China's different types of state financing is not only recommended, but also much needed. More academic effort is required in tracking the provision of Chinese OOF to the PICs, especially given China's increasing role as a major non-traditional aid donor in the region. Furthermore, recent attempts aimed at mapping China's official financing in the Pacific Islands region continue to lump together Beijing's ODA and OOF under the 'aid' label. In doing so, China's different motivations behind the allocation of both disparate financing flows remain incorrectly associated with Chinese 'aid'. The apparent lack of adequate data and analysis on China's disaggregated official financing in the Pacific contributes to skewed debates on Chinese development activities in the region and

fosters misunderstandings of the motivations and determinants for its foreign aid.

## Notes

1. For an extensive literature review on China's aid distribution, see Carter (2017).
2. Referring to Chinese aid projects in the PICs, Australia's Minister for International Development and the Pacific, Concetta Fierravanti-Wells, stated: '[you have] got the Pacific full of these useless buildings which nobody maintains, which are basically white elephants' (Wembridge 2018).
3. For instance, according to the International Monetary Fund, Tonga, Vanuatu, and Samoa are at high risk of external debt distress and all have significant debt to Beijing (International Monetary Fund 2016a, 2016b, 2017). The public debt level in Tonga is around 43 per cent of GDP with 39 per cent being external debt. Two significant loans from China Exim Bank (US\$72.14 and US\$47.71 million) account for approximately two-thirds of Tonga's external debt stock and around 2 per cent is owed to the Bank of China (Dornan and Brant 2014, 353).
4. See also Smith (2018).
5. In April 2018, reports emerged that China had approached Vanuatu about the possibility of establishing a Chinese military base, which was later denied by both Chinese and Vanuatu officials (Williams 2018).
6. China has formal diplomatic relations with the Cook Islands, the Federated States of Micronesia, Fiji, Niue, Papua New Guinea, Samoa, Tonga, and Vanuatu. Kiribati, the Marshall Islands, Nauru, Palau, the Solomon Islands, and Tuvalu, on the other hand, maintain diplomatic relations with Taiwan.
7. For further discussion on whether or not China's official financing to the Pacific is tied to natural resource extraction in the Pacific, see Wesley-Smith (2013), Brant (2013) and Zhang (2017).
8. In this respect, reference is often made to the controversial Ramu nickel and cobalt mine located in Papua New Guinea that is financed by both the China Development Bank and China Exim Bank (Varrall 2018).
9. Projects listed as 'Vague Official Finance' have not been considered given the lack of information about the projects' level of concessionality or intent that is necessary to make a clear distinction between ODA and OOF.
10. The selection of the PICs is based on the categorisation of the United Nations Department of Economic Affairs on the world's Small Island Developing States (2018).
11. AidData's dataset contains four regional projects allocated to the Pacific of which only one flow is labelled as 'recommended for research', yet lacks any monetary value. This data scarcity provides further justification for the exclusion of regional flows in the analysis of China's financing flows to the PICs.
12. To further substantiate the IVC measure of foreign policy convergence, the voting similarity between the PICs that do and do not recognise Taiwan has been compared. Employing the IVC measure, the PICs that recognise Taiwan have an IVC score of 48%. In contrast, those PICs that have formal diplomatic relations with China show a substantially higher level of voting similarity, namely 63%. This difference is significant at any conventional level.
13. To account for PICs switching diplomatic recognition between China and Taiwan within short periods of time, only if PICs have had formal diplomatic relations with

Taipei or Beijing for over a year, the coding of the binary variable is changed accordingly.

14. Nauru is an illustrative case in terms of ‘chequebook diplomacy’, i.e. diplomatic recognition in return for financial assistance. On 21 July 2002, Nauru decided to sever its diplomatic relations with Taiwan when Beijing promised to grant the small island state US\$60 million and to relieve the country’s US\$77 million debt (Tak-ho 2002). At the time, Nauru faced significant financial distress and neared bankruptcy. When Taiwan refused Nauru President Rene Harris’ request for a fivefold increase in Taiwan’s annual aid (to US\$10 million), Harris approached China. Although Nauru had been a long-time ally of Taiwan, the island state accepted the Chinese monetary assistance in return for recognising Beijing. Three years later, prompted by China’s failure to come up with the pledged millions in aid and Taiwan’s assistance in paying off a debt of US\$13.5 million, Nauru switched its loyalty back to Taipei again (Su 2005; Van Fossen 2007).
15. The index variable is based on whether or not the PICs produced the following natural resources: bauxite, chromium, cobalt, copper, gold, nickel, crude petroleum, natural gas, phosphate, and silver. These commodities represent the natural resources that are most often produced by the PICs. If a country produces all ten resources, it gets a score of 1. If, however, it produces 5 out of 10, it gets a score of 0.5.
16. Supplementary Materials are available under the following URL: <https://osf.io/mwk6a/>.
17. The following transformation was performed:  $\ln(of_{it} + 1)$ .

## References

- Abbas, S. A., N. Belhocine, A. ElGanainy, and M. Horton. 2010. A historical public debt database. IMF Working Paper wp/10/245. <https://www.imf.org/external/datamapper/datasets/DEBT>
- Alesina, A., and D. Dollar. 2000. Who gives foreign aid to whom and why? *Journal of Economic Growth* 5 (1):33–63. doi:10.1023/A:1009874203400.
- Alesina, A., and B. Weder. 2002. Do corrupt governments receive less Foreign aid? *American Economic Review* 92 (4):1126–37. doi:10.1257/00028280260344669.
- Bailey, M. A., A. Strezhnev, and E. Voeten. 2017. Estimating dynamic state preferences from United Nations voting data. *Journal of Conflict Resolution* 61 (2):430–56. doi:10.1177/0022002715595700.
- Brant, P. 2013. Chinese aid in the South Pacific: Linked to resources? *Asian Studies Review* 37 (2):158–77. doi:10.1080/10357823.2013.767311.
- Brant, P. 2015. The geopolitics of Chinese aid: Mapping Beijing’s funding in the Pacific. *Foreign Affairs Snapshots*, March 4. <https://www.foreignaffairs.com/articles/china/2015-03-04/geopolitics-chinese-aid>
- Bräutigam, D. 2009. *The Dragon’s gift: The real story of China in Africa*. Oxford: Oxford University Press.
- Bräutigam, D. 2011. Aid ‘with Chinese characteristics’: Chinese Foreign aid and development finance meet the OECD-DAC aid regime. *Journal of International Development* 23 (5):752–64. doi:10.1002/jid.1798.
- Brazys, S., and A. Dukalskis. 2017. Canary in the coal mine? China, the UNGA, and the changing world order. *Review of International Studies* 43 (4):742–64. doi:10.1017/S0260210517000067.
- British Geological Survey. 2019. *World mineral statistics data*. Nottingham: British Geological Survey. <https://www.bgs.ac.uk/mineralsuk/statistics/>.

- Carter, B. 2017. *Literature review on China's aid. K4D helpdesk report*. Institute of Development Studies, University of Sussex. [https://assets.publishing.service.gov.uk/media/5a5f38d6e5274a443e00372b/177\\_China\\_aid.pdf](https://assets.publishing.service.gov.uk/media/5a5f38d6e5274a443e00372b/177_China_aid.pdf).
- Carter, D. B., and R. W. Stone. 2015. Democracy and multilateralism: The case of vote buying in the UN general assembly. *International Organization* 69 (1):1–33. doi:10.1017/S0020818314000186.
- Cave, D. 2018. A new battle for Guadalcanal, this time with China. *The New York Times*, July 21. <https://www.nytimes.com/2018/07/21/world/asia/china-australia-guadalcanal-solomon-islands.html>
- Davies, M., H. Edinger, N. Tay, and S. Naidu. 2008. *How China delivers development assistance to Africa*. Stellenbosch: Centre for Chinese Studies, University of Stellenbosch.
- Department of Foreign Affairs and Trade. 2018. Development assistance in the Pacific: Overview of Australia's aid program to the Pacific: Overview of Australia's aid program to the Pacific. <https://dfat.gov.au/geo/pacific/development-assistance/Pages/overview-of-australias-aid-program-to-the-pacific.aspx>
- Dornan, M., and P. Brant. 2014. Chinese assistance in the Pacific: Agency, effectiveness and the role of Pacific Island governments. *Asia and the Pacific Policy Studies* 1 (2):349–63. doi:10.1002/app5.35.
- Dornan, M., and J. Pryke. 2017. Foreign aid to the Pacific: Trends and developments in the twenty-first century. *Asia & The Pacific Policy Studies* 3 (4):386–404. doi:10.1002/app5.185.
- Dreher, A., and A. Fuchs. 2015. Rogue aid? An empirical analysis of China's aid allocation. *Canadian Journal of Economics* 48 (3):988–1023. doi:10.1111/caje.12166.
- Dreher, A., A. Fuchs, B. Parks, A. M. Strange, and M. J. Tierney. 2017. Aid, China, and growth: Evidence from a new global development finance dataset. AidData Working Paper 15. AidData, Institute for the Theory & Practice of International Relations, College of William & Mary. <https://www.aiddata.org/publications/aid-china-and-growth-evidence-from-a-new-global-development-finance-dataset>
- Dreher, A., A. Fuchs, B. Parks, A. M. Strange, and M. J. Tierney. 2018. Apples and dragon fruits: The determinants of aid and other forms of state financing from China to Africa. *International Studies Quarterly* 62 (1):182–94. doi:10.1093/isq/sqx052.
- Dreher, A., P. Nunnenkamp, and R. Thiele. 2008. Does US aid buy UN general assembly votes? A disaggregated analysis. *Public Choice* 136 (1):139–64. doi:10.1007/s11127-008-9286-x.
- Dreher, A., and J. Sturm. 2012. Do the IMF and the World Bank influence voting in the UN general assembly? *Public Choice* 151 (1–2):363–97. doi:10.1007/s11127-010-9750-2.
- Dreher, A., J. Sturm, and J. R. Vreeland. 2009a. Development aid and international politics: Does membership on the UN security council influence World Bank decisions? *Journal of Development Economics* 88 (1):1–18. doi:10.1016/j.jdeveco.2008.02.003.
- Dreher, A., J. Sturm, and J. R. Vreeland. 2009b. Global horse trading: IMF loans for votes in the United Nations security council. *European Economic Review* 53 (7):742–57. doi:10.1016/j.euroecorev.2009.03.002.
- Ferdinand, P. 2014. Foreign policy convergence in Pacific Asia: The evidence from voting in the UN general assembly. *The British Journal of Politics and International Relations* 16 (4):662–79. doi:10.1111/1467-856X.12019.
- Flores-Macías, G. A., and S. E. Kreps. 2013. The Foreign policy consequences of trade: China's commercial relations with Africa and Latin America, 1992–2006. *The Journal of Politics* 75 (2):357–71. doi:10.1017/S0022381613000066.
- Fox, R., and M. Dornan. 2018. China in the Pacific: is China engaged in “debt-trap diplomacy”? *Devpolicy Blog*, November 8. <http://www.devpolicy.org/is-china-engaged-in-debt-trap-diplomacy-20181108/>

- Freedom House. 2018. Freedom in the world comparative and historical data: Country and territory ratings and statuses, 1973-2018. <https://freedomhouse.org/report-types/freedom-world>
- Gartzke, E. 2006. The affinity of nations index, 1946–2002: Codebook Version 4.0. [https://pages.ucsd.edu/~egartzke/data/affinity\\_codebook\\_03102006.pdf](https://pages.ucsd.edu/~egartzke/data/affinity_codebook_03102006.pdf)
- Graue, C., and S. Dziedzic. 2018. Federal Minister Concetta Fierravanti-Wells accuses China of funding ‘roads that go nowhere’ in Pacific. *ABC News*, January 10. <http://www.abc.net.au/news/2018-01-10/australia-hits-out-at-chinese-aid-to-pacific/9316732>
- Henderson, J., and B. Reilly. 2003. Dragon in paradise: China’s rising start in Oceania. *The National Interest*, 72 (Summer): 94–104.
- Hosli, M. O., E. van Kampen, F. Meijerink, and K. Tennis. 2010. Voting cohesion in the United Nations general assembly: The case of the European Union. Paper presented at the ECPR Fifth Pan-European Conference, Porto, June 24–26.
- Institute, L. 2018. Pacific aid map. <https://pacificaidmap.lowyinstitute.org>
- International Monetary Fund. 2016a. IMF staff country reports: Tonga: 2016 Article IV consultation-press release; staff report; and statement by the executive director for tonga. <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Tonga-2016-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-Executive-43992>
- International Monetary Fund. 2016b. IMF staff country reports: Vanuatu: 2016 Article IV consultation-press release; staff report; and statement by the executive director for Vanuatu. <https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Vanuatu-2016-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-44361>
- International Monetary Fund. 2017. IMF staff country reports: Samoa: 2017 Article IV consultation-press release; staff report; and statement by the executive director for Samoa. <https://www.imf.org/en/Publications/CR/Issues/2017/05/15/Samoa-2017-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-Executive-44893>
- Isaksson, A.-S., and A. Kotsadam. 2018. Chinese aid and local corruption. *Journal of Public Economics* 159:146–59. doi:10.1016/j.jpubeco.2018.01.002.
- Keohane, R. O. 1967. The study of political influence in the general assembly. *International Organization* 21 (2):221–37. doi:10.1017/S0020818300013217.
- Klan, A. 2018. Chinese envoy tells Vanuatu it expects support in return for aid. *The Australian*, January 30. <https://www.theaustralian.com.au/national-affairs/foreign-affairs/chinese-envoy-tells-vanuatu-it-expects-support-in-return-for-aid/news-story/44fd8ded4a475a2a247e54d9dcf46344>
- Kurlantzick, J. 2006. *Beijing’s Safari: China’s Move into Africa and its implications for aid, development, and governance*. Washington DC: Carnegie Endowment for International Peace. [http://carnegieendowment.org/files/kurlantzick\\_outlook\\_africa2.pdf](http://carnegieendowment.org/files/kurlantzick_outlook_africa2.pdf).
- Kuziemko, I., and E. Werker. 2006. How much is a seat on the security council worth? Foreign aid and Bribery at the United Nations. *Journal of Political Economy* 114 (5):905–30. doi:10.1086/507155.
- Lijphart, A. 1963. The analysis of bloc voting in the general assembly: A critique and a proposal. *American Political Science Review* 57 (4):902–17. doi:10.2307/1952608.
- Lyons, K. 2018. Huge increase in Chinese aid pledged to the Pacific. *The Guardian*, August 8. <https://www.theguardian.com/world/2018/aug/08/huge-increase-in-chinese-aid-pledged-to-pacific>
- Maizels, A., and M. K. Nissanke. 1984. Motivations for aid to developing countries. *World Development* 12 (9):879–900. doi:10.1016/0305-750X(84)90046-9.
- Marshall, M. G., T. R. Gurr, and K. Jaggers. 2017. *Polity IV project: Political regime characteristics and transitions, 1800–2016. Dataset users’ manual*. Vienna: Center for Systemic Peace. <http://www.systemicpeace.org/inscr/p4manualv2016.pdf>.

- McCulloch, C. 2018. \$714m to be pumped into govt's 'Pacific reset' plan. *Radio New Zealand*, May 8. <https://www.radionz.co.nz/news/political/356903/714m-to-be-pumped-into-govt-s-pacific-reset-plan>
- Meick, E., M. Ker, and H. M. Chan. 2018. *China's engagement in the Pacific Islands: Implications for the United States*. Washington: U.S.-China Economic and Security Review Commission. <https://www.uscc.gov/sites/default/files/Research/China-Pacific%20Islands%20Staff%20Report.pdf>.
- Naím, M. 2007. Help not wanted. *The New York Times*, February 15. <https://www.nytimes.com/2007/02/15/opinion/15naim.html>
- Parker, S., and G. Chefitz. 2018. *Debtbook diplomacy: China's strategic leveraging of its newfound economic influence and the consequences for U.S. Foreign Policy*. Cambridge: Harvard Kennedy School, Belfer Center for Science and International Affairs. <https://www.belfercenter.org/sites/default/files/files/publication/Debtbook%20Diplomacy%20PDF.pdf>.
- Rich, T. S. 2009. Status for sale: Taiwan and the competition for diplomatic recognition. *Issues & Studies* 45 (5):159–88.
- Smith, G. 2018. Is there a problem with ... PRC aid to the Pacific? *China Matters*, April 4. <http://chinamatters.org.au/wp-content/uploads/2018/04/China-Matters-Recommend-04-April-2018-PRC-Aid-Pacific.pdf>
- Strange, A. M., M. Cheng, B. Russell, S. Ghose, and B. Parks. 2017. *AidData's tracking underreported financial flows (TUFF) Methodology, Version 1.3*. Williamsburg: AidData at William & Mary.
- Strüver, G. 2016. What friends are made of: Bilateral linkages and domestic drivers of Foreign policy alignment with China. *Foreign Policy Analysis* 12 (1):170–91. doi:10.1111/fpa.12050.
- Su, J. 2005. Nauru switches its allegiance back to Taiwan from China. *Taipei Times*, May 15. <http://www.taipetimes.com/News/front/archives/2005/05/15/2003254718>
- Swedlund, H. J. 2017. Is China eroding the bargaining power of traditional donors in Africa? *International Affairs* 93 (2):389–408. doi:10.1093/ia/iw059.
- Tak-ho, F. 2002. Win for Beijing as Nauru switches ties. *South China Morning Post*, July 22. <http://www.scmp.com/article/385859/win-beijing-nauru-switches-ties>
- Thorvaldsson, S. 2015. Behave or else? Aid and voting on the UN security council. Unpublished manuscript. <https://www.svanhildur.com/uploads/3/0/2/2/30227211/behaveorelse.pdf>
- Tull, D. M. 2006. China's engagement in Africa: Scope, significance and consequences. *The Journal of Modern African Studies* 44 (3):459–79. doi:10.1017/S0022278X06001856.
- U.S. Department of State. 2017. *U.S. Engagement in the Pacific*. Office of the Spokesperson. <https://www.state.gov/r/pa/prs/ps/2017/09/273839.htm>.
- United Nations Department of Economic Affairs. 2018. Small Island developing states. <https://sustainabledevelopment.un.org/topics/sids/list>
- Van Fossen, A. 2007. The struggle for recognition: Diplomatic competition between China and Taiwan in Oceania. *Journal of Chinese Political Science* 12 (2):125–46. doi:10.1007/s11366-007-9008-0.
- Varrall, M. 2016. Domestic actors and agendas in Chinese aid policy. *The Pacific Review* 29 (1):21–44. doi:10.1080/09512748.2015.1066414.
- Varrall, M. 2018. Understanding China's approach to aid. *Lowy Institute: The Interpreter*, January 12. <https://www.lowyinstitute.org/the-interpreter/understanding-chinas-approach-aid>
- Voeten, E. 2000. Clashes in the assembly. *International Organization* 54 (2):185–215. doi:10.1162/002081800551154.

- Voeten, E. 2013. Data and analyses of voting in the UN general assembly. In *Routledge handbook of international organization*, ed. B. Reinalda, 54–66. London & New York: Routledge.
- Vreeland, J. R., and A. Dreher. 2014. *The political economy of the United Nations security council: Money and influence*. Cambridge: Cambridge University Press.
- Wallis, J. 2017. Crowded and complex: The changing geopolitics of the South Pacific. *Australian Strategic Policy Institute: The Strategist*, April 24. <https://www.aspistrategist.org.au/crowded-complex-changing-geopolitics-south-pacific/>
- Wang, T. Y. 1999. U.S. Foreign aid and UN voting: An analysis of important issues. *International Studies Quarterly* 43 (1):199–210. doi:10.1111/0020-8833.00117.
- Wembridge, M. 2018. Australia lashes out at China's 'useless' Pacific projects. *Financial Times*, January 10. <https://www.ft.com/content/9bd0cb6a-f5a6-11e7-8715-e94187b3017e>
- Wesley-Smith, T. 2013. China's rise in Oceania: Issues and perspectives. *Pacific Affairs* 86 (2):351–72. doi:10.5509/2013862351.
- Williams, J. 2018. Australia shudders amid talk of a Chinese military base in its backyard. *The New York Times*, April 11. <https://www.nytimes.com/2018/04/11/world/australia/vanuatu-chinese-military-base.html>
- World Bank, World Development Indicators. 2018b. Population, total <https://data.worldbank.org/indicator/SP.POP.TOTL>
- World Bank, World Development Indicators. 2018c. GDP per capita (current US\$) <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- World Bank, World Governance Indicators 2018a. Control of corruption: Estimate <http://databank.worldbank.org/data/reports.aspx?source=worldwide-governance-indicators&Type=TABLE&preview=on>
- Xu, J., and R. Carey. 2014. China's development finance: What issues for reporting and monitoring systems? *China and International Development* 45 (4):102–13. doi:10.1111/1759-5436.12096.
- Zhang, D. 2017. China's diplomacy in the Pacific: Interests, means and implications. *Security Challenges* 13 (2):32–53.
- Zhang, D. 2018a. Chinese concessional loans Part 1 — Perceptions and Misperceptions. SSGM In Brief 2018/23. [http://dpa.bellschool.anu.edu.au/sites/default/files/publications/attachments/2018-11/ib\\_2018\\_23\\_zhang.pdf](http://dpa.bellschool.anu.edu.au/sites/default/files/publications/attachments/2018-11/ib_2018_23_zhang.pdf)
- Zhang, D. 2018b. Chinese concessional loans Part 2 — Pacific Indebtedness. SSGM In Brief 2018/29. [https://openresearch-repository.anu.edu.au/bitstream/1885/154727/1/ib2018\\_29\\_chinese\\_concessional\\_loans\\_part\\_2\\_-\\_pacific\\_indebtedness.pdf](https://openresearch-repository.anu.edu.au/bitstream/1885/154727/1/ib2018_29_chinese_concessional_loans_part_2_-_pacific_indebtedness.pdf)
- Zhang, D., and S. Lawson. 2017. China in Pacific regional politics. *The Round Table* 106 (2):197–206. doi:10.1080/00358533.2017.1296705.
- Zhang, D., and G. Smith. 2017. China's foreign aid: structure, agencies, and identities. *Third World Quarterly* 38 (10):2330–46. doi:10.1080/01436597.2017.1333419.