

RESEARCH ARTICLE

# Explaining variations in responsiveness to external pressure: Japan's aid policy and bureaucratic politics

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## Abstract

Although preceding studies on Japan's foreign aid tend to report that Japan's aid policy is receptive to US pressure, it remains unclear which direction the US wishes Japan to assist its aid programs and how bureaucratic politics of Japan reduces the magnitude of US influence. This paper pursues the first attempt to provide a theoretical framework for the direction of US influence on Japan's aid provision and to explore whether its impact varies across different types of aid. I utilize a new dataset on Japan's Official Development Assistance from 1971 to 2009 and employ both ordinary least squares and two-stage least squares regressions to handle the issues of reverse causality and joint decision-making. The combined results of quantitative and qualitative analyses suggest that the US tends to urge Japan to complement its aid efforts rather than to substitute them as substitution will allow Japan to increase its clout in strategically important recipients and the US attempts to minimize this risk by asking Japan to disburse aid in tandem. I also find that the allocation of Japanese grants is more receptive to US pressure than that of loans because the former is left to the discretion of the Ministry of Foreign Affairs that uses external pressure to win bureaucratic turf wars, whereas loans are determined through consultations among multiple agencies with constituencies that prioritize Japan's domestic interests. The findings are robust across different model specifications and different samples.

**Key words:** Aid allocation; bureaucratic politics; external pressure

Foreign aid has been one of the major tools of developed countries to attain their political objectives. Preceding studies often found that donors tend to disburse aid to advance their political and strategic interests, such as assisting governments of vital importance (Maizels and Nissanke, 1984; Schraeder *et al.*, 1998; Alesina and Dollar, 2000; Boschini and Olofsgård, 2007; Fleck and Kilby, 2010; Boutton and Carter, 2014) and/or altering the policies of recipients (Dunning, 2004; Kuziemko and Werker, 2006; Bueno de Mesquita and Smith, 2007; Dreher *et al.*, 2009a, 2009b; Bearce and Tirone, 2010; Lim and Vreeland, 2013; Carter and Stone, 2015) rather than merely meet recipients' needs. Although the use of aid to attain political objectives is not restricted to a particular donor, scholars often identify the US, the largest economy in the postwar era along with the greatest interest in maintaining global stability, as the most frequent user of aid as a foreign policy instrument because the efficacy of aid hinges largely on the resources available to the donor who disburses it (Meernik *et al.*, 1998; Apodaca and Stohl, 1999; Fleck and Kilby, 2010).<sup>1</sup>

<sup>1</sup>During the Cold War, the US directed large volumes of aid to anti-communist leaders, such as Mobutu Sese Seko in Zaire and Ferdinand Marcos in the Philippines. Similarly, since 9/11, the US has increased its aid levels to frontline states, such as Iraq and Afghanistan. The US has also disbursed substantial assistance to Egypt as a reward for concluding a peace accord with Israel, whereas as a punishment, it redirected aid from Zimbabwe, which failed to vote in tandem with the US while sitting on the United Nations Security Council (UNSC) (Maizels and Nissanke, 1984: 892).

Yet the efficacy of aid as a foreign policy tool depends also on the aid policies adopted by the others (Orr, 1990: 144). If other donors join the US efforts, Washington is more likely to attain its political objectives. Conversely, if other donors take measures that will offset the impact of American foreign aid, the US needs to expend more resources to achieve its ends. As cooperation from other donors, particularly from its allies, certainly helps the US attain its overarching political objectives, the US often keeps a watchful eye on the flows of aid disbursed by other donors. There are potentially two directions in which the US would ask allies to assist its aid programs. One way is to complement its aid efforts: the US may urge its allies to disburse aid to the same recipients. Another way is to substitute its aid efforts: the US may pressure its allies to disburse aid to countries that receive little US aid. Depending on which direction the US presses the allies to disburse aid, the probability the US achieves its diplomatic objectives will shift because substitution entails the costs of losing control over several developing countries, allowing other donors to pursue their own interests. To see whether and how the US attempts to minimize this risk, I examine both the direction and magnitude of US influence on lesser powers' aid allocation by focusing on the relationship between the US and Japan.

Although the US has applied pressure on various subordinate states, I focus on this binary relationship because Japan has been one of the largest donors of bilateral aid during the period of this study (1971–2009).<sup>2</sup> Despite its significance, Japan's aid policy has been criticized for its responsiveness to *gaiatsu* (external pressure), especially the one from the US (Calder, 1988; Orr, 1990; Miyashita, 1999, 2003; Lancaster, 2010).<sup>3</sup> For instance, at the 1983 Organization for Economic Co-operation and Development (OECD) conference, 'U.S. representatives reportedly presented Japanese delegates with a list of 20 countries for aid consideration, selected for their strategic importance' (Yasutomo, 1986: 104). Moreover, since the 1970s, the US and Japan have regularly held aid consultations (Inada, 1989: 402). Because postwar Japan depends heavily on the US for its security and trade, Japan frequently made concessions to demonstrate its willingness to support US foreign policy (Orr, 1990: 17). However, this does not mean that Japan has always succumbed to US pressure. Interestingly enough, different studies found that Japan seeks commercial interests through aid delivery, and that such aid policies have been repeatedly criticized by US officials (Orr, 1990: 125; Arase, 1995; Hook and Zhang, 1998; Schraeder *et al.*, 1998; Berthélemy and Tichit, 2004). Why is there inconsistency in previous findings? Are there any variations in Japan's responsiveness to external pressure? If so, what determines these variations? I address these questions by shedding light on domestic politics of Japan. Japan's aid policy is predominantly determined by bureaucratic administrators (Inada, 1989: 401), and different bureaucratic agencies are in charge of allocating grants and loans. Thus, I will analyze allocation of grants and loans separately to explore how differences in decision making influence the degree to which US interests shape Japan's aid policy.

I argue that the US applies pressure on Japan to complement its aid efforts rather than to substitute them because substitution will allow Japan to strengthen its ties with recipients and advance its own interests.<sup>4</sup> Such opportunistic behavior will reduce American influence on the recipients and prevent the US from achieving its overarching diplomatic objectives. To minimize this risk, the US pressures Japan to complement its aid efforts. I further assert that allocation of Japanese grants is more receptive to US pressure than that of loans because in Japan, grants are left to the discretion of the Ministry of Foreign Affairs (MOFA) that uses external pressure to win bureaucratic turf wars, whereas loans are determined through consultations among multiple bureaucratic agencies, including the one that represents the interests of Japanese domestic industry. Using a new dataset on Japan's Official Development

<sup>2</sup>While a growing literature on multilateral aid suggests that the US attempts to ease its burden through institutionalization, it still seems to preferentially employ bilateral channels in certain contexts as some donors (i.e., donors that rely heavily on US protection) are vulnerable to US pressure.

<sup>3</sup>*Gaiatsu* is defined as explicit external, especially American, pressure that attempts to change the course of action of the Japanese government. It often takes a form of expressed concerns or requests for concessions and is not necessarily accompanied by explicit threats of retaliation or use of force (Orr, 1990: 17).

<sup>4</sup>For instance, Japan may attempt to secure markets for domestic manufacturers (Schraeder *et al.*, 1998).

Assistance (ODA) from 1971 to 2009, I estimate both ordinary least squares (OLS) and two-stage least squares (2SLS) regressions to handle the issues of reverse causality and joint decision-making. I also conduct case studies to demonstrate how Japan changed its aid policies in response to US pressure. The results of empirical analyses support the argument.

## 1. Related literature

The responsiveness of Japan's foreign policy, including its aid programs, to external (especially US) pressure has been widely discussed in the preceding studies (Calder, 1988; Orr, 1990; Miyashita, 1999, 2003; Lancaster, 2010). Past theoretical studies often attributed Japan's receptiveness to external pressure to its heavy reliance on American security guarantees (Lake, 2009). Japan had no alternative alliance partners, and faced acute threats from China, the Soviet Union, and North Korea. Its self-imposed military constraints also exacerbated fears of US disengagement among the Japanese public (Cha, 2000).<sup>5</sup> Preceding studies tended to assert that Japan disbursed aid in accordance with US interests in order to deflect American complaints about unequal burden-sharing and reinforce the US–Japan security tie. For instance, Lake (1999: 182) argued that Japan's postwar dependence on US protection made it impossible to have freedom in policy making. Similarly, Miyashita (1999) posited that Japan's responsiveness to American pressure is primarily a result of the asymmetric interdependence between them. Several empirical analyses on Japan's aid allocation provided evidence to support these claims (Katada, 1997; Neumayer, 2003).

However, different empirical studies reported that there are dissimilarities between US and Japanese aid patterns: whereas the US seeks to advance its geopolitical and ideological interests, Japan's aid is driven primarily by its commercial interests (Schraeder *et al.*, 1998; Berthélemy and Tichit, 2004). Indeed, even in the 1980s, on average 21% of Japanese aid went to socialist countries, whereas only 6% of US aid was directed to such regimes (Schraeder *et al.*, 1998: 312). Provision of large volumes of aid from Japan to these countries during the Cold War arguably suggests that Japan was not entirely susceptible to US pressure. These mixed findings indicate that we need a different theoretical framework to understand variations in Japan's responsiveness to external pressure.

Moreover, preceding studies did not scrutinize the direction of US influence on Japan's aid patterns. As noted, there are potentially two directions in which the US might ask Japan to assist its aid programs: one is complementary and the other is substitution. Exploring the direction in which the US asks Japan to assist its aid programs is important because Japan's aid allocation affects the probability that Washington will achieve its diplomatic objectives. Since most previous studies did not explore why the US urged Japan to disburse aid to particular recipients, I provide a theoretical framework for the direction of US pressure on Japan's aid flows. Previous empirical studies also failed to exhibit consistent findings regarding US influence on Japan's aid policy as they tended to focus on one specific region or employ one particular type of assistance as a measure of American influence. The limited scope of their analyses resulted in mixed findings; whereas Katada (1997) found that in South and Central America, the US urges Japan to supplement its aid efforts, Neumayer (2003) demonstrated that Washington pressures Japan to complement its military assistance. Thus, it remains uncertain whether their findings will still hold even if we expand the scope of their analyses into different regions or employ a different measurement of US influence. A more systematic study needs to be conducted to provide more general insights into Japan's responsiveness to US pressure.

Another shortcoming of past studies is that they did not differentiate loans from grants,<sup>6</sup> even though they acknowledged that loans constituted a disproportionately large share of Japan's

<sup>5</sup>To reduce regional fears over the resurgence of Japanese militarism, since 1976, Japan has set its military expenditures less than 1% of GDP (Nester, 1996: 323).

<sup>6</sup>To the best of the author's knowledge, Potter and Van Belle (2004) is the first and the only quantitative study that analyzed grants and loans separately. Yet their research focused on media impact on Japan's aid allocation and did not investigate the relationship between US and Japanese aid flows.

ODA.<sup>7</sup> The allocation of loans and grants deserves separate attention because different bureaucratic agencies participate in their allocation, and these differences in the policy-making process largely affect the degree to which US interests shape their provisions. Japan's strong sectionalism in bureaucracy has been widely discussed, and its impact on formulating aid policy has drawn particular scholarly attention (Rix, 1980; Orr, 1990; Lancaster, 2010). If each ministry or bureaucratic agent attempts to maximize parochial interests through aid delivery, then who participates in the decision-making process undoubtedly affects Japan's aid allocation. Because the ratio of loans to ODA varies from year to year and across regions, I conduct separate analyses of Japanese grants and loans to explore both the direction and magnitude of US pressure on their allocations, and examine how bureaucratic politics in Japan influences the degree to which it responds to external pressure.

## 2. The argument

In the postwar era, the US formed an alliance with Japan to maintain security in East Asia. Although the US agreed to carry a heavy defense burden to provide security guarantees for Japan, such defense policies have frequently met severe domestic criticism in the US as they seemed to allow Japan to free-ride on American defense efforts. To circumvent domestic criticisms, US officials constantly urged Japan to share the burden in other issue areas, including foreign aid.<sup>8</sup> The lack of domestic support for aid programs has also prompted the US government to pressure Japan to share the cost of aid delivery.<sup>9</sup> For instance, the former US Secretary of State Henry Kissinger asserted that Japan should spend more on economic assistance rather than defense expenditures, and former US National Security Advisor Zbigniew Brzezinski articulated that Japan should increase its aid so that the total of both economic assistance and military spending reached 4% of GNP (Inada, 1989: 400). President Jimmy Carter also urged Japan to expand its aid budget and share the financial burden (Orr, 1990: 111).

Despite widespread public loathness to expand aid budget, foreign aid has been a major tool of the US government to advance its political interests. There seem to be at least two overarching objectives the US seeks to attain through aid provision. The first objective is the preservation of its sphere of influence by protecting the governments of strategically important locations from being toppled by anti-US rebels. There are ample historical examples in which the US has disbursed large volumes of aid to assist governments facing communist threats (e.g., Turkey and Greece) (Boschini and Olofsgård, 2007)<sup>10</sup> or combating terrorist groups (e.g., Afghanistan and Iraq).<sup>11</sup> The second objective is to increase US bargaining power vis-à-vis the recipients so that it can facilitate reform of economic institutions (Bearce and Tirone, 2010), promote democracy and human rights (Meernik *et al.*, 1998; Apodaca and Stohl, 1999; Lai 2003; Dunning, 2004), and alter their voting behavior in multilateral institutions (Kuziemko and Werker, 2006; Dreher *et al.*, 2009a, 2009b; Carter and Stone, 2015). Regardless of the differences in US diplomatic objectives, I argue that the US would press Japan to complement its aid efforts rather than substitute them as substitution would allow Japan to increase its clout in the recipient and advance its own interests.

If the primary goal was to preserve its sphere of influence, the US would urge others to disburse aid in tandem. Although ideally, the US would let other donors assist pro-US governments on its behalf

<sup>7</sup>Japanese policy-makers defended the predominance of yen loans based on Japan's own experience. They argued that loans would support recipients in their self-help effort and encourage them to avoid corruption and use financial resources efficiently in order to repay the debt (Hook and Zhang, 1998: 1054; Katada, 2002: 330).

<sup>8</sup>US leaders refrained from pressing Japan to increase military capabilities as it would enhance the regional fear about the resurgence of Japan's militarism.

<sup>9</sup>US citizens were not generally supportive of expanding aid budget as foreign aid basically means a transfer of resources from domestic citizens to foreigners (Milner and Tingley, 2010). Gilens (2001) attributes citizens' lack of support to their erroneous beliefs about the size of US aid budget.

<sup>10</sup>The US has also assisted pro-US groups (e.g., the Contras in Nicaragua) to overthrow anti-US governments.

<sup>11</sup>Anti-terrorist efforts began during the Cold War, and the US has dramatically increased its aid levels since the advent of the War on Terror (Fleck and Kilby, 2010; Boutton and Carter, 2014).

and reduce or eliminate the necessity for the US to provide aid, there are several reasons for the US not to adopt such a strategy. First, the volume of aid disbursed by other donors may not be sufficient to maintain pro-US regimes because no ally has financial resources comparable to those of the US. Second, the US administration would face global criticism if it reduced its aid levels substantially. For instance, when a proposal for reducing US aid by 45% was leaked, the Japanese government protested that ‘in the context of substantially reduced U.S. aid levels, it would be difficult to defend’ the new aid budget in the Diet (Orr, 1988: 751). Third, the withdrawal of US aid may increase the risk that other donors will act opportunistically: once lesser powers find that the US has lost its influence over particular states, they may attempt to enhance their own clout in them. Because a limited US presence would reduce its global influence and future diplomatic and investment opportunities, the US government would not dare focus on a small number of recipients (Bigsten, 2006: 21; Knack and Rahman, 2007: 195; Frot and Santiso, 2011: 65). Thus, the US attempts to retain influence on strategically important states and prevent other donors from increasing their clout in them.

If the primary purpose of US aid provision was to alter the behavior or policies of recipients, the US would also urge other donors to provide aid in tandem so that it could enhance its bargaining leverage with recipients while minimizing the risk of other donors seeking their own interests. If the US asks other donors to provide aid to a particular state in accordance with the initiation of its aid programs, the recipient may become more inclined to comply with American demand. If the US urges other donors to redirect their aid in accordance with the withdrawal of its aid, recipients are more likely to succumb to US threats because failure to follow US requests would mean the withdrawal of aid from multiple sources. By urging other donors to withdraw aid simultaneously, the US could also prevent them from enhancing their bargaining leverage vis-à-vis recipients. If the US instead focused on fewer recipients and allowed others to advance their interests, such as monopolizing the market of a developing country, the US would find it more difficult to convince them to withdraw aid as their benefits of maintaining relations with the recipient may surpass the costs of circumventing US pressure. For this reason, Washington urged allies to withdraw aid from the Sandinista Nicaragua in tandem with the US (Orr, 1990: 144). Similarly, following the Vietnamese invasion of Cambodia in 1978, the US officials pressured Japan to subdue the opinion of continuously providing Japan’s aid to Hanoi as they suspected that Japan took this opportunity to advance its commercial interests (Orr, 1990: 122). Accordingly, I derive the first hypothesis:

*Hypothesis 1: US aid patterns have a positive impact on the allocation of Japan’s ODA, meaning that Japan tends to disburse aid in line with the US.*

Although the US has constantly pressured Japan to disburse aid in tandem, Japan’s aid flows do not always coincide with US aid patterns because aid allocation is ultimately determined by domestic actors within Japan. Japan has never had an aid ministry, and decisions on aid allocation to individual recipients are left up to administration after the Diet approves the total aid budget (Yasutomo, 1986: 67; Inada, 1989: 406; Orr, 1990: 24). Participants in the decision-making process differ between grants and loans, and this substantially affects the impact of external pressure on their allocation. Allocation of grants is largely left to the discretion of the MOFA (Orr, 1990: 30; Arase, 1994: 178),<sup>12</sup> which is the lead agency in foreign affairs and has close ties with representatives from other countries. Yet this ministry lacks a strong domestic constituency and needs backing from abroad to preserve its influence within the bureaucracy (Orr, 1990: 107; Miyashita, 1999: 707). According to Orr (1990: 13), MOFA sometimes urged the US ‘to apply pressure in order to bolster the Ministry’s position relative to other ministries on many bilateral issues.’ MOFA’s sensitivity to global criticism as well as its desire

<sup>12</sup>Although 16 ministries are, in principle, able to participate in the decision-making process, MOFA coordinates their diverse interests (Arase, 1994: 178).

to win bureaucratic turf battles enabled the US to have profound influence on the allocation of Japanese grants.<sup>13</sup>

In contrast, the allocation of loans has been determined through consultations among three (previously four) agencies (Orr, 1990: 30; Arase, 1994: 178). In addition to MOFA, the Ministry for Economy, Trade, and Industry (METI) and the Ministry of Finance participate in allocation decisions.<sup>14</sup> The involvement of multiple agencies reduces MOFA's influence in the policy-making process and exacerbates the pulling and hauling among various bureaucratic agencies. In particular, METI, which represents the interests of Japanese industry, often seeks to advance the country's commercial interests.<sup>15</sup> Because Japanese loan programs frequently entailed construction of large-scale infrastructure in recipient states, they could bring considerable benefits to contractors. Therefore, numerous Japanese business companies, especially construction firms and trading companies, have carried out intense lobbying in Japan (Orr, 1990: 28). To protect and promote their interests, METI has been encouraging to direct aid to countries with a high economic potential for Japanese firms. According to Orr (1990: 37), 'MITI never opposes extending assistance to communist countries based on political grounds.'<sup>16</sup> Consequently, even during the Cold War, large volumes of yen loans were extended to communist countries, such as China and Laos (Inada, 1989: 405). Accordingly, the involvement of multiple agencies in the policy-making process reduces the impact of external pressure on the allocation of yen loans.

I further suspect that the characteristics of Japanese loans may also reduce the impact of US pressure on their allocation. Japanese ministries and agencies tend to become more selective when determining loan recipients. Contrary to grant aid, loans require repayment, and insolvency or even delay in repayment could cause serious financial loss to the lender. Japanese loan programs rely heavily on borrowing from the Fiscal Investment and Loan Program (FILP) and the General Account budget (Arase, 1995: 99).<sup>17</sup> Default means the loss of savings and pensions of Japanese citizens, which will immediately provoke domestic repercussions. Therefore, ministries and bureaucratic agencies, including MOFA, become more selective in determining loan recipients to ensure that loans are paid back in full. Orr (1990: 59) states that '[a]id, especially yen loans, demonstrates the government's confidence in a recipient country's stability.' The desire to avoid default also seems to reduce the impact of US pressure on the allocation of loans. Accordingly, I derive the second hypothesis:

*Hypothesis 2: The allocation of Japanese grants is more susceptible to US pressure than that of loans.*

### 3. Research design

I utilize the following five variables as the dependent variables of this study: the volumes of Japanese grants, technical assistance,<sup>18</sup> grants-tech (i.e., the aggregates of grants and technical assistance), the net disbursement of loans, and the net disbursement of ODA (i.e., the aggregates of grants-tech and loans) to each country in a given year (in constant 2015 US dollars).<sup>19</sup> The data come from

<sup>13</sup>MOFA assisted the US as long as *gaiatsu* would help expand its influence vis-à-vis other agencies. Therefore, its primary objective is not necessarily aligned with US interests.

<sup>14</sup>Until 2001, the Economic Planning Agency also participated in the policy-making process.

<sup>15</sup>Japanese trading companies have assisted local governments with drafting project proposals and sometimes submitted development plans directly to METI (Orr, 1990: 36, 60–65). Declining Japanese industries, such as aluminum makers and manufacturing companies, have also asked METI for help to move production overseas through the implementation of loan projects (Arase, 1995: 79–91, 129).

<sup>16</sup>METI was called the Ministry of International Trade and Industry (MITI) until 2001.

<sup>17</sup>FILP includes government pensions and postal savings. Grant aid draws on the General Account budget (i.e., taxpayers' money).

<sup>18</sup>Technical assistance includes provision of training and dispatchment of volunteers to recipients. MOFA exerts a significant influence on its allocation, although its influence has been waning recently (Orr, 1990: 30).

<sup>19</sup>I converted the flows into constant 2015 US dollars, using the DAC deflator. Until 2015, the provision of aid for military purposes had been prohibited in Japan (Rafferty, 2015).

MOFA's website (MOFA, 2016) and the sample covers both developed and developing countries for the period 1971–2009.<sup>20</sup> I take the natural logarithm of these variables (plus one) as they are highly right skewed. Although the bulk of studies on aid allocation use OECD data, I employ MOFA's dataset for the following reasons. First, it contains no missing values from 1969 to 2014.<sup>21</sup> A comparison between MOFA and the OECD data reveals that 1,875 observations (28% of the total) are missing from the OECD data between 1971 and 2009.<sup>22</sup> Second, MOFA data have a record of aid flows from Japan to countries not on the DAC's list. The OECD defines foreign aid as ODA if it is directed toward states on the DAC list and if it satisfies the condition of a grant element of at least 25%.<sup>23</sup> However, in reality, donors frequently give aid to countries not placed on the list, especially if the latter suffer catastrophic losses from natural disasters. Indeed, Japan extended its aid even to some OECD countries.<sup>24</sup> The use of MOFA data, therefore, helps us avoid sample selection bias. Third, MOFA data contain separate observations of various types of Japanese aid, allowing us to examine the differences across them.<sup>25</sup>

I utilize US aid as the key independent variable for this analysis. This variable measures the sum of US economic and military assistance, both of which come from the US Agency for International Development (USAID, 2016). I take the natural logarithm of this variable (plus one). When estimating OLS regressions, I use this variable in one year lag. If Japanese decision-makers allocate foreign aid based on US aid allocation in the previous year, the use of a lagged variable is justified. When estimating 2SLS regressions, however, I employ the unlagged variable to allow for the possibility that the US and Japan jointly determine their aid levels. I expect that the estimated coefficients have a positive sign, and that the coefficient I obtain when using grants as the dependent variable is greater than the one I obtain when using loans as the dependent variable.

I include a series of control variables found in the literature on the determinants of foreign aid. First, I include three variables that measure recipients' economic need. One is the natural logarithm of per capita gross domestic product (GDP), taken from the United Nations Statistics Division (UNSD, 2016). The 1992 ODA Charter of Japan articulates that humanitarian concerns (i.e., poverty reduction) are one of the primary objectives of Japan's ODA (MOFA, 1992: Secs. 2.4, 3.2[b]),<sup>26</sup> and preceding studies demonstrated that lower income levels are associated with higher aid levels (Chan, 1992: 11; Katada, 1997; Schraeder *et al.*, 1998; Tuman and Ayoub, 2004; Tuman *et al.*, 2009). I expect that grants are more likely to be directed to least developed countries partly because the recipients do not have to repay the debt, and partly because the Japanese government is more selective in loan recipients.

Next, I include the natural logarithm of population taken from the UNSD (2016). Although large populations generally enhance economic growth, previous research found a strong negative relationship between population size and Japan's aid volumes (Katada, 1997; Tuman *et al.*, 2009) and attributed this outcome to the fact that each country has a vote in the UN General Assembly (UNGA) and the votes of smaller states are less expensive to buy off (Katada, 1997: 941). Thus, population is expected to have a negative impact on the allocation of grants and loans.

<sup>20</sup>The data are unbalanced panel data as each country's entry into the international system and the OECD varies.

<sup>21</sup>Missing values in MOFA's data denote no transactions. I contacted MOFA and obtained confirmation.

<sup>22</sup>Of these, 295 observations contain positive values. The correlation between these two data sets is about 0.94.

<sup>23</sup>Moreover, during the Cold War, the OECD did not treat aid to communist regimes as ODA. After the end of the Cold War, such countries are categorized as 'part II' countries, and part II data are not available until 1993.

<sup>24</sup>Japan's net ODA to the following OECD countries (and years) takes a positive value: Chile (2010), Czech Republic (1996–2004), Estonia (2010), Greece (1973–1994), Hungary (1996–1998, 2000–2010), Israel (2010), Mexico (1994–1997, 2003–2006), Poland (1996–1998), Portugal (1978, 1980–1991), Slovakia (2000–2008), Slovenia (2010), South Korea (2008–2009), Spain (1971–1981), and Turkey (1971–1996, 2000, 2003, 2006–2010).

<sup>25</sup>Following the practice of previous research (i.e., Kuziemko and Werker, 2006), negative values of US and Japanese aid are replaced with zeros.

<sup>26</sup>The 1992 ODA Charter, adopted by the cabinet, is the first official document articulating Japan's aid philosophy.

Trade has been regarded as a key determinant of Japanese aid flows as Japan needs to expand its export markets and secure imports of raw materials owing to a small domestic market and the lack of natural resources (Chan, 1992: 7). Nevertheless, the findings of past studies are mixed. While some reported that there is a positive relationship between trade and Japan's aid flows (Maizels and Nissanke, 1984; Schraeder *et al.*, 1998; Tuman and Ayoub, 2004), others found that the ratio of trade to GDP is negatively associated with aid levels (Tuman *et al.*, 2009), and still others found no relationship between them (Chan, 1992: 13). I employ the natural logarithm of the sum of exports and imports between Japan and a country (plus one). The original data on trade are taken from the International Monetary Fund (IMF, 2016).<sup>27</sup> I suspect that trade is positively associated with both grants and loans, albeit more so to loans because wealthier states tend to trade more with Japan and are less likely to go into default.

Second, to control for the effects of the recipients' policy orientation, I introduce democracy, policy distance, and war into the analysis. Democracy is an indicator variable, coded 1 if a country has a democratic government and 0 otherwise. This variable comes from Cheibub *et al.* (2010). The spread of democracy has been one of the ideological goals of the US (Meernik *et al.*, 1998; Apodaca and Stohl, 1999; Lai, 2003; Dunning, 2004), and previous research found that the US tends to disburse more aid to democratic states (Alesina and Dollar, 2000: 49). Japan has historically assisted fledgling democracies to signal its support for this ideological goal of the US. For example, during the 1980s, Japan disbursed aid to recently democratized countries such as Jamaica (Brooks and Orr, 1985: 333), and the 1992 ODA Charter announced that democratization is one of the determinants of Japan's ODA (MOFA, 1992). Preceding studies found that Japan's ODA is associated with democratic regimes (Tuman and Ayoub, 2004; Tuman *et al.*, 2009). Therefore, I speculate that democracy has a positive impact on the allocation of Japanese grants and loans.

Previous research found a positive relationship between states' voting patterns at the UNGA and aid flows (Alesina and Dollar, 2000: 46). Thus, I introduce policy distance, which measures the absolute distance between the ideal point estimate of Japan and that of each state in a given year. The data on ideal point estimates come from Voeten *et al.* (2009). The longer the distance between their ideal points, the less likely it is that they vote in tandem. I expect that policy distance has a negative impact on the allocation of Japan's grants and loans.

I also include war, an indicator variable, which takes the value of 1 if the recipient is a primary party to an inter- or intra-state conflict and 0 otherwise. I create this variable based on the UCDP/PRIO Armed Conflict Dataset (Pettersson and Wallensteen, 2015). Since 1945, Japan has embraced the idea of *'heiwa kokka'*, a peace-loving nation, and used its aid as a tool to signal its pacifist spirit (Yasutomo, 1989–1990: 502). The 1992 ODA Charter declares that recipients' military spending and arms exports are determinants of Japan's ODA (MOFA, 1992). Japan is particularly reluctant to extend loans to war-torn states partly because they are less likely to repay the debt, and partly because the safety of the personnel, who are to be dispatched if a Japanese corporation wins the bidding, is not ensured.<sup>28</sup> For the same reason, Japan seems to refrain from sending technical experts to conflict zones. Accordingly, Japanese aid, especially loans and technical assistance, is less likely to be directed to countries engaged in armed conflicts.

Third, to control for the effects of natural disasters on aid allocations, I include total deaths, a variable that measures the natural logarithm of the number of deaths (plus one) caused by natural disasters that took place in a country in a given year. This variable comes from EM-DAT (CRED, 2016). Several scholars assert that donors disburse ODA to countries that have recently suffered from natural disasters regardless of their economic development (Frot and Santiso, 2011). I expect that as the number of deaths caused by natural disasters increases, Japan is more inclined to disburse aid, especially grant aid, to affected countries.

<sup>27</sup>I converted the original data into constant 2014 US dollars.

<sup>28</sup>The bulk of yen loans are allotted to the construction of economic infrastructure in recipients.



Fourth, I include attacks on Japanese, a variable that counts the number of terrorist attacks targeting Japanese citizens in a country. The original data are derived from the Global Terrorism Database (GTD) (START, 2016), and I take the natural logarithm (plus one). An attack launched against Japanese citizens seems to stimulate a domestic backlash, and the Japanese government is compelled to take measures to prevent the recurrence of such tragic events. I expect that this variable has a positive impact on the allocation of Japan's grants because they seem to work effectively in assisting recipient governments. However, the Japanese government might be reluctant to allow its citizens to be dispatched to countries where their safety is not guaranteed. Thus, I expect that this variable has a negative impact on the allocation of loans and technical assistance.

Fifth, I include UNSC member, an indicator variable, coded 1 if a country is a temporary member of the UNSC and 0 otherwise.<sup>29</sup> There has been a growing concern over major powers' vote-buying at the UNSC (Kuziemko and Werker, 2006; Dreher *et al.*, 2009a, 2009b). Lim and Vreeland (2013) demonstrated that aid from the Asian Development Bank (AsDB) tends to surge dramatically while the recipient is serving on the UNSC, and they used this finding as evidence for Japan's attempt to influence the Council's resolutions. If Japan also aims to alter voting patterns through bilateral channels, the flows of Japanese grants and loans must have a positive relationship with this variable. Summary statistics are presented in the Supplementary files.<sup>30</sup>

#### 4. Results

Table 1 reports the results of OLS regressions. The dependent variables in columns 1–5 are (Japanese) net disbursement of ODA, loans, grants-tech, grants, and technical assistance (tech assist), respectively. The coefficient estimates of US aid in all columns have a positive sign and statistical significance, supporting Hypothesis 1. It is noteworthy that this result holds even after I control for recipients' economic strength and humanitarian concerns, suggesting that Japan disburses aid in line with the US not simply because they compete over export markets or care victims of natural disasters. Moreover, the comparison between the coefficients in columns 2–5 reveals that *ceteris paribus*, the allocation of yen loans (0.12 in column 2) is less receptive to US influence than that of grants (0.16, 0.17, and 0.14 in columns 3–5, respectively). The results of Seemingly Unrelated Regressions also suggest that the estimated coefficient for loans is indeed smaller than the ones for grants and grants-tech, supporting Hypothesis 2.<sup>31</sup>

Table 1 further reveals that Japan allocated grants and loans for different purposes. The estimated coefficients of GDP per capita in columns 1, 3, and 4 are negative, whereas those in columns 2 and 5 are positive. The statistical significance in column 4 means that *ceteris paribus* as a state becomes wealthier, it is less likely to receive grants from Japan. The coefficient estimates of population are negative in columns 1–3, whereas those in columns 4–5 are positive. Only the coefficient in column 2 is statistically significant, suggesting that *ceteris paribus* as a state's population grows, Japan becomes less inclined to extend loans to that state. The estimated coefficients of trade are positive in all columns (except column 4), although only those in columns 2 and 5 are statistically significant. Thus, *ceteris paribus* as the volumes of trade between Japan and a recipient increase, Japan tends to raise the levels of loans and technical assistance to that state.

A country's policy orientation seems to be associated with the allocation of Japan's ODA. The coefficient estimates of democracy are positive and statistically significant in all columns (except column 2). Therefore, all else equal, Japan tends to increase the levels of grants once a country is democratized. Similarly, the negative significant sign of policy distance (except column 2) suggests that *ceteris paribus* as policy distance between Japan and a country widens, Japan is less inclined to give grants to that state. The estimated coefficients of war are negative and statistically significant in all columns, indicating that Japan has a strong disinclination to disburse both loans and grants to the countries at war. Although Japan's ODA has been criticized for its lack of a consistent aid philosophy (Yasutomo, 1986: 14;

<sup>29</sup>Permanent members are treated as missing values.

<sup>30</sup>See Table 3 in the Supplementary files.

<sup>31</sup>See Table 4 in the Supplementary files.

Table 1. Results of OLS regressions

	1 Net ODA	2 Loans	3 Grants-tech	4 Grants	5 Tech assist
Constant	20.768 (25.306)	39.192* (22.425)	-4.680 (24.401)	-27.639 (32.958)	-14.813 (23.462)
ln(US aid) <sub>t-1</sub>	0.194*** (0.034)	0.119*** (0.041)	0.160*** (0.031)	0.168*** (0.035)	0.138*** (0.029)
ln(GDPpc) <sub>t-1</sub>	-0.958 (0.708)	0.573 (0.860)	-0.233 (0.573)	-1.694** (0.843)	0.333 (0.598)
ln(Population) <sub>t-1</sub>	-1.121 (1.336)	-3.120*** (1.087)	-0.019 (1.301)	2.290 (1.743)	0.222 (1.239)
ln(Trade) <sub>t-1</sub>	0.091 (0.066)	0.178** (0.078)	0.081 (0.062)	-0.039 (0.108)	0.121* (0.069)
Democracy <sub>t-1</sub>	1.205** (0.485)	0.223 (0.555)	1.112*** (0.330)	0.912* (0.517)	1.213*** (0.324)
Policy distance <sub>t-1</sub>	-1.567*** (0.390)	-0.438 (0.458)	-1.857*** (0.364)	-0.961** (0.402)	-1.824*** (0.359)
War <sub>t-1</sub>	-1.375*** (0.388)	-1.551*** (0.680)	-0.892*** (0.227)	-1.432*** (0.465)	-0.780*** (0.222)
ln(Natural disasters) <sub>t-1</sub>	0.080** (0.037)	-0.064 (0.060)	0.055** (0.025)	0.111** (0.050)	0.042* (0.023)
ln(Attacks on Japanese) <sub>t-1</sub>	0.072 (0.830)	-0.998 (1.130)	0.493 (0.332)	1.724* (0.964)	0.169 (0.229)
UNSC member	-0.102 (0.262)	0.326 (0.348)	0.063 (0.169)	0.133 (0.208)	0.080 (0.164)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	5,477	5,477	5,477	5,477	5,477
R <sup>2</sup>	0.667	0.492	0.810	0.675	0.812

Clustered standard errors are reported within parentheses. \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$  (two-tailed).

Hook and Zhang, 1998), this anti-war orientation has been upheld since the Ohira cabinet (1978–1980), which refused to disburse aid to countries engaging in armed conflict (Yasutomo, 1986: 43). The coefficient in column 2, however, is much smaller than the one in column 5, suggesting that even if a country is involved in armed conflict, Japan may not reduce the amount of technical assistance as much as the volume of loans.

The estimated coefficients of natural disasters are positive and statistically significant in all columns (except column 2), although their sizes are relatively small. Therefore, all else equal, Japan tends to increase the levels of grants and technical assistance, albeit slightly, as the number of deaths caused by natural disasters rises. The estimated coefficients of attacks on Japanese are positive in all columns (except column 2) but only coefficient in column 4 is statistically significant. Thus, *ceteris paribus* Japan disburses more grants as the number of attacks targeting Japanese nationals in a country increases, although the relatively large size of standard errors means that uncertainty surrounding the effects of terrorism on Japan's aid disbursements remains high.

Surprisingly, membership of the UNSC does not seem to be associated with the allocation of Japan's ODA. The estimated coefficients of UNSC member are not statistically significant in all columns and their sizes are equally small (except column 2). This result contradicts with the findings of previous research on Japan's aid allocation (Vreeland and Dreher, 2014: 149–157), US aid allocation (Kuziemko and Werker, 2006), German aid allocation (Dreher *et al.*, 2015), and aid disbursements by multilateral institutions (Dreher *et al.*, 2009a, 2009b; Lim and Vreeland, 2013). To find out why our findings are mixed, I estimate regressions with different specifications and different data sets.<sup>32</sup> The overall results suggest that the inconsistencies stem from the use of different data sets. I also speculate that the outcome misses statistical significance partly because Japan has utilized its aid programs to

<sup>32</sup>Results are available upon request.

secure a temporary seat at the UNSC rather than to influence its resolutions, and partly because since 1971, Japan has used multilateral channels rather than bilateral ones to conceal its exercise of power over the recipient (Lim and Vreeland, 2013).<sup>33</sup>

**5. Issues of endogeneity**

Although the results of OLS regressions support both Hypotheses 1 and 2, OLS estimates would be biased upward if Japanese aid levels raise US aid volumes, whereas they would be biased downward if Japanese aid levels reduce the supply of US aid. To tackle the issues of reverse causality and joint decision-making, I estimate 2SLS regressions using US attacks as an instrument. This variable counts the number of terrorist attacks targeting US nationals in a potential recipient state in year  $t - 1$  (START, 2016). I take the natural logarithm of this variable (plus one). I consider the following system of equations:

$$A_{it} = \alpha Z_{it-1} + X_{it}\Gamma + \delta_t + \psi_i + \varepsilon_{it}, \tag{1}$$

$$Y_{it} = \beta A_{it} + X_{it}\Gamma + \delta_t + \psi_i + \nu_{it}. \tag{2}$$

Equation (1) is the first stage of the 2SLS system and equation (2) is the second stage. The variable  $A_{it}$  is the endogenous variable of interest, the volume of US aid disbursed to a particular recipient  $i$  in year  $t$ .  $X_{it}$  is a vector of country-year covariates,  $Y_{it}$  denotes Japan’s aid,  $\delta_t$  is year fixed effects,  $\psi_i$  is country fixed effects, and  $Z_{it-1}$  denotes US attacks. The error term  $\varepsilon_{it}$  in (1) (or  $\nu_{it}$  in (2)) captures all factors that affect US aid (Japan’s aid) other than covariates and fixed effects. OLS estimator of equation (2) would be biased if these two error terms are correlated owing to the presence of unobservable common factors (i.e., omitted variables) that affect both US and Japanese aid policies. To overcome the endogeneity problem, I estimate equation (1) and save the fitted values  $\hat{A}_{it}$ , which are defined as

$$\hat{A}_{it} = \alpha Z_{it-1} + X_{it}\Gamma + \delta_t + \psi_i. \tag{3}$$

That is,  $\hat{A}_{it}$  exclude the residual of the first-stage regression that is possibly correlated with  $\nu_{it}$ . The 2SLS second stage regresses  $Y_{it}$  on  $\hat{A}_{it}$ ,  $X_{it}$ , and the fixed effects. This means that the 2SLS estimator is consistent even in the presence of the omitted variables (Wooldridge, 2013).

The instrumental variable must satisfy the following two conditions. First, it must be correlated with the endogenous regressor (i.e., US aid). Previous research demonstrated that the US tends to disburse more aid as the number of terrorist attacks targeting Americans increases (Boutton and Carter, 2014). I also find that the coefficient of US attacks in the first stage is positive and statistically significant (see column 6 in Table 2). According to Neumayer and Plümper (2011), US citizens frequently fall victim to international terrorism, and they attributed this fact to the extensive presence of US military personnel outside the homeland. Since World War II, the US has formed security alliances with numerous countries and stationed its troops inside their territories to preserve its strategic interests and maintain global stability. For terrorist groups, however, the presence of US troops appears to be both a threat to their existence and a hindrance to the achievement of their political goals. Thus, they often choose US personnel as the primary target of their attacks (Crenshaw, 2001: 432). Following attacks, the US government frequently increases its aid levels to assist the government of the targeted state, to restore public order, and to improve security.

Second, the instrument must be uncorrelated with the structural error term. Previous research on aid allocation and Japanese foreign policy suggests that the second condition also holds. In the postwar era, the general public in Japan tends to think Japan should uphold Article 9 of the Constitution,

<sup>33</sup>It is equally plausible that the decisions of the AsDB are mere reflections of the interests of the US, another key shareholder of the bank, as Japan is vulnerable to US pressure even at the AsDB.

**Table 2.** Results of 2SLS regressions

	1 Net ODA	2 Loans	3 Grants-tech	4 Grants	5 Tech assist	6 First stage
Constant	-2.691 (25.777)	37.574 (24.461)	-16.824 (23.120)	-44.346 (34.505)	-23.682 (22.698)	42.470 (27.176)
ln(US aid)	0.785*** (0.226)	0.154 (0.240)	0.463*** (0.137)	0.587** (0.238)	0.358** (0.148)	
ln(GDPpc) <sub>t-1</sub>	0.409 (0.837)	0.668 (1.020)	0.475 (0.615)	-0.720 (1.009)	0.850 (0.641)	-2.257*** (0.572)
ln(Population) <sub>t-1</sub>	-0.731 (1.328)	-3.098*** (1.091)	0.180 (1.223)	2.567 (1.794)	0.366 (1.166)	-0.880 (1.486)
ln(Trade) <sub>t-1</sub>	0.114 (0.073)	0.180** (0.077)	0.093 (0.065)	-0.023 (0.108)	0.130* (0.070)	-0.031 (0.055)
Democracy <sub>t-1</sub>	1.164** (0.493)	0.214 (0.537)	1.088*** (0.327)	0.881* (0.503)	1.194*** (0.319)	-0.031 (0.383)
Policy distance <sub>t-1</sub>	0.209 (0.757)	-0.347 (0.879)	-0.956* (0.490)	0.295 (0.838)	-1.172** (0.515)	-3.040*** (0.415)
War <sub>t-1</sub>	-1.237*** (0.413)	-1.565** (0.674)	-0.834*** (0.215)	-1.341*** (0.465)	-0.743*** (0.208)	-0.454 (0.372)
ln(Natural disasters) <sub>t-1</sub>	0.028 (0.041)	-0.074 (0.059)	0.025 (0.027)	0.073 (0.052)	0.018 (0.025)	0.054 (0.036)
ln(Attacks on Japanese) <sub>t-1</sub>	-0.491 (0.736)	-1.014 (1.163)	0.215 (0.299)	1.329* (0.718)	-0.030 (0.273)	0.179 (0.582)
UNSC member	-0.227 (0.296)	0.302 (0.341)	-0.011 (0.199)	0.039 (0.230)	0.023 (0.185)	0.214 (0.237)
ln(US attacks) <sub>t-1</sub>						1.204*** (0.280)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,477	5,477	5,477	5,477	5,477	5,477
R <sup>2</sup>	0.563	0.490	0.775	0.629	0.791	0.715

Clustered standard errors are reported in parentheses. \**p* < 0.1, \*\**p* < 0.05, \*\*\**p* < 0.01 (two-tailed). The Kleibergen–Paap rk Wald *F* statistic is 18.505 in columns 1–5.

which strictly prohibits the possession of a military and the use of troops except for defensive purposes. Although the Japanese government attempted to expand the mandate of Self-Defense Forces (SDF) by passing the International Peace Cooperation Law in 1992, the actual participation of SDF in UN peacekeeping missions remained low. Owing to the limited presence of troops abroad, Japanese nationals have been less susceptible to terrorist attacks than Americans. This means that US attacks and attacks on Japanese are not correlated, and that the instrument is unlikely to have a direct impact on the allocation of Japan's ODA, although it may still affect the latter through US aid allocation. In addition, previous research on aid delivery revealed that the US may not increase its aid levels after observing terrorist attacks against foreign nationals. For example, Boutton and Carter (2014) found no evidence that US aid levels are associated with the number of terrorist attacks targeting non-US nationals, even if the victims are from a formal ally of the US. Given that even the US, which possesses the interests in maintaining global stability, is reluctant to disburse aid to protect the interests of its allies, the lesser powers, which normally do not possess such interests, are unlikely to voluntarily increase their aid levels following the incidents targeting US nationals. Indeed, Potter and Van Belle (2004) found no evidence that Japan's aid allocation is associated with negative media coverage, such as global terrorist activities. Note that even at the onset of the War on Terror, the US government had to urge Japan to disburse aid to neighboring states of Afghanistan (MOFA, 2002).

These findings suggest that in the absence of US pressure, Japan is unlikely to give aid to compensate the damage caused by terrorism or to show its sympathy to foreign victims of terrorist attacks. To determine the validity of this claim, I perform the following placebo tests. First, I estimate OLS regressions including a variable that counts the number of terrorist attacks targeting British nationals in a country. Second, I estimate OLS regressions with a variable counting the total number of terrorist attacks minus the number of terrorist attacks targeting US and Japanese nationals in a country. I find that neither of these variables has a positive and significant influence on the allocation of Japan's ODA.<sup>34</sup> I also estimate 2SLS regressions with another instrumental variable and test for the validity of overidentifying restrictions.<sup>35</sup> Hansen's *J* statistic fails to reject the null hypothesis that all overidentifying restrictions are jointly valid at the 5% level.

As long as these two conditions are met, *Z* can be used to estimate the causal effect of US aid on Japan's aid (Morgan and Winship, 2015). Table 2 presents results of 2SLS estimation.<sup>36</sup> Column 6 reports the results of the first stage.<sup>37</sup> The estimated coefficient of US attacks has the expected positive sign, meaning that terrorist attacks increase the volume of US foreign aid. Columns 1–5 present the results of the second stage. The estimated coefficients of US aid are positive and statistically significant in columns 1 and 3–5, although the loss of statistical significance in column 2 seems to be caused by the increase in standard errors. Because the result in column 2 does not pass the robust regression-based test,<sup>38</sup> here I compare the estimate in column 2 in Table 1 and those in columns 1 and 3–5 in Table 2.<sup>39</sup> Because the IV influences the volume of Japanese aid only through US aid (see Fig. 1), I interpret the coefficient of interest,  $\beta$ , in (2) as showing the causal effect of a change in

<sup>34</sup>See Tables 5–6 in the Supplementary files.

<sup>35</sup>I employ US arms exports, a variable that measures the volume of US arms exports to a country, as the second instrumental variable. See Table 7 in the Supplementary files.

<sup>36</sup>The Kleibergen-Paap rk Wald *F* statistic is 18.505 in columns 1–5.

<sup>37</sup>All exogenous variables in the second stage are included in the first stage as instruments. Thus, trade (policy distance) still measures the amount of trade (the distance of ideal point estimates) between Japan and a country.

<sup>38</sup>The robust regression-based test (Wooldridge, 1995) checks whether regressors that are treated as endogenous in the model are in fact exogenous. The test statistics of columns 1–5 are  $p = 0.002, 0.834, 0.015, 0.076, \text{ and } 0.080$ , respectively, meaning that the tested variables in columns 1, 3–5 must be treated as endogenous.

<sup>39</sup>The estimated coefficient of unlagged US aid using yen loans as the dependent variable is 0.105, which is statistically significant at the 5% level.



Fig. 1. A causal graph.

US aid, which is induced by the change in US attacks, on the change in Japan's aid.<sup>40</sup> The estimates imply that an additional 1% rise in US aid, caused by terrorist attacks, will increase Japan's net ODA, grants-tech, grants, and technical assistance by 0.79, 0.46, 0.59, and 0.36%, respectively. Since the increase in loans is just 0.12% (column 2 in Table 1), I conclude that the supply of US aid has a greater impact on the allocation of grants than that of loans, thereby supporting Hypothesis 2. Although there are several differences between Tables 1 and 2,<sup>41</sup> the central results regarding the impact of US aid on Japan's aid allocation remain intact (i.e., Hypotheses 1 and 2 are supported).

One may think that the increase in Japan's aid to a US strategic location followed by the increase in American aid does not necessarily mean that the US applied pressure on Japan to disburse aid to the particular recipient because Japan, which anticipated future US pressure, might have voluntarily increased its aid to that country. However, I disagree with this interpretation due to the following reasons. First, until the US exerts pressure, Japanese officials are not certain whether the change in Japan's policy actually meets US interests because the US may wish to exclude interference from other countries. Second, US pressure helps the MOFA convince other bureaucratic agencies of the necessity of changing Japan's aid policy. To strengthen its bargaining power, therefore, MOFA officials have an incentive to wait for US pressure. Third, Japan has employed its aid policy to signal its willingness to assist US overarching political objectives. If Japan altered its aid policy before the US applying pressure, it could not credibly signal its willingness because Washington might perceive that Japan is simply advancing self-interests. To demonstrate that Japan sacrifices its interests to accommodate US concerns, Japan needs to wait for US pressure before changing its aid policy. Indeed, in all cases I examined (see the next section), I found that Japan shifted its aid policy after it faced US pressure. The combined results of quantitative and qualitative analyses, therefore, suggest that Japan's aid has been receptive to US pressure.

To evaluate the robustness of my empirical results, I conducted a series of additional tests, and reported the results in the Supplementary files. The central findings remained largely unaffected.

## 6. Cases

The findings in the previous section reveal that when American strategic interests were threatened by terrorist activities, the US tended to increase its foreign aid to the affected state in the following year and apply pressure on Japan to follow suit. Yet combatting terrorism is just one of the many motives that drive US aid provision. To see how other interests prompt the US to exert pressure on Japan, and whether Japan changes its aid programs in response to US pressure, I conducted case studies. The cases include Nicaragua, the Gulf War, Vietnam, China, Russia, and North Korea; however, I only present the case of China in this paper and relegate other cases to the Supplementary files.

## 7. China

When the Chinese government brutally suppressed prodemocracy demonstrators in Tiananmen Square on 4 June 1989, the US and major European powers strongly accused China of human rights

<sup>40</sup> Assuming monotonicity, I alternatively interpret  $\beta$  as showing the *average* causal effect for observations that comply with the instrument (i.e., a *local average treatment effect*). Compliers are observations that receive more US aid following increases in the number of terrorist attacks targeting US citizens.

<sup>41</sup> The estimated coefficients of GDP per capita in columns 1 and 3 flip sign and the one in column 4 becomes statistically insignificant. The coefficient estimate of population in column 3 flips sign, the ones of policy distance in columns 1 and 4 change sign and become statistically insignificant, and the statistical significance of natural disasters in columns 1, 3–5 disappears. The estimated coefficients of attacks on Japanese in columns 1 and 5 and the one of UNSC member in column 3 flip sign, although they remain statistically insignificant.

abuses, and decided to impose economic and diplomatic sanctions against it. US President George H.W. Bush publicly deplored the military crackdown and suspended arms sales to China (Skidmore and Gates, 1997: 521). Sino–American relations became further strained over the treatment of Fang Lizhi, a Chinese prodemocracy activist who was in the custody of the American embassy in Beijing. Although the US granted asylum to Fang, the Chinese government issued an arrest warrant for this political dissident (Miyashita, 2003: 61–62). On 20 June, President Bush, under pressure from the Congress, expressed his opposition to World Bank loans to China, and on 26 June, the World Bank announced the suspension of these loans (Kesavan, 1990). On 29 June, the US House of Representatives passed an amendment to the foreign aid bill, introducing more sanctions on China. The amendment was also approved by the Senate on 14 July (Skidmore and Gates, 1997: 522).

Japan was initially reluctant to take punitive measures against China. On 7 June, Prime Minister Sosuke Uno stated that while the military crackdown was regrettable, he would refrain from denouncing the Chinese government. He also denied that Japan might apply sanctions against China (Kesavan, 1990: 672). Similarly, Foreign Minister Hiroshi Mitsuzuka stated that he was not yet thinking of taking punitive action against China (Kesavan, 1990: 672). The Japanese government believed that sanctions were counterproductive as they would provoke Chinese nationalistic sentiments and jeopardize the Sino–Japanese relationship (Miyashita, 2003: 58). Japanese corporations were also opposed to the suspension of aid as they had high commercial stakes in China (Miyashita, 2003: 56).

Japan's reluctance to take punitive measures against China provoked vehement criticism from the US and Western European countries. The Western media accused Japan of taking a soft line on China's human rights abuses and suspected that Japanese firms were seeking to monopolize the Chinese market by sending their staff back to China soon after the incident (Miyashita, 2003: 59). The US Congress also hardened its criticism of Japan's equivocal position on China's human rights abuses (Kesavan, 1990: 675). In response to this mounting international criticism, on 20 June 1990, the MOFA announced that it would postpone the introduction of the third aid package (\$5.2 billion loan program) to China (Miyashita, 2003: 59). Although MOFA officials did not believe that sanctions were effective in altering China's behavior, they decided to act in concert with Western countries to avoid provoking the US Congress and avert international isolation (Zhao, 1993: 170–171; Miyashita, 2003: 56, 70).

Shortly after the suspension of Japan's ODA, Japanese policymakers and business leaders called for the early resumption of loans and normalization of relations with Beijing. Yet MOFA officials and the Foreign Ministry, who were under strong foreign pressure, objected to the resumption of foreign aid. For instance, when the new Prime Minister Toshiki Kaifu attempted to partially resume the yen loans, the Foreign Ministry suggested that it would not be a good idea to resume aid without US consent. In particular, Deputy Foreign Minister Takakazu Kuriyama and Vice Minister for International Affairs Hisashi Ogawa stated that 'Japan's unilateral action might cause a major strain in U.S.-Japan relations and alienate Japan from the other G-7 members' (Miyashita, 2003: 66).

US pressure on Japan to sustain a freeze on aid mounted following the deterioration of the Sino–US relationship over the Fang incident. In October 1989, US Undersecretary of State Robert Kimmitt warned Japanese Vice Foreign Minister Hisashi Owada that the US government would not abruptly lift the aid sanctions on China (Kesavan, 1990). In December, National Security Adviser Brent Scowcroft warned Japan not to resume the yen loans too quickly (Zhao, 1993: 172). In early March 1990, Secretary of State James Baker told Japanese Foreign Minister Taro Nakayama that the US was opposed to lifting the ban on non-humanitarian aid to China, and that it would expect Japan to refrain from resuming the yen loans until Beijing allowed Fang and his family to flee the country (Miyashita, 2003: 67). In late April, when an LDP member, Toshio Yamaguchi, visited Washington to discuss trade issues, Brent Scowcroft reminded him that Japan should not unilaterally lift its sanctions on China (Miyashita, 2003: 67). In May, Scowcroft told former Foreign Minister Hiroshi Mitsuzuka that 'the United States does not want to see the loans to China being restored too quickly' (Miyashita, 2003: 62). Facing US pressure, the MOFA concluded that Japan should not unilaterally lift the ban on economic assistance to China.

After December 1989, the US–China relationship gradually ameliorated. On 8–9 December, Brent Scowcroft visited Beijing to pursue improved US–China relations. On 14 December, China announced that it was ready to discuss the Fang Lizhi issue with the US. On 19 December, President Bush announced the lifting of the congressional ban on the Export–Import Bank loans to China (Kesavan, 1990). On 10 January 1990, the Chinese government declared the termination of martial law, and on 20 January, the government released the prodemocracy demonstrators who were arrested during the 4 June military crackdown (Miyashita, 2003: 65). On 27 February, the World Bank partially lifted a freeze on the loans to China, although the US Congress remained adamantly opposed to the full resumption of World Bank loans until China dropped charges against Fang Lizhi (Kesavan, 1990; Miyashita, 2003: 66). On 25 June 1990, the Chinese government finally allowed Fang Lizhi to leave the country. While the release of Fang did not elicit a full resumption of World Bank loans, President Bush informed Prime Minister Toshiki Kaifu that he would not object to Japan’s resumption of the loans to China (Dowd, 1990). Once Bush has given his approval, at the July 1990 G-7 summit in Houston, Prime Minister Kaifu announced that Japan would gradually resume the yen loans to China.

## 8. Conclusion

In this paper, I explored whether and how the US urges minor powers to disburse aid to achieve its overarching political objectives and how domestic politics of subordinate states affects the degree to which external pressure shapes their aid policies by focusing on the relationship between the US and Japan. This was the first attempt to provide a theoretical framework for the direction of US influence on Japan’s aid provision and to explore why its impact varies across different types of aid by focusing on Japan’s bureaucratic politics. I employed a new dataset of Japan’s ODA and estimated both OLS and 2SLS regressions to handle the issues of reverse causality and joint decision-making. I argued and demonstrated that the US applies pressure on Japan to complement its aid efforts rather than to substitute them as the US attempts to prevent Japan from strengthening ties with the recipients and advancing its own commercial interests. Thus, Japan tends to disburse aid in tandem with the US. However, since Japan’s aid policies are determined by bureaucratic agencies, there exist variations in Japan’s receptiveness to external pressure. If a bureaucratic agency, which has close ties with foreign representatives but lacks a strong domestic constituency, is in charge of aid allocation, the aid policy is more receptive to US pressure than an aid policy formulated through consultations among multiple agencies including the one with strong domestic support. Accordingly, in Japan, the allocation of grant aid, which is left to the discretion of MOFA, is more receptive to US pressure than that of loans. These two hypotheses were supported by the combined results of quantitative and qualitative analyses.

The results of this study help us understand a longstanding puzzle of why there exists a discrepancy in criticisms of Japan’s ODA; while some scholars argued that Japan’s aid policy has been vulnerable to *gaiatsu* (Calder, 1988), others asserted that Japan has been seeking its own commercial interests (Schraeder *et al.*, 1998). This seeming discrepancy in the responsiveness of Japan’s aid policy might have stemmed from the fact that most existing quantitative studies on Japan’s ODA employed aggregated data and did not investigate the impact of US aid on the allocation of different types of Japan’s ODA. Because the share of loans in Japan’s ODA varies from year to year, it is not surprising that previous findings are mixed. The outcomes of this study, therefore, suggest the importance of disaggregating ODA especially if donors disburse various types of aid and different domestic actors are in charge of their allocation.

The findings of this paper are further extendable to the literature on aid coordination (or lack thereof).<sup>42</sup> Recently, a growing number of scholars and policymakers have stressed the importance

<sup>42</sup>Aid coordination means here the concentration of aid in recipient countries rather than in specific aid sectors. See, for example, Knack and Rahman (2007), Frot and Santiso (2011), and Fuchs *et al.* (2015).



of aid coordination and encouraged donors to concentrate on fewer recipients as recipients generally lack sufficient administrative skills to absorb aid from multiple channels. For example, Knack and Rahman (2007) asserted that donor proliferation causes excessive recruitment of administrators by donor states, which puts further strain on already scarce resources (i.e., skilled labor) of recipients. Nevertheless, previous empirical studies generally found that donor proliferation remains more prevalent than aid coordination (e.g., Frot and Santiso, 2011), although they did not provide us much insight into why coordination fails.<sup>43</sup> The findings of this research indicate that a superpower's incentives to use aid to attain diplomatic objectives and to prevent minor powers from acting opportunistically also account for coordination failure. Accordingly, if the dominant state could refrain from pressuring others to complement its aid efforts, or if developed countries in general could resist a temptation to inhibit others from specializing in a particular country and strengthening political/economic ties with the recipient, we may observe a more efficient delivery of foreign aid.

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## References

- Alesina A and Dollar D (2000) Who gives foreign aid to whom and why? *Journal of Economic Growth* 5, 33–63.
- Apodaca C and Stohl M (1999) United States human rights policy and foreign assistance. *International Studies Quarterly* 43, 185–198.
- Arase D (1994) Public-private sector interest coordination in Japan's ODA. *Pacific Affairs* 67, 171–199.
- Arase D (1995) *Buying Power: The Political Economy of Japan's Foreign Aid*. Boulder: Lynne Rienner.
- Beare DH and Tirone DC (2010) Foreign aid effectiveness and the strategic goals of donor governments. *Journal of Politics* 72, 837–851.
- Berthélemy J-C and Tichit A (2004) Bilateral donors' aid allocation decisions – A three-dimensional panel analysis. *International Review of Economics and Finance* 13, 253–274.
- Bigsten A (2006) Donor coordination and the uses of aid. *Göteborg University Working Papers in Economics* 196.
- Boschini A and Olofsgård A (2007) Foreign Aid: An instrument for fighting communism? *Journal of Development Studies* 43, 622–648.
- Boutton A and Carter DB (2014) Fair-weather allies? Terrorism and the allocation of US foreign aid. *Journal of Conflict Resolution* 58, 1144–1173.
- Brooks WL and Orr RM Jr (1985) Japan's foreign economic assistance. *Asian Survey* 25, 322–340.
- Bueno de Mesquita B and Smith A (2007) Foreign aid and policy concessions. *Journal of Conflict Resolution* 51, 251–284.
- Calder KE (1988) Japanese foreign economic policy formation: Explaining the reactive state. *World Politics* 40, 517–541.
- Carter DB and Stone RW (2015) Democracy and multilateralism: The case of vote buying in the UN General Assembly. *International Organization* 69, 1–33.
- Centre for Research on the Epidemiology of Disasters (CREED) (2016) EM-DAT: The International Disaster Database. <https://protect-us.mimecast.com/s/tBh9CDkA1Ac0QBySkKndj?domain=emdat.be> (accessed 24 August 2016).
- Cha VD (2000) Abandonment, Entrapment, and Neoclassical Realism in Asia: The United States, Japan, and Korea. *International Studies Quarterly* 44, 261–291.

<sup>43</sup>As an exception, Frot and Santiso (2011) posited that donors cannot coordinate if there is a growing global concern over humanitarian suffering; For instance, when Indian Ocean earthquake and tsunami hit the coasts of Indonesia and other countries in December 2004, herding occurred. Similarly, Fuchs *et al.* (2015) insisted that coordination fails owing to competition among donors over export markets.

- Chan S** (1992) Humanitarianism, mercantilism, or comprehensive security? Disbursement patterns of Japanese foreign aid. *Asian Affairs* **19**, 3–17.
- Cheibub JA, Gandhi J and Vreeland JR** (2010) Democracy and dictatorship revisited. *Public Choice* **143**, 67–101.
- Crenshaw M** (2001) Why America? The globalization of civil war. *Current History* **100**, 425–432.
- Dowd M** (1990) Evolution in Europe; Bush accepts Japanese aid to China, with limits. *New York Times*. July 8.
- Dreher A, Sturm J and Vreeland JR** (2009a) Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions? *Journal of Development Economics* **88**, 1–18.
- Dreher A, Sturm J and Vreeland JR** (2009b) Global horse trading: IMF loans for votes in the United Nations Security Council. *European Economic Review* **53**, 742–757.
- Dreher A, Nunnenkamp P and Schmaljohann M** (2015) The allocation of German aid: Self-interest and government ideology. *Economics & Politics* **27**, 160–184.
- Dunning T** (2004) Conditioning the effects of aid: Cold War politics, donor credibility, and democracy in Africa. *International Organization* **58**, 409–423.
- Fleck RK and Kilby C** (2010) Changing aid regimes? U.S. Foreign aid from the Cold War to the war on terror. *Journal of Development Economics* **91**, 185–197.
- Frot E and Santiso J** (2011) Herding in aid allocation. *Kyklos* **64**, 54–74.
- Fuchs A, Nunnenkamp P and Öhler H** (2015) Why donors of foreign aid do not coordinate: The role of competition for export markets and political support. *World Economy* **38**, 255–285.
- Gilens M** (2001) Political ignorance and collective policy preferences. *American Political Science Review* **95**, 379–396.
- Hook SW and Zhang G** (1998) Japan's aid policy since the Cold War: Rhetoric and reality. *Asian Survey* **38**, 1051–1066.
- Inada J** (1989) Japan's aid diplomacy: Economic, political or strategic? *Millennium: Journal of International Studies* **18**, 399–414.
- International Monetary Fund (IMF)** (2016) Direction of Trade Statistics (DOT). <https://protect-us.mimecast.com/s/NvrpCG6EvEfGoJ6cYgtZX?domain=data.imf.org> (accessed 20 August 2016).
- Katada SN** (1997) Two aid hegemons: Japanese-US interaction and aid allocation to Latin America and the Caribbean. *World Development* **25**, 931–945.
- Katada SN** (2002) Japan's two-track aid approach: The forces behind competing triads. *Asian Survey* **42**, 320–342.
- Kesavan KV** (1990) Japan and the Tiananmen Square incident: Aspects of the bilateral relationship. *Asian Survey* **30**, 669–681.
- Knack S and Rahman A** (2007) Donor fragmentation and bureaucratic quality in aid recipients. *Journal of Development Economics* **83**, 176–197.
- Kuziemko I and Werker E** (2006) How much is a seat on the Security Council worth? Foreign aid and bribery at the United Nations. *Journal of Political Economy* **114**, 905–930.
- Lai B** (2003) Examining the goals of US foreign assistance in the post-Cold War period, 1991–96. *Journal of Peace Research* **40**, 103–128.
- Lake DA** (1999) *Entangling Relations: American Foreign Policy in Its Century*. Princeton: Princeton University Press.
- Lake DA** (2009) *Hierarchy in International Relations*. Ithaca: Cornell University Press.
- Lancaster C** (2010) Japan's ODA – Naiatsu and Gaiatsu: Domestic sources and international influences. In Leheny D and Warren K (eds), *Japanese Aid and the Construction of Global Development: Inescapable Solutions*. London: Routledge, pp. 29–53.
- Lim DYM and Vreeland JR** (2013) Regional organizations and international politics: Japanese influence over the Asian development bank and the UN Security Council. *World Politics* **65**, 34–72.
- Maizels A and Nissanke MK** (1984) Motivations for aid to developing countries. *World Development* **12**, 879–900.
- Meernik J, Krueger EL and Poe SC** (1998) Testing models of U.S. foreign policy: Foreign aid during and after the Cold War. *Journal of Politics* **60**, 63–85.
- Milner HV and Tingley DH** (2010) The political economy of U.S. foreign aid: American legislators and the domestic politics of aid. *Economics & Politics* **22**, 200–232.
- Ministry of Foreign Affairs of Japan (MOFA)** (1992) Japan's Official Development Assistance Charter. <https://protect-us.mimecast.com/s/y0lscJ6RyRf5P8VhkdJUY?domain=mofa.go.jp> (accessed 14 November 2016).
- Ministry of Foreign Affairs of Japan (MOFA)** (2002) Diplomatic Bluebook 2002. <https://protect-us.mimecast.com/s/PJKcCKrR1RSm0q6lQOIMd?domain=mofa.go.jp> (accessed 24 August 2017).
- Ministry of Foreign Affairs of Japan (MOFA)** (2016) Japan's ODA. <https://protect-us.mimecast.com/s/aFuXCL9R7RI45P7uA9oGT?domain=mofa.go.jp> (accessed 20 August 2016).
- Miyashita A** (1999) Gaiatsu and Japan's foreign aid: Rethinking the reactive-proactive debate. *International Studies Quarterly* **43**, 695–731.
- Miyashita A** (2003) *Limits to Power: Asymmetric Dependence and Japanese Foreign Aid Policy*. New York: Lexington Books.
- Morgan SL and Winship C** (2015) *Counterfactuals and Causal Inference: Methods and Principles for Social Research*, 2nd Edn. New York: Cambridge University Press.
- Nester WR** (1996) *Power Across the Pacific: A Diplomatic History of American Relations with Japan*. London: Macmillan.

- Neumayer E (2003) Do human rights matter in bilateral aid allocation? A quantitative analysis of 21 donor countries. *Social Science Quarterly* **84**, 650–666.
- Neumayer E and Plümper T (2011) Foreign terror on Americans. *Journal of Peace Research* **48**, 3–17.
- Orr RM Jr (1988) The aid factor in U.S.-Japan relations. *Asian Survey* **28**, 740–756.
- Orr RM Jr (1990) *The Emergence of Japan's Foreign Aid Power*. New York: Columbia University Press.
- Pottersson T and Wallensteen P (2015) Armed conflicts, 1946–2014. *Journal of Peace Research* **52**, 536–550.
- Potter DM and Van Belle D (2004) News media coverage influence on Japan's foreign aid allocations. *Japanese Journal of Political Science* **5**, 113–135.
- Rafferty K (2015) Abe's new policy on foreign aid risks playing with fire. *The Japan Times*. March 10.
- Rix A (1980) *Japan's Economic Aid*. London: Croom Helm.
- Schraeder PJ, Hook SW and Taylor B (1998) Clarifying the foreign aid puzzle: A comparison of American, Japanese, French, and Swedish aid flows. *World Politics* **50**, 294–323.
- Skidmore D and Gates W (1997) After Tiananmen: The struggle over U.S. policy toward China in the Bush administration. *Presidential Studies Quarterly* **27**, 514–539.
- Study of Terrorism and Responses to Terrorism (START) (2016) Global Terrorism Database. <https://protect-us.mimecast.com/s/ex8vCQWRnRtrm6YTYSuO5?domain=start.umd.edu> (accessed 27 August 2016).
- Tuman JP and Ayoub AS (2004) The determinants of Japanese official development assistance in Africa: A pooled time series analysis. *International Interactions* **30**, 43–57.
- Tuman JP, Strand JR and Emmert CF (2009) The disbursement pattern of Japanese foreign aid: A reappraisal. *Journal of East Asian Studies* **9**, 219–248.
- U.S. Agency for International Development (USAID) (2016) Foreign Aid Explorer: The Official Record of U.S. Foreign Aid. <https://protect-us.mimecast.com/s/YGrjCR67O7fb8rxHLtVSQ?domain=explorer.usaid.gov> (accessed 22 June 2016).
- Voeten E, Strezhnev A and Bailey M (2009) United Nations General Assembly Voting Data. hdl:1902.1/12379, Harvard Dataverse, V16 [UNF:6:V09q7uLWRKrY16w2g/cmDg==] (accessed 24 June 2016).
- Vreeland JR and Dreher A (2014) *The Political Economy of the United Nations Security Council: Money and Influence*. New York: Cambridge University Press.
- Wooldridge JM (1995) Score diagnostics for linear models estimated by two stage least squares. In GS Maddala, Phillips PCB and Srinivasan TN (eds), *Advances in Econometrics and Quantitative Economics: Essays in Honor of Professor C. R. Rao*. Oxford: Blackwell, pp. 66–87.
- Wooldridge JM (2013) *Introductory Econometrics: A Modern Approach*, 5th Edn. India: Cengage Learning.
- Yasutomo DT (1986) *The Manner of Giving: Strategic Aid and Japanese Foreign Policy*. Lexington: Lexington Books.
- Yasutomo DT (1989–1990) Why Aid? Japan as an “Aid great power”. *Pacific Affairs* **62**, 490–503.
- Zhao Q (1993) Japan's aid diplomacy with China. In BM Koppel and Orr RM Jr (eds), *Japan's Foreign Aid: Power and Policy in a New Era*. Boulder: Westview Press, pp. 163–187.