# THE EFFECTS OF DONOR GOVERNMENT IDEOLOGY ON DEVELOPMENT AID SPENDING

ADDING A BILATERAL APPROACH

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#### Abstract

International agreements stipulate that developed nations should spend 0.7% of their GDP on development aid, yet many countries do not reach this goal. This has various reasons, however some suspect that the donor government ideology could play a role. In existing literature, no consensus exists on whether this is the case and if so, to what extent that might be. This thesis investigates this question using PPML regressions with various fixed effects. The data set used includes data on donor government ideologies and aid flows from OECD donors to recipient countries. It adds to the existing literature by using bilateral data and country specific fixed effects, in addition to the more broadly used aggregated donor aid flows, in the analysis. Moreover, this thesis uses the share of ideologies in governments rather than a government ideology scale. This way, it allows centre-wing parties to have different effects than simply the average of left-wing and right-wing parties. Results indicate the higher the share of centre and right-wing parties in donor governments, the higher aid disbursements and commitments are relative to a fully left-wing government. Possible reasons are the moral reasons for higher aid spending centre-wing parties might have and the potentially high cost of domestic social spending by left-wing parties. Finally, centre and/or right-wing parties could have spent more on aid for geopolitical purposes, especially during the Cold War. Furthermore, ideologies also matter for whether aid is distributed via grants or loans and in what sectors aid is spent. The performed robustness checks suggest that many results were mainly driven by aid spending during the Cold War, and that after the Cold War, the effect of ideological differences in government on total aid budgets has become negligible. These findings thus imply that government ideologies can play a role in decisions regarding development aid spending, however in recent decades this role has been marginalised.

## Contents

1. Introduction
2. Theoretical background
2.1 Development aid
2.2 Government ideology
2.3 Determinants of aid spending
2.4 The effects of government ideology on aid
2.5 Forming hypotheses
3. Data
3.1 Aid flows
3.2 Government ideology 10
3.3 Control variables
4. Methodology 11
4.1 Aid at the donor level
4.2 Controls 11
4.3 Aid at the bilateral level
4.4 Potential issues 12
4.5 PPML
5. Results
5.1 Descriptive statistics
5.2 Aggregate level regressions
5.3 Bilateral level regressions
6. Robustness Checks
6.1 Excluding donor countries
6.2 Time split
6.3 Different ideology measure
6.4 Total aid flows rather than the percentage of GDP
6.5 Evaluating the hypotheses
7. Limitations
8. Conclusion
Bibliography
Appendix

## 1. Introduction

In 2022, foreign aid spending by Organisation for Economic Co-operation and Development (OECD) countries rose to an all-time high of 204 billion USD, with one of the biggest increases in real terms ever recorded from 2021 to 2022 (OECD Media Office, 2023). According to the OECD (2023), this was partly caused by geopolitical circumstances like the Russian invasion of Ukraine and the aftermath of the COVID-19 pandemic. Nevertheless, for the members of the OECD's Development Assistance Committee (DAC), this record total amounted to only 0.36% of the combined gross national income (GNI) (OECD, 2023). Even though this ratio is the highest in 40 years, it is still well below the 0.7% of GNI spending goal set by the United Nations. Only Denmark, Germany, Luxembourg, Norway and Sweden met this target in 2022. This poses the question what factors influence the amount of foreign aid donated by developed countries. Why do Denmark and Germany meet the target, whereas the United States and France do not, for instance?

The topic of development aid, or Official Development Assistance (ODA), has been studied extensively in the past. Previous literature has found evidence for certain determinants of aid flows in the past. For instance, Fink and Redaelli (2009) find that donor countries favor smaller, geographically closer and oil exporting countries, as well as former colonies and politically aligned countries. In the end though, all these considerations concern decisions taken by politicians in the donor country. Politicians, specifically the governing party or parties, can increase or decrease spending, and decide on where and how money is spent. Therefore, the potentially decisive role that politicians play in ODA spending policy should not be neglected. Literature on this topic exists, yet in their overview of aid budget literature, Fuchs et al. (2014) show that existing literature finds differing results for the effects of government ideology on aid budget. The existing literature differs between studies supporting the idea that a right-wing government decreases aid budgets, to studies that find the opposite result and studies finding no effect at all. In their own analysis of the determinants of aid budget, Fuchs et al. (2014) do not find a significant effect for the donor government ideology. All in all, the evidence is inconclusive. Therefore, this paper will study the following research question:

#### How does government ideology in donor countries affect spending on development aid?

This thesis hypothesizes donor government ideology does not affect the overall aid budget, but that it does affect the channels through which the overall aid budget is spent. In short, this would be intuitive as, although different ideologies have different ideas on how and what to spend money on, geopolitical developments and the long-term nature of aid programs could create some consensus across ideologies on the importance of development aid and limit variation in overall spending across donor governments.

Academically speaking, this question is not new. However, the existing literature struggles in finding a conclusive answer. Therefore, more research is needed. This thesis will add to the literature by

researching the different types of aid a country donate. Perhaps government ideology does not matter for the overall aid budget, but governments from a certain ideology prefer humanitarian aid over economic aid or donate to different recipient countries. In addition, this thesis will not only consider the aggregate aid flows from donor countries, but will also investigate bilateral aid flows. This way recipient specific characteristics can be incorporated into the analysis. Furthermore, findings of this thesis can have real-world implications. Recipient countries, which are affected by the ODA donations, could target lobbying efforts at donor countries which the results suggest are likely to donate, or adjust policy in anticipation of what is to come from, for example, left-wing governments. In donor countries, voters might be interested in how parties actually spend money. Finally, donor country government could use results to find likely donor country partners for ODA programs.

Methodology for this thesis will be based on Fuchs et al. (2014), however this thesis will employ PPML, as this is best suited to deal with the zero aid flows. Thus, PPML regressions with fixed effects will be used when we are interested in the effect of donor ideology on multiple measures of aid effort. These regressions are performed using both aggregated data and bilateral data. Multiple control variables and country or country pair fixed effects are included, in addition to year fixed effects. Data on aid comes from the OECD DAC database, whereas data on government ideology comes from the Comparative Political Data Set.

This thesis will start with a review of theoretical and empirical literature already available on this topic. This analysis will lead to hypotheses regarding the research question of this paper. After the literature review, the data used in this thesis and its sources will be explained. This is followed by a section in which the methodology that is used to answer the research question will be discussed. The results of the research are published in the results section and will be elaborated upon in this section. Robustness checks are then conducted to test the validity of the results. Some limitations are discussed, before a conclusion is reached regarding the main research question.

## 2. Theoretical background

#### 2.1 Development aid

Not all organisations and countries follow the same definition of development aid, and using different definitions may lead to differences in reported values. The OECD records data on what the it calls 'development flows', including 'official development assistance' or ODA . The OECD definition of ODA is "government aid that promotes and specifically targets the economic development and welfare of developing countries" (OECD, 2023). As ODA data is collected, verified and made publicly available by the OECD, the reported values can be considered uniform. ODA is reported and recorded by members of the Development Assistance Committee (DAC) of the OECD, of which there are 31. For this thesis, development aid follows the definition of the OECD on ODA. This provides a clear definition accompanied by uniform data suitable to be used in the regressions. In addition, the reporting countries in the DAC include the most developed nations in the world with most of the largest economies represented.

#### 2.2 Government ideology

Government ideology can be even harder to quantify than development aid. For example, left-wing parties in one country might be considered quite right-wing in another. Cochrane (2013) finds that left-wing parties are bound across multiple dimensions, whereas right-wing parties differ more across multiple policy dimensions and are thus less like-minded and more of a pragmatic coalition compared to left-wing parties. The takeaway here is that the left-right spectrum is not perfect, and therefore quantifying ideologies does have its limitations.

Fuchs et al. (2014), the most recent paper in a well-respected journal on the topic, use the Database of Political Institutions by Beck et al. (2001). This database gives governments values -1, 0 or 1, based on ideology. Such index data is not as suitable to deal with coalition governments though, given the limited possible values government ideology can take. Rather than assigning the government as a whole into the left-wing, centre or right-wing, some data sets show the share of seats in parliament for left-wing, centre or right-wing parties as a percentage of all seats held by the government. This way, we can more accurately quantify coalition governments and use a value that says more about the power a certain ideology holds within the government. In addition, using a scale to measure how leftwing or right-wing a government is, causes centre-wing parties to be caught in the middle. Although centre-wing parties are centre-wing because they are somewhere in between left-wing parties donate three times more aid than right-wing parties, then centre-wing parties are assumed to donate about twice as many aid as right-wing parties when using such an ideology scale. This is not necessarily true. Therefore, using ideology shares within the government rather than rating the government on a

scale from left to right allows centre-wing parties to have its own results. For this reason, this thesis will use data on government ideology that includes these shares rather than an index.

#### 2.3 Determinants of aid spending

As Fuchs et al. (2014) showcase in their overview of the aid budget literature, there are many hypothetical determinants of aid that have been studied in the past. This reaches from relatively straightforward factors like the GDP per capita of the donor country to perhaps less obvious possible determinants like the level of inequality within the donor country. Fuchs et al. (2014) also indicate that for many of these possible determinants, studies have found various results and accordingly there is no conclusive answer to the question what factors influence the size of the aid budget for donor countries.

Some of the first empirical studies into the determinants of aid budgets were conducted by Beenstock (1980) & Mosley (1985). Both mention income per capita, unemployment and budget deficits as important explanatory variables. These are some of the more straightforward possible explanatory variables mentioned before. Lundsgaarde et al. (2007) find that donor countries give less aid to recipient countries when imports from a recipient country to the donor country increases. Breuning (2001) finds that more female representation in a donor's parliament increases giving. Geopolitical factors have also been found to influence aid donations. Boschini and Olofsgård (2007) suggest that the reduction in aid disbursements in the 1990's was linked to the end of the cold war, whereas Dreher and Fuchs (2011) show how aid effort increased during the War on Terror in the early 2000s. Finally, donor countries have also been found to buy influence through the use of development aid. The US uses aid as leverage for countries to vote in favour of the US position in the UN General Assembly (Carter & Stone, 2015), whereas aid allocation by China depends on the recognition of Taiwan as a sovereign state, among others (Hoeffler & Sterck, 2022). All in all, the takeaway here is that the size and allocation of aid budgets have a very large number of possible explanatory variables, ranging from macroeconomic variables to geopolitical circumstances. Claessens et al. (2009) even argue that aid-allocation criteria and their weight change over time, making it even more difficult to establish what the determinants of aid are.

#### 2.4 The effects of government ideology on aid

Past research has studied both domestic politics on an individual citizen level as well as at the national politics level. For instance, Chong and Gradstein (2008) find that individual relative income and satisfaction with own government performance are positively related with the willingness to provide foreign aid. In line with Chong and Gradstein (2008), Paxton and Knack (2011) show that attitudes toward aid are influenced by religiosity, beliefs about the causes of poverty, awareness of international affairs, and trust in people and institutions. These attitudes toward aid could affect which parties are elected into office or to what extent parties feel free to increase spending without losing support among voters. These individual voter preferences thus affect the place where decisions are made on

aid spending: national politics in donor countries. Dreher et al. (2015) try to establish whether ideological proximity between the donor government and the recipient government affects the effectiveness of the aid, and indeed find that aid tends to be less effective when political ideology differs between the two. The majority of the literature on this topic focuses on the effects of donor government ideology on the size and allocation of the aid budget, as is also the focus of this thesis.

One of the first influential quantitative studies that looked into the effects of donor government ideology on the size and allocation of the aid budget is by Thérien and Noël (2000). Thérien and Noël (2000) investigate the aid budgets of 16 OECD countries and hypothesise that leftists and religious power in governments is positively related to foreign aid spending. This is assumed to be the case because leftist parties and religious parties are expected to have higher social spending, which in turn would increase foreign aid spending. Interestingly, they do not find any significant results for religious parties or for left-wing parties on the short term, but they do find a significant effect for the cumulative left-wing power. Cumulative power means that the authors take the sum of a certain ideology's power in previous years. Therien and Noël (2000) conclude that this is because over time, leftist parties build a welfare state with high social spending, which then causes aid spending to increase. Therefore, it would not necessarily matter which government is in power this year alone, but also which governments have been in power for the last decades.

Nevertheless, not all literature has found that only cumulative power matters. Bertolli et al. (2008) actually find that right-wing governments have a higher aid spending. The authors suggest that although one might expect left-wing parties to care more about poverty and development abroad, other motives for giving aid that right-wing parties hold in high regard might overshadow the left-wing motives (Bertolli et al., 2008). Dreher et al. (2015) get similar results, as when they study the German aid budget, they conclude that Socialist (SPD party) leadership in the government decreases the amount of aid commitments. However, other studies find opposite results. Tingley's (2010) results suggest that as governments become more conservative their foreign aid efforts are likely to fall, with this being especially true for the poorest recipients for most OECD countries in 1971-2002. Faini (2006) does not find a significant effect of government ideology, but results indicate a correlation between right-wing governments and lower aid spending. Finally, Fuchs et al. (2014) also do not get a significant result for government ideology, although the sign of the coefficient suggests that right-wing governments spend less on aid. There are multiple possible reasons why these studies have found differing results. First, the years and donor countries studied vary, which could influence results. Second, the methodologies used by these studies also differ. This includes both the estimation methods used and the variables included. For example, using a scale from -1 to 1 or a scale from 1 to 10 will alter the results. In addition, Tingley (2010) rates parties from left-wing to right-wing only based on economic stances, rather than social and moral ideas. Regardless of whether this is the correct approach, this will have an effect on the results that follow.

Few studies have looked into the effects of government ideology on aid allocation, rather than only the size of the budget, so there is little evidence in this regard. Brech and Potrafke (2014) study the allocation of aid and state that left-wing governments increased the growth of aid through bilateral grants. In particular, left-wing governments increased spending to lower income countries, and thus the authors' results support the results found by Tingley (2010) (Brech and Potrafke, 2014). This suggest that perhaps disentangling aid flows can provide a more conclusive answer to the question what effect donor government ideology has on aid flows. Finally, Allen and Flynn (2018) took a new approach by examining the impact of donor politics on the channels through which aid is donated. Their results indicate that left-wing governments are more inclined to channel aid through NGOs, whereas right-wing governments are more likely to channel aid through the recipient government, which could be explained by the different motives these different ideologies are likely to have.

#### 2.5 Forming hypotheses

Hypotheses do not follow easily from the literature, as existing literature does not provide an unequivocal answer to the question how the donor government ideology affects the size and allocation of aid budgets. Building on Fuchs et al. (2014) and Faini (2006), who do not find a significant coefficient for government ideology, the following first hypothesis is formed:

1. Donor government ideology does not affect the overall aid budget, either in aid disbursements or in aid commitments.

Certain geopolitical causes are supported by all ideologies, like the importance of getting countries on your side during the cold war, which likely motivates all ideologies to a certain amount of aid donations. Additionally, aid programs are often long-term programs, which is why aid funding cannot easily be adjusted overnight. Finally, different ideologies might spend aid on different goals, but that does not mean overall spending differs between these ideologies. Using disaggregated aid flows, this thesis will also investigate whether this allocation of the aid budget is indeed affected by the donor government ideology. Following the findings by Brech and Potrafke (2014) and Allen and Flynn (2018), the following second hypothesis is formed:

#### 2. Donor government ideology affects the channels through which the overall aid budget is spent.

This would be intuitive since different ideologies campaign on spending money in different ways domestically, which are likely to be reflected in aid spending. For example, left-wing parties are often associated with social programs whereas right-wing parties are more often associated with economic development. Different ideologies could also choose to finance more aid through loans rather than grants, or to prefer certain ideological governments in recipient countries.

#### 3. Data

#### 3.1 Aid flows

Aid flow data comes from the OECD database for the Development Assistance Committee (DAC), which is available from 1960 to 2019. The database provides total flows by donor country, total bilateral flows by donor and recipient country, as well as numerous categories of ODA, indicating what part of the ODA flow is dedicated to a certain purpose or what flows are commitments versus what flows are actually disbursed.

The OECD records this data since 1960. For most donor countries, data is thus available from 1960 until the present. This is not true for every donor country though, which is mostly because some states were not independent until after 1960 or because states were not yet a part of the OECD in 1960. The appendix contains an overview of the donor countries included in this thesis, which are countries that have aid data available at the OECD, in addition to being in the political data set. The recipient countries are countries that are included on the DAC List of ODA Recipients. This list consists of all low and middle income countries based on gross national income (GNI) per capita and shows all countries and territories eligible to receive ODA.

The OECD has two criteria for aid flows to be classified as ODA. First, it has to be provided by official government agencies, so it cannot be provided by private companies or non-governmental organizations based in the donor country. Second, it has to concessional in character. This means that in the case of loans, the loans have to be offered at a better rate than usual. Finally, certain donations such as military equipment will never be considered ODA. ODA flows are self-reported by the donor country.

The OECD differentiates between commitments and disbursements in the data. Commitments are donor's intentions and thus give an indication for future flows. Disbursements show actual payments. Disbursement flows can be negative, since loan repayments by the recipient country are deducted from the outgoing flows, however the gross disbursements exclude these loan repayments. Next, ODA is also reported by sector. According to the OECD (2023), the reported sector is "the specific area of the recipient's economic or social structure whose development is, or is intended to be fostered by the aid". The sectors that will be considered in this thesis are social infrastructure and services, economic infrastructure and services, production sectors and humanitarian aid. At the donor country level, this data is available from 1967 for most countries. At the bilateral level, it is available from 2005. Third, money can be given to recipients as a grant or as a loan. According to the OECD, with grants, financial resources are provided to developing countries free of interest and with no provision for repayment. In the case of soft loans, these loans have to be repaid with interest, albeit at a significantly lower rate than if developing countries borrowed from commercial banks. This data is available from 1960 onwards.

#### 3.2 Government ideology

Data on government ideology comes from the Comparative Political Data Set (CPDS) by Armingeon et al. (2021). This data set has been used for papers in highly respected journals, such as by Ansell (2014) in the American Political Science Review and Acharya et al. (2013) in the Journal of Law and Economics. It is available for 36 countries from 1960 to 2019, with some gaps. In contrast to when data for aid becomes available in the OECD database, countries are included in this data set from the year of the first democratic elections, if the country was not already democratic from 1960 onwards. This means that previously communist countries have only been included since the fall of communism and that a country like Spain has only been included after the fall of the fascist government.

The main variables that will be used for this study are the government composition variables. These indicate the extent to which governments are left-wing, centre or right-wing, defined as the shares of left-wing/centre/right-wing government parties. This share is the share of parliamentary seats of one ideology as a percentage of the total parliamentary seats of all governing parties. As a robustness check, the Schmidt index will be used to measure government ideology. This index measures ideology of a government on a scale from 1 to 5, with 1 being a hegemony of right-wing parties and 5 being a hegemony of left-wing parties. The classification of parties for both measures was done according to Schmidt (1996).

Data on recipient government ideology comes from the Global Dataset on Political Leaders by Herre (2022). Since many recipient country are not or have not been parliamentary democracies in recent history, this data set identifies the ideology of the actual political leader of the country, be it a prime minister, president, queen etc. This data is available for 182 countries from 1945 to 2020.

#### 3.3 Control variables

The following control variables are included in the models: GDP per capita, real GDP growth, government expenditures and trade openness. The reasons for this are explained in section 4.2. These variables are already included in the CPDS with the source being OECD.

## 4. Methodology

#### 4.1 Aid at the donor level

The main equation used in this thesis follows Fuchs et al. (2014), which is the paper closest to this research. This yields the following basic equation to be used, with i denoting country and t denoting year:

(1) 
$$Y_{it} = \alpha + \beta_1 I deology_{it} + X_{it} + \delta_t + \theta_i + \varepsilon_{it}$$

In this equation,  $Y_{it}$  represents the various aid outcomes that this paper is interested in. This includes the aid donated by a donor country, as well as the disaggregated aid flows that are studied. These flows are studied using the aggregated donor level first, and then at the bilateral level. The full number of outcomes will be highlighted later in the methodology section. In order to control for the size of a donor's economy, we follow previous literature in expressing ODA as a percentage of the gross domestic product (GDP). One disadvantage of this strategy is that the outcome variable will not only depend on aid flows, but also on economic cycles. This means that in case GDP shrinks, the outcome value could increase even if aid flows remain constant. However, in such a case the same amount of aid flow will be more costly to a donor country relative to its total income. To ensure that this does not threaten results, a robustness check will be performed using total ODA rather than ODA as a percentage of GDP.

Furthermore,  $\alpha$  is the constant and *Ideology* measures to what extent a donor government is left-, centre- or right-wing. The value of this variable is a share. Regressions are performed using the centre and right-wing party share in the regressions, thus measuring the effect of an increase in those shares relative to a fully left-wing government. Finally,  $X_{it}$  is a number of further explanatory variables used as controls,  $\delta_t \& \theta_i$  are time and country fixed effects respectively and  $\varepsilon_{it}$  is the error term. The time fixed effects eliminate bias from unobservable variables that change over time but are constant over entities. Country fixed effects control for characteristics of countries that do not vary over time, such as their geographical location.

#### 4.2 Controls

In order to not overcontrol, this study will only include controls that prior research has found to have a key effect on aid budgets. These are GDP per capita, real GDP growth, trade openness, government expenditures as a percentage of GDP and total ODA value donated by all DAC members (Fuchs et al., 2014). The total supply of ODA donated by all donors is covered by the year fixed effects though, and so it will be left out of the equations. Thus,  $X_{it}$  includes the following explanatory variables. *GDPpercapita*<sub>it</sub> is the GDP per capita of country i in year t, measured in millions US dollars. *GDPgrowth*<sub>it</sub> is real GDP growth of country i in year t as the percentual change from the previous year. *GovExpenditure*<sub>it</sub> is the government expenditure of country i in year t, measured as a

percentage of the country's GDP.  $TradeOpenness_{it}$  is the trade openness of country i in year t, measured as total imports plus total exports divided by GDP.

#### 4.3 Aid at the bilateral level

After analysing the aid flows at the donor level, an additional data set is used which includes bilateral aid flows. This allows us to change the donor country fixed effects for country pair fixed effects and to include recipient-year fixed effects. Using bilateral data also presents the opportunity to include country-time varying variables for the recipient country. However, doing so would severely limit the number of observations that can be included in this thesis, as data availability for some potentially relevant variables is often limited to recent years and to certain recipient countries. Since there is no consensus on whether including such variables would improve the reliability of results, this thesis will opt for the larger number of observations rather than the inclusion of additional variables.

The following equation is used at the bilateral level:

(2) 
$$Y_{ijt} = \alpha + \beta_1 I deology_{it} + \beta_2 GDP percapita_{it} + \beta_3 GDP growth_{it} + \beta_4 GovExpenditure_{it} + \beta_5 TradeOpenness_{it} + \delta_t + \theta_{ii} + \varphi_{it} + \varepsilon_{it}$$

Here *ij* denotes country pair and *j* denotes recipient. The outcome variable is now the bilateral aid flow for country donor-recipient country pair *ij* rather than all aid donated by a donor country. Second, donor fixed effects are replaced by country pair fixed effects, which means that any donorrecipient country pair time-invariant characteristics will be taken into account. Third, recipient-year fixed effects,  $\varphi_{jt}$ , are included. These fixed effects eliminate determinants specific to a recipient in a certain year. Let's say a country was hit by a natural disaster in a certain year, and thus received a large amount of aid from all donor countries, these fixed effects can control for this.

#### 4.4 Potential issues

In sections 4.1 and 4.3, two equations have been laid out to estimate the effect of donor government ideology on aid flows. However, doing a simple OLS regression will result in some issues. First of all, there are quite some zero aid flows or missing values in the data. This could be because the reporting donor country did not donate, but also because the reporting donor country only reported certain values to the OECD. For example, perhaps the disbursements have been reported, but the commitments have not. This results in the question of what to do with these observations. Should those observations be left out, because they are not accurate, or should they all be included as zeroes? Excluding these observations could mean excluding actual zero aid flows, which are of course also relevant. Including these observations could mean including certain aid flows as zero aid flows while they might be quite large, but unreported. This would also bias results.

For the data at the donor level, observations with missing values for the aid outcome variable will be excluded from the analysis. This is because aid at the donor level is practically never zero,

which indicates that the missing values are due to reporting issues rather than due to zero aid flows. For the bilateral aid data, this assumption is more difficult to make. The aid flows to one specific recipient could very well be zero for some observations, especially over the course of nearly sixty years between so many donor and recipient countries. Hence, these missing values will be treated as zero aid flows. This belief is supported by the fact that summing the bilateral flows from one donor in the data, total donor flows from the same donor are nearly identical.

A different potential issue is reverse causality. This would be the case if aid flows also affect the government ideology. That would mean that aid flows influence the outcome of elections and thus what parties are elected into office. While it is not impossible that a person could change their vote depending on the observed aid flows, it is generally believed that this is not an issue that is decisive for the overwhelming majority of voters. As Brech and Potrafke (2014) argue, voters are more concerned with domestic policies that make up a much larger part of the total government budget. Thus, reverse causality cannot fully be ruled out, but it is not likely for this study.

Of course, omitted variables exist that might be correlated with aid flows and donor government ideology. Think of certain moral values shared by the population within a donor country. However, there is no data available on this that is equally reliable across all donor countries in the sample. This does mean that it is difficult to say that the results of this study can be interpreted as causal effects, as is often the case for academic studies.

#### 4.5 PPML

When we take values as zero aid flows, using OLS yields a problem. It is preferred to take the logarithmic values of the aid flow, however it's not possible to take the logged value of zero. In the literature, these zero aid flows are either omitted, or a small value is added to the zero-aid flow, let's say 0.01, to enable the use of logs. Either method has its flaws, however. Omitting zero aid flows simply because your methodology cannot deal with these flows will mean introducing a bias into your results. Increasing a value to a number above zero, even if it's still a very small number, also introduces a bias.

Silva and Tenreyro showed in their influential paper in 2006 that Poisson Pseudo-Maximum Likelihood estimation method (PPML) outperforms simple OLS and Tobit approaches with heteroskedasticity and many zero observations in the data, which is often the case in studies regarding aid flows and trade flows, among others. They show that PPML estimates are more efficient and consistent and that estimates are also valid with heteroskedasticity. PPML is a Poisson regression with standard errors that are robust even if there is overdispersion. Therefore, this is better suited in the case of a large number of zero observations, including for this thesis.

## 5. Results

#### 5.1 Descriptive statistics

The average trends for the main dependent and independent variables, aid and ideology, can be found in figures 5.1 and 5.2.





Figure 5.1 shows how the average ideology of the donor countries in the sample varies throughout the past 60 years. For example, right-wing governments were more common in the 1980's and left-wing governments in the 1990's. Since 2001 however, right-wing parties have been represented more than other ideologies in the donor countries in the sample. Centre-wing parties have been less prominently represented in governments in recent decades compared to the 1960's, however their share is still significant.



Figure 5.2: Average aid disbursements and commitments as a share of donor GDP 1960-2019

Figure 5.2 shows that on average, donor countries donate much less than the UN goal of 0.7% of GDP. As expected, commitments and disbursements follow similar trends. Interestingly, aid commitments and disbursements were relatively high in the 1970's and 1980's, possibly due to the geopolitical implications of the cold war. After the end of the cold war, relative aid donations declined, before experiencing a new rise in the late 2000's and 2010's. The largest donors in the sample in absolute terms are the United States, Germany, Japan and the United Kingdom.

Scatterplots in figures 5.3, 5.4 and 5.5 display the values of average disbursements as percentage of GDP every year and the average value of ideology shares in the same year. These can be found in the appendix. The fitted values show a negative correlation between disbursements and left-wing-shares, a positive correlation between disbursements and centre-wing shares and a slightly negative correlation between disbursements and right-wing shares. Of course, these correlations cannot be interpreted as causal.

#### 5.2 Aggregate level regressions

Although OLS might not give the most reliable causal coefficients, it can provide us with a first indication of the results. The results for the OLS regressions for the donor level value of disbursements and commitments can be found in table 5.1.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party share	0.001	0.001
	(0.001)	(0.001)
Donor government right-wing party share	0.001***	0.001*
	(0.000)	(0.001)
Donor GDP per capita (\$ x1000)	-0.001	0.004
	(0.006)	(0.004)
Donor real GDP growth (%)	0.008	0.006
	(0.011)	(0.010)
Donor government expenditure (% of GDP)	0.018**	0.011
8- · (/)	(0.008)	(0.008)
Donor trade openness (% of GDP)	0.008**	0.005*
	(0.003)	(0.002)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1,122	1,052

Table 5.1: Logged aid as a share of donor GDP: disbursements and commitments (OLS Donor level)

*Notes:* Standard errors in parentheses, clustered by donor country. OLS with dependent variables being either aid disbursements or aid commitments as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

When looking at the explanatory variables other than ideology, it's suggested that an increase in government expenditure as a percentage of GDP increases both aid disbursements. Intuitively, this makes sense, as a larger, more active government with a higher total budget as percentage of GDP is also likely to spend more on development aid as percentage of GDP, which it would do even if it does not spend more on development aid relative to its total budget. There appears to be a positive correlation between trade openness and both disbursements and commitments. As for ideology, interestingly results suggest that the more right-wing a government is, the higher aid disbursements are. The coefficients for the other ideologies are not significant.

PPML is expected to yield more reliable results due to the large number of zero aid flows in the data. In table 5.2 below are the results for the PPML estimation at the donor level.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001**	0.001**
share	(0.001)	(0.000)
Donor government right-wing party	0.001***	0.001*
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.006***	0.008***
	(0.002)	(0.002)
Donor real GDP growth (%)	0.008	0.007
	(0.008)	(0.008)
Donor government expenditure (% of	0.020***	0.013**
GDP)	(0.005)	(0.005)
Donor trade openness (% of GDP)	0.003**	0.002
	(0.001)	(0.001)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1,120	1,052

Table 5.2: Aid as a share of donor GDP: disbursements and commitments (PPML donor level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The results in table 5.2 generally mirror the findings suggested by the OLS regression regarding the sign and approximate magnitudes of the explanatory variables. The statistically significant results suggest more right-wing governments have higher aid disbursements and commitments than left-wing governments, as do centre-wing governments. This reflects Bertolli et al. (2008) findings that right-wing governments have a higher aid spending than left-wing governments. Although these coefficients are statistically significant, are they also economically significant? The coefficients indicate that a 1-unit increase of the centre and right-wing party shares increases aid as share of donor GDP by 0.001 percentage point. Thus, a fully centre or fully right-wing government could increase aid as a share of donor GDP up to 0.1 percentage point, which is definitely economically significant. This is because a 0.1 percentage point increase would be a significant step towards the UN goal of 0.7% of GDP going to development aid. Furthermore, the results suggest that an increase in the government expenditures as a percentage of the GDP increases both disbursements and commitments, as does an increase in GDP per capita. Trade openness appears relevant only for the disbursements of aid, with an increase in trade openness leading to an increase in trade disbursements.

Disaggregated data from the OECD allows us to dig deeper into the aid flows. In table 5.4 are the ideology coefficients for four different aid sectors: social aid, economic aid, production aid and humanitarian aid.

VARIABLES	(1) Social	(2) Economic	(3) Production	(4) Humanitarian
Donor government centre-wing party	0.002**	0.001	-0.000	0.002
share	(0.001)	(0.002)	(0.001)	(0.001)
Donor government right-wing party	0.001	-0.001	0.001	0.000
share	(0.001)	(0.001)	(0.001)	(0.001)
Donor-Recipient pair FE	YES	YES	YES	YES
Recipient-Year FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	994	985	987	943

Table 5.3: Aid as a share of donor GDP: by sector (PPML donor level)

*Notes:* Standard errors in parentheses, clustered by donor country. PPML with dependent variables being social aid (*Social*), economic aid (*Economic*), production aid (*Production*) or humanitarian aid (*Humanitarian*) as a share of donor GDP.

Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Again, results in table 5.3 indicate that donor government ideology can matter. At the donor level, left-wing parties seem to donate less in the social sector than centre-wing parties. Although centre-wing parties in government, which have often been Christian parties in OECD countries over the past decades, could also be expected to have an increased focus on social issues rather in comparison to right-wing parties, it is surprising to see that left-wing parties do not appear to follow a similar strategy. A possible explanation could be that, if we assume that left-wing parties spend less on aid overall as suggested by the results in table 5.3, left-wing parties save on social aid rather than other aid sectors. An increase of 1 in the share of centre-wing parties in government decreases social aid spending by 0.02 percentage points of GDP, according to these results. For other sectors, the results do not indicate a significant difference between ideologies

	(1)	(2)
VARIABLES	Grant	Loan
Donor government centre-wing party share	0.001**	0.002
	(0.001)	(0.002)
Donor government right-wing party share	0.001*	-0.002
	(0.000)	(0.002)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1.051	725

Table 5.4: Aid as a share of donor GDP: grants and loans (PPML donor level)

*Notes:* Standard errors in parentheses, clustered by donor country. PPML with dependent variables being either aid grants or aid loans as a share of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.4 results indicate that the larger the share of centre and right-wing parties, the higher the amount of grants as a share of donor GDP. Similar to the possible explanation for the sectoral aid allocation, it's possible that when left-wing parties save on the total aid budget, they decide to save on

grants rather than loans. An increase of 1 for the share of either centre- or right-wing parties increases grants by 0.01 percentage point of GDP.

#### 5.3 Bilateral level regressions

The same analyses are also performed using the bilateral data. The inclusion of country pair fixed effects rather than donor country fixed effects, in addition to the use of recipient-year fixed effects, could improve causal estimation. Since the outcomes in these analyses are aid donated to a specific recipient, shares of donor GDP would be very low. To facilitate interpretation, the shares are multiplied by one million for all bilateral level regressions, which causes the dependent variable to become the amount of aid in USD to a single recipient per 1 million USD of donor GDP. First, an OLS regression is performed. In the bilateral level regressions, missing values for the dependent variable were replaced with 0.01 in order to be able to take logs. These results are presented in table 5.5.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001***	0.003***
share	(0.000)	(0.000)
Donor government right-wing party	0.000**	0.001***
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.011***	0.014***
F <b>F</b> (+)	(0.002)	(0.002)
Donor real GDP growth (%)	0.011***	-0.011**
	(0.004)	(0.005)
Donor government expenditure (% of	0.032***	0.014***
GDP)	(0.004)	(0.005)
Donor trade openness (% of GDP)	-0.002*	0.005***
	(0.001)	(0.001)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,395	86,515

Table 5.5: Logged aid as a share of donor GDP: disbursements and commitments (OLS bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. OLS with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In the results in table 5.5, all controls have significant coefficients. This does not entirely mirror the results from aggregated data. Higher donor GDP per capita and donor government expenditures are correlated with an increase in disbursements and commitments. The signs of the coefficients for trade openness and real GDP growth differ for disbursements and commitments, suggesting the effects of variables on these outcome variables are not necessarily the same. As for ideology, from bilateral data it seems that both more right-wing

and more centre-oriented governments increase aid commitments and disbursements compared to left-wing governments. The centre-wing coefficient is highest.

	(1)	(2)
VARIABLES	(1) Disbursements	(2) Commitments
AMADLES	Disbursements	Communents
Donor government centre-wing party	0.001***	0.002***
share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Denor CDP per conite ( $^{\circ}$ v1000)	0.006***	0.000***
Donor ODP per capita (\$ x1000)	(0.002)	(0.002)
	(0.002)	(0.002)
Donor real GDP growth (%)	-0.001	-0.004
e vi	(0.004)	(0.006)
Donor government expenditure (% of	0 023***	0 021***
GDP)	(0.004)	(0.004)
- ,	(,	
Donor trade openness (% of GDP)	0.001	0.002
	(0.001)	(0.001)
Donor-Recipient pair FF	YFS	YES
Recipient-Year FF	YFS	VES
Year FF	YFS	VES
Observations	86 467	86 059
00001 (00000	00,-107	00,057

Table 5.6: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments (PPML *bilateral level*)

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Next up are the PPML regressions, the first results being in table 5.6. Again, generally speaking the results are relatively similar to what was found using OLS and using the donor level data. Nevertheless, not all signs and magnitudes are the same. The statistically significant results centrewing governments have higher aid disbursements and commitments, which was also found in the donor level data. There are no longer statistically significant coefficients for right-wing party share. This would be in line with Dreher, Nunnenkamp, et al. (2015), as they find that in Germany specifically, left-wing governments donated less aid compared to the centre CDU/CSU governments. The results suggest that aid budgets are largest under governments with a large share of centre-wing parties. In addition, these results suggest that an increase in donor GDP per capita or donor government expenditure increases the aid donations relative to GDP, as before.

While many are focussed on the differences between left-wing parties and right-wing parties, the results actually suggest that centre-wing parties might be the biggest advocates of higher development aid spending, both for disbursements and commitments, as their coefficients are most frequently statistically significant and often larger than the right-wing coefficients. A plausible explanation is the Christian background of many centre-wing parties in the sample, perhaps adding to a sense of moral duty amongst these parties. Another possible explanation is that left-wing governments introduce costly domestic programs, and fund these by saving on foreign aid spending. Finally, perhaps centre and/or right-wing parties believed donating more aid would create closer donor-recipient ties, and with it more geopolitical security during the Cold War, more so than left-wing parties did.

These findings come with a number of implications, both in the donor country and in the recipient country. In donor countries, political parties and voters should consider these results. For political parties, it's important to assess their ideas and plans on the topic of aid. For example, members of left-wing political parties might be unpleasantly surprised to find out that left-wing parties donate less than right-wing parties. For recipient countries, the results suggest election results in donor countries can affect the amount of aid received and whether this happens through grants or loans.

	(1)	(2)	(3)	(4)
VARIABLES	Social	Economic	Production	Humanitarian
Donor government centre-wing	-0.001*	-0.008***	-0.004***	0.001
party share	(0.001)	(0.001)	(0.001)	(0.001)
Donor government right-wing	-0.001***	-0.006***	0.000	0.001
party share	(0.000)	(0.001)	(0.001)	(0.001)
Donor-Recipient pair FE	YES	YES	YES	YES
Recipient-Year FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	33,750	23,755	24,897	25,613

Table 5.7: Aid to a single recipient per 1 million USD of donor GDP: by sector (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being social aid (*Social*), economic aid (*Economic*), production aid (*Production*) or humanitarian aid (*Humanitarian*) to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.7 shows results for the sectoral budget allocation regression. Results are different from what was found using donor level data. Although they do indicate that ideology plays a role in the sectoral budget allocation, different coefficients are statistically significant and signs differ from what was found from the donor level data. This is likely due to the fact that the bilateral data for aid in different sectors is only available from 2005, whereas this data is available for many more years in the donor level data. As results differ, it is difficult to draw overall conclusions on what ideology prefers what sector for aid. However, as signs and statistically significant coefficients differ, it is an indication that ideological preferences can change throughout the years. For instance, the coefficients for centre-wing party share was positive and significant at the donor level, whereas now the coefficients for centre-wing party share are negative. This means left-wing parties are likely to have grown increasingly fond of social aid throughout the years. In addition, the coefficients for centre and right-wing party share are also significantly negative for economic aid. All in all, although it is difficult to

draw conclusions on magnitudes, it seems that ideologies in the donor government do affect the sectoral allocation of aid.

As Allen and Flynn (2018) find that left-wing governments are more inclined to channel aid through NGO's, the results from table 5.7 could suggest that these are often NGO's focused on economic development rather than social or humanitarian causes. This is interesting to note, as people might be more inclined to associate NGO's with such social and humanitarian causes, however of course NGO's focussing on economic development exist too.

	(1)	(2)
VARIABLES	Grant	Loan
Donor government centre-wing party share	0.002***	0.003***
	(0.000)	(0.001)
Donor government right-wing party share	0.001***	-0.004***
	(0.000)	(0.001)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,009	35,218

Table 5.8: Aid to a single recipient per 1 million USD of donor GDP: grants and loans (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid grants or aid loans to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The analysis of the grants and loans values in table 5.8 also tell a more extensive story when using the bilateral data. Previously, the donor level data indicated an increase in the centre-wing party share increased the amount of grant funding. This result is reflected in the bilateral data, however this data yields additional findings. The data suggest that right-wing parties also increase grant donations compared to left-wing parties. Conversely, the amount of loan funding decreases under more right-wing governments. Interestingly, not only do grants increase when the centre-wing party share increases, but the same appears to happen for loans. A probable explanation is that this is because a large centre-wing party share increases overall aid disbursements and commitments, as per table 5.6, and that centre-wing parties choose to increase both grants and loans, rather than only one of these.

Next, observations are split into three categories, one for each ideology, based on the ideology of the recipient government. This way, one could observe if donor governments prefer recipient countries with governments of the same ideology, i.e. right-wing donor governments donating more to recipients with a right-wing government.

Table 5.9: Aid to a single recipient per 1 million USD of donor GDP: disbursements by recipient ideology

VARIABLES	(1)	(2)	(3)
	Disbursements - Left wing	Disbursements - Centre	Disbursements - Right
	recipient leader	wing recipient leader	wing recipient leader
Donor government centre-wing party share	0.002***	-0.000	0.001**
	(0.001)	(0.001)	(0.001)
Donor government right-wing party share	0.001*	-0.001	0.000
	(0.000)	(0.001)	(0.000)
Donor-Recipient pair FE	YES	YES	YES
Recipient-Year FE	YES	YES	YES
Year FE	YES	YES	YES
Observations	34,798	5,323	45,954

(PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being aid disbursements to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.10: Aid to a single recipient per 1 million USD of donor GDP: commitments by recipient ideology

#### (PPML bilateral level)

VARIABLES	(1) Commitments - Left wing recipient leader	(2) Commitments - Centre wing recipient leader	(3) Commitments - Right wing recipient leader
	•	•	•
Donor government centre-wing	0.002***	0.001	0.001***
party share	(0.001)	(0.001)	(0.001)
Donor government right wing	0.000	0.000	0.000
Donor government right-wing	0.000	-0.000	-0.000
party share	(0.000)	(0.001)	(0.000)
Donor-Recipient pair FE	YES	YES	YES
Recipient-Year FE	YES	YES	YES
Year FE	YES	YES	YES
Observations	34,483	5,216	45,597

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being the aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The results for the analyses where observations are split into three samples by recipient ideology lead to a familiar result. Centre-wing party share coefficients are significant for both disbursements and commitments in the samples with left-wing recipient leaders and right-wing recipient leaders. The coefficient in the sample with centre-wing recipient leaders is also positive, however not statistically significant. Possibly, this is due to the relatively low number of observations in this sample. The results are likely driven by the fact that centre-wing governments increase aid spending in general, rather than these positive coefficients existing because centre-wing parties prefer certain recipient ideologies. Interestingly though, the coefficient in the sample with left-wing recipient leaders is higher than for right-wing recipient leaders, indicating that there is a larger gap between centre and left-wing donor governments when the recipient leader is left-wing rather than right-wing. All in all, this would suggest that donor governments do not take the findings of Dreher et al. (2015), who conclude ideological proximity increases aid's effectiveness, into consideration when deciding on aid recipients.

## 6. Robustness Checks

First, two donor countries will be excluded separately from the analysis. Second, the data will be split into two time periods, one before the end of the Cold War and one after. Third, a different ideology measure will be employed. Finally, total flows rather than flows as a percentage of donor GDP will be used. These robustness checks will be performed using the total disbursements and commitments as dependent variables. These are the main dependent variables and in addition, data availability is best for these outcome variables. Moreover, the results of the robustness checks in this section use the bilateral data, as this is the main focus of this thesis. At the donor level, results are comparable though.

#### 6.1 Excluding donor countries

In the first robustness check, estimations are done excluding the United States (US) and Germany, respectively. One could argue that parties from the same ideology do not necessarily take similar decisions in different OECD countries. By excluding two of the largest donors, both representing different types of OECD countries, it's possible to examine if results are altered. The United States is the largest economy and largest donor of aid in absolute terms within the sample, and it's an example of a country with two political parties, always having one ruling party. Germany is the largest European economy and is an example of a country that has seen coalition governments. First, the US is excluded from the sample.

	(1)	
	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.002***	0.002***
share	(0.000)	(0.000)
	× ,	
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	81,505	81,103

Table 6.1: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments (PPML bilateral level excluding USA)

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

After excluding the United States from the sample, the coefficients that were statistically significant using the full sample remain statistically significant and keep the same signs in table 6.1. Although the magnitudes for the centre-wing party share coefficients change slightly, the change is very limited. After returning the United States to the sample and excluding Germany instead, another regression is run, with results in table 6.2.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party share	0.001*** (0.000)	0.002*** (0.000)
Donor government right-wing party share	0.000 (0.000)	-0.000 (0.000)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	80,993	80,580

 Table 6.2: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments
 (PPML bilateral level excluding Germany)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The coefficients that were statistically significant using the full sample remain statistically significant and keep the same signs and magnitudes in table 6.2, again indicating results are robust to excluding large donors from the sample.

### 6.2 Time split

The first time period includes the years 1960 up to and including 1991, the second includes the years 1992 up to and including 2019. This is done for two reasons. First, preferences within the different ideologies could have changed over time. For example, perhaps left-wing parties were very much in favour of increasing aid budgets in the past, but they prioritise domestic spending in recent decades. Second, the end of the Cold War is seen by many as a turning point in recent geopolitical history. Possibly, geopolitical decisions and policy decisions have changed substantially after the end of the Cold War. For this reason, the first time period ends in 1991 with the end of the cold war. Important to note here is that there are more than twice as many observations for the second time period. There are two main reasons for this. First and most important, many more countries exist in the second time that have not been independent during (most of) the first time period, both donor and recipient countries. Second, data collection was better during the second time period.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.002***	0.002***
share	(0.001)	(0.001)
Donor government right-wing party	0.001**	0.000
share	(0.000)	(0.000)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	25,663	25,184
Observations	25,663	25,184

 Table 6.3: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments
 1960-1991 (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Compared to the full sample, the coefficients in table 6.3 for centre-wing party share are statistically significant again and have similar magnitudes. However, the coefficient for right-wing party share concerning disbursements is now also statistically significant and positive. This suggest that ideology differences between right and left have been larger during this first time period compared to the full sample, as right-wing parties donated more compared to left-wing parties, whereas this was not found in the full sample.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	60,631	60,283

 Table 6.4: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments
 1992-2019 (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Interestingly, none of the coefficients in table 6.4 are statistically significant. This is in line with Fuchs et al. (2014) and Faini (2006), who did not find a significant effect for government ideology. These studies used only more recent years in their analysis, and the robustness checks from this thesis suggest that in more recent years, there is indeed no significant coefficient for donor government ideology. Therefore, the first time period seems to have driven the statistically significant

coefficients for the full sample. This belief is reinforced by the finding that in the first time period, the coefficient for right-wing party share on disbursements was statistically significant and thus ideological differences on the topic of aid were larger relative to the full sample. This would suggest that in the years after the Cold War, there is no longer a statistically significant difference between ideologically different political parties on the topic of aid budgets. Differences between political ideologies on this topic appear to have been larger in the years 1960-1991 compared to the years 1992-2019, which might have to do with the Cold War, but this could also indicate changes in preferences within political parties over time.

Of course, if, as the robustness checks suggest, the importance of government ideology has been negligible in recent decades, these implications might no longer be valid. The takeaway for the present day would thus be that party ideologies should not matter to voters or recipient countries. Still, the fact that government ideology has been shown to affect aid allocation in the recent past means it is something to be looking out for in the years to come. Party preferences change constantly and considering the growing tensions between the West on the one hand and Russia and China on the other hand, geopolitical considerations could also mean ideological differences between donor governments regain importance in relation to aid, just like the results indicate they did during the Cold War.

#### 6.3 Different ideology measure

For this robustness check, the Schmidt index is used. This data comes from the same dataset as the main ideology measure used in this thesis. The Schmidt index measures the government ideology on a scale of 1 to 5, with a 1 indicating a hegemony of right-wing parties in the cabinet, and a 5 indicating a hegemony of left-wing parties in the cabinet. Thus, a higher value for this variable indicates that the government is more left-wing oriented.

	(1)	(2)
VARIABLES	Disbursements	Commitments
Donor government Schmidt index	-0.010*	-0.005
	(0.005)	(0.006)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,467	86,059

 Table 6.5: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments
 (PPML bilateral level using the Schmidt index)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness.

\_\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In this robustness check, results indicate that there is a significant effect of donor government ideology on the aid budget. However, rather than coefficients for separate ideologies, there is now a

scale from 1 to 5. Thus, the negative coefficient for the Schmidt indicates that the more left-wing a government is, the less aid is donated. An increase of 1 on the index decreases disbursements by 1 percentage point. As the index can increase by 4 at max, from 1 to 5, the difference between a fully right-wing government and a fully left-wing government is suggested to be around 4%. In the main analysis, significant coefficients are not found for right-wing party share compared to left-wing party share, but there is a positive significant coefficient for centre-wing party share. Possibly, the results for the Schmidt index are thus driven by centre-wing parties rather than right-wing parties. What's challenging though, is that an index like the Schmidt index does not leave room for the centre-wing parties have different policies than the average of left-wing and right-wing. Therefore, it's not possible to check the robustness of every single ideology share variable. Nevertheless, overall the trend that was found in the original analysis is reflected in the results found using this different ideology index.

#### 6.4 Total aid flows rather than the percentage of GDP

In this robustness check, the total values for aid disbursements and commitments are used rather than these values as a percentage of donor GDP. This to address the concern that in case GDP shrinks, the outcome value could increase even if aid flows remain constant when using aid as percentage of GDP.

VARIABLES	Disbursements	Commitments
Donor government	0.001**	0.000
centre-wing party share	(0.000)	(0.000)
Donor government	0.000	-0.001
right-wing party share	(0.000)	(0.001)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86 467	86 059

Table 6.6: Total aid to a single recipient: disbursements and commitments (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either total aid disbursements or total aid commitments to a single recipient, rather than as a percentage of donor GDP. Controls included: donor GDP per capita, donor real GDP growth, donor government expenditure & donor trade openness. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The coefficient for centre-wing party share in the case of commitments has lost its significance and is at zero. Thus, the centre-wing party share coefficient only has significance when accounting for donor economy size. Nevertheless, the coefficient in the case of disbursements is arguably the most important, as it sees to actual money being distributed, and this coefficient is significantly positive even when not accounting for donor GDP.

#### 6.5 Evaluating the hypotheses

After checking the robustness of the results, it is possible to look back the hypotheses that were formed in the theoretical background section. The hypotheses were as follows:

1. Donor government ideology does not affect the overall aid budget, either in aid disbursements or in aid commitments.

#### 2. Donor government ideology affects the channels through which the overall aid budget is spent.

Regarding the first hypothesis, the answer to whether it holds or not appears more nuanced than a yes or no answer. The results indicate that government ideology has affected the overall aid budget in the period 1960-2019, however the results also indicate that this has not been the case anymore for the most recent three decades. Thus, donor government ideology has affected the overall aid budget in the past, yet it does not anymore. Therefore, the hypothesis holds for these recent decades. As for the second hypothesis, donor government ideology affects some of the channels through which aid is spent, as both the sectoral aid allocation and the choice for grants or loans are influenced by donor government ideologies. Therefore, the second hypothesis does hold.

## 7. Limitations

Like any study, this thesis has its limitations. First of all, omitted variable bias is likely to exist. This would be the case if there are variables that are correlated with both the aid outcome variable and donor government ideology. This includes a wide range of possible factors, which can't all be controlled for and can be hard to identify and quantify. As was discussed, there is a plausible possibility that changes in political preferences within ideologies, as well as changing societal norms and geopolitical developments, have played in the differences in results for different time periods. However, such changes are very difficult to quantify.

Another limitation is that the use of OECD ODA data excludes donor countries not in the DAC, like China, Russia or Brazil. For some of these missing countries, this is less of an issue. For instance, China has a single party system and thus it is not possible to investigate the effects of government ideology on donated aid. This would however be possible for countries like Argentina or Brazil. As this thesis investigates the effect of donor government ideology, it is thus important to acknowledge that any possible findings are valid for aid in the form of ODA, and outcomes may not be the same in the case of a different aid definition with different reported values. Also, although the results indicate left-wing parties can take different action from centre and right-wing parties on average, specific parties that identify with an ideology might behave different from other parties within that ideological group, and thus results do not have to be valid in one specific setting.

Recommendations can also be made for future academic studies on this topic. First, the aforementioned differences between countries could be explored further. It would be interesting to find out how big these differences are and why these differences exist. A related topic for future research is digging deeper into the reasons why, globally, ideological differences have been relevant for aid budgets and allocations and why this possibly has changed over the past decades. Such research would have a more qualitative nature, compared to the quantitative nature of this thesis.

## 8. Conclusion

This thesis aims to identify the effect of donor government ideology on development aid spending. To this end, data on aid flows and data on the share of ideologies in donor governments are used in PPML regressions with fixed effects.

Using data at the donor country level and at the bilateral level, results indicate centre-wing governments increase disbursements and commitments most compared to right-wing and left-wing governments. In addition, more left-wing government save on grants, whereas more right-wing governments increase grant spending at the cost of loan spending. No conclusive significant coefficients are found for the effect of donor government ideology on aid spending within different sectors of aid. The performed robustness checks do suggest that these results were mainly driven by aid spending during the Cold War, and that after the Cold War, the effect of ideological differences in government on aid spending has become negligible. These results could have a number of causes. Possibly, centre-wing parties feel a moral duty to donate due to their often Christian nature, however, it could also be that left-wing parties introduce costly social programs domestically, and fund these in part by saving on development aid. Finally, ideas on the use of foreign aid for geopolitical purposes during the Cold War could have differed between different ideologies. Finding the exact cause would require additional research though.

Overall, this thesis is a new piece of the puzzle in the literature on the relation between donor government ideology and donated aid flows. By being the first to employ PPML in this regard, including additional years and analysing disaggregated flows as well, it hopes to take academics one step closer to conclusive answers. The findings of this study emphasize the importance of analysing centre-wing parties separately. Future research is still needed to get there though, since results in part of the existing literature and results from this thesis differ. As the existing quantitative research finds conflicting results, qualitative research might provide more insight into the factors driving political parties to make their decisions on aid spending.

Looking back at the introduction of this thesis, can we explain why Denmark and Germany do meet the UN target for aid spending, whereas the United States and France do not? The answer is no, not entirely. Yes, we do know some of the factors that affect aid spending, like macroeconomic circumstances and geopolitical developments, but no, there is no consensus yet on what factors play what exact role, including what role donor government ideology plays with regard to aid spending.

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# Appendix

Donor countries in sample		
Australia	Japan	
Austria	Luxembourg	
Belgium	Netherlands	
Canada	New Zealand	
Czech Republic	Norway	
Denmark	Poland	
Finland	Portugal	
France	Slovak Republic	
Germany	Slovenia	
Greece	Spain	
Hungary	Sweden	
Iceland	Switzerland	
Ireland	United Kingdom	
Italy	United States	

## **Scatterplots**

Figure 5.3: Scatterplot of average disbursements vs average left-wing share





Figure 5.4: Scatterplot of average disbursements vs average centre-wing share

Figure 5.5: Scatterplot of average disbursements vs average rightt-wing share



#### **Regression tables**

Table 5.1: Logged aid as a share of donor GDP: disbursements and commitments (OLS Donor level)

VARIABLES	Disbursements	Commitments
Donor government centre-wing party share	0.001	0.001
	(0.001)	(0.001)
Donor government right-wing party share	0.001***	0.001*
	(0.000)	(0.001)
$\mathbf{D}_{\text{constraint}} = \mathbf{C} \mathbf{D} \mathbf{D}_{\text{constraint}} + \mathbf{C} \mathbf{C} = 1 0 0 0$	0.001	0.004
Donor GDP per capita (\$ x1000)	-0.001	0.004
	(0.006)	(0.004)
Donor real GDP growth (%)	0.008	0.006
	(0.011)	(0.010)
	(01011)	(01010)
Donor government expenditure (% of GDP)	0.018**	0.011
	(0.008)	(0.008)
		0.005*
Donor trade openness (% of GDP)	0.008**	0.005*
	(0.003)	(0.002)
Constant	-9.344***	-6.985***
	(0.284)	(0.324)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1,122	1,052
R-squared	0.322	0.210
Number of donors	29	29

*Notes:* Standard errors in parentheses, clustered by donor country. OLS with dependent variables being either aid disbursements or aid commitments as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.2: Aid as a share o	f donor GDP: disbursements and a	commitments (PPML donor level)

VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001**	0.001**
share	(0.001)	(0.000)
Donor government right-wing party	0.001***	0.001*
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.006***	0.008***
	(0.002)	(0.002)
Donor real GDP growth (%)	0.008	0.007
	(0.008)	(0.008)
Donor government expenditure (% of	0.020***	0.013**
GDP)	(0.005)	(0.005)
Donor trade openness (% of GDP)	0.003**	0.002
	(0.001)	(0.001)
Constant	-6.792***	-6.357***
	(0.242)	(0.266)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1,120	1,052

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments as a share of donor GDP.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

VARIABLES	Social	Economic	Production	Humanitarian
Donor government centre-wing party	0.002**	0.001	-0.000	0.002
share	(0.001)	(0.002)	(0.001)	(0.001)
Donor government right-wing party	0.001	-0.001	0.001	0.000
share	(0.001)	(0.001)	(0.001)	(0.001)
Donor GDP per capita (\$ x1000)	0.015***	0.009*	0.015***	-0.003
	(0.004)	(0.005)	(0.004)	(0.006)
Donor real CDP growth $(\%)$	0.007	0.017	0.011	0.000
Donoi leai ODI glowili (%)	(0.007)	(0.020)	(0.011)	(0.009
	(0.013)	(0.050)	(0.014)	(0.019)
Donor government expenditure (%	-0.001	0.033**	0.030***	0.023
of GDP)	(0.018)	(0.013)	(0.010)	(0.016)
Donor trade openness (% of GDP)	-0.002***	0.002	0.002	0.001
F () )	(0.001)	(0.003)	(0.003)	(0.001)
Constant	-7.165***	-9.455***	-9.346***	-9.069***
	(0.784)	(0.762)	(0.607)	(0.982)
Danan Daainiant aain EE	VEC	VEC	VEC	VEC
Donor-Recipient pair FE	IES	IES	I ES	IES
Kecipient-Year FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	994	985	987	943

#### Table 5.3: Aid as a share of donor GDP: by sector (PPML donor level)

*Notes:* Standard errors in parentheses, clustered by donor country. PPML with dependent variables being social aid (*Social*), economic aid (*Economic*), production aid (*Production*) or humanitarian aid (*Humanitarian*) as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Table 5.4: Aid as a share of donor GDP: grants and loans (PPML donor level)

VARIABLES	Grant	Loan
Donor government centre-wing party share	0.001**	0.002
	(0.001)	(0.002)
Donor government right-wing party share	0.001*	-0.002
	(0.000)	(0.002)
Donor GDP per capita (\$ x1000)	0.007***	0.022
	(0.002)	(0.015)
Donor real GDP growth (%)	0.005	-0.017
	(0.008)	(0.023)
Donor government expenditure (% of GDP)	0.011**	0.062**
	(0.005)	(0.030)
Donor trade openness (% of GDP)	0.002*	-0.018
	(0.001)	(0.015)
Constant	-6.390***	-9.026***
	(0.236)	(1.689)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	1,051	725

Notes: Standard errors in parentheses, clustered by donor country. PPML with dependent variables being either aid grants or aid loans as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.5: Logged aid as a share of donor GDP: disbursements and com	mitments (OLS bilateral level)
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VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001***	0.003***
share	(0.000)	(0.000)
Donor government right-wing party	0.000**	0.001***
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.011***	0.014***
	(0.002)	(0.002)
Donor real GDP growth (%)	0.011***	-0.011**
	(0.004)	(0.005)
Donor government expenditure (% of	0.032***	0.014***
GDP)	(0.004)	(0.005)
Donor trade openness (% of GDP)	-0.002*	0.005***
	(0.001)	(0.001)
Constant	-14.329***	-16.342***
	(0.784)	(0.913)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,395	86,515

Notes: Standard errors in parentheses, clustered by country pair. OLS with dependent variables being either aid disbursements or aid commitments as a share of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.6: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments (PPML

VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001***	0.002***
share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.006***	0 009***
	(0.002)	(0.002)
Donor real GDP growth (%)	-0.001	-0.004
	(0.004)	(0.006)
Donor government expenditure (% of	0 023***	0.021***
GDP)	(0.004)	(0.004)
	0.001	0.000
Donor trade openness (% of GDP)	0.001	0.002
	(0.001)	(0.001)
Constant	2.956***	3.023***
	(0.192)	(0.205)
Donon Decinient nein EE	VES	VEC
Donor-Recipient pair FE	I Eð VES	
Kecipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,467	86,059

#### *bilateral level*)

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

VARIABLES	Social	Economic	Production	Humanitarian
Donor government centre-wing	-0.001*	-0.008***	-0.004***	0.001
party share	(0.001)	(0.001)	(0.001)	(0.001)
Donor government right-wing	-0.001***	-0.006***	0.000	0.001
party share	(0.000)	(0.001)	(0.001)	(0.001)
Donor GDP per capita (\$ x1000)	0.009***	-0.000	0.002	0.003
	(0.003)	(0.006)	(0.007)	(0.004)
Donor real GDP growth (%)	0.000	0.014	-0.019*	0.005
	(0.005)	(0.024)	(0.011)	(0.007)
Donor government expenditure	0.013***	-0.028	-0.011	0.004
(% of GDP)	(0.005)	(0.022)	(0.010)	(0.007)
Donor trade openness (% of	-0.003**	0.001	0.003	-0.006***
GDP)	(0.001)	(0.003)	(0.002)	(0.001)
Constant	2.742***	4.994***	2.386***	2.903***
	(0.352)	(1.216)	(0.876)	(0.492)
Donor-Recipient pair FE	YES	YES	YES	YES
Recipient-Year FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	33,750	23,755	24,897	25,613

Table 5.7: Aid to a single recipient per 1 million USD of donor GDP: by sector (PPML bilateral level)

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being social aid (Social), economic aid (Economic), production aid (Production) or humanitarian aid (Humanitarian) to a single recipient per 1 million USD of donor GDP.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 5.8: Aid to a single recipient per 1 million USD of donor GDP: grants and loans (PPML bilateral level)

VARIABLES	Grant	Loan
Donor government centre-wing party share	0.002***	0.003***
	(0.000)	(0.001)
Donor government right-wing party share	0.001***	-0.004***
	(0.000)	(0.001)
Donor GDP per capita (\$ x1000)	0.011***	0.011
	(0.002)	(0.008)
Donor real GDP growth (%)	-0.002	-0.011
<b>C</b>	(0.005)	(0.017)
Donor government expenditure (% of GDP)	0.013***	0.080***
	(0.004)	(0.013)
Donor trade openness (% of GDP)	0.004***	-0.022***
• · · · ·	(0.001)	(0.007)
Constant	2.899***	1.575*
	(0.203)	(0.811)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,009	35,218

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid grants or aid loans to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

VARIABLES	Disbursements - Left wing recipient leader	Disbursements - Centre wing recipient leader	Disbursements - Right wing recipient leader
Donor government centre-wing	0.002***	-0.000	0.001**
party share	(0.001)	(0.001)	(0.001)
Donor government right-wing	0.001*	-0.001	0.000
party share	(0.000)	(0.001)	(0.000)
Donor GDP per capita (\$ x1000)	0.002	0.004	0.003
	(0.003)	(0.007)	(0.002)
Donor real GDP growth (%)	-0.002	0.009	-0.001
	(0.006)	(0.011)	(0.006)
Donor government expenditure	0.029***	0.015	0.020***
(% of GDP)	(0.004)	(0.013)	(0.005)
Donor trade openness (% of	-0.000	-0.005	0.003**
GDP)	(0.001)	(0.003)	(0.001)
Constant	2.927***	3.913***	3.060***
	(0.237)	(0.817)	(0.260)
Donor-Recipient pair FE	YES	YES	YES
Recipient-Year FE	YES	YES	YES
Year FE	YES	YES	YES
Observations	34,798	5,323	45,954

Table 5.9: Aid to a single recipient per 1 million USD of donor GDP: disbursements by recipient ideology (PPML bilateral level)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being aid disbursements to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

VARIABLES	Commitments - Left wing recipient leader	Commitments - Centre wing recipient leader	Commitments - Right wing recipient leader
Donor government centre-	0.002***	0.001	0.001***
wing party share	(0.001)	(0.001)	(0.001)
Donor government right-	0.000	-0.000	-0.000
wing party share	(0.000)	(0.001)	(0.000)
Donor GDP per capita (\$	0.005	0.013**	0.006***
x1000)	(0.004)	(0.007)	(0.002)
Donor real GDP growth (%)	-0.001	-0.008	-0.007
	(0.007)	(0.020)	(0.008)
Donor government	0.027***	0.009	0.018***
expenditure (% of GDP)	(0.005)	(0.017)	(0.006)
Donor trade openness (% of	0.000	-0.002	0.003**
GDP)	(0.002)	(0.003)	(0.001)
Constant	3.091***	3.615***	3.153***
	(0.294)	(0.917)	(0.283)
Donor-Recipient pair FF	VES	VES	VES
Recipient-Year FF	YES	VFS	VFS
Vear FF	VES	VES	VES
Observations	3/ /83	5 216	15 597
	57,705	5,210	т,,,,,,

## Table 5.10: Aid to a single recipient per 1 million USD of donor GDP: commitments by recipient ideology (PPML bilateral level)

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being the aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# **Robustness Checks**

VARIABLES	Disbursements	Commitments
Donor government centre-wing	0.002***	0.002***
party share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
	0.00/***	0.010***
Donor GDP per capita (\$ x1000)	(0.002)	(0.002)
	à ana	, , , , , , , , , , , , , , , , , , ,
Donor real GDP growth (%)	0.000	-0.002
	(0.004)	(0.006)
Donor government expenditure (%	0.022***	0.020***
of GDP)	(0.004)	(0.004)
Donor trade openness (% of GDP)	0.001	0.002
•	(0.001)	(0.001)
Constant	3.006***	3.066***
	(0.194)	(0.209)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	81,505	81,103

 Table 6.1: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments
 (PPML bilateral level excluding USA)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6.2: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments (PPML

VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.001***	0.002***
share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.006***	0.010***
• • • · ·	(0.002)	(0.002)
Donor real GDP growth (%)	-0.001	-0.006
	(0.005)	(0.006)
Donor government expenditure (% of	0.025***	0.022***
GDP)	(0.004)	(0.004)
Donor trade openness (% of GDP)	0.001	0.002
• • • •	(0.001)	(0.001)
Constant	2.905***	2.981***
	(0.196)	(0.210)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	80,993	80,580

#### bilateral level excluding Germany)

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6.3: Aid to a single recipient per 1 million USD of donor GDP: disbursements and c	commitments
1960-1991 (PPML bilateral level)	

VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.002***	0.002***
share	(0.001)	(0.001)
		0.000
Donor government right-wing party	0.001**	0.000
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.030***	0.004
	(0.010)	(0.012)
Donor real GDP growth (%)	0.006	0.018**
	(0.006)	(0.009)
Donor government expenditure (% of	0.041***	0.041***
GDP)	(0.005)	(0.006)
Donor trade openness (% of GDP)	-0.002	-0.012***
	(0.004)	(0.004)
Constant	2.555***	3.540***
	(0.480)	(0.446)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	25,663	25,184

*Notes:* Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6.4: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments

1992-2019	(PPML	bilateral	level)
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VARIABLES	Disbursements	Commitments
Donor government centre-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor government right-wing party	0.000	-0.000
share	(0.000)	(0.000)
Donor GDP per capita (\$ x1000)	0.002	0.003
	(0.002)	(0.002)
Donor real GDP growth (%)	0.005	0.002
	(0.004)	(0.005)
Donor government expenditure (% of	0.024***	0.017***
GDP)	(0.004)	(0.004)
Donor trade openness (% of GDP)	0.001	0.002*
I ( , , ,	(0.001)	(0.001)
Constant	2.780***	3.046***
	(0.218)	(0.264)
		1176
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	60,631	60,283

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Table 6.5: Aid to a single recipient per 1 million USD of donor GDP: disbursements and commitments

(PPML bilateral level using the Schmidt index)

VARIABLES	Disbursements	Commitments
Donor government Schmidt index	-0.010*	-0.005
	(0.005)	(0.006)
Donor GDP per capita (\$ x1000)	0.006***	0.009***
	(0.002)	(0.002)
Donor real GDP growth (%)	-0.000	-0.004
	(0.004)	(0.006)
Donor government expenditure (% of GDP)	0.023***	0.020***
	(0.004)	(0.004)
Donor trade openness (% of GDP)	0.001	0.002
	(0.001)	(0.001)
Constant	3.046***	3.120***
	(0.185)	(0.202)
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86,467	86,059

Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either aid

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disbursements or aid commitments to a single recipient per 1 million USD of donor GDP. \_\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 6.6: Total aid to a single recipient: disbursements and commitments	(PPML bilateral level)
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VARIABLES	Disbursements	Commitments
Donor government	0.001**	0.000
centre-wing party share	(0.000)	(0.000)
Donor government	0.000	-0.001*
right-wing party share	(0.000)	(0.000)
Donor GDP per capita	0.028***	0.030***
(\$ x1000)	(0.003)	(0.003)
	0.000	0.010
Donor real GDP growth	-0.006	-0.010
(%)	(0.007)	(0.008)
Donor government	0.034***	0.034***
expenditure (% of GDP)	(0.004)	(0.005)
Donor trade openness	-0.006***	-0.003
(% of GDP)	(0.002)	(0.002)
Constant	2 493***	2 627***
Constant	(0.215)	(0.248)
	VEQ	VEG
Donor-Recipient pair FE	YES	YES
Recipient-Year FE	YES	YES
Year FE	YES	YES
Observations	86 467	86 059

Observations86,46786,059Notes: Standard errors in parentheses, clustered by country pair. PPML with dependent variables being either total aid<br/>disbursements or total aid commitments to a single recipient, rather than as a percentage of donor GDP.<br/>\*\*\* p<0.01, \*\* p<0.05, \* p<0.1</th>