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Political Orientation of European Donor Countries and its Relationship with Foreign Aid

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ABSTRACT

This thesis investigates whether foreign aid is impacted by government ideology in 18 European countries between 1990–2019. We apply a panel individual fixed-effects model and subject the relationship between government ideology and foreign aid to further controls not utilised in previous papers, the main one being the share of radicals in the parliament which we control for and interact with the government ideology variable. Our initial results from the model support previous findings. The results, however, become inconclusive after applying robustness checks, which indicates that government ideology might not have as significant of an impact as showcased in previous research. We discuss that this might be due to changing trends in the European foreign aid context, with higher domestic Official Development Assistance spending depressing the relationship. We suggest that government ideology might impact foreign aid allocation more than the total level of aid but that further research is necessary to establish any causal relationship between higher domestic Official Development Assistance spending and ideology.

Keywords: Foreign Aid, European Union, Government Ideology, Official Development Assistance, Aid Donors, Populism, Panel Fixed Effects

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1 Introduction

Official Development Assistance (ODA) reached record levels in 2022 after having increased steadily since the 1960s (UNCTAD 2024). However, while reaching these unprecedented levels, a larger share of ODA is being spent domestically in donor countries. Moreover, infringements on aid are being made, a notable example being the recent decision in 2025 by the President of the United States Donald Trump to sign the Executive Order on Reevaluating and Realigning United States Foreign Aid, entailing a ban on assistance administered through USAID until it has undergone a review and been approved (Bruce 2025). This is to better align foreign aid with the America First agenda, according to Peel, Neville and Borrett (2025). These recent events in the United States highlight foreign aid's intricate link with domestic politics.

The relationship between ideology at the government level and foreign aid is the focus of this thesis. A growing body of literature studies the effect of ideology on donor countries' foreign aid and numerous case studies and political science studies identify a trend of left-leaning governments providing more foreign aid (Stokke 1989; Lumsdaine 1993; Thérien and Noël 2000). Within the field of economics, this relationship has been confirmed using econometric methods, with both Tingley (2010) and Brech and Potrafke (2014), for instance, finding that left-leaning governments have higher foreign aid levels. Brech and Potrafke (2014) write that these results indicate the presence of a partisan effect.

The existence of this partisan effect is what we construct this thesis's hypothesis around. We hypothesise that left-wing governments have higher foreign aid levels than their right-wing counterparts. This builds upon previous research and the following premise: firstly, that foreign aid can be likened to domestic welfare spending and secondly, that these domestic political preferences correspond to foreign aid policy preferences. This hypothesis entails the following research question: "How do European governments' ideological orientation impact foreign aid donations levels to developing countries post-1990?". With the results of this research question, we contribute with new insights to the field by including new potential explanatory factors for foreign aid donations levels.

We test our hypothesis by employing a panel individual fixed-effects model where the regression specification features various variables that have been deemed relevant to control for based on previous research. Data for the variables come from various sources, such as the OECD, IMF and Party Government in Europe Database (PAGED) among others. Our government ideology variable comes from the PAGED dataset, which is based on political party data from the Manifesto Project Dataset.

We initially find a significant result showing that left-leaning governments have higher foreign aid levels, but further robustness checks and sensitivity analyses cast doubts on the findings' validity. Considering that previous research supports our hypothesis, we reason about our results' diverging nature. A concluding suggestion is that changing aid donor allocation behaviour - but also potential faulty model specification or data, a different political environment or weakened

relationship between government ideology and foreign aid - could be reasons for the discrepancy between our findings and previous findings.

Our findings may be useful for various stakeholders in the foreign aid sector to understand the potential impacts of changes to the European political and ideological landscape, and the implications those may have for their practice. Our results further contribute to the existing body of literature on this subject, as we expand on past research by including new variables, newer data and identify key areas where further research is of importance.

The thesis is structured as follows. Section 2 provides relevant background information for understanding foreign aid. Section 3 provides an empirical background, outlining the findings of previous studies on the relationship between government ideology and foreign aid. That is followed by Section 4, which describes the theoretical foundation underlying our hypothesis, the hypothesis itself, our contribution as well as research question. Section 5 provides relevant information regarding the datasets utilised for this thesis and the construction of variables. Our choice of and motivation for the methodology is then explained in Section 6, which is followed by our subsequent findings in Section 7. Section 8 analyses these findings' validity, with Section 9 detailing our conclusions.

2 Background

We begin our discussion by providing some context to the subject, such as the definition of foreign aid, a brief overview and its trajectory, focusing on multi- and bilateral foreign aid.

2.1 Definition of Official Development Assistance

Official Development Assistance (ODA) is used in this paper analogously to “foreign aid”. OECD (2024) defines ODA as “activities carried out with the economic development and welfare of developing countries as their main objective. It is a measure of donor effort, including grants and grant equivalents of concessional loans”. More specifically, ODA consists of three components: ODA flows, ODA-eligible private sector instruments (PSI) and ODA grant equivalent measures.

ODA flows are all grants and loans that are provided to the official sector in recipient countries, international non-governmental organisations (NGOs) or multilateral development institutions. The loans must have a grant element to make them have a concessional character. ODA-eligible PSI are financial support to the private sector in the recipient country and the ODA grant equivalent measure² is a way of transforming the size of ODA-eligible PSI and ODA loans to make all the commitments comparable in terms of monetary value. This thesis’s data includes all of the above types of ODA-eligible elements and are jointly termed “ODA” or “foreign aid”.

2.2 Overview of Foreign Aid

There has been a steady increase in net ODA levels from the 1960s and onwards. In 2022, the total net ODA level for the countries in the Development Assistance Committee’s (DAC), the OECD’s forum for some of the world’s largest aid providers, surpassed \$200 billion. When one only looks at the EU countries and institutions, the total amounts to around \$125 billion. The total foreign aid in 2022 globally amounted to the record level of \$287 billion, an amount that still, however, falls below the United Nation Sustainable Development Goal 17-target by \$143 billion (UNCTAD 2024).

Foreign aid has been allocated with shifting priorities over the years. Modern foreign aid can be said to have its origins in the Cold War, starting with the US’s Marshall Plan to reduce the spread of communism in Europe (Griffin 1996, p. 34). Foreign aid continued to be marked by US-Soviet rivalry until the fall of the Soviet Union, with donor countries giving aid to countries to further a certain ideology. Besides political and ideological motivations, though, commercial interests began to play a bigger role in ODA, with donor countries, for instance, focusing on

²The grant-equivalence method was introduced and implemented in 2019 (using 2018) data. It is therefore only included in the last year of the data. Calculating the grant equivalence of, for instance, a loan is done by discounting future flows from a financial commitment by a donor country to today’s value. If the future discounted flows are lower than what the donor country contributes today, then that difference constitutes the grant equivalent. For more information on the grant-equivalence method, see OECD 2021.

giving aid to countries with which they had a trade interest (Younas 2008). Since the end of the Cold War, donor countries continue to provide aid for a myriad of reasons, but not to uphold political “blocks” to the same extent as during the Cold War.

The destination of ODA has changed as well. UNCTAD (2024) writes that in the period 2012-2022, aid to developing regions decreased by 2% despite a record level of foreign aid, with the majority of the increase being attributed to the increase of aid to “unspecified” recipients by 54% (p. 6). The unspecified recipients category contains, among other things, domestic spending on refugees and asylum seekers, with the significant increase being driven by two major spikes in refugee waves: the first one in 2015 when more than a million refugees came to Europe from the Middle East, and the second one because of the great influx of refugees from Ukraine between 2021 and 2022. Figure 1 showcases the domestic ODA spending - aid to unspecified recipients - as share of total ODA up to 2019, as that is the cutoff point for the data utilised in this thesis. The figure clearly illustrates the spike in 2015. The Appendix A includes another figure, containing data up until year 2023 which also captures the second refugee wave coming from Ukraine.

Figure 1 illustrates overall domestic spending of ODA as a share of total ODA starting in 2010. This trend is further exemplified and illustrated in Figure 2, which showcases the development of the share of domestic ODA for a selection of countries in our dataset. Besides the clear spikes in 2015 for almost all of the countries, these graphs also indicate an overall increase in the share of domestic ODA spending. It could, however, be the lingering effects of 2015’s refugee wave. To ascertain a trend, we therefore include another graph in the Appendix A with data up until 2023 that confirm a continuing increase. This is partly driven by the Ukrainian refugee wave in 2021 and 2022 as well, though.

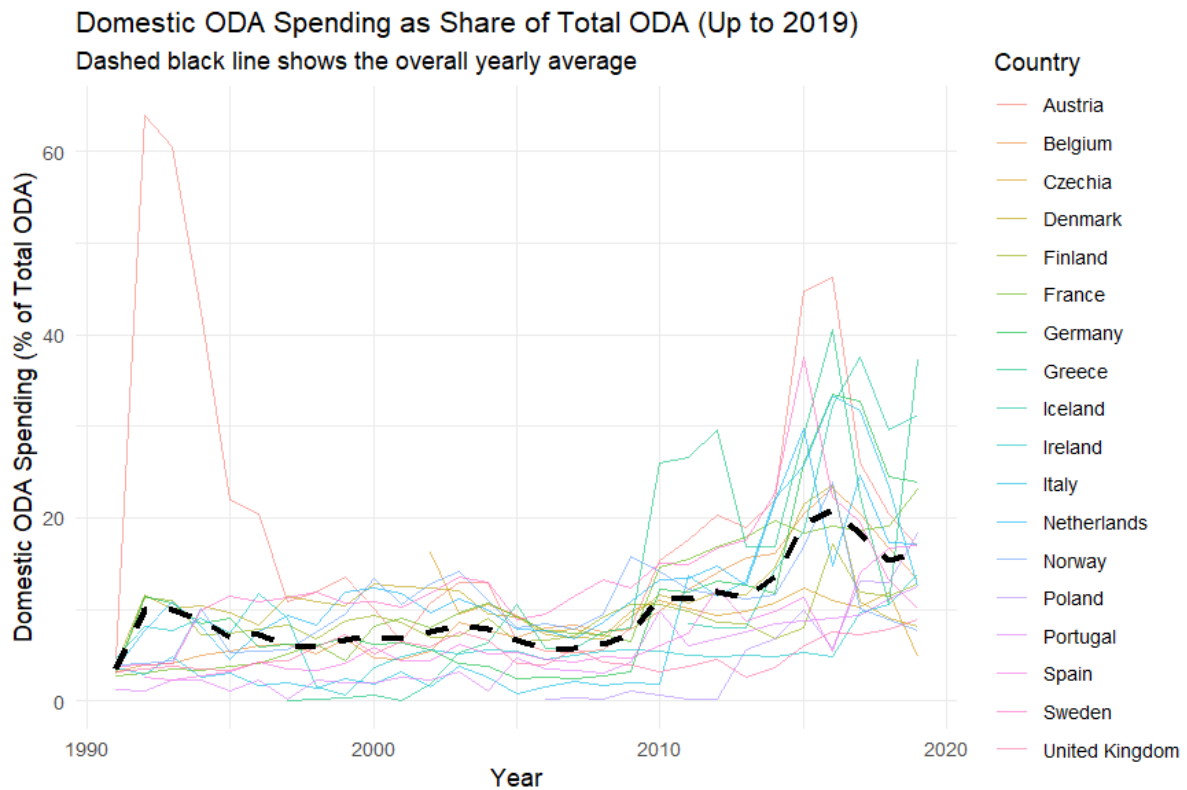


Figure 1: Domestic ODA Spending as Share of Total ODA (Up to 2019). Source: van Teutem et al (2025).

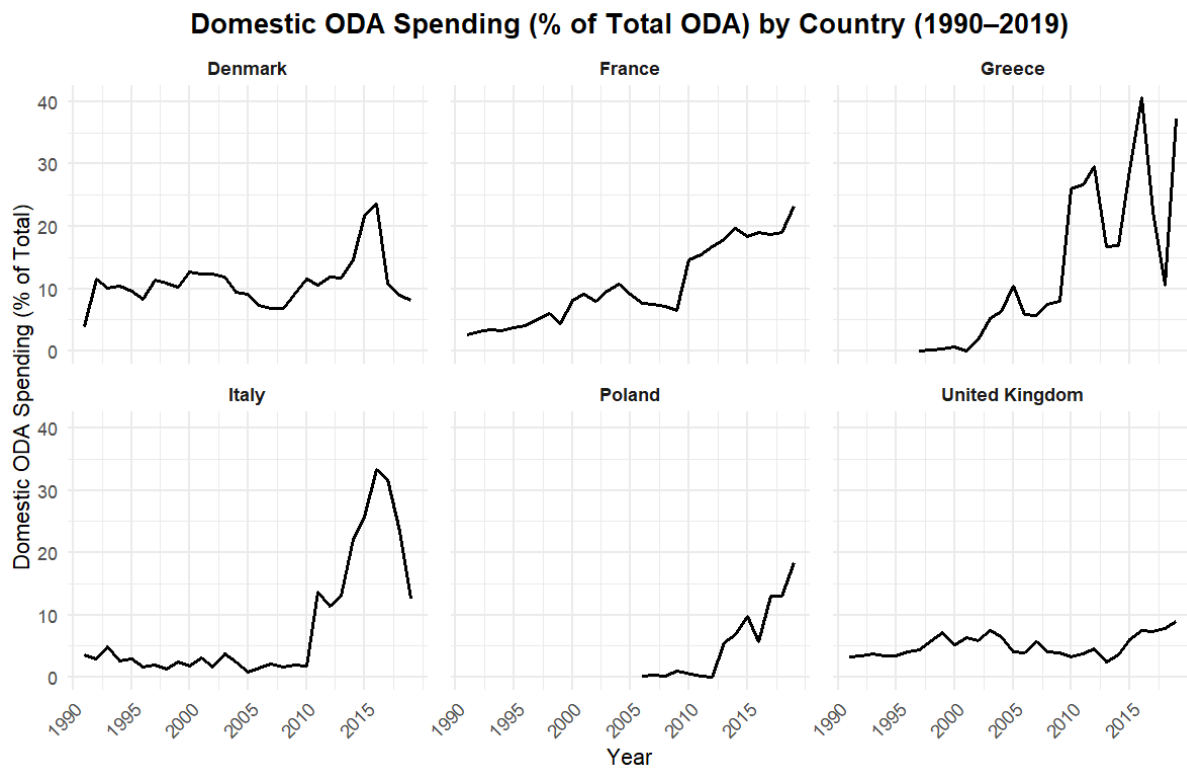


Figure 2: Domestic ODA Spending as % of Total ODA for a Selection of Countries (Up to 2019). Source: van Teutem et al (2025).

2.3 The Trajectory of Multilateral Official Development Assistance

ODA can be both bi- and multilateral aid (OECD 2021). For Europe, the European Commission and EU institutions are large donors of foreign aid, donations that are then classified as multilateral foreign aid donations in the EU member states' reporting on foreign aid. This multilateral aid is determined on a top EU level, with all countries' prime ministers and EU ministers convening to determine the overall EU budget, including the share of external relations spending classified as ODA (Rabe 2025).

Of the determined level, each member country calculates how much can be credited as their contribution to the total ODA level, which is thereafter included as part of their national ODA reporting. A country's multilateral ODA level is therefore partly determined by the overall EU ODA budget and the share which can be accounted as their own. This is, in turn, included in their national reporting of foreign aid. The total national foreign aid budget is therefore the sum of the multilateral aid going through the EU and to other multilateral organisations (such as the United Nations agencies, development banks and NGOs) and the bilateral aid, which countries themselves decide how to distribute to recipient countries.

3 Empirical Background

A large share of the research on foreign aid concerns recipient-country factors. A growing share, however, focuses on donor-country factors' significance. The following section refers to existing studies focusing on the significance of donor ideology for foreign aid. We start by focusing on the results from political science studies and then move on to findings within the field of economics.

3.1 Studies Within the Field of Political Science

Thérien (2002) showcases how foreign aid has been affected by left-right partisanship since its beginning, with its very definition being coloured by ideological division. Those who described themselves as left-leaning strove for a more restrictive definition of foreign aid than those leaning to the right. A more restrictive definition would have the consequence that less could be accounted for as foreign aid and governments would therefore have to commit more money to meet the stringent criteria, a position that right-leaning partisans opposed. He further highlights that foreign aid donations were more generous when the left of the political spectrum had a larger relative power throughout history.

While Thérien writes about foreign aid in general, various case studies within political science have focused specifically on the relationship between government ideology and foreign aid effort. Lumsdaine (1993) concludes that left-leaning parties and governments have been more positive towards aid throughout the world by showcasing historical accounts of aid effort in countries where left-leaning parties worked to increase aid effort and right-leaning parties worked against it (p. 161-167). Stokke et al (1989) showcase a similar trend of left-leaning governments committing to greater aid efforts than their right-leaning counterparts through case studies done on various countries, such as Sweden and Norway.

Thérien and Noël (2000) investigate the relationship between ideology and foreign aid using a LISREL analysis. They construct their ideology variable by looking at cumulative political power, which allows them to add a time aspect to the relationship. This time aspect is prudent, they argue, as "The effect of social democracy on public policy is likely to be a long-run phenomenon, felt only after a party has been in power for many years" (p. 153). Introducing this time aspect would allow them to observe the significance of ideology for foreign aid identified in the above works by Stokke (1989) and Lumsdaine (1993). What Thérien and Noël find is that left-wing governments have an effect on foreign aid but only in the long run. This could be due to left-wing values becoming institutionalised in places where left-wing partisans have had more relative power compared to right-wing partisans over a longer period of time, as evidenced by the continuing high foreign aid levels from countries with established social-democratic institutions.

3.2 Studies Within the Field of Economics

Moving from the field of political science into economics, a growing body of literature is testing the relationship between ideology and foreign aid. Some have assessed ideology's significance for aid allocation (Greene and Licht (2018) among others); others have looked at its role in the channels chosen for aid (see for example Flynn and Allen (2018)); and some have assessed the role of ideology in the effectiveness of aid given (Dreher, Minasyan and Nunnenkamp 2015; Gutting and Steinwand 2017).

None of the above papers using econometric methods concern total aid levels, rather focusing on its use or allocation. Tingley (2010), however, focuses on ideology's role for total aid. He constructs a political variable of government ideological orientation using data from the Comparative Manifestos Project (CMP) and uses aid effort levels from the OECD/DAC database. The political variable is constructed by only looking at economic policy factors to evaluate the view that governments constituent parties have on what the government's role in society should be, which is the scale he uses to determine whether to qualify a government as left- or right-leaning. He thereafter utilises a time-series cross-sectional dataset to observe the impact of changes in the political and economic variables, with the result being that the more the government leans towards the right, the less foreign aid it donates. He concludes that both political and economic variables within donor countries have an impact on the aid effort, though only for foreign aid destined to low-income countries and multilateral aid.

Developing on Tingley's (2010) research that covers the period 1971-2002, Brech and Potrafke (2014) examine similar questions but expand the covered period to 1960-2009. Their results, confirming Tingley's, indicate that left-wing governments indeed increase spending, though this is only statistically significant for aid destined to lower-income countries. The authors write that a partisan effect is present, meaning that wealth redistribution (transfers) commonly associated with left-leaning ideology can explain an increased transfer (in the form of aid) from richer OECD countries to lower-income countries. They do, however, conclude that it is localised and targets certain recipients.

4 Hypothesis and Research Question

In this section, we present our hypothesis and its underlying theoretical framework. We also provide a more detailed explanation regarding our contribution to the existing literature on the relationship between government ideology and foreign aid. Lastly, we present our research question.

4.1 Theoretical Framework

In this section we elaborate on two key components of our hypothesis: foreign aid's similarities to domestic welfare spending as well as the relationship between domestic political preferences and foreign policy preferences.

4.1.1 Foreign Aid's Similarities to Domestic Welfare Spending

Lumsdaine (1993) was one of the pioneers of linking ideology to foreign aid by making an analogy between foreign aid and welfare spending. He argues that foreign aid has its foundation in humanitarianism, with the focus of eradicating poverty and economic inequality rather than any other motive (p. 115-116). Foreign aid, Lumsdaine writes, shares this foundation with domestic social spending, as a country's spending on domestic wealth redistribution is also dependent on the ideological focus of eradicating poverty and economic inequality.

This, in turn, indicates that a preference for domestic wealth redistribution also should correspond to a preference for foreign aid, as the preference for domestic wealth redistribution is shaped by one's preference for poverty level and income inequality. This entails that variations in foreign aid preference should be correlated with domestic variations in attitudes to poverty and income inequality - domestic social spending should have a positive covariance with foreign aid spending (p. 120). The wish to decrease poverty, alongside solidarity with developing countries, should be positively correlated with foreign aid effort (p. 154).

To further strengthen his argument, Lumsdaine shows how top donor countries have relatively high domestic social spending as a share of GDP alongside a higher concern for poverty among its citizens, as illustrated by higher shares of PVO (private voluntary contributions) to aid institutions (p. 121-125). The most generous donors furthermore have a higher amount of social-democratic policies.

In sum, foreign aid is akin to domestic welfare since it relies on the same normative foundation as the preferences for welfare does: the wish to decrease poverty and economic inequality. Preferences for foreign aid and domestic welfare can be said to be driven by the same values. This is illustrated by the fact that many top donors also have a relatively high wealth redistribution domestically.

4.1.2 Domestic Political Beliefs and their Relationship with Foreign Policy Beliefs

While Lumsdaine (1993) illustrates how foreign aid can be viewed as welfare, he assumes that one's domestic political preferences can be extrapolated to foreign policy preferences. Various studies have been done on the correlation between domestic political and foreign policy preferences amongst members of the general public as well as elites, some also focusing on the interplay between them.

Pertaining to individuals, Lumsdaine (1993) highlights data that showcases how individuals who express concern for inequality and want to decrease poverty make larger amounts of private voluntary contributions to the "Third World" (p. 121-125). These are illustrative of individuals' preferences for foreign aid, and one can expect these preferences to be catered to by publicly-elected officials since they run the risk of performing worse in elections if they deviate too strongly from public opinion during their tenure. This is evidenced by Milner and Tingley (2015), who showcase that American elites avoid foreign policy instruments that are found to be ideologically divisive in public opinion (p. 261-262), which economic foreign aid is deemed to be (p. 199). This suggests that individuals' domestic political preferences translate to foreign policy preferences.

Regarding American elites, Murray, Cowden and Russett (1999) examine whether one can bifurcate their domestic policy preferences from foreign policy preferences. They find that preferences for the former are strongly correlated with preferences for the latter, i.e. that an elite's stance on a liberal-conservative ideological continuum acts as a primary indicator for their foreign policy preferences. In other words, there is "[...] a strong degree of horizontal constraint between the beliefs about foreign and domestic policy among American elites" (p. 173).

4.1.3 Implications for the Relationship between Foreign Aid and Government Ideology

What does the fact that foreign aid can be likened to domestic welfare spending entail for the objective of this thesis? Viewing foreign aid as akin to welfare spending allows us to draw a theoretical connection between ideology and foreign aid because of the partisan effect that's present for domestic welfare spending. Which topics can be classified as left and right are showcased in a table in the Appendix B, with the welfare state being ideologically divisive: left-wing ideology favours an expansion of it whereas right-wing ideology aims to limit it.³

A core aspect of left-wing ideology is redistribution, in other words the favouring of a strong welfare state as a wealth redistribution mechanism (Lumsdaine 1993, p. 138). This is because it is seen as the way to reduce economic inequality and poverty domestically. With foreign aid sharing the same normative foundation as domestic welfare spending, one can infer that support

³For our definition of left-wing and right-wing ideology, we follow the assumptions made by the Manifesto Right-Left index. Previous research within the field of foreign aid and government ideology, such as Tingley (2010) and Lumsdaine (1993), has used similar assumptions with the main defining line differentiating the right and left being their stance on the welfare state and economic wealth redistribution policies, all of which are included in our own definition.

for the latter indicates support for the former, i.e. that those leaning towards the left would be more positive to higher foreign aid effort as foreign aid can be seen as an international extension of the redistribution politics they favour domestically.

Further, the fact that the horizontal constraint amongst elites found by Murray, Cowden and Russett (1999) indicates an ideological consistency for domestic and international issues and that the elites in question are also constrained by ideological divides in public opinion entail that they are unlikely to implement foreign aid policy that goes against their domestic ideological identity that initially got them elected. This validates the connection between government ideology and foreign aid that is central for our hypothesis.

Building on the tie between ideology and foreign aid, it can be relevant to hypothesise regarding the role of populism in this relationship due to the increase of populism in Europe (Silver 2022). Populism ties into ideology and can be viewed as the extremes of the ideological spectrum, which then makes its influence on the “mainstream” political parties closer to the middle of interest. Populists tend to utilise an “us” versus “them” nationalistic rhetoric (Singh 2021). Foreign aid could also be phrased in that manner - thus becoming the opposite of domestic welfare rather than the international expansion of it that Lumsdaine (1993) proposes - since populists could argue it moves resources away from domestic social spending. In other words, populism - both the left- and right-wing kind - could be said to introduce a nationalist component to redistribution, preferring domestic wealth redistribution over international wealth redistribution (in the form of foreign aid). This rhetoric puts global solidarity at odds with concerns for domestic poverty and economic inequality, rather than global solidarity and addressing poverty coming together to form a normative basis from which support for foreign aid grows as theorised by Lumsdaine (1993).

This entails that the existence of populism could impact the relationship between government ideology and foreign aid, as partially proved by Hammerschmidt et al (2022) who find that the increased share of right-wing populists in parliament reduces foreign aid levels. Building on previous arguments and findings, it could be argued that right-wing governments are more susceptible to the influence of populist parties since there is a stronger ideological overlap between contemporary populists, that generally are right-wing populists (Silver 2022), and right-wing parties when it comes to foreign aid policy - right-wing parties are against higher levels due to foreign aid’s similarities to the domestic welfare state, and populists in general want to limit it due to them wanting to prioritise domestic spending.

4.2 Hypothesis

Based on the theoretical framework, our hypothesis is that left-wing governments entail higher foreign aid levels. This hypothesis is based on the following: (1) that foreign aid can be likened to domestic welfare spending and therefore becomes a left-right partisan issue; and (2) that domestic political preferences correspond to foreign policy preferences.

If this hypothesis is true, the coefficient for the independent variable capturing government ideology will be negative. It will be negative due to the construction of our government ideology variable, with smaller variables of government ideology meaning the government leans left and larger values indicating the government leans right. An elaboration of the construction of the variable is provided in Section 5.2. From this, the following null hypothesis is created: there is no positive effect on foreign aid for governments moving towards the left.

$$\begin{aligned} H_0 : \beta_1 &\geq 0 \\ H_1 : \beta_1 &< 0 \end{aligned}$$

Figure 3: Hypothesis Formulation

4.3 Contribution

This thesis aims to contribute to the existing research on how shifts in government ideology in European countries can impact foreign aid donations. One way it does this is by incorporating newer data up until the year 2019. Since we include newer data, it also becomes relevant to subject the data to further controls than those used in previous papers, one example being the level of populism since it can be theorised to impact the relationship between government ideology and foreign aid, and has increased significantly in recent years (Silver 2022). In other words, this thesis contributes by assessing whether the relationship between government ideology and foreign aid still is significant in a changing political landscape. With the results of our research, we aim to contribute to an understanding of what implications ideological shifts in modern-day Europe might mean for future foreign aid.

It is of importance to continue studying this relationship against the backdrop of previous research, as changes to the surrounding environment of foreign aid can impact the relationship and therefore be consequential for global development efforts.

4.4 Research Question

With the aforementioned hypothesis in mind, our research question is as follows:

How do European governments' ideological orientation impact foreign aid donations levels to developing countries post-1990?

5 Data

This section provides an overview of the datasets utilised in this thesis as well as an explanation for the variables used in the models and their construction.

5.1 Data Collection

We utilise data from various datasets in order to test our model. We use the Umeå University-based Party Government in Europe Database (PAGED) for two variables in our model: a variable for government ideology and one for the share of seats in parliament occupied by radical parties. For foreign aid, we use both the DAC3A and DAC2A datasets from the Organisation for Economic Co-operation and Development (OECD). Furthermore, we use data points from the World Penn Database, United Nations Development Programme, IMF World Economic Outlook Database and EU. All these databases cover a larger number of countries and/or time periods than what we investigate but part of the choice of time period and countries covered by the thesis is based on data coverage limits. The databases have been accessed through open sources online and then compiled, creating our own dataset.

By combining these datasets we achieve a total of 488 usable observations in 18 countries covering the time period 1990-2019.

5.2 Data for Government Political Orientation and Share of Radicals in Parliament

The Party Government in Europe Database (PAGED) is a new dataset that includes data on a number of political aspects.⁴ We utilise data for our key variable (*cab_gravity*) as well as a control variable indicating the share of seats in parliament occupied by radical parties (*rad_share*).

The cabinet ideological center of gravity (*cab_gravity*) datapoint quantifies (with a continuous variable) where on an ideological right-left scale a government is placed. The PAGED database does this by taking the weighted mean of cabinet members' political party ideological scores which generates one final ideological score for the entire government (the cabinet ideological center of gravity).

The basis for the government's ideological score is the individual cabinet members' political party's score. This political party ideological score comes from the Manifesto Project Database, which assigns political parties an ideology score (also called the Manifesto Right-Left score or RILE score) based on how often they refer to topics that have been classified as either right- or left-wing (with the classification being developed by Laver and Budge (1992) and showcased in Appendix B). The political party's final ideological score fits within the range -100 to +100, where +100 indicates that the party only talks about right-wing policies and -100 respectively

⁴An elaboration on the PAGED dataset can be found in Appendix B.

for left-wing policies. Having these extreme scores, however, is rare as most parties talk about both left- and right-wing policies (Manifesto Project Team 2018).

The determinants of the classification of a political party are how often policies that are considered as left-wing or right-wing are mentioned in their communication. What counts as a policy “belonging” to the left/right is based on political theoretical writings from the 1900s. This might raise questions as to the validity of the measure to summarise a position in contemporary politics, but Volkens et al (2013) showcase that empirical evidence can attest to its validity.

As the political party ideology score is the basis for the general government’s ideological score, the general government score takes on the same limitations ranging from being extremely left: -100 (if all cabinet members are from left-wing political parties that have a score of -100) and +100 (if all cabinet members are from right-wing political parties that have a score of +100). As an example, if half the government cabinet members are from a political party with a score of -5 and the other half from a political party with a score of +25, the overall government ideology score will be +10.

The intuitive understanding of what the final score implies is difficult but can make more sense when scores are put in relation to each other (e.g. out of two governments, which one is further to the right?). The advantage of using these ideological scores is, as Budge (2013) highlights, that the variables are constructed by the Manifesto Project *a priori* based on communication and are time- and context-independent, meaning that ideology scores can be compared over time and between countries, which allows for political trends to be followed and compared between countries and over time. The graphs in Appendix C, illustrate the evolution of the *cab_gravity* variable over time.

The second variable from the PAGED dataset is the share of parliamentary seats occupied by radical parties (*rad_share*). This variable is based on the classification of parties in the Manifesto Project Database and includes parties that are labelled as socialists, nationalist or radical right parties by the Manifesto Project. This variable is relevant in today’s discussion about populism since there is considerable overlap between populist and radical parties, a point that Rooduijn and Akkerman (2017) support by finding that both left- and right-wing radicals use populist rhetoric. Descriptive statistics of the variable and how it has evolved since 1990 can be found in Appendix C.

5.3 Data for Foreign Aid Levels

For foreign aid levels (*foreign_aid*) we utilise two datasets from the Organisation for Economic Co-operation and Development (OECD). The overarching purpose of OECD’s statistics on foreign aid is transparency: to inform the citizens of OECD member countries about how their governments spend their tax money (OECD 2025). The data is collected through the Development Assistance Committee (DAC) members’ mandatory reporting to the OECD. Based on

the large number of peer reviewed articles using the same datasets, it can be argued that the data is highly credible and well suited for this paper’s aim.

The first dataset we use is ‘DAC3A: Aid (ODA) commitments to countries and regions’ and the second one is ‘DAC2A: Aid (ODA) disbursements to countries and regions’. In order to include more countries, we’ve decided to use the DAC2A-database instead of the DAC3A-database for the countries with many observations missing in the DAC3A-database. This means that all the yearly observations for a country are from one of the two databases, as we have not mixed the databases within countries. Figure 4 shows which database has been used for which country (using alpha-2 codes):

	AT	BE	DK	FI	FR	DE	GR	IE	IT	NL	NO	PT	ES	SE	GB	CZ	IS	PL
DAC3A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
DAC2A																Yes	Yes	Yes

Figure 4: Table Showcasing which Database has been Utilised for each Country.

The main difference between the datasets is that DAC3A is about what levels of foreign aid governments *commit* to disburse, whereas the DAC2A database shows what they actually pay out to countries (and/or send through multilateral agencies). The difference between the two datasets when compared was small, thus legitimising the combination of the two. An illustration of the difference between commitments and disbursements for the three countries where the alternative dataset was chosen can be seen in Figure 5. For Iceland the difference is more notable but both variables rise and fall at the same place, meaning that the variation is retained while the model’s fixed-effects absorb the difference in level. To further justify the choice of using foreign aid disbursements instead of commitments for some countries, we conduct a Leave-One-Country-Out sensitivity check on our model in section 7.2.2 to see if any of the countries might be driving the results.



Figure 5: Normalised Foreign Aid Commitments versus Disbursements. Source: OECD (2025) DAC3A and DAC2A.

The choice of using DAC3A (ODA commitments) as the primary dataset is that it can be assumed to have a closer tie to the government’s ideology as they have more freedom to determine what level of foreign aid they wish to commit. This can be contrasted with actual disbursements, which are more impacted by what levels the previous government has committed. This might differ from the incumbent government’s preferred level of foreign aid, thus loosening the tie between government ideology and foreign aid.

The datasets provide aggregate and detailed statistics on foreign aid, such as classification of foreign aid as bi- or multilateral aid and geographical distribution of both recipient and donor countries. However, for this thesis only the total level of ODA is considered. All foreign aid numbers are in constant US dollars and a visualisation of the foreign aid levels between 1990-2019 for the 18 countries included can be seen in the Appendix C.

5.4 Data for Control Variables

The inclusion of the EU dummy variable (*EU_member*) is to determine if an EU-membership has an influence on foreign aid donations. Gnangnon (2013) explores the impact of fiscal episodes for DAC members’ foreign aid donations and finds a significant difference between EU and non-EU member states’ reaction in the DAC group, which motivates the inclusion of EU-membership as a control variable to explore if EU-membership has any significant impact on foreign aid in our models. The EU dummy takes on a binary value, coded 1 for a country that is an EU-member in that observation year.

GDP per capita (*gdp_cap*) and population (*population*) are included as control variables to account for evidence that wealthier countries provide more foreign aid and that smaller countries donate aid differently (Hoadley 1980). While it could be relevant to denote foreign aid as

a share of GDP, different measurement units for GDP and foreign aid can reduce comparability between countries. Further, introducing foreign aid as a ratio of GDP can lead to multicollinearity issues with GDP per capita and population included as explanatory variables. The data for the GDP and population size comes from the World Penn Database and the IMF World Economic Outlook Database respectively.

To assess if the economic health of a government and its budgetary flexibility has an impact on foreign aid donations levels, government net lending (*general_gov_net_lending*) is included as a control variable. Williams (2024) explores the relationship between a donor country's economic health and foreign aid by examining determinants of ODA donation in health research and development. Albeit only looking at a subset of ODA, it is reasonable to expect the relationship found - that economic burden is negatively related to health R&D ODA - to also be applicable at an overall level of ODA, an argument that Gnangon (2013) finds support for. The net government lending variable is a proxy indicating whether a government has a budget surplus or not which could be indicative of economic health and a government's budgetary ability to spend on foreign aid.

5.5 Upper and Lower Bound of Years Included

The start date of the panel data is 1990. The reason this is a relevant starting date is twofold. The first is that this marks the start of the democratisation process of Eastern Europe after the end of the Cold War, meaning that political data on democratic governments' ideology only becomes available after this date for the region. The second reason is that the end of the Cold War marked a shift in countries' motivation behind foreign aid donations. During the cold war, foreign aid from European countries had a more important strategic aspect compared to post-1990 foreign aid donations, according to findings from Boschini and Olofsgård (2007).

The end date of the panel data is 2019 due to data limitations in the PAGED-database. For that reason, this thesis does not explore the possible effects on foreign aid donations of the Covid-19 pandemic, starting 2020, or the Russian invasion of Ukraine, starting 2022.

5.6 Descriptive Statistics and Variance

Table 1: Descriptive Statistics of Variables

Variable	Mean	SD	Min	Median	Max	IQR	Distinct	Valid	Missing
<i>foreign_aid</i>	2580.9	3698.9	1.8	1250	27987	2906.3	512	513	0
<i>rad_share</i>	0.1	0.1	0.0	0.1	0.6	0.2	131	513	0
<i>cab_gravity</i>	-2.9	14.8	-47.7	-3.4	32.8	17	179	496	17
<i>gdp_cap</i>	0.0	0.0	0.0	0.0	0.1	0.0	511	511	2
<i>population</i>	24.7	25.2	0.3	10.5	83.1	41.0	502	511	2
<i>gen_gov_net_lend</i>	-2.1	4.6	-32.1	-2.5	18.5	4.3	500	506	7
<i>EU_member</i>	0.8	–	0	–	1	–	2	513	0
0 = Non-member: 87 (17.0%), 1 = Member: 426 (83.0%)									

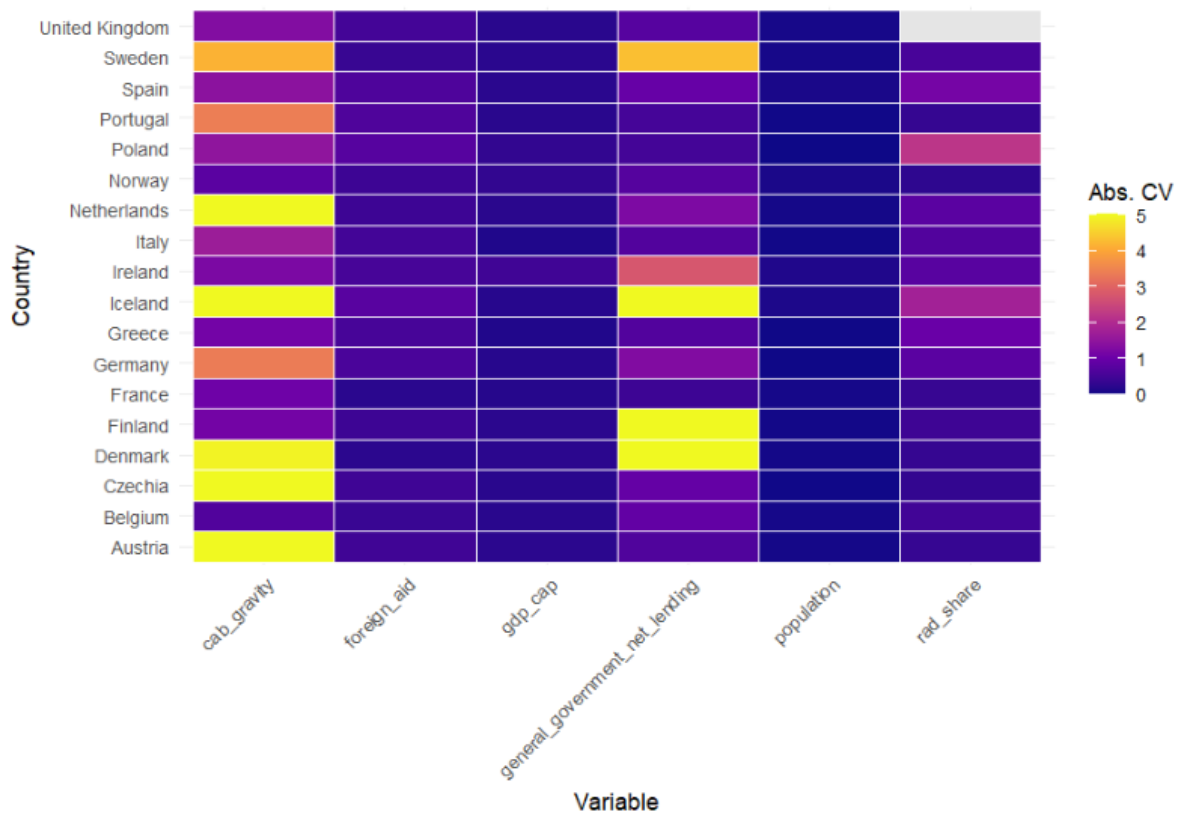


Figure 6: Absolute Coefficient of Variation by Country and Variable

Table 1 showcases the summary statistics for the variables used in the data. The mean, standard deviation, minimum and maximum values are shown. The “IQR” (InterQuartile Range) column indicates how far away the first and third quartile are from each other. The “distinct” column shows how many distinct values that variable takes on while the “missing” column indicates how many variables are missing.

Figure 6 indicates the absolute value of the Coefficient of Variation by country and variable. The coefficient of variation is a metric that measures how much a variable varies, in this case within each country. The Coefficient of Variation is the Standard Deviation divided by the mean.

Note that the colour scheme is capped at 5 due to some countries having very high (above 5) CV values for *cab_gravity* which distorted the colour coding of the graph. Also note that the United Kingdom did not have any radical parties in the parliament for the time period observed.

6 Empirical Methodology

This section motivates and elaborates on our choice of methodology.

6.1 Model Choice and Specification

To test our hypothesis we will apply a panel individual fixed-effects model. The choice of the model is based on the panel data structure of our data and our desire to isolate within-unit effects, as we only expect to see the impact of a government’s ideology on foreign aid within countries (the assumption is that a government in country A, only can impact foreign aid donations in country A but not in B)⁵. Further, the model applies controls for time-invariant characteristics within units, which is equivalent to introducing a control variable for each country or unit (γ_i). We believe this to be suitable for catching systematic differences between countries and may have an impact on foreign aid. Such time-persistent characteristics of countries could be linked to political traditions, bureaucratic/institutional differences or historical relationships with other countries that have a time-independent effect on foreign aid.

The hypothesis will be tested using the following specification:

$$Aid_{i,t} = Aid_{i,t-1} + cab_gravity_{i,t} + cab_gravity_{i,t} * rad_share_{i,t} + X_{i,t} + \gamma_i + \epsilon_{i,t}$$

Figure 7: Basic Regression Specification Being Tested

The $Aid_{i,t}$ is the dependent variable that captures foreign aid and is measured as the amount of aid (Official Development Assistance) a country with the index i gives in the year t . We also include a one-year lag for the aid variable, $Aid_{i,t-1}$, as an independent variable because of evidence that foreign aid exhibits serial correlation, meaning that past foreign aid is a significant predictor of future foreign aid. Boschini and Olofsgård (2007), for example, highlight that aid projects’ multi-year nature and previous years’ budgets often are significantly influential on succeeding budget levels, supporting the argument for aid being serial correlated. This in turn necessitates a lagged variable, with Boschini and Olofsgård (2007) finding that a one-year lag on foreign aid is a significant explanatory variable in their experiment through a Wald test.

The explanatory variable $cab_gravity_{i,t}$, indicates numerically, as outlined in Section 5, the ideological weighted mean of the government for each country, with index i in each time period t , on the Manifesto Project Right-Left index.

The interaction variable, $rad_share_{i,t}$, indicates the share of seats in parliament occupied by radical parties as a number between 0 and 1 in country i in year t .

⁵This can be questioned as the European Union is a major foreign aid donor and the decisions with regards to its foreign aid donations are taken jointly by all governments of the Member States. However, as we mention in previous sections, countries can account for aid going through multilateral institutions in their own national reporting of foreign aid and thus adjust their level of bilateral aid if they disagree with the total foreign aid donations level. Thus, they still have considerable direct control over a larger share of foreign aid, as the EU institutions only channel around 25% of total aid provided by EU member states (according to Hoekman and Shingal 2024).

The vector $X_{i,t}$, denotes the control variables: Real Gross Domestic Production (GDP) per capita, a dummy for EU-membership, population and government net lending. All the control variables are time- and country-dependent, meaning they vary each year for all countries.

6.2 Choice of Standard Errors

To account for potential systematic time shocks (cross-sectional time dependences) we apply Driscoll-Kraay standard errors instead of using a two-way fixed-effects model that accounts for both time-indifferent country effects and cross-sectional time shocks (Wooldridge 2021). This selection was made based on the overall assessment of the utility of the additional factors that Driscoll-Kraay standard errors consider when determining the standard errors for a model.

Driscoll-Kraay standard errors are not only well-suited for considering temporal shocks that impact all the countries (panels) at the same time but are also suitable for cases where the selection of panels is non-random⁶ or where other dependencies may exist across panels (Driscoll and Kraay 1998). As we don't introduce control variables for time effects and have specifically chosen European countries, this might introduce systematic biases that would not have been considered in an accurate way by a two-ways fixed-effects model and therefore motivates the use of Driscoll-Kraay standard errors.⁷

⁶The selection of data points is in a non-random fashion in two major aspects: countries selected and time-span covered. Due to data-limitations in the number of years covered by datasets (upper bound and partially lower bound) but also due there being evidence of a large difference in the nature of foreign aid donations after the cold war, the choice of looking at the years 1990-2019 is not random. Furthermore, due to very low data coverage for some European States (mainly smaller and Eastern European countries) some countries have not been included in the model. The key determining variables for exclusions were *foreign_aid* and *cab_gravity*.

⁷In addition to Driscoll-Kraay standard errors, Arellano standard errors were also tested. The use of Arellano standard errors did not change our results significantly. A comparison of the two standard errors can be found in the Appendix D.

7 Results

In this section, we present the results of our model as well as subject our results to various robustness checks, namely checking the data’s variation, conducting a Leave-One-Country-Out analysis as well as applying a System Generalised Method of Moments model.

7.1 Panel Individual Fixed-Effects Model Results

Table 2: Individual Country Fixed-Effects Model

Variable	Estimate
lag(foreign_aid, 1)	0.5699*** (0.2146)
cab_gravity	-11.6970* (6.2567)
rad_share	1692.2757 (1067.2295)
gdp_cap	22276.1979* (13430.6830)
population	141.7292* (84.4395)
general_gov_net_lending	22.1813 (14.9173)
EU_member	-305.7014 (210.0320)
rad_share: cab_gravity	31.5382 (20.8263)
Model Summary	
R-squared	0.5354
Adjusted R-squared	0.5103
F-statistic	66.56 on 8 and 462 DF, $p < 2.22 \times 10^{-16}$
Observations	488 (Unbalanced panel: 18 countries, $T = 18-30$)

Notes: Estimates based on individual within fixed-effects model via `plm`. Standard errors are in parentheses.

Table 2 summarises the results of our panel fixed-effects regression model elaborated in Section 6. The table shows that our main coefficient of interest *cab_gravity* is negative and significant, meaning that we can reject our null hypothesis at the 10% significance level. We, in other words, find support for our hypothesis that the more a government leans left, the higher foreign aid level they have. Further, the *lag(foreign_aid, 1)* is highly significant at the 1% level and positive, which is in alignment with the previous findings of Boschini and Olofsgård (2007) that aid is serial-correlated.

Both *gdp_cap* and *population* are significant and positive at the 10% level. As foreign aid is in absolute values in this model, it is expected that population would significantly increase foreign aid value because it is a key indicator of whether a country is “big” or “small”. Intuitively, the same string of logic can be applied to the fact that GDP per capita is a positive

determinant of foreign aid, as richer countries would donate more foreign aid relative to their population size than poorer countries.

Interestingly, we do not find *rad_share* to be negative or significant, going against the findings of Hammerschmidt et al (2022) that radical parties would decrease foreign aid donations levels. Important to note, on one hand, is that *rad_share* measures the overall amount of radicals in parliament whereas Hammerschmidt et al only look at the specific subset of right-wing radicals in parliament and government. On the other hand, governments and parliaments are intimately intertwined, as the parliament is usually involved in the passing of budgets in parliamentary democracies, entailing it would have been expected that the share of radicals impact the relationship between foreign aid and government ideology (due to their influence in parliament). Furthermore, the interaction variable between the share of radicals and the government ideology is positive, indicating that when the share of radical parties in parliament is high, a right-wing government is likely to give relatively more foreign aid than a left-wing government. This is not in line with our theoretical discussion in Section 4.1 but it is insignificant.

EU-member is negative, pointing towards lower foreign aid spending by EU member states. This is, however, insignificant. It should also be noted that the EU spending on foreign aid is proportionally included in the ODA reporting of member states, as explained in Section 2. *general_gov_net_lending* indicates that the health of the government finances and potential budget surpluses may have a positive impact on foreign aid donations. The overall sign of the coefficient is in alignment with findings by, for instance, Williams (2024) but is surprisingly insignificant.

The explanatory power of the model should also be examined, with an adjusted R-squared of 0.51. This level of explanatory power could be questioned, though when considering the large number of factors besides ideology and our control variables that could have an influence on a government's decision-making process when ultimately setting the budget for foreign aid, one could see a model with an R-squared of this magnitude as satisfactory.

7.2 Robustness Checks for Panel Fixed-Effects Model

To further determine the validity of the results of the model, it is prudent to test the model's robustness by conducting sensitivity analyses and checks. We assess possible problems such as multicollinearity and whether specific countries drive the results. We also use a System GMM model to assess whether our results hold when applying a different model.

7.2.1 Correlation Matrix and VIF test

Variables with a high covariance may cause problems, undermining the magnitude of the coefficients and inflating the standard errors. Highly-correlated variables may also lead to lower confidence in the adjusted R-square value and the model's ability to properly assess the independent variables' true explanatory power.

To assess whether this is an issue for our model, we have created a correlation matrix, showcased in Figure 8, and a VIF table (based on a pooled version of the panel fixed-effects model to be able to observe the within unit variation), showcased in Figure 9. In these figures, the indicated correlation of variables is reasonable with good indicators in the VIF-model (absolute value of correlation < 0.7 and VIF-values < 5), thus suggesting that the risk of multicollinearity is small. There is, however, a lack of academic guidance on what the best method is for assessing the level of multicollinearity in data for a panel fixed-effects model with lagged variables, entailing that these results should be interpreted with caution.

	Aid	Radical	Ideology	GDP cap	Pop.	Gov. lending	EU
foreign_aid	1.000	-0.088	-0.013	0.241	0.665	0.070	0.154
rad_share	-0.088	1.000	-0.016	0.163	-0.224	0.259	-0.025
cab_gravity	-0.013	-0.016	1.000	-0.200	0.181	-0.168	0.063
gdp_cap	0.241	0.163	-0.200	1.000	-0.145	0.441	-0.077
population	0.665	-0.224	0.181	-0.145	1.000	-0.232	0.320
Gov lending	0.070	0.259	-0.168	0.441	-0.232	1.000	-0.332
EU member	0.154	-0.025	0.063	-0.077	0.320	-0.332	1.000

Figure 8: Correlation Matrix of Variables.

Variable	VIF
lag(foreign_aid, 1)	2.343
rad_share	1.128
cab_gravity	1.090
gdp_cap	1.482
population	2.547
general_government_net_lending	1.500
EU_member	1.240

Figure 9: Variance Inflation Factors (VIF) for a Pooled Version of the Panel Fixed-Effects Model.

7.2.2 Leave-One-Country-Out Sensitivity Analysis

When conducting a Leave-One-Country-Out sensitivity analysis of the above panel fixed-effects model, illustrated in Figure 10, we find that when certain countries are dropped from the model, the estimated coefficients strengthen the support of our hypothesis. For the government ideology one can notice that if Poland, Denmark or France are left out, the estimate for the coefficient is negative and significant at a 5% level rather than a 10% level.

This suggests that in some countries, the relationship between a left-leaning government and higher foreign aid levels is more pronounced than in others and that in the particular cases of Poland, Denmark and France, government ideology has a comparatively lower influence on foreign aid levels.

For the share of seats in parliament occupied by radical parties, the result we expected is rejected when the United Kingdom is dropped as the estimated coefficient is positive at a 5% significance level.

What this implies for the result concerning populism/radical parties, could be that the true impact of the share of radical parties in parliament is potentially masked in the overall results due to the fact that the UK is the only country in our panel set that has not had any parties classified as radical in their parliament for the time period considered in this thesis. Ultimately, this could imply that the Leave-One-Country-Out analysis where the UK is dropped is closer to the true relationship.

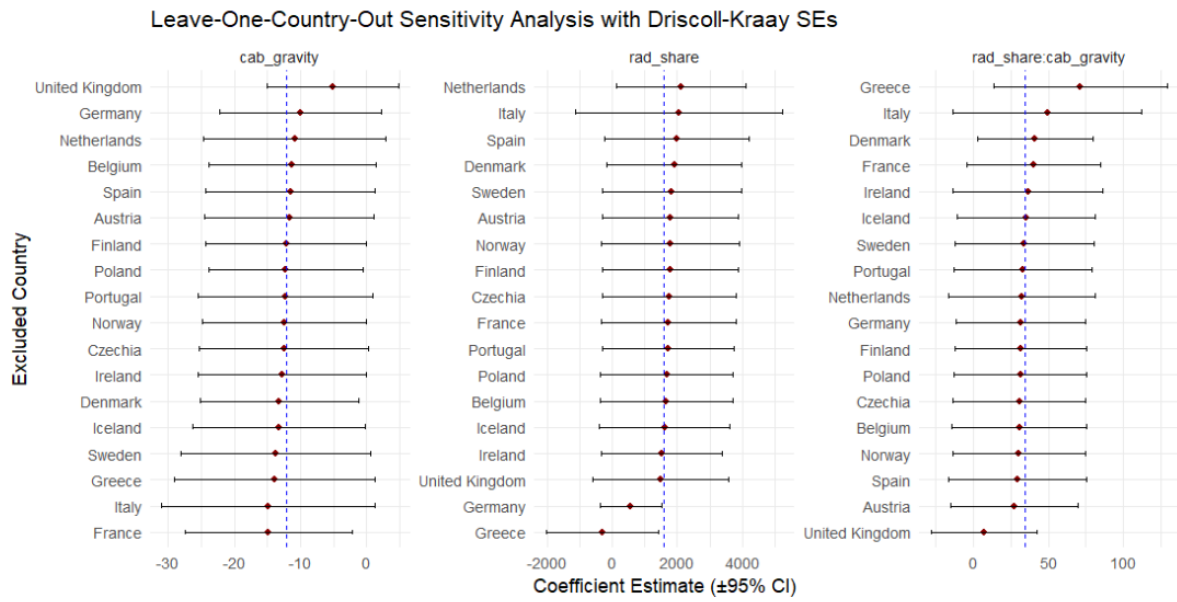


Figure 10: Leave-One-Country-Out Analysis of the Panel Fixed-Effects Model

Figure 10 shows the outcome of a Leave-One-Country-Out analysis of the estimates in Table 2. For each country that has been excluded, the estimated coefficient when running the model without the excluded country, is displayed with a 95% confidence interval using Driscoll-Kraay standard errors. The three different graphs are ordered by country whose exclusion leads to the largest estimated coefficient for the remaining countries in the model.

7.2.3 System Generalised Method of Moments (System GMM)

The serial-correlation of foreign aid while using panel fixed-effects models can potentially lead to misleading estimates of the coefficient. To remedy this, we do a robustness check of our model by using the System Generalised Method of Moments (System GMM) model. This method was developed to handle dynamic panel data, fixed-effects and autocorrelation within observations (Roodman 2009). Due to the serial correlation of foreign aid, as showcased by the significance

of the $\text{lag}(\text{foreign_aid}, 1)$ variable, the application of a System GMM model appears prudent.

The System GMM model is based on an estimation method by Arellano-Bond where regressors are differenced and instrumentalised, with the added assumption that the instrumented variables are uncorrelated with the fixed effects. Table 3 reports the System GMM model estimators for our normalised variables.⁸

Table 3: System GMM Results (Two-Step Estimation) with Normalised Variables

Variable	Estimate
$\text{lag}(\text{foreign_aid}, 1)$	0.8078** (0.3317)
cab_gravity	-0.0181 (0.0296)
rad_share	-0.0048 (0.0260)
gdp_cap	0.0607 (0.0458)
population	0.1737 (0.1771)
$\text{general_government_net_lending}$	0.0352 (0.0283)
EU_member	0.0215 (0.0573)
$\text{rad_share:cab_gravity}$	0.0039 (0.0228)
Model Diagnostics	
Unbalanced Panel	$n = 18, T = 18\text{--}30, N = 489$
Observations Used	906
Sargan Test (p-value)	0.1073
AR(1) Test (p-value)	0.0721
AR(2) Test (p-value)	0.5006
Wald Test (p-value)	<2.2e-16

Notes: This table presents results from a two-step System GMM estimation with robust standard errors. Standard errors are in parentheses. The instruments used within the GMM model are foreign aid lagged t-2 to t-4. The instruments are collapsed to avoid a proliferation of variables and reduce overfitting in accordance with Roodman (2009), and all continuous variables have been normalised.

Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Various diagnostics tests have been conducted to ascertain the model's significance and relevance. The AR(2) test indicates that the model does not suffer from second-order autocorrelation, implying that the instruments, which in this case are past foreign aid levels, are valid.

⁸Due to model instability when adding more variables, all control variables have been normalised. Without the normalisations, the model was not able to compute any results. See Appendix E for more information.

Further, the Hansen/Sargan test supports this by testing if the instruments are uncorrelated with the error term, where the p-value of 0.1073 is in an appropriate range, thus strengthening the case that the instruments used are valid. The final Wald test checks for joint significance of explanatory variables. The outcome of the test shows that the model is overall statistically significant.

If the estimated values from the System GMM model were significant, they would have further strengthened our results' robustness. Instead, we find that the outcome of the model does not provide a strong support for the findings in Table 2. The only significant variable is the $lag(foreign_aid, 1)$ variable, albeit with a lower significance level, with the rest of our previously-significant coefficients becoming insignificant. The sign of *cab_gravity* is still in line with our hypothesis. The signs of the other variables have also stayed the same with the exception of *rad_share*. Interestingly, the *rad_share* variable switches sign, indicating that radical parties decrease foreign aid donations. It is, as all other variables, though, still insignificant.

The difference in significance of the estimators of our panel fixed-effects model and System GMM model warrants further discussion, as it brings the validity of our panel fixed-effects model into question. This will be further elaborated on in Section 8.

8 Discussion

In this section, we discuss the findings of our regression specification as well as the implications of the robustness checks on our findings. We begin by discussing the potential reasons for us finding inconclusive results by linking our findings to previous academic research, our theoretical framework and trends in foreign aid, to then going over to sensemaking of our results from a methodological perspective.

8.1 Ideology and Potential Theoretical Reasons for Insignificant Results

Unlike previous research done by Tingley (2010) and Brech and Potrafke (2014), when subjecting our base results from our initial panel fixed-effects model to robustness checks, we are unable to reject our null hypothesis, as our estimators' significance considerably worsen.

Both Tingley (2010) and Brech and Potrafke (2014) find that the positive relationship between left-leaning governments and higher foreign aid are most pronounced for foreign aid to low-income countries. This suggests the possibility that it is with the allocation of aid where the relationship to government ideology is the most pronounced. This could be a possible reason as to why, when subjecting our results to robustness checks, we find that the overall aid levels are not affected by government ideology.

With this in mind, we need to think about the possible things that could be hidden within our results. Section 2 showcases that the amount of ODA that goes to the unspecified category, i.e. is spent within donor countries, has significantly increased throughout the years. Numerous countries have seen their shares of ODA being spent domestically increase, a trend which was accelerated by the 2015 migration crisis in Europe, as countries can count money spent on handling the refugees who come to their country as part of their foreign aid.

As mentioned previously, when dropping some countries from our model, we see the significance level increase, namely Poland, Denmark and France. In both Poland and France, we further note that the share of ODA being spent domestically has considerably increased. At the same time, the results show that the relationship between left-leaning governmental ideology and higher foreign aid effort is not as pronounced. This entails that right-leaning governments in those countries do not diminish the total foreign aid effort. Why this could be, then, is because instead of minimising the foreign aid level, they spend a larger share of their ODA domestically handling the influx of refugees.

Discussing how akin this is to domestic welfare spending is then key to discussing how this relates to our hypothesis. If spending money on refugees still could be likened to domestic welfare spending, our hypothesis indicates that this would not be a relevant explanatory factor for why our results are not significant since right-leaning governments would want to minimise this spending as well. Spending money on handling immigrants cannot, however, be likened to

domestic wealth redistribution as it is not as voluntary as domestic welfare spending. This implies that right-wing parties might not be as opposed to it from an ideological perspective since immigration spending relates more to two right-wing policy points (stipulated in Appendix B) - maintaining order and security as well as integrating immigrants to preserve the “national way of life” - than imposed redistribution of wealth.

What right-leaning governments then might see is an opportunity to minimise their international wealth redistribution (foreign aid going abroad) by spending a larger share of their ODA domestically as part of handling refugees instead. This is money that would have to be spent anyway, but right-leaning governments see an opportunity to minimise wealth transfers overseas instead while still being able to maintain foreign aid numbers. They would also avoid a public debate regarding minimising foreign aid levels since it is a divisive topic within public opinion, in line with findings by Milner and Tingley (2015). This entails that right-leaning governments become less concerned with minimising foreign aid levels, instead opting to spend a larger share of ODA domestically.

Another reason for why our model does not fully support previous findings on government ideology and its relationship to foreign aid like those presented by Tingley (2010) and Brech and Potrafke (2014), could be explained by the findings by Thérien and Noël (2000). They find that the impact of left-wing ideology in increasing foreign aid levels is neither immediate nor direct but acts over time through the establishment of welfare institutions. This could imply that our model, which tests if the incumbent government ideology has any effects on foreign aid levels, does not fully capture this long-term and indirect impact. Therefore we cannot confirm nor reject the findings made by Thérien and Noël (2000) but only reason about its implication for our model.

8.2 Limitations

Insignificant results might not necessarily be because of government ideology not having a real impact on foreign aid as our models suggest but could instead be due to methodological or data limitations. These limitations could prevent us from producing a reliable estimate of the impact of government ideology and other variables on the foreign aid donation levels. As the results were inconclusive, a discussion on possible underlying limitations is of importance.

8.2.1 Variance in the Data

When utilising a GMM model, sufficient variance in the variables that are being instrumented is necessary. The same is true for the panel fixed-effects model: the variance in all variables must be sufficient enough to be able to draw conclusions. One reason why we fail to clearly support our hypothesis could then be due to limited variation being available for exploitation in the model variables. Figure 6 in Section 5.6 indicates the variation exhibited.

While a mere description might not provide exhaustive proof that the variance is high enough

for effective use in the models, it can help improve our understanding of the structure of the data. The Coefficient of Variation score (CV-score), which is the standard deviation divided by the mean, gives an indication of the within-unit variation of all variables in the panel data set. As aforementioned in Section 5.6, scores are higher for our main variables of interest, such as *foreign_aid* and *cab_gravity*, which is especially important for the robustness tests' validity considering that *foreign_aid* is the variable that becomes instrumented in the System GMM model. The within-country variation of population is low, which is not surprising since it is a value that changes slowly over 30 years, where many countries in Europe have experienced a reducing growth rate these past decades.

This might have had an adverse impact on the usability of our variables but overall, the variation across variables and within countries is deemed sufficient and thus not a key contributor as to why our estimators using System GMM become insignificant. Further, the GMM model necessitates a normalisation of variables, which decreases the within-unit variance compared to the variables that were used in the panel fixed-effects model.

8.2.2 The Interpretability of the Estimated Coefficients

Due to the different units of measurements that are used in the panel fixed-effects models, the intuitive understanding of the estimated coefficients is reduced. The *cab_gravity* variable is difficult to intuitively interpret as, for example, a one-unit change in government ideology (thus in RILE score) is difficult to understand the real implications of.⁹

The difficulty concerning the interpretability of the ideological variable may also be due to the construction of it and the underlying assumptions about what constitutes as a left-wing policy or a right-wing policy (see Appendix B). It could therefore be that the definitions or the policies attributed as left-wing and right-wing respectively (which the *cab_gravity* is fundamentally based on) are not relevant in explaining a political party's or government's stance on foreign aid and causing the coefficients of the models to become insignificant due to measurement errors in the variables in regards to what we "need" in the models.

As the main independent variable of our model has difficulties in being understood intuitively, the economic significance of our findings relating foreign aid to government ideology also become harder to determine. To further improve the model's interpretability concerning economic significance, it could in future research be interesting to test the robustness of the model with regards to the definition of what constitutes a left-wing or right-wing government by challenging the underlying assumptions.

⁹The formal interpretation of the coefficient for *cab_gravity* (in this case called β) would be that if the weighted average of the government's cabinet members' political parties' score increases by 1 point, there would be a β change in absolut 2022-dollar value in foreign aid. The change in political score means that the weighted average of government parties has a 1%-point increase of sentences in their communications that mention right-wing topics in relation to sentences that mention left-wing topics. The outline of what defines as a left-wing or right-wing policy is outlined in Appendix B.

A possibility would also be to look at other right-left ideology measures (such as the Manifesto Common Space Scores or the Dynamic State Space Position) and compare how the results of the model vary between measurement units. This could potentially improve the interpretability of economic significance but one should keep in mind that Volkens et al (2013) find empirical support for the RILE-index's validity, especially as an ideological measure over time. The variables were normalised when doing a robustness check through the System GMM model, which can allow for an easier interpretation of the economic significance of the variables, especially for the control variables that have a more straightforward unit of measurement.

8.2.3 Availability of Data and Systematic Issues

The data used for this thesis spans from 1990-2019. However, there are some missing variables which cause the panel data to become unbalanced. The theoretical maximum number of foreign aid observations is 540 (18 countries times 30 years). As the dependent variable is necessary for the analysis, the new effective maximum of observation was 513. However, out of these 513 foreign aid observations, 17 were missing observations for the government ideology, further reducing the number of effectively available observations for the models. A large number of the incomplete panels are from the countries in the former Eastern bloc or smaller countries (such as Iceland), which can be explained by lower reporting rates to the OECD about foreign aid. The missing variables may lead to a bias in the data and could be one of the reasons for why the results of the models are inconclusive. Furthermore, the lower explanatory power of the models (R-squared) indicates that there might be omitted variables which could impact the foreign aid levels of donor countries.

There could also be issues with systematic shocks hitting all the countries at the same time. These could be crises (such as the dotcom crash, 2008 global financial crisis or immigration crisis) that have an implication on government budgets and their decision to allocate aid. We do consider these, though, when using Driscoll-Kraay standard errors that consider potential systematic time-dependent shocks. However, these standard errors may have issues handling shocks that only impact a subset of panels or impact the countries in different ways.

8.2.4 Model Misspecification

Within the panel fixed-effects model we have done robustness checks and sensitivity analyses of the model. This, to a degree, confirms the initial results that supported our hypothesis but overall casts doubts on what the true relationship between foreign aid and government ideology might be. There could potentially be issues with inserting a lagged variable due to endogeneity problems stemming from the two being highly correlated.

The System Generalised Method of Moments is also a complicated model to apply, which increases the risks of accidentally misspecifying models. We have conducted a test to assure that the instrumentalised variable - the lagged foreign aid - is valid but the internal mechanics

of GMM are opaque, leaving a hint of uncertainty about what the implications of the instrumentalisation mechanism are.

9 Conclusions

This thesis has explored the impact of government ideology on foreign aid donations using a panel fixed-effects model. The model yielded significant results at a 10% level, confirming our hypothesis that left-wing governments provide more in foreign aid relative to right-wing governments. These results are in accordance with previous findings. They also contribute with new research by including newer data and controlling for new variables, such as the share of radical parties.

However, the robustness checks and sensitivity analyses done on the results raise questions regarding the level of validity of them, and could indicate that the support for the theory that total foreign aid allocations decrease with right-wing governments might have been overestimated. We therefore find the relationship between governmental ideology and total foreign aid levels to be inconclusive, with foreign aid levels possibly not being the aspect of foreign aid impacted by ideology. The aspect impacted by governmental ideology would rather be how it is allocated.

The addition of this thesis to the academic literature nuances previous findings. Some reasons why the results of this thesis differ from previous results could be due to the inclusion of newer data where we theorise that the ideological rationale behind providing foreign aid is undergoing a shift where a larger part of European governments' Official Development Assistance is being allocated domestically instead of abroad. This suggests that the relevant relationship to study might rather be government ideology and aid allocation.

In this thesis we also test for whether the rise of populism in Europe, quantified in this thesis by the share of parliamentary seats occupied by radical parties, has an impact on foreign aid levels. We do not find significant results, thus indicating that there is no impact. We do, however, recommend further research be conducted to more definitely determine if populism has any other impact on foreign aid, such as on aid allocation.

Our results contribute to increasing the body of literature regarding the relationship between foreign aid and government ideology and stress the importance of further research into other possible factors that impact said relationship. We suggest populism to be one such factor as well as the increasing share of aid going to unspecified recipients to be another, but more thorough research has to be done to establish any potential causality.

Key stakeholders that may find our contributions of relevance are professionals in both donor and recipient countries handling matters pertaining to foreign aid, multilateral institutions coordinating ODA, academics and policy-makers determining the level and allocation of donations.

10 Bibliography

- Arellano, M.. (1987). PRACTITIONERS' CORNER: Computing Robust Standard Errors for Within-groups Estimators, *Oxford Bulletin of Economics and Statistics* 49(4), pp. 431-434. <https://doi-org.ezp.sub.su.se/10.1111/j.1468-0084.1987.mp49004006.x>
- Bruce, T.. (2025). *Implementing the President's Executive Order on Reevaluating and Realigning United States Foreign Aid*, US Department of State website. <https://www.state.gov/implementing-the-presidents-executive-order-on-reevaluating-and-realigning-united-states-foreign-aid/> (Latest accessed: 12/3-25).
- Budge, I.. (2013). *The standard right-left scale*, Essex University. https://manifesto-project.wzb.eu/download/papers/budge_right-left-scale.pdf (Accessed 1/5-25).
- Boschini, A. and Olofsgård, A.. (2007). Foreign aid: An instrument for fighting communism?, *Journal of Development Studies* 43(4), pp. 622-648. <https://doi.org/10.1080/00220380701259707>
- Brech, V. and Potrafke, N.. (2014). Donor ideology and types of foreign aid, *Journal of Comparative Economics* 42(1), pp. 61-75. <https://doi.org/10.1016/j.jce.2013.07.002>
- Dreher, A., Minasyan, A. and Nunnenkamp, P.. (2015). Government ideology in donor and recipient countries: Does ideological proximity matter for the effectiveness of aid?, *European Economic Review* 79, pp. 80-92. <https://doi.org/10.1016/j.eurocorev.2015.07.004>
- Driscoll, J. C. and Kraay, A. C.. (1998). Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data, *The Review of Economics and Statistics* 80(4), pp. 549-560. <https://www.jstor.org/stable/2646837> (Accessed 30/4-25).
- Feenstra, R., Inklaar, R. and Timmer, M.. (2015). The Next Generation of the Penn World Table, *American Economic Review* 105(10), pp. 3150-3182. [Dataset]. <https://doi.org/10.34894/QT5BCC> (Accessed 11/3-2025).
- Flynn, E., M., Allen Hannah, S.. (2017). Donor Government Ideology and Aid Bypass, *Foreign Policy Analysis* 14(4), pp. 449-468. <https://doi-org.ezp.sub.su.se/10.1093/fpa/orx005>
- Gnangnon, S.. (2013). The consequences of fiscal episodes in OECD DAC countries for aid supply, *The Quarterly Review of Economics and Finance* 53(3), pp. 302-313. <https://doi.org/10.1016/j.qref.2013.05.004>
- Greene, Z. D., Licht, A. A.. (2018). Domestic Politics and Changes in Foreign Aid Allocation: The Role of Party Preferences, *Political Research Quarterly* 71(2), pp. 284-301. <https://doi.org/10.1177/1065912917735176>

Griffin, K.. (1996). *Studies in Globalization and Economic Transitions*. Basingstoke: Macmillan.

Gutting, R. and Steinwand, M. C.. (2017). Donor Fragmentation, Aid Shocks, and Violent Political Conflict, *The Journal of Conflict Resolution* 61(3), pp. 643-670.
<https://www.jstor.org/stable/26363868>

Hammerschmidt, D., Meyer, C. and Pintsch, A.. (2022). Foreign aid in times of populism: the influence of populist radical right parties on the official development assistance of OECD countries, *Cambridge review of international affairs* 35(4), pp. 478-499.
<https://doi.org/10.1080/09557571.2021.1980498>

Hellström, J., Bergman, T. and Lindahl, J.. (2024). *Party Government in Europe Database (PAGED) – Coalition Governance in Central Eastern and Western Europe Dataset, Version 2024.12* [Dataset]. Umeå universitet. <https://repdem.org/> (Accessed 31/3-2025)

Hoadley, J. S.. (1980). Small States as Aid Donors, *International Organization* 34(1), pp. 121-137. <https://doi.org/10.1017/S0020818300003994>

Hoekman, B. and Shingal, A.. (2024). Development Goals, commercial interest and EU Aid-for-Trade, *World Development* 173, article 106389. <https://doi.org/10.1016/j.worlddev.2023.106389>

International Monetary Fund. (2024). *World Economic Outlook Database: October 2024 Edition*. International Monetary Fund. [Dataset]. <https://www.imf.org/en/Publications/WEO/weo-database/2024/October> (Accessed 14/3-2025).

Laver, M.J. and Budge, I.. (1992). *Party Policy and Government Coalitions*. Palgrave Macmillan, London.

Lumsdaine, H. D.. (1993). *Moral Vision in International Politics: The Foreign Aid Regime, 1949-1989*. Princeton University Press.

Manifesto Project Team. (2018). *Working with the Manifesto Project Dataset (Main Dataset)*. <https://manifesto-project.wzb.eu/tutorials/main-dataset> (Accessed 5/5-2025).

Milner, V. H. and Tingley, D.. (2015). *Sailing the Water's Edge: The Domestic Politics of American Foreign Policy*. Princeton University Press.

Murray, S. K., Cowden, J. A. and Russett, M. B.. (1999). The convergence of American elites' domestic beliefs with their foreign policy beliefs, *International Interactions* 25(2), pp. 153-180. <https://doi-org.ezp.sub.su.se/10.1080/03050629908434947>

Organisation for Economic Co-operation and Development, Development Co-operation Directorate (DCD) and Development Assistance Committee (DAC). (2024). *Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire*. [https://one.oecd.org/document/DCD/DAC\(2024\)40/FINAL/en/pdf](https://one.oecd.org/document/DCD/DAC(2024)40/FINAL/en/pdf) (Accessed 6/5-2025).

Organisation for Economic Co-operation and Development. (2021). *Official Development Assistance (ODA)*. <https://image.mfa.go.th/mfa/0/GH2PYnujXi/%E0%B9%80%E0%B8%AD%E0%B8%81%E0%B8%AA%E0%B8%B2%E0%B8%A3/What-is-ODA.pdf> (Accessed 6/5-2025).

Organisation for Economic Co-operation and Development. (2025). *Key messages*. <https://www.oecd.org/en/topics/oda-trends-and-statistics.html> (Accessed 31/3-2025).

Organisation for Economic Co-operation and Development Database. (2025). *DAC2A: Aid (ODA) disbursements to countries and regions*. Organisation for Economic Co-operation and Development. [Dataset]. <https://data-explorer.oecd.org/> (Accessed 14/3-2025).

Organisation for Economic Co-operation and Development Database. (2025). *DAC3A: Aid (ODA) commitments to countries and regions*. Organisation for Economic Co-operation and Development. [Dataset]. <https://data-explorer.oecd.org/> (Accessed 14/3-2025).

Stokke, O. (1989). *Western middle powers and global poverty: the determinants of the aid policies of Canada, Denmark, the Netherlands, Norway and Sweden*. The Scandinavian Institute of African Studies in cooperation with The Norwegian Institute of International Affairs.

Peel, M., Neville, S. and Borrett, A.. (2025). The Trump aid gap, *Financial Times*. February 16th. <https://www.ft.com/content/daaaf8d0-2988-403a-8e75-9baa8f3b3cb0> (Accessed 29/4-2025).

Roodman, D.. (2009). How to do Xtabond2: An Introduction to Difference and System GMM in Stata, *The Stata Journal* 9(1), pp. 86-136. <https://doi-org.ez.hhs.se/10.1177/1536867X0900900106>

Rooduijn, M. and Akkerman, T.. (2017). Flank attacks: Populism and left-right radicalism in Western Europe, *Party Politics* 23(3), pp. 193-204. <https://doi-org.ezp.sub.su.se/10.1177/1354068815596514>

Silver, L.. (2022). Populists in Europe – especially those on the right – have increased their vote shares in recent elections, *Pew Research Center*. October 6th. <https://www.pewresearch.org/short-reads/2022/10/06/populists-in-europe-especially-those-on-the-right-have-increased-their-vote-shares-in-recent-elections/> (Accessed 2/5-25).

- Singh, P.. (2021). Populism, Nationalism, and Nationalist Populism. *Studies in comparative international development* 56(2), pp. 250-269. <https://doi.org/10.1007/s12116-021-09337-6>
- Thérien, J. P.. (2002). Debating foreign aid: right versus left, *Third World Quarterly* 23(3), pp. 449–466. <https://doi.org/10.1080/01436590220138385>
- Thérien, J. P. and Noël, A.. (2000) Political Parties and Foreign Aid, *American Political Science Review* 94(1), pp. 151-162. <https://doi.org/10.2307/2586386>
- Tingley, D.. (2010). Donors and domestic politics: Political influences on foreign aid effort, *The Quarterly Review of Economics and Finance* 50:1, pp. 40-49. <https://doi.org/10.1016/j.qref.2009.10.003>
- United Nations Trade and Development (UNCTAD). (2024). *AID UNDER PRESSURE - 3 accelerating shifts in official development assistance*. United Nations. https://unctad.org/system/files/official-document/un-gcrg-oda-report_en.pdf (Accessed 1/5-2025).
- Volken, A., et al. (2013). 5 Understanding and Validating the Left-Right Scale (RILE). *Mapping Policy Preferences From Texts: Statistical Solutions for Manifesto Analysts*. Oxford University Press, pp. 85–106.
- Younas, J.. (2008). Motivation for bilateral aid allocation: Altruism or trade benefits, *European Journal of Political Economy* 24(3), pp. 661-674. <https://doi.org/10.1016/j.ejpoleco.2008.05.003>
- van Teutem, S. Titchie, H. and Arrigada, P.. (2025). *How much foreign aid is spent domestically rather than overseas?*. <https://ourworldindata.org/foreign-aid-domestic-overseas> (Accessed 10/4-2025).
- Williams, C.. (2024). Donor country official development assistance in health R&D: domestic economic burden vs. medical disseminative capacity, *Science and Public Policy* 51(6), pp. 1143-1155. <https://doi-org.ezp.sub.su.se/10.1093/scipol/scae056>
- Wooldridge, J. M.. (2021). *Two-Way Fixed Effects, the Two-Way Mundlak Regression, and Difference-in-Differences Estimators*, Michigan State University. <http://dx.doi.org/10.2139/ssrn.3906345>

Personal Communication

Rabe, P., Team Leader of Partnerships with the United Nations at the European Commission (2025). Online meeting on the 24th of March.

Appendix A - Domestic Spending ODA

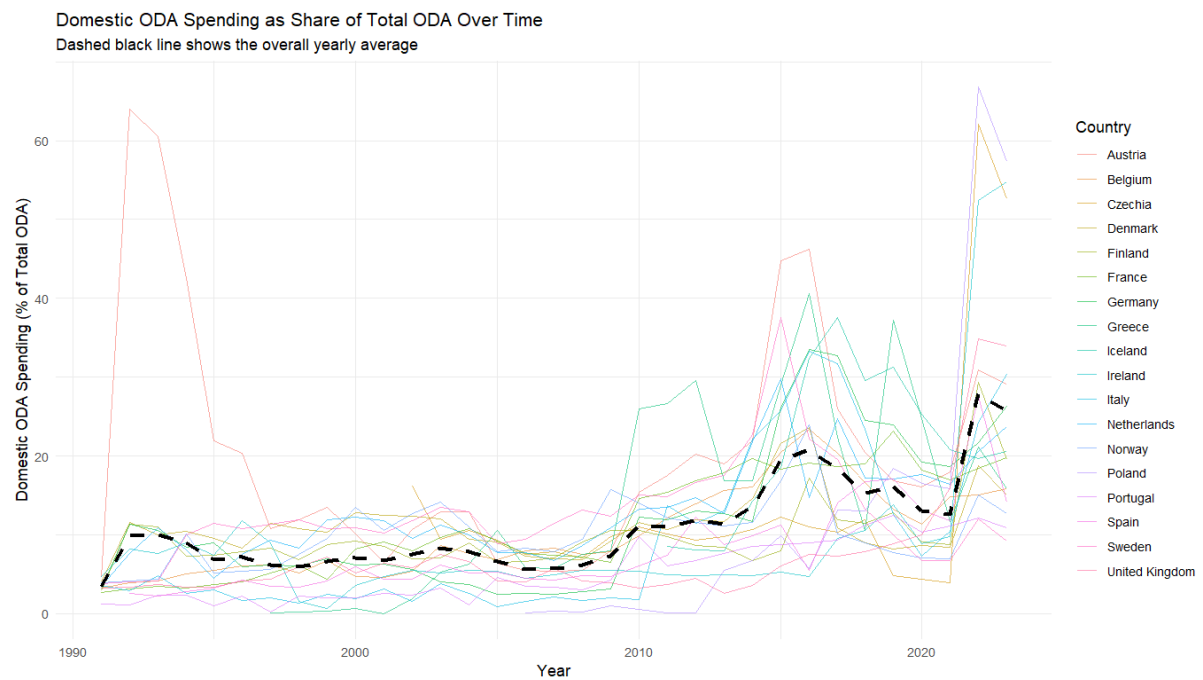


Figure 11: Domestic ODA Spending as Share of Total ODA from 1990-2023. Source: van Teutem et al (2025).

Appendix B - PAGED and Manifesto Project Database

PAGED is a fairly new dataset, with the first completed version of it being released in 2021, headed by senior lecturer Johan Hellström at Umeå University. The dataset includes data on various political aspects such as types of government coalitions, institutions, parliaments etc.. The data has been collected through various channels: official documents, party documents, semi-structured interviews with former staff, country experts, and cabinet members as well as a review of media reports. Such an extensive data collection process is prudent when it comes to political variables since they are political and therefore can be considered sensitive and can be interpreted differently depending on the person. Having multiple sources is therefore needed in order to ensure the variables are as objective as possible. The purpose of the dataset is to expand on and update the existing data at Umeå university and was funded by Riksbankens Jubileumsfond.

The political orientation of governments (called *cab_gravity* - Cabinet Center of Gravity - in our thesis) has in PAGED been quantified based on data from the Manifesto Project Database and is reported according to the Manifesto Right-Left (RILE) index, indicating numerically where in a right-left political spectrum a government is positioned.

The RILE score is based on how often a right-wing topic or a left-wing topic is mentioned in a party's communication and if it is mentioned in a positive or negative light. There are in total 24 topics, 12 right-wing topics and 12 left-wing topics, with the rest being classified as neutral in regards to the left-right discussion. Figure 12 outlines which topics are viewed as left- and right-wing respectively and if they should be mentioned in a positive or negative light in the manifesto to be classified as showing support for either right-wing or left-wing ideology. Within each topic, a party gets a score depending on how often the topic is mentioned. This score in each topic is the share of all political sentences that are about each topic. For example, if 6% of all political sentences in a manifesto is about the Welfare State Expansion, this would indicate a score of 6 for that left-wing topic. If a political party does not mention any of the topics, their score would thus be 0. The final RILE score is the sum of the scores of right-wing topics subtracted by the sum of scores in left-wing topics. The theoretical bounds of the RILE score is -100 to +100. This is however, very rare and would only be attributed to a party if 100% of their communication was about either left-wing (score of -100) or right-wing (score of +100) topics. Most parties fall somewhere in between as they usually talk about both left-wing and right-wing issues as well as issues that have been classified as neutral.

A critique of the RILE score is that it was developed for Western European countries and might fail to reflect cultural differences on what is considered left-wing or right-wing topics. However, since our dataset is focused on European countries, this does not present too big of a disadvantage with the RILE score.

The Manifesto Project Database also analyses parties' election manifestos to delegate them to a so-called party family through assessing four aspects: origin and sociology, international

federations and transnational groupings, policy and ideology as well as party name. This party classification by the Manifesto Project Database is used by PAGED for identifying radical parties for which they calculate the share of parliament seats they occupy. This is the second variable from PAGED that we utilise in this thesis and have labelled *rad_share*.

Left	Right
Anti-Imperialism	Military: Positive
Military: Negative	Freedom and Human Rights
Peace	Constitutionalism: Positive
Internationalism: Positive	Political Authority
Democracy	Free Market Economy
Market Regulation	Incentives: Positive
Economic Planning	Protectionism: Negative
Protectionism: Positive	Economic Orthodoxy
Controlled Economy	Welfare State Limitation
Nationalisation	National Way of Life: Positive
Welfare State Expansion	Traditional Morality: Positive
Education Expansion	Law and Order: Positive
Labour Groups: Positive	Civic Mindedness: Positive

Figure 12: Topics classified as being either Left or Right-wing

Source: Manifesto Project Team. (2018). Working with the Manifesto Project Dataset (Main Dataset). <https://manifesto-project.wzb.eu/tutorials/main-dataset> (Accessed 5/5-2025).

Appendix C - Descriptive Statistics

The following graphs are visualisations of variables from our compiled dataset. Data on the variables come from the datasets previously mentioned in Section 5.

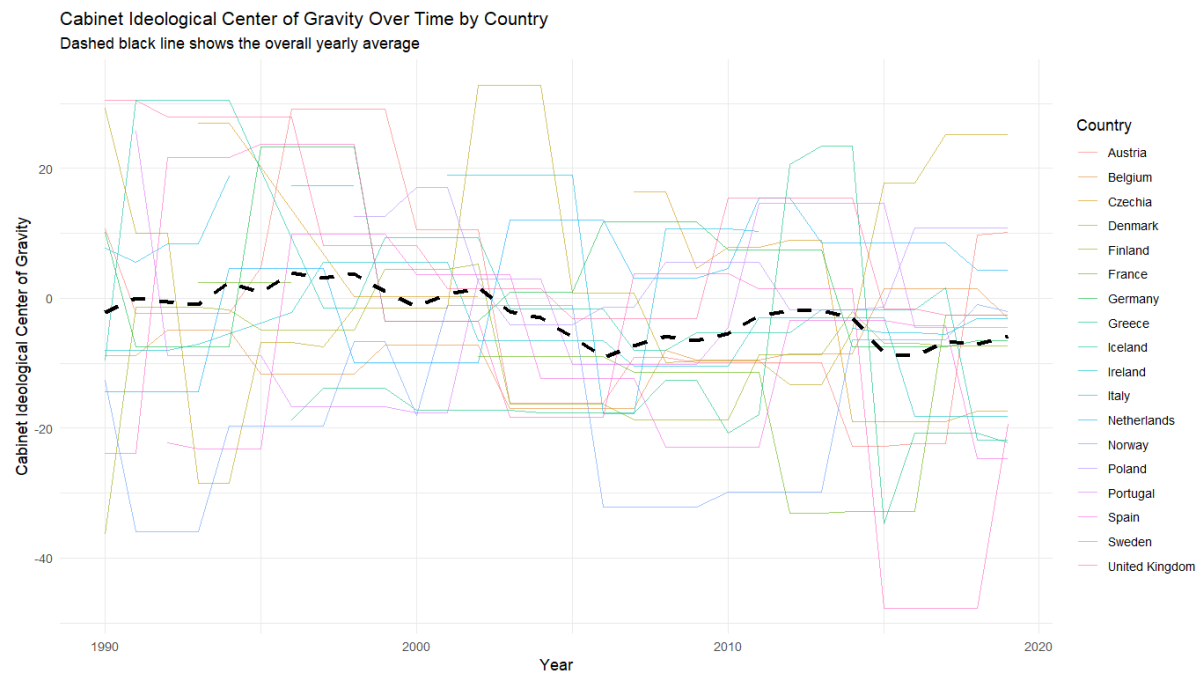


Figure 13: The Evolution of *cab_gravity* for Countries in Our Dataset with Unweighted Mean. Source: Hellström et al (2024).

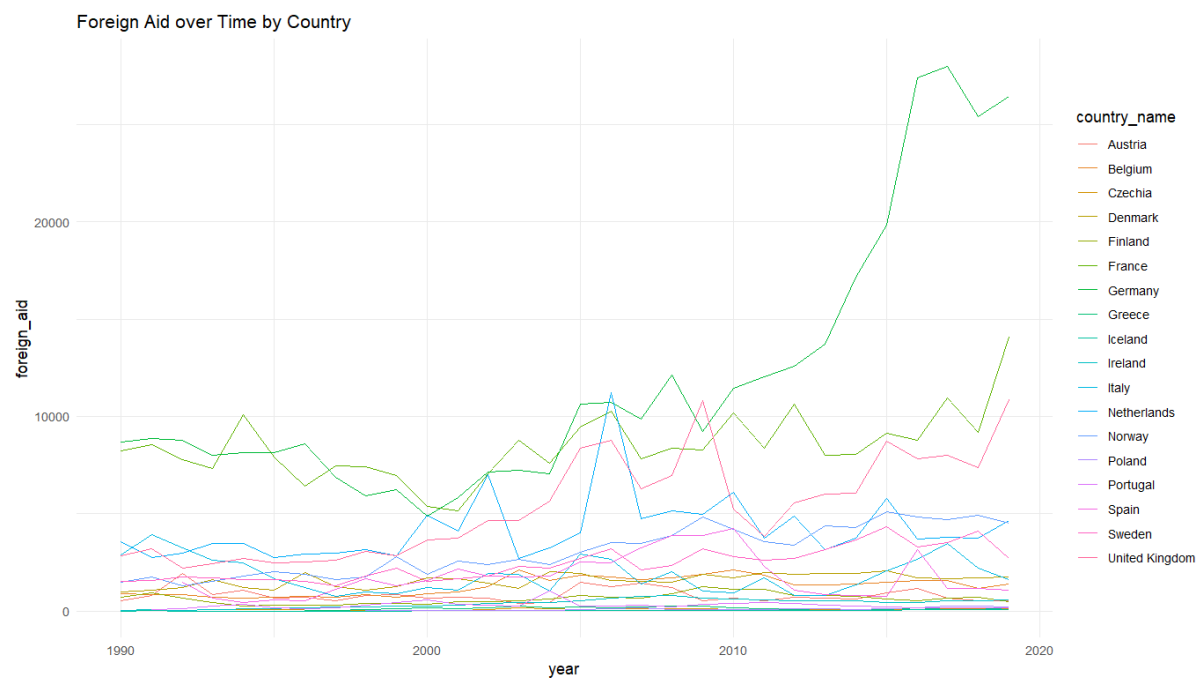


Figure 14: Foreign Aid over Time for the Countries in Our Dataset. Source: OECD (2025) DAC3A and DAC2A.

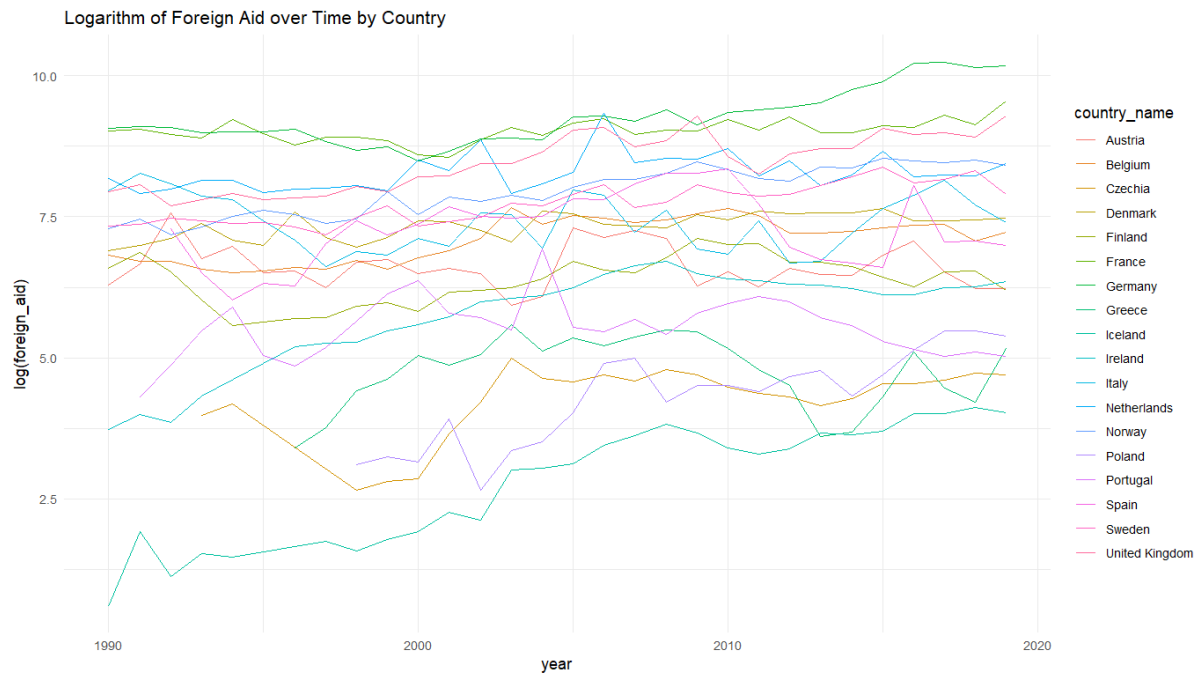


Figure 15: The Logarithm of Foreign Aid over Time for the Countries in Our Dataset. Source: OECD (2025) DAC3A and DAC2A.

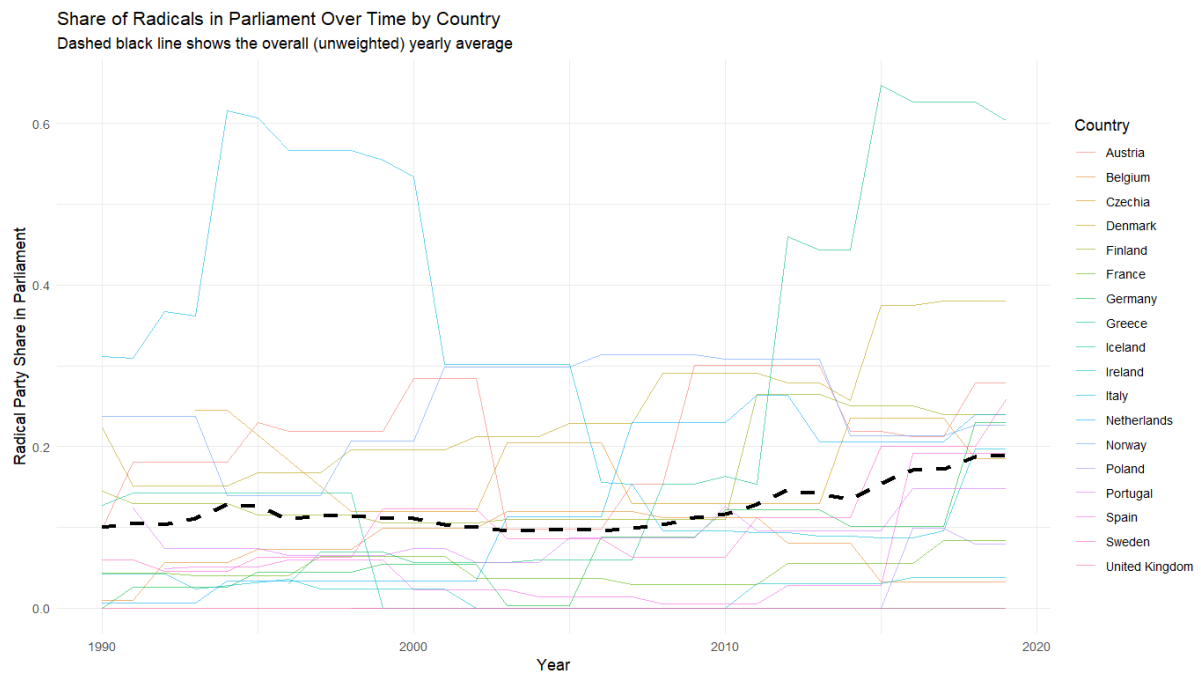


Figure 16: Share of Seats in the Parliament Occupied by Radical Parties. Source: Hellström et al (2024).

Appendix D - Panel Fixed-Effects Model Arellano Standard Errors

Table 4: Regression Results with Driscoll-Kraay and Arellano Standard Errors

Variable	Estimate	Arellano	Driscoll-Kraay
lag(foreign_aid, 1)	0.5699***	0.2854 (0.0464)	0.2146 (0.0082)
cab_gravity	-11.6970*	7.7716 (0.1330)	6.2567 (0.0622)
rad_share	1692.2757	980.8583 (0.0851)	1067.2295 (0.1135)
gdp_cap	22276.1979*	15230.2050 (0.1442)	13430.6830 (0.0979)
population	141.7292*	114.0435 (0.2146)	84.4395 (0.0939)
gen_gov_net_lend	22.1813	15.2616 (0.1468)	14.9173 (0.1377)
EU_member	-305.7014	266.2245 (0.2514)	210.0320 (0.1462)
rad_share: cab_gravity	31.5382	27.5536 (0.2530)	20.8263 (0.1306)
Model Summary	Unbalanced Panel: n = 18, T = 18–30, N = 488		
R^2		0.53544	
Adj. R^2		0.5103	
F-statistic	66.5609 on 8 and 462 DF, p-value: < 2.22e–16		

Note: Standard errors and p-values are shown beneath the coefficient estimates.

Significance is based on Driscoll-Kraay p-values.

* p < 0.10, ** p < 0.05, *** p < 0.01.

Comparison of Arellano standard errors and Driscoll-Kraay standard errors for the panel fixed-effects model. The Arellano standard errors, or clustered robust standard errors, are designed to handle heteroskedasticity and serial correlation issues in panel data when estimating within-group effects (Arellano 1987).

Appendix E - Motivation for Normalisation

The reasons for why the model fails without normalisation can be due to a number of reasons. One of these could be multicollinearity which however seems unlikely as the correlation between variables is not strong. Another reason could be that the GMM fails to account for variables that differ considerably in magnitude (e.g. foreign aid ranging in the millions while the share of radical parties taking seats in the parliament takes on values between 0-1). However, by normalising the values, the potential issues of multicollinearity and large differences in variable magnitude are reduced. With more variables, the model becomes overfitted which leads to model instability as the number of instruments increases as a function of the number of variables, which reduces the reliability of the model.

Usage of Artificial Intelligence Disclaimer

In writing this thesis, generative AI has been utilised. ChatGPT by open AI has been used to assist in the following tasks:

- Debugging and troubleshooting of R-code.
- Increase efficiency in transforming regression outputs to LaTeX tables.
- Linguistic enhancements such as fixing grammar and improving readability.

ChatGPT has aided us in guaranteeing the quality of R-code to create reliable tables with outputs as well as streamlining the use of LaTeX. It also increased the thesis's quality by improving the text's grammar and readability, which we found was of great importance.

There is the risk of AI providing faulty responses to questions regarding coding and grammar, which we mitigated by double-checking answers with R-forums, academic literature and other forums pertaining to grammatical rules. We also made sure to be as detailed in our questions to ChatGPT as possible to minimise the risk of receiving incorrect and/or irrelevant answers.

The insights gained by utilising Generative AI are, among other things, its utility in increasing productivity and efficiency, as it otherwise would have been considerably more time-consuming to produce R-code and LaTeX code. We also realised the value of ensuring clarity in our language by consulting AI as a form of grammar check. However, we did come to realise the danger of relying too much on AI as a form of proofreading when asking it about the level of clarity of our paragraphs, as it can impede one's ability to independently formulate one's own train of thought. Therefore, we made sure to mainly use it as a grammar check.