THE POLITICAL ECONOMY OF INTERNATIONAL FINANCIAL FLOWS TO DEVELOPING COUNTRIES

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OVERVIEW

One of the major problems for developing countries is the lack of capital for investments to spur their economic growth. As their institutional situation and economic performance often prevent them from accessing the international capital market and make borrowing expensive, they depend on other forms of financial flows. Foreign aid and foreign direct investments (FDI) are the two most important types of these financial flows for developing countries (Kosack and Tobin 2009). The two flows differ in their purposes and in what determines their allocation. Foreign aid is targeted mainly at the provision of basic goods, e.g., health, education, sanitation and infrastructure, or to support the development of good governance through, e.g., the support of financial management or judicial reforms. Foreign direct investments, on the other hand, serve entrepreneurial purposes to develop new markets, reduce production costs or to secure manufacturing processes, e.g., through direct access to needed input factors like minerals or ores. However both might serve the development of a country. It is therefore of interest what determines the allocation of these two financial flows. In the following four chapters I will focus on political economy arguments to highlight different aspects that influence these allocation decisions. The first three chapters are related to foreign aid decisions and the last chapter focuses on FDI.

A broad literature analyzes the allocation decision of aid by official donors of the OECD's Development Assistance Committee (DAC). These studies provide two important findings: first, that apart from need and merit, geo-strategic and commercial interests are important determinants for the allocation of aid; and second, that donors differ in their allocation patterns. Many studies try to determine exactly how the importance of these factors differs between the donors. Yet most of these studies assume that a country's behavior is constant despite changes of the government's ideology. This seems to be a strong assumption as the growing literature on leadership shows that a country's foreign policy, foreign trade and economic policy all change with changes in leadership (Jones and Olken 2005; 2009; Potrafke 2009; Dreher and Jensen 2013). Only one study by Fleck and Kilby (2006) takes this literature into account; it analyzes how changes in the ideology of the United States' leadership over time affect the importance of different factors in the US bilateral aid allocation decisions. In Chapter I, we[1] follow the example of Fleck and Kilby and seek to determine whether the changing ideology of the German government over time affects the importance of the factors that determine its bilateral aid allocation. Towards this end, we analyze the allocation of German bilateral aid to 138 countries over the 1973-2010 period with respect to political economy determinants, i.e., geo-strategic and commercial motives. Additionally, we study whether the importance of these factors differs with the ideology of the leadership. Germany is a particularly interesting case as the ideology of the chancellor and the Ministers of Foreign Affairs and for Economic Cooperation and

[1] This study is joint work with Axel Dreher (Ruprecht-Karl University Heidelberg) and Peter Nunnenkamp (Kiel Institute for the World Economy).

Development, the two crucial ministries with respect to the allocation of foreign aid, has often changed and differed between them.

We find that in general geo-strategic and – less robustly – commercial motives matter in addition to the recipients' need. Accordingly temporary members of the United Nations Security Council (UNSC) on average receive around 31% (50 million USD) more bilateral aid from Germany. Our results suggest that a more socialist-oriented leadership of the German government in general, and the Ministry for Economic Cooperation and Development and the Federal Foreign Office in particular, leads to more importance being placed on geo-strategic and commercial motives in aid allocation decisions. For example, under a socialist BMZ there is an increase in the elasticity of aid with respect to exports from 0.31 to 0.55 percent. Controlling for other factors, socialist leadership also decreases the amount of aid commitments by around 32%. These findings suggest that geo-strategic and commercial motives matter for the German bilateral aid allocation decision and that ideology partly influences the importance these factors.

In Chapter II the focus changes from aid allocation in general to the specific design of conditionality that is attached to the World Bank's development policy lending. Conditionality is an intensively discussed issue. On the one hand the World Bank argues that it helps countries to improve their economic situation. Critics, on the other hand, argue that conditions imply that the World Bank has superior knowledge when compared to the governments of recipient countries revealing the Bank's behavior to be paternalistic in nature. This argument is especially important against the background of empirical research that challenges the objectivity of conditions. For the International Monetary Fund (IMF), which is similar in its organizational structure and therefore comparable to the World Bank, several studies have shown that major shareholders, especially the United States have an influence on conditionality (e.g., Gould 2003; Dreher and Jensen 2007; Stone 2008). For the World Bank, due to a lack of publicly available information on its conditions, to date no empirical study exists that analyzes the political economy of its conditionality with a large dataset. The study presented in Chapter II[2] tries to fill this gap by analyzing the influence of the World Bank's five major shareholders – the United States, the United Kingdom, Japan, France and Germany – on conditions of development policy loans. The analysis focuses on a specific subset of conditions, i.e., trade conditions, and how they relate to the commercial interests of the Bank's five major shareholders. Using a newly available dataset on World Bank conditionality we analyze the conditionality design of more than 870 projects over the 1981 – 2010 period.

Our analysis reveals that the shareholders pursue different strategies with regards to trade protection and promotion through trade liberalization conditions. For Germany, an increase of German bilateral trade by one log point leads to an increase of approximately 2.5 more trade liberalization conditions. This suggests that Germany follows a trade promotion strategy. For the US, on the other hand, our results show that trading partners receive significantly fewer trade conditions – on average

[2] This study is joint work with Martin Breßlein (Trier University).

0.9 fewer conditions with a log point increase in bilateral trade. This suggests that the US seeks to protect its own bilateral trading relations from the competition that would arise in the case of more open markets. For Japan, the United Kingdom and France we do not find support for a relationship between commercial interests and the design of conditionality. These results complement previous findings on World Bank lending by showing that major shareholders influence the design of conditions to further their commercial interests. Further, our findings contribute to the ongoing debate on restricting the power of major shareholders and increasing the transparency of lending decisions. Given that conditions should aim to implement the needed reforms to improve the economic and social development in the medium- to long-run, it is critical that they are not subverted for shareholders' political economy considerations and economic benefit.

The studies in Chapters I and II focus on the donors' perspective and interests in the allocation of aid. However the recipient government might also behave strategically in order to influence aid decisions. This is taken into account in the analysis in Chapter III where I analyze the effect of ratification of international human rights treaties on aid allocation.

A broad literature in both political science and law shows that after ratifying international human rights treaties, countries often do not adjust their behavior accordingly. This is especially true for those countries with low standards of human rights protection. Vreeland (2008) shows that those dictators who use torture are more likely to ratify the United Nation's Convention Against Torture (CAT) and Hafner-Burton and Tsutsui (2007) report that oppressive countries fail to change their behavior after the ratification of the CAT and the International Convention on Civil and Political Rights (ICCPR). This empirical evidence is puzzling and gives rise to the question why countries decide to ratify these treaties when they do not subsequently comply. One possible explanation is foreign aid. Many donors claim that they take a country's respect for human rights into consideration in their aid allocation decisions. Thus, there might be a monetary reward for the ratification of human rights treaties that explains the legal commitment from a political economy perspective.

For this aim I investigate the effect of ratification of different human rights treaties adopted by the United Nations General Assembly on the Official Development Assistance (ODA) given by donors of the OECD DAC. On average the ratification of an additional human rights treaty increases total ODA by 6% (around 33.5 million USD) and the ratification of one of the two most important treaties, on torture and civil and political rights, increases total ODA by up to 19% (around 97 million USD). Additionally, I show that countries with a poor record of human rights protection can use treaty ratification as a substitute for actual improvements in their behavior regarding human rights protection. While ratification of the two most important treaties does not increase ODA for countries with high levels of respect for human rights, it increases aid commitments to those countries with the lowest respect for human rights by almost 42%. This pattern does not significantly differ between the Nordic donors and the five largest DAC donors. This study offers two important findings. First, the ratification of human rights treaties by countries with a low actual respect for human rights might be

the result of strategic cost-benefit analysis. While the costs of committing to these human rights treaties is low due to the lack of enforcement measures, the benefit through increased aid inflows is high – especially for those countries known as human rights abusers. This makes ratification attractive and might explain the puzzling history of unfulfilled legal commitments. The second important finding is the fact that donors reward especially those countries with a bad reputation of human rights protection presumably because they take the ratification as a credible signal for the recipient's intent to change its abusive behavior. Given the empirical evidence that this change does not occur, donors should reconsider their behavior and either reward only observable improvements in human rights protection or provide specific aid to help a country to implement its legal commitments and change its behavior.

In the last chapter of this dissertation, Chapter IV, I focus on FDI as the second important international financial flow for developing countries. FDI, apart from being a capital inflow, offer the advantage of knowledge transfers. This transfer of knowledge through, e.g., new production processes increases productivity and thereby contributes to economic growth to a higher extent than domestic investments (Borensztein *et al.*, 1998). Additional spill-over effects are often achieved that strengthen the whole economy through, e.g., an increased demand for inputs. Another advantage of FDI with respect to other investment flows is its lower volatility because they aim to establish an economic relationship where sunk costs reduce the probability of a withdrawal of money on short notice. Many developing countries are therefore eager to attract more FDI to benefit from these effects. Political and governance factors like rule of law, stability of the government and corruption are factors with an important influence on investors' decisions.

In this analysis, I evaluate the effect of the Extractive Industries Transparency Initiative (EITI) on FDI inflows in participating countries. The initiative targets the problem of low transparency in the public financial management of resource incomes. Transparency is crucial in resource-rich countries to impede rent-seeking behavior and reduce corruption to ensure that the country indeed benefits from its natural wealth (Kolstad and Søreide 2009). Apart from increased transparency and rising accountability, the EITI predicts rising FDI inflows in the longer run due to improvements in governance. Yet, numerous studies argue and show that joining an institution or organization often already has a positive effect in the short-run. This is due to the signaling effect and the increased credibility of announcements done in the surrounding of an international institution (Lohmann 2003). In this sense Dreher et al. (2010) show that membership in international organizations as well as the ratification of certain UN conventions has a positive effect on FDI inflows. Against the background of this literature I evaluate the effect of becoming a candidate of the EITI on FDI inflows in the following year. The signal of becoming an EITI candidate has the potential to improve a country's appeal for foreign direct investment (FDI) as quality of governance is an important factor for investment decisions. Using a panel of 81 countries, this study shows that joining the EITI increases the ratio of FDI inflows to GDP on average by around two percentage points. This is a remarkable increase given

that the average ratio of FDI inflows to GDP in the sample is five percent. Interestingly, a government announcing that it plans to join the EITI has no effect on FDI. This result supports the assumption that the EITI gives additional credibility to a country but only in the case where it has expended sufficient effort to be accepted as a candidate country. It is only after this occurs that investors begin to react. This effect is independent of economic reforms or a change in government. It seems that countries can send a positive signal to investors by joining the EITI and thereby showing their willingness to reform and increase transparency.

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CHAPTER I :

THE ALLOCATION OF GERMAN AID: SELF-INTEREST AND GOVERNMENT IDEOLOGY*

I.1. INTRODUCTION

The importance of leaders in shaping the policies of their country has recently moved into the spotlight in economics and political science alike. Jones and Olken (2005; 2009) find that leadership change can affect economic policy and outcomes, democratization, and conflict. McGillivray and Smith (2004) report that leadership change in authoritarian regimes leads to a major decline in trade. Dreher and Jensen (2013) show that leaders affect their country's foreign policy position. Potrafke (2009) finds that government ideology matters for voting alignment with the United States in the UN General Assembly.

The literature on development aid has largely ignored the potentially important role of political leadership.[3] It typically focuses on the motives of donor countries as unitary actors, thereby failing to account for varying ideologies of governments and different political affiliations of those in charge of development aid. The lack of empirical evidence is particularly striking when it comes to the question of whether political leadership and government ideology help explain the importance of geo-strategic and commercial motives of aid, and why it appears to vary not only across donor countries, but also over time.[4]

In this paper, we try to fill this gap by focusing on geo-strategic and commercial motives underlying the allocation of German aid. Such motives are unlikely to be constant over time as changes in political leadership can be expected to have important bearings on the allocation of foreign aid. Therefore, our major aim is to assess whether the political ideology of the government and the

* This analysis is joint work with Axel Dreher (Ruprecht-Karl University Heidelberg) and Peter Nunnenkamp (Kiel Institute for the World Economy).

[3] A few studies have addressed the role of political ideology for the overall size of aid budgets; see Fuchs et al. (2014) for an overview. By contrast, ideology has typically been ignored as a determinant of aid allocation and its underlying motivations.

[4] Fleck and Kilby (2006) represent the major exception from this typical neglect in aid allocation studies (see section I.2 for details).

political affiliation of the relevant ministers have mattered for the importance of geo-strategic and commercial motives in the allocation of German aid since the 1970s.

Germany offers a particularly interesting case to analyze the impact of political ideology on the importance of selfish aid motivations. The dominant political orientation of German governments has shifted back and forth from conservative to socialist. Moreover, various coalition governments appointed conservative, liberal and socialist politicians to serve as ministers of the Ministry for Economic Cooperation and Development. Coalition partners with a different political orientation have often held office in the Federal Foreign Office. Both ministries are important players involved in the allocation of German aid, while their motivations are not necessarily aligned (Nunnenkamp and Öhler 2011).

We specify our hypotheses and how they relate to the previous literature in section I.2. As detailed in section I.3, we employ fixed-effects Tobit estimations for a panel of 138 recipient countries over the 1973-2010 period to test the hypothesis that the relative importance of selfish aid motivations varies according to the ideological orientation of the ruling government in general, and the relevant players within the administration. Section I.4 presents our empirical results. We find that less aid is committed under socialist leadership, controlled for other factors. Geo-strategic and commercial motives appear to be important. When we relate these motives to the political color of the German government, the Ministry for Economic Cooperation and Development, and the Federal Foreign Office, we find their importance to increase under socialist leadership. Our findings are thus in sharp contrast with the widespread belief that mainly conservative governments use aid as a means to promote exports and strengthen strategic alliances. The final section concludes.

I.2. BACKGROUND AND HYPOTHESES

We link two separate strands of the previous literature on foreign aid. First, our analysis relates to the large number of studies on aid allocation across recipient countries. Second, we draw on the much smaller literature on the determinants of donor generosity, notably the role political ideology plays in determining the overall size of aid budgets. This second strand of the literature also touches on recent work on the importance of individual leaders in shaping the policies of their countries.

Various studies on the allocation of aid by official donors of the OECD's Development Assistance Committee (DAC) have shown that aid is not only motivated by altruism, but also by the self-interest of donors. Alesina and Dollar (2000: 33) find "considerable evidence that the direction of foreign aid is dictated as much by political and strategic considerations, as by the economic needs and policy performance of the recipients." Alesina and Dollar introduced UN voting patterns as an indicator of political aid motivations. Recipients received more aid from all major donors when voting in line with the donor country in the UN General Assembly. This almost uniform empirical pattern suggests, if only implicitly, that political motives of aid span over the whole ideological spectrum of donor governments.

The fixed effects estimations by Höffler and Outram (2011) provide a more nuanced picture on UN voting as a determinant of aid allocation. They find, inter alia, that Germany's aid allocation responds positively to recipient countries' voting in line with the United States; but voting in line with Germany itself has no significant effects on German aid. The cross-section analysis of Nunnenkamp and Öhler (2011) focuses on comparing the allocation of German aid through different channels, including non-governmental organizations. Nevertheless, it is of some interest in the present context that Nunnenkamp and Öhler (2011: 316) find "clear evidence for German political interests [as reflected in UN voting coincidence] being associated with the allocation of aid through various channels." The Social Democratic Party (SPD) was in charge of the Ministry for Economic Cooperation and Development during the 2005-2007 period considered in Nunnenkamp and Öhler – until November 2005 under the SPD-led government of Chancellor Schröder and subsequently in the grand coalition under the conservative Chancellor Merkel.[5] This provides the first indication that geo-strategic aid motivations may not be restricted to times when conservative ideologies dominate German development cooperation.

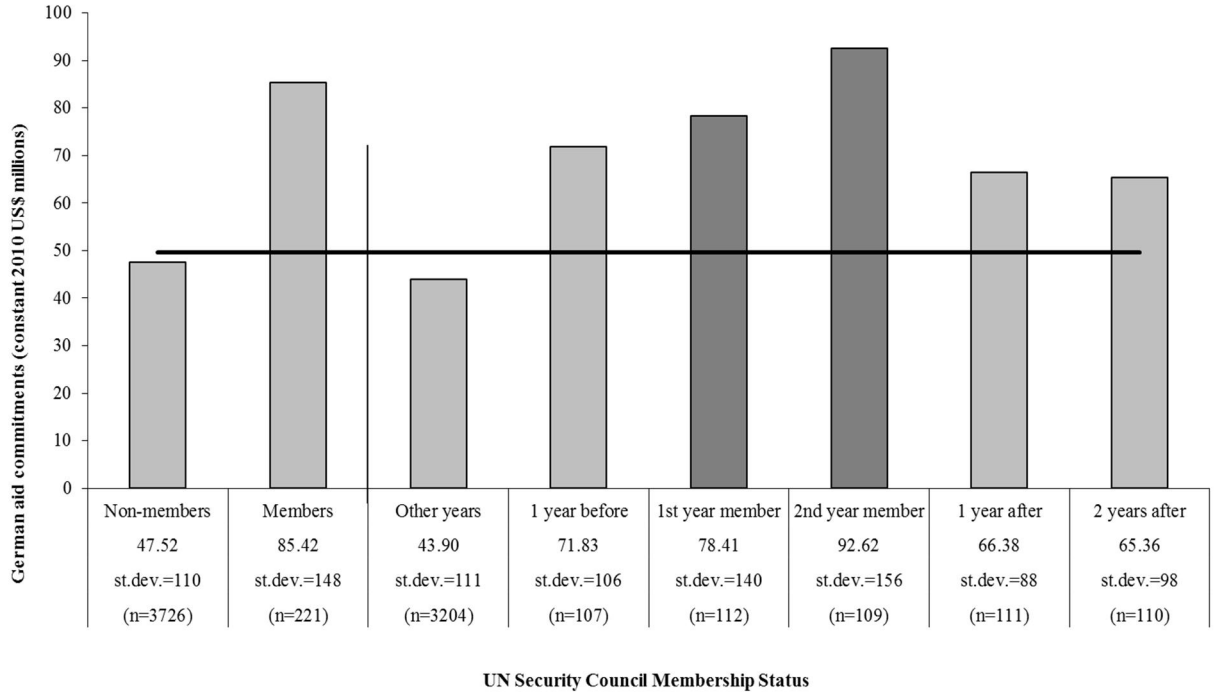
Subsequent research has employed refined measures of political and strategic interest. In particular, recent research provides evidence that governments elected to the United Nations Security Council (UNSC) receive more generous financial support than other developing countries. Dreher et al. (2009a) show that elected UNSC members are more likely to participate in IMF programs. Moreover, fewer and laxer conditions are attached to IMF programs for UNSC members. UNSC members also receive more aid from the United States, the World Bank, the Asian Development Bank, and the United Nations Development Program (Kuziemko and Werker 2006; Dreher et al. 2009b; Lim and Vreeland 2013).[6] Figure I.1 visualizes the amount of German aid committed to countries on and not on the UNSC (in constant 2010 million US$). As can be seen, temporary members of the UNSC receive more than double the amount of aid compared to non-members. Aid commitments are largest in the two years of membership.

Temporary UNSC membership has a conceptional advantage over previous attempts to measure the importance of geo-strategic considerations in that it is exogenous to variables that might be directly related to foreign aid (Bueno de Mesquita and Smith 2010; Dreher et al. 2012). Countries enter the UNSC for two years, and are precluded from immediate re-election. It is difficult to think of variables affecting the amount of aid a country receives in the two years it serves on the UNSC that are unrelated to geo-strategic motivations. Dreher et al. (2012) confirm the idiosyncrasies of UNSC selection.

[5] Note that the SPD also held the Federal Foreign Office in the grand coalition (see Table A I.2 in the appendix). In contrast to Nunnenkamp and Öhler (2011), the cross-country study of Faust and Ziaja (2012) covers German aid allocation during two sub-periods after the end of the Cold War (1992-1999 and 2000-2008). UN voting proves to be statistically insignificant in most of the estimations reported by Faust and Ziaja.

[6] On the contrary, UNSC membership does not seem to affect loans by the Inter-American Development Bank (Bland and Kilby 2012; Hernandez 2013).

Figure I.1: German Aid Commitments by UN Security Council Membership over Time



The horizontal line shows the average German aid commitments across our entire sample.

Considerable evidence exists that donors are using aid as a means of buying political support from recipient countries in the United Nations. It has received less attention, however, whether the importance of geo-strategic motives of aid varies over the ideological spectrum of donor governments and whether the party affiliation of the political leaders of a country's aid authorities makes a difference.

Essentially the same is true for commercial motivations of aid. It is widely accepted that the allocation of aid is shaped by trade-related interests of donors, though not necessarily to the same extent across donors and over time. Berthélemy and Tichit (2004) find a strong impact of bilateral trade intensity on the allocation of aid. More recent studies underscore the relevance of trade-related interests (e.g., Younas 2008; Höffler and Outram 2011). According to Berthélemy and Tichit (2004), such trade-related interests vary between donor countries.[7] Berthélemy (2006) ranks various donors according to the elasticity of aid with respect to bilateral trade intensity. Most of the larger donors, including Germany, are rated 'moderately egoistic.' At the same time, Dollar and Levin (2006), as well as Claessens et al. (2009), find that donors have recently become more altruistic by targeting aid at poor recipient countries with sound institutions and economic policies.[8] This could also be the case for Germany. According to Nunnenkamp and Öhler (2011), German exports to recipient countries were *negatively* associated with German aid in recent years (2005-2007), which is in stark contrast to

[7] Feeny and McGillivray (2008) stress that the determinants of aid also differ between major recipient countries.
[8] For a more sceptical assessment, see Nunnenkamp and Thiele (2006) who conclude that export-related interests and post-colonial ties remained important.

commercial aid motivations.[9] However, what actually drives the changes in the allocation of aid over time and whether these changes are likely to persist, remains up for debate.

Turning to the second strand of the relevant literature, it is now widely believed that individual leaders can make a difference with respect to a country's policies. Specifically, several authors expect that left-wing politicians are more supportive of foreign aid than right-wing politicians (e.g., Thérien and Noel 2000; Milner and Tingley 2010). Socialist beliefs call for government intervention in order to reduce inequality through redistribution of income and wealth. According to conservative beliefs, government intervention has to be kept to the minimum in order not to impair individual effort and interfere in markets. Being less concerned about inequality at home, conservatives appear to be predisposed with spending less on foreign aid as a means of reducing worldwide inequality.[10]

All the same, the dichotomy of a pro-aid left and a contra-aid right may be overly simplistic. Two major arguments have been advanced in the literature as to why left-leaning governments do not necessarily run larger aid budgets. Altruistic motivations of aid are not confined to socialist traditions of redistribution. Rather, conservative governments may be as generous as socialist ones since Christian roots call for international solidarity, too (Thérien and Noel 2000).[11] Furthermore, one may suspect that business-friendly conservative governments grant aid to foster the economic interests of their political constituencies, e.g., by using aid as a means of export promotion (Round and Odedokun 2004).[12]

Indeed, empirical findings are mixed with regard to the effect of political ideology on international solidarity, measured by the overall size of foreign aid budgets. Thérien and Noel (2000), as well as Chong and Gradstein (2008), find that left-wing governments grant more aid. Brech and Potrafke (2013) corroborate this result for aid delivered as bilateral grants, though not for other forms of aid. Partisanship variables proved to be insignificant in the analysis of donors' aid effort by Lundsgaarde et al. (2010). According to some studies, however, the overall aid effort of right-wing governments is even stronger than that of left-wing governments (Round and Odedokun 2004; Goldstein and Moss 2005; Bertoli et al. 2007).

Our subsequent analysis is not concerned with overall aid efforts, instead focusing on the distribution of a given aid budget across recipient countries. We follow previous aid allocation studies and analyze *bilateral* aid relations.[13] Importantly, our estimation approach allows us to assess whether conservative or socialist governments provide more aid to particular recipient countries for selfish

[9] As noted before, Faust and Ziaja (2012) cover the post-Cold War period. They find trade-related interests to be relevant for German aid allocation.
[10] See also Noel and Thérien (1995).
[11] See also Goldstein and Moss (2005) on "compassionate conservatives" in the United States.
[12] Tingley's (2010) finding that aid efforts to middle-income recipient countries were unaffected when conservative governments ruled in donor countries, whereas conservative governments granted less aid to low-income recipient countries than left-wing governments, could also fit into this argument. Middle-income countries can reasonably be assumed to be of a greater commercial interest to donor countries than low-income countries.
[13] However, we take into account that left-wing governments may be more inclined to use multilateral aid channels than right-wing governments. See Section I.3 for details.

reasons, by interacting the variables reflecting geo-strategic and commercial motives of aid with indicators of political ideology and partisanship (see section I.3 for details). To the best of our knowledge, Fleck and Kilby (2006)'s study on US aid over the 1960-1997 period is the only one employing a similar approach to assess the role of political changes on bilateral aid allocation. Fleck and Kilby rate US presidents and congresses on a liberal-conservative scale. They show, inter alia, that commercial interests have greater weight under more conservative congresses. By contrast, the impact of shifts towards Republican presidents and more conservative congresses on geo-strategic aid motivations (proxied by UN voting affinity) proves to be weak and ambiguous.

Our study differs in several respects from Fleck and Kilby (2006). First, our analysis extends into the most recent past, while Fleck and Kilby barely cover the period during which donors may have become more altruistic. Second, we employ temporary membership on the UNSC, in addition to voting patterns in the UNGA, as an exogenous measure of geo-strategic self-interest (see above). Third, we account for partisanship at the level of the relevant ministries, in addition to the political ideology at the top of German governments (chancellors). In contrast to the United States, German governments are typically coalitions of political parties placed at different points of the ideological spectrum so that the findings for the United States do not necessarily carry over to the allocation of German aid.

We hypothesize that both the general political ideology of German governments in office as well as partisanship of ministers in charge of international development cooperation matter for the importance of geo-strategic and commercial motives in the allocation of German bilateral aid.[14] However, split political competencies over international development cooperation and the institutional complexity at the level of the German aid administration (through so-called implementation agencies) could have weakened the impact of ideology and partisanship on aid allocation. German development cooperation has typically been characterized by incongruent political ideologies as the heads of the Ministry for Economic Cooperation and Development and the Federal Foreign Office had different party affiliations in German governments until recently.[15] As noted by Faust and Ziaja (2012), both ministries are struggling over competencies in the field of international development cooperation. At the same time, the German aid regime is characterized by a complex and fragmented structure of implementing agencies. A recent peer review of German aid noted: "Given the wide variety of actors within the German system, it is a challenge to bring coherence to the design and implementation to its aid" (OECD 2006: 58). Brombacher (2009) argues that the complex administrative system tends to

[14] See Breuning (1995: 246) for a discussion on the role of ministers in charge of development cooperation for political agenda setting in Belgium, the Netherlands and the United Kingdom: "The political affiliation of the minister has the potential to affect the debate in Parliament as a whole." However, agenda setting does not appear to be affected significantly by the political affiliation of ministers in Breuning's study.

[15] The situation has changed since November 2005 under the two governments led by Chancellor Merkel (see Table A I.2 in the appendix for details). Round and Odedokun (2004) suspect that coalitions of parties with incongruent ideologies and policies have larger overall aid budgets; but these authors do not consider bilateral aid allocation. Martens (2002: 182) argues that aid programs "are likely to be broader and more vaguely defined" if coalitions include a wide range of parties.

undermine political control of development cooperation.[16] Specifically, "bureaucracy controlled foreign aid" (Easterly 2002: 247) could imply that administrative rigidity and bureaucratic incentives weaken the links between political ideology and aid allocation criteria.

I.3. DATA AND METHOD

We investigate the importance of geo-strategic and commercial motives as drivers of German aid, and how these motives depend on ideology:

$$(1) \quad Aid_{it} = \beta UNSC_{it} + \gamma UNGA_{it-1} + \delta Exports_{it-1} + \zeta Social_{itj} + \theta X_{it-1} + \tau_t + \eta_i + \varepsilon_{it},$$

where Aid_{it} is (logged) aid committed by Germany in year t to recipient i,[17] measured in constant US$. $UNSC_{it}$ indicates membership in the United Nations Security Council, while $UNGA_{it-1}$ captures the recipient's voting behavior in the General Assembly in the previous year. Voting behavior can range between zero and one, with zero indicating that the recipient never voted in line with Germany in year *t-1*, and one indicating that voting was always the same.[18] Given that the bulk of voting is in the last quarter of the year, it is important to lag the variable as otherwise aid would precede voting in time. *Exports* are the (logged) exports from Germany to the respective recipient country (taken from Comtrade, and measured in constant 2005 US$). To minimize problems of reversed causality, we also lag this variable. *Social* captures the political orientation of the heads of government (chancellor), the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ), and the Federal Foreign Office (Auswärtiges Amt, AA). *Social* is set to one in year t when the respective government unit j has been headed by a politician from the socialist SPD. The variable is coded as a (proportionate) fraction of one if socialist politicians were in charge for only part of year t.[19] We use contemporaneous values, assuming that the current politician can affect new aid commitments.

Our set of control variables, represented by the vector X in equation (1), follows the previous literature on aid allocation (see section I.2). We add the log of the recipient country's GDP per capita (measured in constant 2000 US$, and taken from the World Bank's World Development Indicators 2012) to capture need. Richer countries should receive less aid, all else being equal. We include the (log of the) recipient country's population given that we do not measure the aid variable in per capita

[16] See also Faust and Ziaja (2012: 8) and the references cited there.
[17] In order not to lose those observations where no aid is granted we add one before taking logs.
[18] Note that we treat abstentions and absences as one half, following Dreher and Sturm (2012), among many others.
[19] The variable is coded as zero if the chancellor was from the conservative CDU throughout year t. In the case of the relevant ministries, it is coded as zero if the Minister for Economic Cooperation and Development or the Minister for Foreign Affairs belonged to parties other than the SPD – i.e., either the CDU, the liberal party (FDP) or the green party (Die Grünen) – throughout year t.

terms – and expect countries with a larger population to receive more aid.[20] We control for "merit" by including the recipient country's level of democracy, measured through the imputed Polity IV indicator of democracy (taken from Teorell et al. 2011).[21] The index ranges between 0 and 10, with larger values indicating more democracy. We also control for (the log of) German commitments of aid channeled through multilateral organizations (measured in constant US$). Our results might be biased unless it is taken into account that socialist governments tend to rely on multilateral channels to a greater extent. While we use contemporaneous values of multilateral aid, the other control variables are lagged by one year. We include a linear time trend τ_t and fixed country effects η_i;[22] ε_{it} is the error term, and standard errors are clustered at the country level. Tables A I.3 and A I.4 (in the appendix) show the summary statistics and report all variables and sources.

Equation (1) allows us to test for the importance of geo-strategic and commercial motives for the allocation of German aid. It also allows us to test whether the political color of leaders of the government and those ministries responsible for the allocation of the bulk of German aid makes a difference regarding the amount of country-specific aid commitments. This question is interesting in its own right. However, we are mainly interested in assessing whether the relative importance of geo-strategic and commercial motives varies with the political color of these leaders. We therefore interact our proxies for geo-strategic and commercial motives with the party affiliation of the three government authorities of interest (chancellor, BMZ and AA):

$$(2)\quad Aid_{it} = \beta UNSC_{it} + \gamma UNGA_{it-1} + \delta Exports_{it-1} + \zeta Social_{itj} + \lambda_1 UNSC_{it} * Social_{itj} +$$

$$\lambda_2 UNGA_{it-1} * Social_{itj} + \lambda_3 Exports_{it-1} * Social_{itj} + \theta X_{it-1} + \tau_t + \eta_i + \varepsilon_{it}\,.$$

As method we use Tobit estimation to take account for the fact that the dependent variable's minimum lies at zero. As the share of zeros in our sample is only four percent, the results are very similar to OLS results, however, the Tobit is preferred as it better explains the existing zeros. We decide to not use a two-step procedure to explain the zeros separately as these methods suffer from a bias in the second step if the two decisions are not completely independent of each other. The next section reports the results.

[20] However, the effect of population could also be negative once the level of development is controlled for. Boone (1996) suggests that a smaller population may proxy for the ease in which a country can be bribed, while offering the same benefits in "one-country-one-vote"-organizations like the United Nations General Assembly.

[21] The original source of Polity IV is Marshall and Jaggers (2003). Teorell et al. (2011) have imputed missing Polity IV data by regressing it on Freedom House's Civil Liberties measure. This imputed measure is thus more complete than the original.

[22] Note that the coefficients in the Tobit model are not affected by the so-called "incidental parameter problem" (Greene 2004). While the standard errors are generally biased downwards in a short sample, this can be neglected when the number of years is comparably large (as is the case here).

I.4. RESULTS

Column 1 of Table I.1 restricts the fixed effects in equation (1) to zero and excludes $Social_{itj}$. The results are in line with much of the previous literature: The amount of aid committed increases with need (proxied by lower GDP per capita) and a larger population, at the one percent level of significance, while the recipient's level of democracy is not significant at conventional levels. The amount of aid committed via multilateral channels is also insignificant. Among our variables of interest, exports and voting in the UNGA are significant at the one and five percent level, respectively, while temporary UNSC membership is marginally insignificant. All three variables have the expected positive coefficient. However, voting in the UNGA could be the consequence rather than a determinant of aid – the omission of country fixed effects renders reversed causality particularly likely. While it is hard to imagine that the positive coefficient of exports is due to reversed causality, the coefficient might reflect omitted variables bias rather than the causal effect of exports as long as fixed country effects are excluded. Therefore, we add the country-specific effects in all subsequent estimations. As can be seen in column 2, GDP per capita and population are no longer significant at conventional levels. The comparably small variation within recipient countries from their mean does not allow for the identification of significant effects. The same holds for exports, which become marginally insignificant. The results with respect to UNGA voting are qualitatively unchanged compared to column 1. The coefficient implies that an increase in voting affinity in the UNGA by one standard deviation from the median of 0.65 to 0.76 increases aid commitments by about 12 percent. It should be noted, however, that controlling for fixed country effects does not necessarily imply that voting *causally* affects aid. Rather, a change in aid receipts over time could lead to greater UNGA voting affinity. Independent of whether aid is used as a bribe to induce a change in voting behavior or rewards past voting behavior, our results show that the recipient's voting in the UNGA does matter. Furthermore, German aid commitments are larger if countries are temporary members of the UNSC. This mirrors findings for other donors such as the United States (Kuziemko and Werker 2006), the IMF (Dreher et al. 2009a), the World Bank (Dreher et al. 2009b), and the Asian Development Bank (Lim and Vreeland 2013). In contrast to UNGA voting, we interpret the coefficient on the UNSC variable to be causal given that UNSC membership is clearly unrelated to any variable that might also determine aid commitments over time (Dreher et al. 2012). Quantitatively, the coefficient implies that German bilateral aid commitments increase by almost 31 percent for countries serving temporarily on the UNSC. Given yearly commitments in the order of US$ 50 million for the average sample country temporary membership of the UNSC would increase German aid by more than US$ 15 million.

In columns 3-5 we turn to the question of whether the political color of leaders matters for the amount of bilateral aid commitments. In column 3 we enter the dummy variable indicating that the chancellor was from the socialist SPD. Column 4 adds the corresponding dummy for a left-wing minister of development (BMZ), while column 5 adds the corresponding dummy for a left-wing foreign minister. Generally speaking, we find that the political color of leaders matters for German

bilateral aid commitments. This resembles similar findings with respect to other policy areas, like a country's foreign policy position (Potrafke 2009; Dreher and Jensen 2013).[23] More specifically, aid commitments prove to be lower under socialist governments in column 3, at the one percent level of significance. This result is in conflict with the conventional wisdom that left-wing politicians are more supportive of foreign aid than right-wing politicians (see section I.2). Instead, it is in line with some previous empirical studies that found the overall aid effort of right-wing governments to be stronger than that of left- wing governments (Round and Odedokun 2004; Goldstein and Moss 2005; Bertoli et al. 2007).

Table I.1: Determinants of German Aid, 1973-2010, Tobit

	(1)	(2)	(3)	(4)	(5)
Log Multilateral Aid	0.155 [0.599]	0.411 [0.141]	0.085 [0.747]	0.145 [0.586]	0.162 [0.544]
Log $GDPpc_{t-1}$	-1.002*** [0.000]	-0.962 [0.118]	-0.928 [0.128]	-0.877 [0.148]	-0.878 [0.147]
Log $Exports_{t-1}$	0.559*** [0.001]	0.350 [0.122]	0.356 [0.111]	0.415* [0.067]	0.412* [0.069]
Log $Population_{t-1}$	0.804*** [0.000]	-0.647 [0.619]	-0.788 [0.540]	-0.976 [0.449]	-0.968 [0.453]
$Polity_{t-1}$	0.033 [0.543]	0.116 [0.106]	0.122* [0.088]	0.126* [0.078]	0.126* [0.079]
UNGA $Voting_{t-1}$	1.709** [0.041]	1.051* [0.085]	1.123* [0.067]	1.060* [0.083]	1.054* [0.085]
UNSC	0.253 [0.110]	0.270*** [0.009]	0.267*** [0.008]	0.257** [0.012]	0.257** [0.012]
Socialist Government			-0.381*** [0.001]	0.216 [0.227]	-0.484*** [0.000]
Socialist BMZ				-0.702*** [0.000]	
Socialist AA					-0.672*** [0.000]
Time Trend	-0.043*** [0.001]	-0.009 [0.804]	-0.004 [0.916]	0.008 [0.825]	0.006 [0.852]
Constant	-1.288 [0.843]	19.205 [0.416]	28.285 [0.222]	28.784 [0.213]	28.354 [0.220]
Country Dummies	NO	YES	YES	YES	YES
Observations	3,947	3,947	3,947	3,947	3,947
Number of Countries	138	138	138	138	138
Pseudo R^2	0.134	0.222	0.223	0.225	0.224

Notes: The dependent variable is Log German ODA Commitments in constant USD. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

The finding that socialist leadership is associated with less German bilateral aid holds in columns 4 and 5. This is even though the coefficient capturing leadership at the general government level becomes insignificant when controlling for a socialist BMZ (column 4), where aid now decreases with a socialist BMZ. Note that the dummies reflecting the political orientation of the BMZ and the government differ only for a few years, namely the 2005-2009 period when the chancellor was conservative and the BMZ was headed by a minister from the SPD. Once we control for the color of the BMZ, we can no longer identify the effect of the government, due to multicollinearity. By contrast, the coefficient capturing leadership at the general government level remains significantly negative once we control for socialist leadership of the Federal Foreign Office. At the same time, the significantly negative dummy for the latter underscores that socialist leadership is associated with less

[23] See Belke and Potrafke (2012) on monetary policy in the OECD and Potrafke (2011) for an analysis of education and cultural expenditures in West German states. Potrafke (2012) reports mixed results regarding the impact of the German government's political orientation on social policy.

German bilateral aid. The size of the coefficients is of substantial quantitative importance. For example, column 3 indicates a decrease of aid commitments by almost 32 percent under socialist governments.

Accounting for the political orientation of leaders, we find that exports are significant at the ten percent level in columns 4 and 5, but not in column 3, of Table I.1. The effect of commercial motives on the allocation of German bilateral aid can therefore not be considered to be robust, which is in line with the ambiguous findings of earlier studies (see section I.2). German aid is increasing with more democracy in the recipient countries in the extended specifications, though only at the ten percent level. In contrast, the effects of UNGA voting and temporary membership on the UNSC are hardly affected when accounting for the political color of leadership at the government and ministerial level. Both coefficients are significantly positive, at least at the ten percent level, in all fixed effects specifications.

As discussed in section I.2, temporary membership on the UNSC has been suggested as an exogenous determinant of aid in different contexts, but has not so far been considered in the context of German aid. Thus, before turning to the interactions between the political color of leaders and the importance of commercial and geo-strategic motives, we delve deeper into the analysis of geo-politically motivated German aid. Table I.2 includes dummies ranging from up to two years before a country was elected to serve on the UNSC to up to two years after the completion of its UNSC term. It is often known well in advance which country will be the next representative of a certain region (Dreher et al. 2012). However, it is not unusual that more than one country competes for this position. In these cases, it will only be clear by October of a certain year, the month the election takes place, who will enter the UNSC on January 1 the following year (Dreher et al. 2012).

The election procedure can explain the results of Table I.2 well. The results in column 1 show that German aid commitments increase significantly, on average, in the year before the election (when in many cases it will already be known who will become a member). The dummy is only marginally significant in the year of the election, probably because pending competitive elections mitigate the effects of anticipated membership. Most importantly, commitments are significantly higher for temporary members of the UNSC during their two-year term, but not significantly higher when the country has left the UNSC. The positive effect during the two-year term remains after consecutively excluding the other dummies, as shown in columns 2-4.

We also investigate whether the effect is more pronounced in “important” years. We follow Kuziemko and Werker (2006) and classify a year’s importance based on the number of UNSC-related articles in the New York Times. Indeed, as Kuziemko and Werker (2006) find for the United States, the increase in aid only prevails in important years (column 5). According to the coefficient, commitments increase by 45 percent when serving on the UNSC in an important year. Overall, we conclude that geo-strategic aid motivations matter.

Table I.2: German Aid and UNSC Membership, 1973-2010, Tobit

	(1)	(2)	(3)	(4)	(5)
Log Multilateral Aid	0.089 [0.738]	0.088 [0.739]	0.087 [0.743]	0.086 [0.746]	0.160 [0.615]
Log $GDPpc_{t-1}$	-0.948 [0.122]	-0.945 [0.123]	-0.934 [0.127]	-0.928 [0.128]	-1.134 [0.110]
Log $Exports_{t-1}$	0.356 [0.112]	0.356 [0.112]	0.356 [0.112]	0.356 [0.112]	0.364 [0.111]
Log $Population_{t-1}$	-0.811 [0.528]	-0.808 [0.530]	-0.794 [0.537]	-0.788 [0.540]	-0.574 [0.681]
$Polity_{t-1}$	0.121* [0.091]	0.121* [0.091]	0.122* [0.089]	0.122* [0.088]	0.128* [0.083]
UNGA $Voting_{t-1}$	1.106* [0.071]	1.108* [0.071]	1.117* [0.068]	1.121* [0.068]	1.262* [0.053]
Socialist Government	-0.380*** [0.001]	-0.380*** [0.001]	-0.380*** [0.001]	-0.381*** [0.001]	-0.357*** [0.003]
Two Years before Election on UNSC	0.086 [0.393]				
Year before Election on UNSC	0.279*** [0.008]	0.272*** [0.006]			
Year of Election on UNSC	0.199 [0.103]	0.191* [0.095]	0.163 [0.129]		
First Year on UNSC	0.280** [0.020]	0.272** [0.016]	0.245** [0.020]	0.234** [0.022]	
Second Year on UNSC	0.348** [0.017]	0.340** [0.014]	0.313** [0.018]	0.302** [0.018]	
Year after UNSC	0.115 [0.246]	0.109 [0.231]			
Two Years after UNSC	0.018 [0.863]				
UNSC Unimportant Year					0.233 [0.172]
UNSC Somewhat Important Year					0.163 [0.309]
UNSC Important Year					0.373** [0.011]
Time Trend	-0.003 [0.937]	-0.003 [0.934]	-0.003 [0.921]	-0.004 [0.916]	-0.010 [0.796]
Constant	28.671 [0.216]	28.605 [0.217]	28.378 [0.220]	28.276 [0.222]	24.368 [0.339]
Observations	3,947	3,947	3,947	3,947	3,694
Number of Countries	138	138	138	138	138
Pseudo R^2	0.223	0.223	0.223	0.223	0.226

Notes: The dependent variable is Log German ODA Commitments in constant USD. Country dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

The estimations reported in Tables I.3-I.5 focus on the interactions between the political color of the chancellor and the relevant ministers and the importance of selfish motives underlying the allocation of German bilateral aid (equation 2). In a first step, we test whether the commercial motivation of aid is more (or less) pronounced under left-wing leadership (Table I.3). As can be seen, the results for our control variables are hardly affected (compared to the corresponding columns 3-5 of Table I.1) when we add the interactions between German exports and the political color of leaders. While changes in need within recipient countries continue to be insignificant, German aid reacts positively to merit in terms of more democracy (at the ten percent level), UNGA voting affinity (also at the ten percent level in columns 1 and 3, but marginally insignificant in column 2), and temporary UNSC membership (at the five percent level at least). In Table I.1 we did not find a robust average effect of commercial motives *per se*. However, the average might well hide important differences between conservative and socialist leadership of the relevant institutions.

The results in Table I.3 indeed show significant differences, even though the insignificant interaction with the political orientation of the chancellor in column 1 may suggest otherwise. In column 2, we interact the dummy for an SPD-led BMZ with (logged) exports.[24] We find that exports matter more for German aid commitments when the BMZ is under socialist leadership, at the one percent level. Calculating the marginal effect, the elasticity of aid with respect to exports is 0.55

[24] As before in Table I.1, we control for SPD-led governments. The results are similar when we exclude this dummy.

percent under a socialist BMZ, but 0.31 percent otherwise. Similarly, commercial motives figure more prominently when the Federal Foreign Office is under socialist leadership.

Table I.3: Political Color and Commercial Determinants of German Aid, 1973-2010, Tobit

	(1)	(2)	(3)
Log Multilateral Aid	0.079 [0.763]	0.118 [0.660]	0.144 [0.591]
Log $GDPpc_{t-1}$	-0.903 [0.137]	-0.866 [0.135]	-0.952 [0.112]
Log $Exports_{t-1}$	0.323 [0.164]	0.312 [0.187]	0.392* [0.082]
Log $Population_{t-1}$	-0.722 [0.576]	-0.839 [0.510]	-1.000 [0.429]
$Polity_{t-1}$	0.123* [0.086]	0.130* [0.070]	0.127* [0.076]
UNGA $Voting_{t-1}$	1.060* [0.076]	0.857 [0.140]	1.024* [0.090]
UNSC	0.271*** [0.007]	0.264*** [0.007]	0.254** [0.012]
Socialist Government	-1.574 [0.146]	0.286 [0.103]	-0.476*** [0.000]
$Exports_{t-1}$*Socialist Government	0.088 [0.234]		
Socialist BMZ		-4.046*** [0.000]	
$Exports_{t-1}$*Socialist BMZ		0.240*** [0.002]	
Socialist AA			-4.644*** [0.000]
$Exports_{t-1}$*Socialist AA			0.290*** [0.000]
Time Trend	-0.003 [0.919]	0.010 [0.773]	0.007 [0.827]
Constant	27.683 [0.232]	28.624 [0.208]	30.026 [0.187]
Observations	3,947	3,947	3,947
Number of Countries	138	138	138
Pseudo R^2	0.224	0.227	0.226

Notes: The dependent variable is Log German ODA Commitments in constant USD. Country dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

The prominence of export-related self-interest under socialist leadership may be surprising. Rather, one could have suspected that business-friendly conservative ministers grant aid to foster the economic interests of their political constituencies (Round and Odedokun 2004). Yet our results are quite plausible when considering that small and medium-sized firms (the so-called *Mittelstand*) constitute 98 percent of all German exporters and, thus, the backbone of Germany's trade and labor market performance (Haunschild et al. 2007). The workers in these firms tend to be relatively qualified, unionized and politically left-leaning. In other words, they represent a highly relevant political constituency for SPD-led government authorities. It should also be noted that an SPD-led BMZ launched the idea of so-called anchor countries (BMZ 2004). Accordingly, major regional players among the developing countries should receive special attention with respect to German aid – arguably not least because they are important trading partners.

In the next step, we investigate whether the geo-strategic motivation of aid is more (or less) pronounced under left-wing leadership. Table I.4 focuses on short-term geo-strategic considerations by interacting the dummies for socialist leadership at the government and ministerial levels with temporary membership on the UNSC. Once again, our control variables are hardly affected by this

modification. At the same time, none of the interacted variables are significant at conventional levels. This suggests that German governments of different political color and with varying party affiliations of the relevant ministers largely resemble each other in granting more aid to temporary members of the UNSC.

Table I.4: Political Color and Geo-strategic (UNSC Membership) Determinants of German Aid, 1973-2010, Tobit

	(1)	(2)	(3)
Log Multilateral Aid	0.086 [0.747]	0.145 [0.586]	0.161 [0.546]
Log GDPpc$_{t-1}$	-0.930 [0.128]	-0.877 [0.148]	-0.879 [0.147]
Log Exports$_{t-1}$	0.357 [0.111]	0.415* [0.067]	0.413* [0.068]
Log Population$_{t-1}$	-0.788 [0.540]	-0.976 [0.449]	-0.969 [0.452]
Polity$_{t-1}$	0.122* [0.088]	0.126* [0.078]	0.126* [0.080]
UNGA Voting$_{t-1}$	1.124* [0.067]	1.060* [0.083]	1.053* [0.085]
UNSC	0.303** [0.036]	0.253 [0.118]	0.242** [0.022]
Socialist Government	-0.376*** [0.002]	0.216 [0.227]	-0.484*** [0.000]
UNSC*Socialist Government	-0.083 [0.660]		
Socialist BMZ		-0.702*** [0.000]	
UNSC*Socialist BMZ		0.006 [0.978]	
Socialist AA			-0.679*** [0.000]
UNSC*Socialist AA			0.138 [0.685]
Time Trend	-0.004 [0.916]	0.008 [0.825]	0.006 [0.851]
Constant	28.293 [0.222]	28.785 [0.213]	28.387 [0.219]
Observations	3,947	3,947	3,947
Number of Countries	138	138	138
Pseudo R^2	0.223	0.225	0.224

Notes: The dependent variable is Log German ODA Commitments in constant USD. Country dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

By contrast, the political orientation of German government authorities matters when interacted with UNGA voting instead (Table I.5). Controlling for temporary membership on the UNSC (and fixed country effects), UNGA voting captures the association of German aid commitments with changes in longer-term political alliances. Surprisingly, we find that such alliances matter more for SPD-led governments and ministries, at the five percent level of significance at least. The marginal effects are substantial, where increases in German aid commitments of 47 percent arise due to an increase in UNGA voting compliance by 0.1 under an SPD-led government and 52 percent under an SPD-led BMZ (calculated at the mean of the explanatory variables). The marginal effect of UNGA voting is even stronger under an SPD-led Federal Foreign Office. However, except for a few weeks in 1982, it was only in 2005-2009 that the SPD was in charge of the Foreign Office. The political constellation was clearly exceptional during this period insofar as the SPD was also in charge of the BMZ in the grand collation with the CDU (see Table A I.2 in the appendix). It is possible that the Foreign Office reacted to the BMZ's special treatment of 'anchor countries' by strengthening its own geo-strategic allocation of aid. More importantly perhaps, Germany's efforts to gain UNSC

membership figured high on the foreign policy agenda and could have strengthened the Foreign Office's geo-strategic aid allocation. Gaining a permanent seat, a longer-term aim of German foreign policy, required political alliances. In the shorter run, aid could have been used in anticipation of the competitive election of Germany as a temporary UNSC member in October 2010.

Table I.5: Political Color and Geo-strategic (UNGA Voting) Determinants of German Aid, 1973-2010, Tobit

	(1)	(2)	(3)
Log Multilateral Aid	0.167 [0.538]	0.262 [0.329]	0.216 [0.413]
Log GDPpc$_{t-1}$	-0.899 [0.140]	-0.852 [0.154]	-0.888 [0.132]
Log Exports$_{t-1}$	0.360 [0.107]	0.412* [0.069]	0.420* [0.062]
Log Population$_{t-1}$	-0.861 [0.503]	-0.958 [0.454]	-0.752 [0.548]
Polity$_{t-1}$	0.128* [0.071]	0.131* [0.066]	0.120* [0.093]
UNGA Voting$_{t-1}$	-0.281 [0.757]	-0.919 [0.347]	0.815 [0.159]
UNSC	0.267*** [0.008]	0.250** [0.013]	0.232** [0.021]
Socialist Government	-1.684*** [0.002]	0.260 [0.143]	-0.472*** [0.000]
UNGA Voting$_{t-1}$*Socialist Government	2.019** [0.012]		
Socialist BMZ		-2.489*** [0.001]	
UNGA Voting$_{t-1}$*Socialist BMZ		2.741** [0.014]	
Socialist AA			-5.981*** [0.002]
UNGA Voting$_{t-1}$*Socialist AA			7.538*** [0.005]
Time Trend	-0.005 [0.893]	0.003 [0.938]	0.002 [0.941]
Constant	28.367 [0.220]	27.185 [0.235]	23.917 [0.285]
Observations	3,947	3,947	3,947
Number of Countries	138	138	138
Pseudo R^2	0.224	0.225	0.225

Notes: The dependent variable is Log German ODA Commitments in constant USD. Country dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

In our general specification we do not control for aid of other donors as they also consider commercial and geo-strategic interest in their allocation decisions. As these variables are correlated between the largest donors and Germany, controlling for the aid of other DAC donors would most likely capture some of the effects we are interestes in. However, as a robustness check we included total aid of DAC donors, excluding German aid, as additional control variable. As the results in Table A I.1 (in the appendix) show, though the size of the coefficients becomes smaller, our previous results are robust to including aid of other donors.

To summarize, it seems that both conservative and socialist German leaders allocate aid according to important short-term geo-strategic considerations, measured by temporary membership on the UNSC, while SPD-led governments and ministries pay more attention to short-term changes to longer-term alliances, measured by voting compliance in the UNGA.

I.5. CONCLUSION

In this paper we investigate the importance of geo-strategic and commercial motives for the allocation of German aid. Our empirical analysis covers 138 recipient countries over the 1973-2010 period.

While the inclusion of fixed country effects minimizes the potential importance of reversed causality or omitted variables bias, we admit that it is hard to identify the causal effect of longer-term strategic and commercial motives in a bullet-proof way. However, regarding short-term geo-strategic motives, we make use of an indicator that has recently been shown to be exogenous to aid: temporary membership in the United Nations Security Council. We are thus confident that our estimates can be interpreted as a causal relationship between geo-strategic motives and aid commitments.

Our results show that temporary UNSC members receive larger commitments of German aid, controlled for fixed country effects and other important determinants of aid. Countries voting in line with Germany in the United Nations General Assembly and – less robustly – important trading partners also receive more aid. We thus conclude that geo-strategic and commercial motives matter for the allocation of German aid.

Our second contribution relates the importance of these motives to the political orientation of the German government, the Ministry for Economic Cooperation and Development, and the Federal Foreign Office. Surprisingly, we find that Germany commits less aid, on average, when the government and the relevant ministries are SPD-led. We also find that the importance of commercial motives increases under socialist leadership. We attribute this finding to the importance of small and medium-sized firms for German exports and the unionization and left-wing political orientation of the workers in these companies.

Concerning geo-strategic motives, the evidence is more ambiguous. On the one hand, political ideology at the government and ministerial levels does not affect the importance of temporary membership on the UNSC for German aid commitments. On the other hand, socialist leadership is associated with more German aid committed to political allies in the UN General Assembly. Political alliances in the UNGA may support German ambitions of gaining a permanent seat on the UNSC in the longer run. Arguably, socialist leaders in Germany are less reluctant than conservative leaders to press this agenda – similar to what has been observed under the SPD-led government under Chancellor Schröder in 2002-2005 with respect to domestic reforms of labor markets and the welfare system. Another explanation might be that socialist-led governments and ministries are under more pressure than their conservative counterparts to justify new aid commitments to the electorate, i.e., to avoid public perceptions that "socialist" aid flows indiscriminately and too generously.

It might not be bad per se that donors benefit from the aid relationship, unless selfish aid motivations undermine the effectiveness of aid for the recipients. However, recent research suggests that politically motivated aid is generally less effective (Dreher et al. 2013). We leave it for future research to analyze whether this finding also holds for the effectiveness of German aid, which would thereby help in clarifying the potential costs of political and commercial favouritism for the recipients of German aid.

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I.7 APPENDIX

Table A I.1: Determinants of German Aid Controlled for DAC Aid, 1973-2010, Tobit

	(1)	(2)	(3)	(4)	(5)	(6)
Log DAC Aid	0.667*** [0.000]	0.667*** [0.000]	0.662*** [0.000]	0.660*** [0.000]	0.663*** [0.000]	0.667*** [0.000]
Log Multilateral Aid	0.307 [0.188]	0.301 [0.197]	0.334 [0.155]	0.359 [0.128]	0.373 [0.118]	0.307 [0.188]
Log $GDPpc_{t-1}$	-0.332 [0.541]	-0.305 [0.571]	-0.277 [0.582]	-0.359 [0.495]	-0.310 [0.567]	-0.331 [0.542]
Log $Exports_{t-1}$	0.124 [0.465]	0.089 [0.616]	0.079 [0.659]	0.158 [0.352]	0.128 [0.450]	0.124 [0.466]
Log $Population_{t-1}$	-0.108 [0.911]	-0.036 [0.970]	-0.145 [0.877]	-0.302 [0.747]	-0.166 [0.863]	-0.107 [0.911]
$Polity_{t-1}$	0.033 [0.473]	0.034 [0.459]	0.041 [0.368]	0.038 [0.406]	0.038 [0.403]	0.033 [0.472]
UNGA $Voting_{t-1}$	0.488 [0.248]	0.420 [0.298]	0.238 [0.545]	0.403 [0.335]	-0.658 [0.266]	0.487 [0.249]
UNSC	0.237** [0.019]	0.242** [0.015]	0.235** [0.016]	0.226** [0.025]	0.238** [0.018]	0.211 [0.147]
Socialist Government	-0.312*** [0.006]	-1.586 [0.122]	0.298* [0.060]	-0.400*** [0.001]	-1.376*** [0.004]	-0.316*** [0.008]
$Exports_{t-1}$*Socialist Government		0.093 [0.179]				
Socialist BMZ			-3.885*** [0.000]			
$Exports_{t-1}$*Socialist BMZ			0.233*** [0.001]			
Socialist AA				-4.233*** [0.000]		
$Exports_{t-1}$*Socialist AA				0.264*** [0.000]		
UNGA $Voting_{t-1}$*Socialist Government					1.648** [0.015]	
UNSC*Socialist Government						0.061 [0.735]
Time Trend	-0.032 [0.202]	-0.031 [0.201]	-0.019 [0.429]	-0.021 [0.384]	-0.032 [0.189]	-0.032 [0.202]
Constant	0.121 [0.994]	-0.553 [0.973]	0.524 [0.974]	1.894 [0.907]	0.250 [0.988]	0.112 [0.995]
Observations	3,935	3,935	3,935	3,935	3,935	3,935
Number of Countries	138	138	138	138	138	138
Pseudo R^2	0.254	0.254	0.258	0.257	0.254	0.254

Notes: The dependent variable is Log German ODA Commitments in constant USD. Country dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A I.2: Political Color in Charge

Begin of term	End of term	Chancellor	Ministry for Economic Cooperation and Development	Minister for Foreign Affairs
21. Okt 69	01. Okt 82	SPD	SPD	FDP
04. Okt 82	16. Sep 82	CDU	CSU	FDP
17. Sep 82	01. Okt 82	CDU	CSU	SPD
02. Okt 82	26. Okt 98	CDU	CSU	FDP
27. Okt 98	21. Nov 05	SPD	SPD	Grüne
22. Nov 05	28. Okt 09	CDU	SPD	SPD
28. Okt 09		CDU	FDP	FDP

Notes: CDU and CSU = conservative (Christlich Demokratische Union Deutschlands and Christlich-Soziale Union in Bayern, the Bavarian sister party of the CDU); FDP = liberal (Freie Demokratische Partei); Grüne = green (Bündnis 90/ Die Grünen); SPD = socialist (Sozialdemokratische Partei Deutschlands).

Table A I.3: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
Socialist Government	3947	0.42	0.48	0	1
Socialist BMZ	3947	0.54	0.48	0	1
Socialist AA	3947	0.13	0.32	0	1
ODA Commitments (in millions, constant 2010 USD)	3947	50	113	0	2240
Multilateral ODA Commitments (in millions, constant 2010 USD)	3947	3580	1020	1550	6730
GDP per capita (constant 2000 USD)	3947	2505	4220	58	61375
Exports (in thousands, constant 2005 USD)	3947	6046	14600	0	199000
Population (in millions)	3947	26	89	0.04	1170
Polity IV	3947	5.06	3.11	0	10
UNGA Voting	3947	0.66	0.08	0.33	0.97
UNSC	3947	0.06	0.23	0	1

Table A I.4: Data Sources

Variable	Description	Source
ODA commitments (log)	Bilateral German ODA commitments to country i in year t in constant 2010 US$, logged.	OECD Query Wizard for International Development Statistics
Multilateral ODA commitments (log)	German ODA commitments to multilateral organizations in year t in constant 2010 US$, logged.	OECD Query Wizard for International Development Statistics
GDP per capita (log)	GDP per capita in constant 2000 US$, logged.	World Bank, World Development Indicators (2012)
Exports (log)	German exports to country i in year t in constant, deflated with 2005 US CPI, logged.	UN Comtrade Database
Population (log)	Total population, logged.	World Bank, World Development Indicators (2012)
Imputed Polity	With Freedom House Civil Liberties index imputed Polity IV. Index ranges from 0 – 10 where 0 reflects least democratic and 10 most democratic.	Teorell et al. 2011
UNGA voting	Share of voting in line with Germany in the UN General Assembly.	Erik Voeten & Anton Strezhnev (2008)
UNSC	Dummy for being temporary member on the UN Security Council.	Dreher et al. (2009b); www.un.org
Socialist Government	Dummy coded 1 if Chancellor is from socialist party (SPD).	www.bundestag.de
Socialist BMZ	Dummy coded 1 if Minister is from socialist party (SPD).	www.bundestag.de
Socialist AA	Dummy coded 1 if Minister is from socialist party (SPD).	www.bundestag.de

CHAPTER II :
SURRENDER YOUR MARKET! DO THE G5 COUNTRIES USE WORLD BANK TRADE CONDITIONALITY TO PROMOTE TRADE? *

II.1. INTRODUCTION

Developing countries around the world turn towards the World Bank – the main actor in terms of multilateral development lending – for financial and technical support. One of the Bank's central instruments are development policy operations. These are fast disbursed credits, loans or grants intended to support a recipient's medium term reform program. A special feature about development policy operations is that they should only be disbursed after the implementation of conditions previously agreed on. According to the World Bank (2005), these conditions are meant to contribute to achieving the development objectives of the recipient country and to improve the recipient's economic situation thereby reducing the default risk the World Bank would have to bear. However, this concept is also heavily criticized. One main issue is the implicit assumption that the Bank has superior knowledge of a country's needs compared to the country's government (Collier et al. 1997). Moreover, conditions need to be implemented to be effective (Koeberle 2003). A third criticism is that conditions can be interpreted as instruments of paternalism with which the Bank can enforce its ideas of an optimal policy design even against the will of the recipient country. This argument becomes even stronger when the conditions' design does not follow objective criteria but is influenced by the interest of main actors within and outside the Bank.

As we discuss in section II.3 many studies on the World Bank show that loan decisions are partly influenced by these particular interests, especially the interests of the United States (e.g., Fleck and Kilby 2006; Dreher et al. 2009; Kilby 2009). Regarding the International Monetary Fund (IMF), which is similar to the World Bank in its organizational design, studies reveal that the number and extent of conditions are influenced by geo-strategic considerations as well (e.g., Dreher and Jensen 2007; Copelovitch 2010). So far, the literature has mainly focused on a preferential treatment of allies of the donors with respect to the lending decision, lending amount and the number of conditions without a direct benefit for the donor. Only Copelovitch (2010) investigates the commercial interests of the donors in the recipient country which leads to a different treatment of the recipient yielding direct benefits to the donor. We take this approach one step further and investigate to what extent the five major shareholders of the World Bank (G5) – the United States, the United Kingdom, Japan, Germany and France – use their position to extract direct trade benefits by influencing the design of conditionality. In contrast to the previous literature, we do not focus on the overall number of

* This analysis is joint work with Martin Breßlein (Trier University).

conditions but on the number of a specific sub-group of conditions, namely conditions on trade liberalization.

As bilateral donors follow commercial interests to a certain extent in their decision to allocate aid (see, e.g., Alesina and Dollar 2003; Younas 2008; Höffler and Outram 2011) we argue that it is likely that they also try to use their influence in the World Bank to promote their commercial interests in terms of conditions favorable to them. It might be harder to influence the specific design of conditionality – and not only the extent of conditionality proxied by the number of conditions – as conditions are developed in general by the staff in accordance with the recipient government. It is, however, more attractive as it offers the possibility to influence a country's policy design given that conditions are actually implemented (Koeberle 2004). As the five main shareholders provide around 40% of the Bank's higher-level staff (World Bank 2012a) their preferences can be represented already during the negotiation process. We argue that this is especially attractive with respect to trade liberalization as it has direct effects on the donors' trading sector. In section II.4 we will discuss different possible strategies a donor might pursue with respect to trade conditions at the World Bank and develop our hypotheses for each of the five donors we study.

We use a newly available dataset on World Bank conditionality[25] that covers more than 1100 development policy lending projects over the 1980-2011 period to analyze whether the main shareholders use their power to influence the design of conditionality, thus fostering their commercial interests. We find evidence (presented in section II.6) that Germany exerts influence to support its trade links by an increased number of trade liberalization conditions attached to loans of their trading partners. On the other hand, for the United States we find a significantly negative relationship between bilateral trade and trade conditions. This suggests a strategy of protecting US traders from increased competition by preventing a liberalization of the relevant markets. For the United Kingdom, France and Japan we cannot identify a robust relationship between their bilateral trade and the extent of trade conditionality. We discuss the implications of these findings and possible consequences in section II.7.

II.2. WORLD BANK CONDITIONALITY

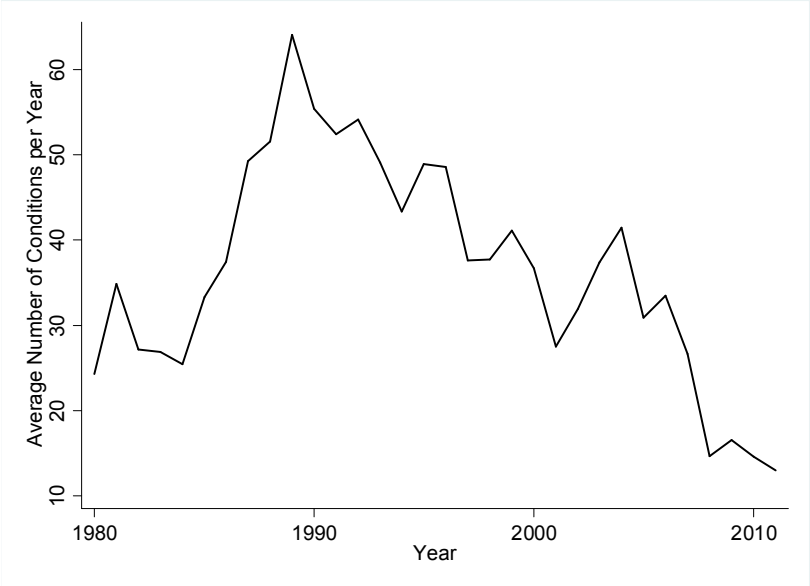
When the IMF and the World Bank were established in 1944, conditionality was not an explicit part of their lending operations (Dreher 2004). Today, however, both the IMF and the World Bank attach conditions to their structural adjustment lending. These conditions are requirements that the recipient country has to fulfill in order to receive financial assistance from the organization. In the early years, conditions attached to IMF lending were much more numerous than those of the World Bank (Dreher 2004). The Bank's creation of adjustment lending programs in the early 1980s changed the situation and made conditions more important for its interventions, exceeding the number of conditions in IMF

[25] World Bank Development Policy Action Database, http://go.worldbank.org/EB6880IVH0, accessed on 02/07/2013.

programs on average. However, since the 1990s the number of conditions attached to the Bank's development policy lending has steadily decreased (see Figure II.1).

According to the World Bank, conditions were mainly focused on resolving short-term economic imbalances in the 1980s and 1990s, whereas today they are mainly a means to induce medium-term institutional changes much more reflective of the interests of the recipient's governments (World Bank 2005). Conditions apply to eleven different themes[26] and two general groups: prior actions and benchmarks. Prior actions are those conditions that have to be fulfilled before i) Board approval in the case of a single-tranche lending and ii) the release of the next tranche in case of multi-tranche operations. Regarding ii) the conditions for the next tranches are already included in the project proposal. If a country fails to comply with certain conditions, the following tranche will only be disbursed if the Board decides to waive them. Benchmarks, on the other hand, are no conditions in a literal sense as non-compliance does not automatically lead to a freeze in disbursements. Benchmarks can be seen as stepping-stones that reflect improvements towards a bigger institutional or policy change, e.g., conducting a study on export facilitation and setting up an appropriate plan of action.

Figure II.1: Average Number of Conditions per Year, 1980 - 2011



The World Bank offers two main reasons why conditions are necessary, both for supporting development as well as due to its banking function (World Bank 2005). First, the assistance provided by the Bank should contribute to the development objectives of the recipient country. By using conditions as criteria for the credit disbursement, positive outcomes shall be ensured. Second,

[26] Economic management; public sector governance, rule of law; financial and private sector development; trade and integration; social protection and risk management; social development, gender and inclusion; human development; urban development; rural development; environment and natural resource management (World Bank 2012b).

conditions are meant to help ensure that the resources will be used in the intended way, as the World Bank is accountable to its own financiers. According to the *Operation Policy for Development Policy Lending*[27] the Bank provides lending only to countries that maintain an adequate macroeconomic policy framework. However it is up to the World Bank to decide whether this adequacy is achieved.

Since the beginning of its usage, conditionality has often come under attack. Some critics interpret conditions as instruments of paternalism with which the Bank can enforce its ideas of optimal policy design against the will of the recipient country. Furthermore, conditions imply the assumption that the Bank's knowledge of a country's needs is superior to the country government's (Collier et al. 1997). On the other hand, if conditionality is an effective measure to foster development and reform, one could criticize that the implementation of conditions is not effectively enforced. Dreher (2004) argues that the World Bank's staff members responsible for each region do not have incentives to strictly review whether conditions have been met as they are under pressure to hand out the allocated budget share to their region. Consequently, it is not in their interest to negotiate stringent criteria and few projects have ever been canceled due to non-compliance with the negotiated conditions. Svensson (2003) studies about 200 structural lending agreements of the World Bank and does not find evidence for a relationship between a recipient government's compliance and loan disbursement. In the case of the International Development Association (IDA), lending and conditions can additionally fall prey to the Samaritan's dilemma. The IDA is the organizational part of the World Bank Group that focuses its lending activities on the poorest countries (GNI p.c. < 1,195 USD in 2013) and some countries above this cut-off that lack the creditworthiness to obtain money via the other borrowing institution of the World Bank, the International Bank for Reconstruction and Development (IBRD).[28] IDA recipients are perceived to be in such need that due to "moral" reasons it would be considered improper to cancel a project even if the recipient does not comply. Interestingly, Kilby (2009) finds evidence that poor macroeconomic performance and a lack of conditionality enforcement leads to lower loan disbursements only if a country is not politically friendly with the United States. Stone (2004) analyzes the performance of IMF conditionality in Africa to evaluate why there is no progress observed in the development of African countries despite the IMF's consistent engagement. He investigates whether the design of the conditions is inappropriate or whether conditions are not sufficiently enforced and concludes that the problem lies with the selectivity of enforcement. Stone shows that the duration of punishment after failing to comply with conditionality rather depends on the importance of the respective country to the major donors than on the quality of economic indicators.

While conditionality in World Bank operations is the main focus of our analysis, it has to be embedded into the larger picture of aid allocation in general. Therefore, the next section reviews the literature addressing political and economic factors that influence the allocation of aid.

[27] OP 8.60 Development Policy Lending, http://go.worldbank.org/N3Y839UBH0, accessed on 09/21/2012.
[28] see http://www.worldbank.org/ida/borrowing-countries.html.

II.3. POLITICAL ECONOMY OF AID ALLOCATION AND CONDITIONALITY

The literature on the political economy of aid allocation suggests that development aid is not as altruistic as one might hope. Though some countries – especially the Nordic ones – seem to allocate aid primarily based on aspects of need and merit, other countries like the United States, France, and Japan also consider other factors such as geo-political interests, colonial pasts and commercial interests (Alesina and Dollar 2000; Younas 2008). Aid allocation based on commercial interests is appealing due to the possibility to intensify the commercial relationship between the donor and the recipient country. One possible way to make this work is via tied aid where the recipient country has to consume products or services produced by the donor country. Another well-studied example is the allocation of aid towards importers of the donor's products. This should intensify the trade relationship between the two countries due to the recipient country's preferential behavior (Younas 2008). For example, countries that import capital goods – the main export goods of donors organized within the OECD's Development Assistance Committee (DAC) – receive significantly more aid from DAC donors. However, there is no effect for imports of other goods on DAC aid allocation. Berthélemy (2006) obtains similar findings when analyzing the influence of trade patterns – the sum of imports and exports as a share of the donors' GDP – on the aid allocation of seventeen DAC donors. With the exception of Switzerland, he finds a significantly positive relationship for all donors. Likewise the analysis in Chapter I of this dissertation shows a significant influence of trade ties, measured as exports to the recipient country, for Germany's bilateral aid allocation.

Intuitively, aid allocation through multilateral channels – where the influence of single donors is restricted (Rodrik 1995) – might lead to a more need-oriented allocation of aid (Maizels and Nissanke 1984). However, several studies have shown that donors retain sufficient influence within multilateral organizations to achieve decisions favorable to their interests (e.g., Frey and Schneider 1986; Dreher 2004; Copelovitch 2010). The influence of the United States is a widely studied example, especially their geo-strategic interests measured by voting behavior of recipient countries in the UN General Assembly (UNGA) or temporary membership on the UN Security Council (e.g., Andersen et al. 2006; Kuziemko and Werker 2006; Kilby 2009).

Yet, commercial interests also play an important role. Fleck and Kilby (2006) analyze the US's influence on the World Bank's lending decisions. According to their results, an increase in the share of US exports to a recipient country by one standard deviation leads to an increase in monetary assistance from the Bank by more than one percent. The same holds true for US bilateral aid and investment flows. Thus, both have a positive influence on World Bank decisions. Copelovitch (2010) analyzes the common interests of the G5 countries (USA, Japan, Germany, France, UK) with respect to their influence on IMF lending decisions. Countries with a high involvement of G5 banks in their financial sector receive, on average, higher loans from the IMF. However, if the commercial interests of the G5 are heterogeneous, i.e., the Bank's involvement is not equally high for all G5 countries, then

lending is reduced. Copelovitch argues that with heterogeneous commercial interests among the main shareholders the role of the IMF staff becomes more important. There is also evidence for non-permanent members of the World Bank's Executive Board exerting influence. According to Kaja and Werker (2010), the Bank's funding of developing countries doubles on average when these countries serve as board members of the IBRD. Morrison (2013) studies borrowers' influence on IDA lending during their membership on the Executive Board. While countries on the Board received significantly more IDA funds than non-Board members during the Cold War, the difference is no longer significant after 1990. Morrison explains this development with the increased importance of the internal policy rating that determines the allocation of IDA funds and improves its transparency.

A second aspect, apart from the amount of aid allocated, where donors can exert influence through multilateral organizations is the design of conditionality. Due to the relative scarcity of data on lending conditions in comparison to lending amounts, there are fewer studies that focus on this aspect of lending. For the World Bank, information on loan conditions has only recently become available. Nevertheless, the studies conducted so far on IMF conditionality, where the organization and decision structure is comparable to the World Bank, reveal that donors also exert influence on the design of conditions. In the existing studies, the focus has been on geo-strategic interests rather than on commercial ones. Dreher and Jensen (2007) provide evidence that US-interests in particular alter the extent of IMF conditionality. Allies of the United States, as measured by their voting behavior in the UNGA, receive loans with, on average, fewer conditions than other countries. Furthermore, friends of the United States face lower conditionality right before democratic elections. Yet, the number of conditions is not the only factor affected by being closely aligned to the United States. Stone (2008) splits conditions into the different themes they cover. He finds that countries strongly supported by the United States, as measured by US bilateral aid, are more likely to receive IMF loans in general and, additionally, with conditions in fewer sectors.

The United States is not the only country influencing IMF decisions. The other four permanent members of the Board also exert influence. Copelovitch (2010) finds that, in addition to higher loans, a country that is of political interest to the G5 will receive fewer conditions even if the interests of the G5 members are heterogeneous. To some extent, this finding indicates logrolling behavior – a tit-for-tat where benefits for allies of another G5 country are granted with the expectation of a reciprocal treatment of one's own allies in the future. With respect to commercial interests, he does not find any evidence for strategic influence to reduce the extent of conditionality. Gould (2003), however, provides evidence that private financiers influence the Fund's conditionality because the IMF does to some extent depend on their money as an additional source of capital within loan agreements.

As conditions are negotiated as part of the loan contract between the international organization and the recipient country, preferences of the recipient country play a role as well. Vreeland (2000) argues that IMF conditionality can be used as a scapegoat by the recipients' governments to

implement unpopular reforms. By including these reforms in the loan conditions, the executives can blame the IMF or the World Bank for the reform and thus reduce the political repercussions of these decisions, such as the risk of not being reelected. For the IMF, Caraway et al. (2012) show that domestic preferences have an influence on the design of labor market conditions. Countries where the labor movement is stronger and better organized will have less demanding labor conditions attached to their IMF loans. The authors argue that the government negotiates in line with the labor organizations to prevent domestic resistance from unsatisfied workers. Our study is somewhat similar to Caraway et al. (2012) as we also analyze a subset of conditions, yet we focus on the influence of the G5 on these conditions.

II.4. G5 INTERESTS AND TRADE CONDITIONS – THE HYPOTHESES

As discussed in the previous section, empirical research on conditionality is scarce. For the World Bank, to the best of our knowledge, there is no existing study evaluating the political economy of conditionality based on a large dataset. Yet, it seems to be an important playground for strategic interests as it offers the possibility to impact a country's policy-making. One would expect that donors take special interest in the design of prior actions, which are more likely to be implemented. However, conditions are negotiated before the Board approves the loan. In case of prior actions for one-tranche-only-projects, prior actions have to be fulfilled before the loan is approved. This implies that the Executive Board might only have a small influence on the setting of conditions. Supposedly, most influence should be exerted during the negotiating process. It is not clear to what extent the Executive Directors might be able to put pressure on this process. For the IMF – this is likely to be similar for the World Bank – Copelovitch (2010) argues that the staff takes the preferences of the Executive Directors into account during the planning stage to ensure that the loan proposal will be approved by the Board. In addition, Kilby (2013) shows that the US exerts indirect influence on post-approval decisions that cannot be influenced directly by the Executive Board. The major shareholders, especially the US, have a dominant position with respect to the institution's higher staff. The share of US higher staff was 24.6 percent in 2010 (World Bank 2012a). The other main shareholders are also well-represented and provide another 15 percent of the higher staff (World Bank 2012a). Given this degree of representation of the G5 both in the final decision-making body, the Executive Board, and among the staff it is not unlikely that conditionality is influenced according to their preferences.

One thematic category of conditions appears to be especially attractive for strategic intervention: trade liberalization. Trade as a commercial motive is, in general, a decisive factor for aid allocation (e.g., Alesina and Dollar 2000; Younas 2008). Apart from the United States, both Japan and France seem to allocate bilateral aid towards countries with which they have strong trade relations (Canavire et al. 2006; Younas 2008) – but Germany with its strong export sector is also likely to favor its trade sector (see Chapter I). For the United States, this relationship even appears to be a prime

motive to provide foreign assistance (Tarnoff and Lawson 2009). If trade promotion is used as an argument to justify bilateral foreign aid to the taxpayer,[29] it seems plausible that countries would try to apply this strategy for multilateral aid as well. In many countries, the export sector is a major pillar of the economy. Politicians have an interest in promoting this sector, firstly to promote economic growth and secondly, to gain support for future elections. As conditions are a crucial part of World Bank lending and recipient countries are, at least officially, obliged to implement these conditions to receive further loans, it seems probable that governments would try to affect the design of trade conditions attached to World Bank loans.

There are in general three strategies a country might pursue when influencing trade conditions: trade intensification, trade creation and trade protection. The first applies to recipient countries with which the donor already has a trade relationship. To intensify this relationship, donors try to augment the trade liberalization efforts of the recipient country by negotiating for more trade liberalization conditions. In the second case, the donor wants to establish new trade routes. Markets that protected themselves with trade restrictions from foreign competitors are forced to liberalize in order to open up new trading possibilities for domestic enterprises. Donors thus push for more trade liberalization in those countries where trade relations are not yet established. The third strategy, trade protection, occurs when a country already has established trade linkages and fears the competition of other actors. In this case the donor tries to prevent trade liberalization.

We assume that these strategies apply differently to each of the G5 countries. First, we can divide the group of five into, generally speaking, the colonizers (France and the United Kingdom) and the non-colonizers (Germany, Japan and the United States of America) with respect to the post 1945 period.[30] The "colonizers" have well established trading routes to their former colonies. These relationships are supported by preferred customs regulations, common language and to some extent a common currency.[31] In 1980, the beginning of our sample period, the share of France's trade with its former colonies was around 36.7% with respect to countries eligible for WB lending and about 19.2% for the UK. Then again, both nations are in general not famous for extensive international trade. Therefore, we suppose that these two countries have a lower interest in stimulating trade via World Bank conditions beyond the already established trading routes.

[29] The Republican presidential candidate Mitt Romney, when presenting his strategy for foreign policy and development cooperation in September 2012, was even more outspoken on this topic. He stated that aid should be used as a reward for countries that remove trade and investment barriers (The Washington Times, http://www.washingtontimes.com/news/2012/sep/25/romney-takes-aim-foreign-aid/, accessed on 9/25/2012).

[30] We are aware that the countries of the non-colonizer group have had some colonies as well. However, first, these colonies refer to a time before World War II, a time when trade was not yet so intense and second, the number of colonies and the post-colonial ties are much lower than for the two countries categorized in the colonizer group.

[31] Most of the former French colonies in Sub-Sahara Africa joined a currency union with their money pegged to the French Franc reducing transaction costs.

Germany and Japan, on the other hand, are countries that, to a large extent, base their economic growth on their export sectors. For Germany a report of the Federal Ministry for Economic Cooperation and Development in 1980 explicitly states that Germany is an export-led economy that aims for trade liberalization and views trade as an important part of a country's development (Deutscher Bundestag 1980). In addition, annual reports by this Ministry to the parliament include information on the positive effect of development cooperation on Germany's exports and domestic job creation (Deutscher Bundestag 1980; 1983). This underlines the importance of trade promotion as a by-product of bilateral aid for Germany. In contrast, Japan does not have a separate Ministry for Development Cooperation. Instead, multiple Ministries and agencies are responsible for its aid allocation (Nikitina and Furuoka 2008). One of these Ministries is the Ministry of International Trade and Industry. According to Hirata (1998), this Ministry intensively influenced aid allocation during the 1960s and 1970s with the aim of increasing Japanese international trade. Given this importance of exports in combination with foreign aid, we assume that both countries follow a trade intensification and/or trade creation strategy with respect to World Bank conditions.

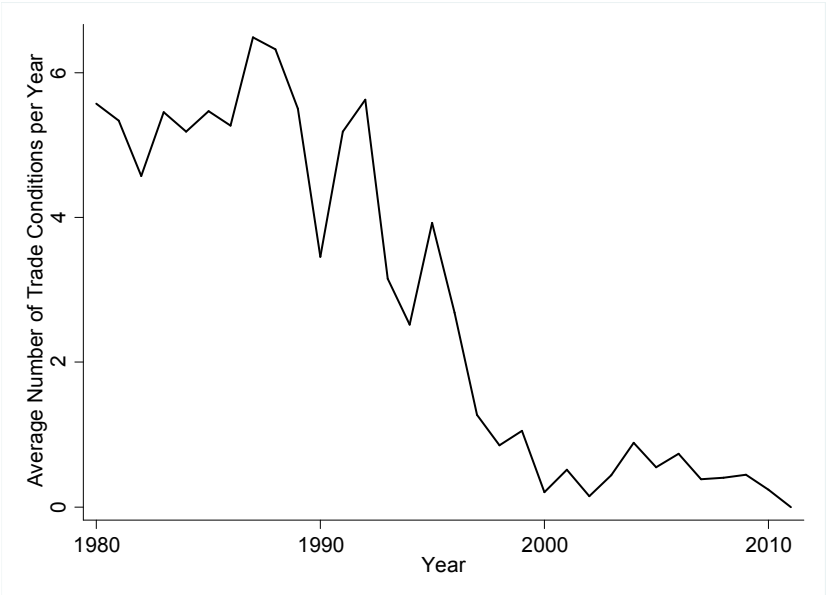
Lastly, for the United States, imports dominate its exports. Nevertheless they also follow a trade-promotion strategy connected to their foreign aid strategy. One institution of the US development cooperation is the United States Trade and Development Agency (USTDA). The USTDA finances projects abroad with the aim to strengthen the recipient's as well as the United States' economy by providing orders for US enterprises and exporters related to these projects. The agency states that one of the project selection criteria apart from "hav[ing] the potential to generate significant exports of U.S. goods and services"[32] is to compete with other foreign companies in the recipients' market (USTDA 2005). According to the agency, two categories of projects exist including the "…establishment of […] trade agreements, market liberalization." Hence, USTDA does not only help US companies to receive orders from abroad, the agency also helps US enterprises to compete against foreign competitors by, e.g., reducing trade barriers for US products. In this sense, USTDA reports a success story for 2011 where it "[...] awarded a $660,000 grant to the China State Grid Electric Power Research Institute in support of opening China's market for U.S. clean energy technologies."[33] Here, the US fosters a trade promotion strategy for a narrow field in which it has identified significant market potential for their enterprises and creates US-specific market entry possibilities. Therefore, we assume that in the multilateral sphere of the World Bank, the US follows a trade protection strategy so as to not endanger bilaterally negotiated advantages by opening the market to all competitors.

[32] See US government's information on USTDA (http://www.allgov.com/departments/independent-agencies/united-states-trade-and-development-agency-ustda?agencyid=7282).
[33] See footnote 29.

II.5. DATA AND METHOD

We test our hypotheses by estimating a reduced-form econometric model including our variables of interest and several control variables that we take from the literature. The unit of observation is each single lending decision.[34] The number of trade liberalization conditions is our dependent variable to identify the importance and extent of trade liberalization conditions in World Bank projects. To obtain this measure, we have reviewed the conditionality descriptions available in the Policy Action Database (World Bank 2012b). This database contains the prior actions and benchmark conditions for 1105 projects approved between 1980 and 2011. Around 70% of the conditions are prior actions while the remaining 30% are benchmarks. We coded a condition as a trade liberalization condition if the condition's theme is grouped under "Trade and Integration"[35] and the corresponding text includes specific trade liberalization requisites. Examples of a prior action condition that we coded as trade liberalization condition read, "Eliminate all import licensing for consumer goods, to be phased with tariff reforms" (Philippines, 1981) or "Eliminate export and import bans and licensing for agricultural products" (Romania, 1997). An example of a benchmark condition that we coded as trade liberalization condition reads "Implement properly trade policy reform" (Indonesia, 1991). An example of a condition that we did not code as trade liberalization condition reads "Review import controls still remaining on luxury goods" (Burundi, 1986). We exclude such conditions from our dataset since they do not imply specific measures that the recipient's government has to implement.

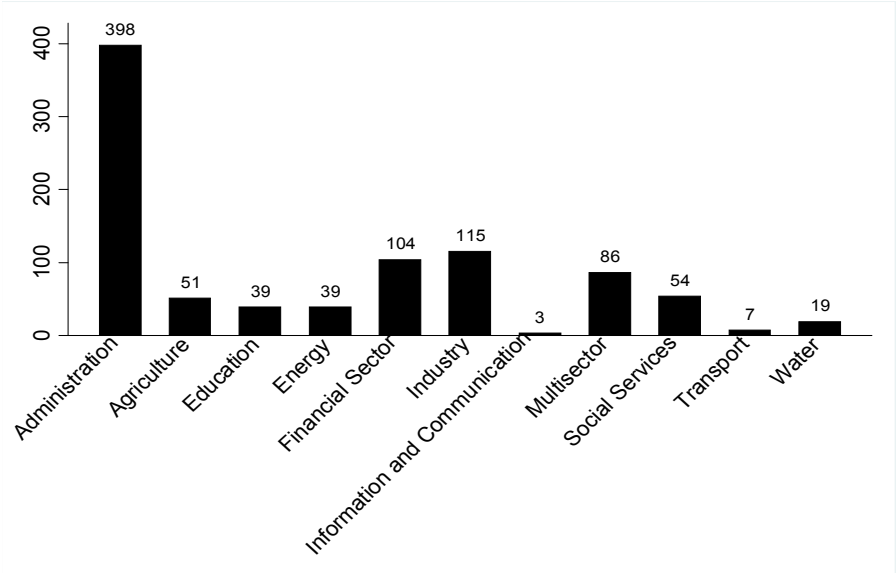
Figure II.2: Average Number of Trade Conditions per Year, 1980 – 2011



[34] Therefore, we do not have a panel dataset and cannot apply panel estimation methods.
[35] This grouping includes: export development and competitiveness, international financial architecture, regional integration, technology diffusion, trade facilitation and market access or other trade and integration.

Dreher and Jensen (2007) note that it is difficult to measure the degree of intrusiveness of conditionality. Hence we follow other studies that use the number of conditions as a proxy for their stringency (Mosley et al. 1991), their causes (Gould 2003; Dreher 2004) and their extent (Ivanova et al. 2006). On average, a project contains approximately 34 conditions, where the maximum lies at a stunning 195 conditions for a loan for reforms in the agricultural sector in Morocco approved in 1988. On average, two conditions of a project are trade conditions. However, more than half of the projects do not include trade conditions (672 projects) which increases the average number of trade conditions in projects with trade conditions to five. The extent of trade conditions largely depends on the project sector. Apparently, the average number of trade conditions is much lower in social service projects (0.1) than in industry projects (6.8). Furthermore, the intensity of trade conditions in the projects has sharply decreased since the mid-1990s. Figures II.1 and II.2 provide an overview of the average number of general conditions and trade liberalization conditions over the sample period. Figure II.3 further visualizes the sectoral distribution of the projects analyzed.

Figure II.3: Number of Projects by Sector, 1980 – 2011



Independent Variables

The set of independent variables is itself comprised of four subsets. The first set, comprised of general control variables, includes GDP per capita, inflation, the current account balance, being under an IMF program and the total number of project conditions. GDP per capita has been found to have a negative or insignificant influence on IMF conditions (Steinwand and Stone 2008; Caraway et al. 2012) and on World Bank lending decisions (Frey and Schneider 1986; Dollar and Levin 2006; Andersen et al. 2006). In our context we assume a negative correlation as richer countries are usually more open and thus "need" less liberalization. Furthermore, higher GDP per capita possibly leaves a country in a

better bargaining situation. We include inflation[36] as an indicator for economic instability and thus the need for economic reforms. We expect a higher inflation rate prior to the arrangement to trigger a higher number of conditions included in an agreement. Trade liberalization might be used as a means to bring monetary policy under control. According to Romer (1993), deflation is costlier in open economies and politicians will therefore act more responsibly. Inflation is also a sign of economic instability whereas trade liberalization can be a means to increase growth and stability of the economy. Another control variable that has been found to be significant with respect to IMF conditionality is the ratio of the current account to GDP (Dreher et al. 2009). Since more balanced trade is usually considered to be favorable for the economic situation of a country, a higher imbalance should additionally trigger the inclusion of more trade conditions. The data on GDP per capita, current account to GDP ratios and inflation are taken from the World Bank's World Development Indicators (World Bank 2012c). We also include the number of total conditions excluding trade conditions, since it is more likely that a project that features more conditions also includes (more) trade conditions. Additionally being under an IMF program should control for the fact that trade liberalization might already be demanded within the IMF agreement and thus reduces the need for these conditions in the World Bank program. This information is taken from Dreher (2006) and the IMF's annual reports.

The second set of control variables accounts for the recipient's trade openness. The most widely used indicator for trade openness is the ratio of total trade to GDP (e.g., Fleck and Kilby 2006; Andersen et al. 2006; Dreher et al. 2009). We expect fewer trade conditions to be included in the projects if a country is already relatively open to trade. We also control for specific trade openness to G5 countries by including dummies for a regional trade agreement (RTA) with the US, Japan and countries in the EU. Furthermore, a dummy indicating a recipient's membership in the GATT/WTO is included. The data for trade openness are taken from the World Bank's World Development Indicators (World Bank 2012c) whereas the data on RTAs are taken from CEPII's gravity dataset (CEPII 2013) as well as the WTO's RTA Databank (WTO 2013a); the GATT/WTO membership is from the WTO (2013b; 2013c). We include the number of World Bank trade conditions in earlier agreements as an additional control for previous reform behavior. To create this variable we sum up all trade conditions attached to programs until the year before the new loan is approved.

The third set of variables controls for the recipients' incentives to include trade liberalization conditions. It includes the legislative competitiveness and a dummy for legislative elections. Given that trade liberalization might encounter resistance with the incumbents' domestic opposition or voters, introducing these reforms within the framework of World Bank conditionality might be preferred. The more veto players that exist regarding domestic legislation, the more difficult it becomes to implement controversial reforms and the more likely it is that a country would use the

[36] We transform inflation to reduce the impact of outliers following Dreher et al. (2008): ((Consumer Price Index/100)/(1+(Consumer Price Index/100)).

World Bank as a scapegoat for their implementation (Vreeland 2004). The second measure, legislative elections, controls for the government's willingness to reform. Costly reforms are more likely to be implemented shortly after an election as the reelection risk is smaller due to the long time period until the next elections take place. The control variables for recipient interests are provided by the Database of Political Institutions (Beck et al. 2001).

In terms of geopolitics, our fourth set of variables, we use a country's voting behavior in the United Nations General Assembly (UNGA) to measure how closely it is allied with the G5 countries. It has been found that closer allies to these countries have been rewarded with fewer conditions attached to their IMF loans (e.g., Andersen et al. 2006). Since however, this is the effect on conditionality in general, it may not apply in the more specific context of trade liberalization where we also control for the total number of conditions. In addition, we control for temporary membership on the UN Security Council (UNSC) as this has been found to be another relevant geo-strategic interest variable (Dreher et al. 2009; 2013).

Lastly, our main variables of interest that measure the commercial interests of the G5 countries are the total bilateral trade flows (constant USD in logs) between the recipient and the respective donor countries. These data have been taken from the World Integrated Trade System's (WITS) database which itself comes from the United Nation's Comtrade database (World Bank 2013).

Estimation Strategy

Our basic econometric model reads as follows:

$$(1)\ tradeconditions_{i,t-1} = \alpha + \beta_1 ln(trade)_{j,i,t-1} + \beta_2 controls_{i,t-1} + \beta_3 tradeopenness_{i,t-1} + \beta_4 recipient_{i,t-1} + \beta_5 geostrategic_{j,i,t-1} + trend + \omega_k + \varphi_i + \varepsilon_{i,t},$$

where $tradeconditions_{l,i,t}$ is the number of trade conditions attached to a loan l that country i received in year t, $ln(trade)_{j,i,t-1}$ is the logarithm of ex- and imports of j, where j represents the individual G5 countries, with country i receiving the loan. $Tradeopenness_{i,t-1}$ includes the described trade openness measures and $geostrategic_{i,t-1}$ refers to the afore-mentioned geo-strategic indicators, namely UNGA voting and UNSC membership. $Recipient_{i,t-1}$ is a vector of the variables measuring the recipients' behavior and $controls_{i,t-1}$ is the vector of general control variables as described above. All control variables with exception of the total number of conditions of the project and UNSC[37] are lagged by one year to account for the fact that the negotiations probably take some time. We add a time trend (*trend*) to catch the overall development of trade conditionality over time. We include a fixed effect ω_k for the sector[38] the project is embedded in and for the recipient country (φ_i). Finally, $\varepsilon_{i,t}$ is an error term

[37] UNSC membership is not lagged as the election of the new members to the UNSC already takes place in the year before entering the council, thus the information is already available.

[38] A project may be embedded in different sectors, see Figure II.3. We assigned the agreement to the sector that was identified as the major sector within the project information.

that we cluster by recipient countries, assuming that within-country errors are not independent of each other.

We perform OLS regressions as a benchmark, fully aware that the mass point at zero (as well as other violations of the Gauss-Markov assumptions) renders the estimates inconsistent and inefficient. Although the count nature of our dependent variable gives rise to a Poisson estimator, our data do not fulfill its strong assumptions of a conditional mean that is equal to the conditional variance (Cameron and Trivedi 2009). Hence, to correct for the apparent overdispersion, we perform Negative Binomial regression as suggested in Hilbe (2007) and used, e.g., in Caraway et al. (2012).[39] As we present in our results section, the zero-inflation of the data still leads to a slight discrepancy between the number of observed zero-counts and the number of zeros predicted.[40] Therefore we will further use the Poisson Pseudo-Maximum-Likelihood (PPML) estimator as a robustness check (Santos Silva and Tenreyro 2006). The PPML estimator is widely used in the trade literature due to its good performance even if a high portion of zeros is observed in the dependent variable.[41]

II.6. RESULTS

We begin our analysis by a step-wise inclusion of our different sets of control variables. Table II.1 presents the respective results for the OLS and Negative Binomial estimations. Due to the previously described shortcomings of the OLS estimator, our interpretation will focus on the Negative Binomial results in the following. The first model only includes the set of general economic and trade openness control variables. None of the economic control variables have a significant and robust effect on the number of trade conditions. As we previously argued, these economic conditions might matter only for the overall number of conditions attached to a loan and not specifically for trade conditions. However, the trade openness measures also appear to be less relevant than expected. Though it is surprising that trade openness has no significant effect as it proxies quite well for a country's general trade openness, it might be too a general measure for the very sector specific liberalization conditions. Regional trade agreements turn out to be relevant only if partnered by the US and then significantly reduce the number of liberalization conditions. If a country had a free trade agreement one year prior to the loan,

[39] As a robustness check, we also performed Poisson estimations (results not reported here but available upon request) where the results broadly stayed the same.

[40] A comparison of the deviation between the predicted and observed values for Poisson and Negative Binomial estimations shows that the Negative Binomial prediction is better for very small values (<4) compared to the Poisson predictions and the predictions of both models become very similar afterwards. Plotting the counts predicted by the model against the observed counts reveals that the zero-inflation apparent in the Poisson model vanishes when using Negative Binomial regression. Therefore, we stick to the Negative Binomial model for further estimations and also decided not to use a zero inflated model.

[41] Martin and Pham (2008) argue that the PPML is less accurate if the zeros are generated by a two-step Heckman selection or by a Tobit truncation process. However, we believe that the zeros in our dataset are true ones, in the sense that they do not result from a process that is different to the one that generates the count. The PPML is therefore adequate for the nature of our data. Nevertheless we also tested a two-step sample selection approach assuming that the process generating a count > 0 was independent from the process generating the number of counts. The second stage, using only positive counts, confirmed our findings.

the expected number of trade conditions decreases by approximately 60%. For an average of two trade conditions, this implies a decrease of more than one condition. In addition, a loan's total number of conditions and the number of prior trade conditions turn out to have a significant effect on the dependent variable. On average, for a one unit increase in the total number of conditions the expected number of trade conditions increases by approximately 1%. This effect is statistically significant at the one percent level. Furthermore, countries that had to fulfill more trade liberalization conditions in the past have less new trade conditions attached to their loan. A one unit increase in the number of prior trade liberalization conditions decreases the expected number of trade conditions by approximately 2.5%.

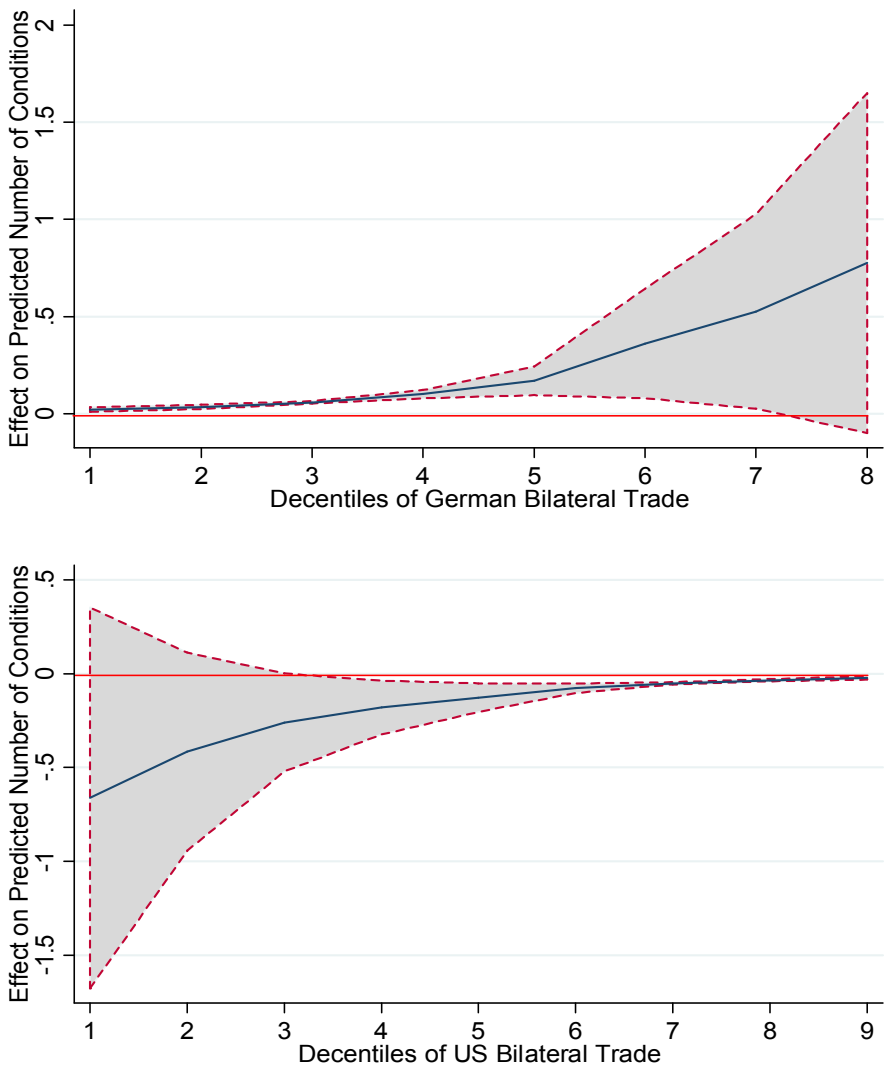
In the second model, we include the index of legislative constraints and the dummy for legislative elections to control for the recipients' interests in implementing trade liberalization reforms. None of the controls for the recipient's interest is statistically significant at conventional levels and their inclusion has no effect on the economic variables. In the next step, we include the bilateral trade variables, which are our main variables of interest. By including the bilateral trade of all five main shareholders simultaneously we make sure to capture only the effect of each donor and not implicitly the effect of another donor with a similar trade pattern. The bilateral trade patterns of the United States and Germany seem to have a significant effect on the number of trade conditions. While the coefficient is significantly positive for Germany, it is negative for the US. This implies that countries that trade a lot with Germany face on average more trade liberalization conditions. Specifically, an increase of German bilateral trade by one log point is correlated with an increase in the number of trade conditions by 126% on average [exp(0.818)-1]. Accordingly an increase of German bilateral trade by 50% would increase the number of trade liberalization conditions by one. This suggests the presence of a German trade intensification strategy. A look at the marginal effect of German trade on the number of conditions over the decentiles of German trade (Figure II.4) shows that the effect is most pronounced around the median where trade is already established but can still be intensified. For the United States and the United Kingdom on the other hand the negative coefficient indicates that recipients who trade more with these countries face, on average, a smaller number of trade liberalization conditions attached to their loans. For the US, the effect of a one log point increase of trade on the number of trade conditions is -43%, i.e., an increase in trade by 50% would decrease the average number of liberalization conditions by 0.63. When analyzing the effect over the different trade decentiles of the US (Figure II.4), the marginal effect is not positive at the lower end of the trade distribution. Thus, the negative effect does not reflect the intent to open-up new markets, as one might have expected.

Table II.1: Baseline Regression OLS and Negative Binomial

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS				Negative Binomial			
Log GDPpc$_{t-1}$	-0.429 [0.694]	-0.303 [0.788]	-1.512 [0.192]	-1.338 [0.287]	0.169 [0.758]	0.148 [0.786]	-0.391 [0.455]	-0.080 [0.900]
Inflation$_{t-1}$	0.794 [0.511]	0.654 [0.587]	0.331 [0.761]	-0.075 [0.952]	0.633 [0.260]	0.652 [0.255]	0.705 [0.172]	0.680 [0.238]
Current Account$_{t-1}$	0.000 [0.986]	0.008 [0.763]	0.008 [0.754]	0.010 [0.709]	0.017 [0.175]	0.019 [0.149]	0.018 [0.154]	0.023* [0.090]
Trade Openness$_{t-1}$	-0.000 [1.000]	0.000 [0.998]	0.004 [0.643]	0.004 [0.636]	-0.001 [0.835]	-0.002 [0.733]	0.001 [0.843]	-0.001 [0.926]
RTA with USA	-0.119 [0.854]	0.277 [0.667]	0.243 [0.656]	0.103 [0.850]	-0.922** [0.034]	-0.831* [0.063]	-0.906** [0.029]	-0.952** [0.027]
RTA with Japan	0.664 [0.273]	0.873* [0.094]	0.940* [0.068]	0.714 [0.168]	0.320 [0.670]	0.570 [0.400]	0.580 [0.353]	0.598 [0.324]
RTA with EU	-0.082 [0.893]	-0.066 [0.915]	-0.364 [0.569]	-0.202 [0.763]	-0.499 [0.336]	-0.532 [0.304]	-0.529 [0.335]	-0.586 [0.319]
GATT/WTO	-0.544 [0.316]	-0.427 [0.434]	-0.333 [0.531]	-0.343 [0.542]	-0.085 [0.756]	0.061 [0.829]	-0.046 [0.863]	-0.067 [0.814]
Under IMF Program$_{t-1}$	-0.254 [0.314]	-0.228 [0.369]	-0.278 [0.265]	-0.233 [0.391]	-0.193 [0.176]	-0.144 [0.299]	-0.159 [0.270]	-0.147 [0.330]
Total no. of Conditions	0.007 [0.382]	0.008 [0.359]	0.008 [0.342]	0.009 [0.317]	0.010*** [0.001]	0.010*** [0.001]	0.010*** [0.001]	0.011*** [0.001]
Number of Prior Trade Conditions	-0.137*** [0.000]	-0.138*** [0.000]	-0.142*** [0.000]	-0.141*** [0.000]	-0.022** [0.029]	-0.024** [0.020]	-0.024** [0.012]	-0.026** [0.010]
Legislative Constraints$_{t-1}$		0.172** [0.047]	0.152* [0.055]	0.178** [0.041]		0.043 [0.333]	0.031 [0.469]	0.016 [0.713]
Election$_{t-1}$		0.449* [0.084]	0.415 [0.124]	0.440 [0.101]		0.158 [0.271]	0.167 [0.239]	0.182 [0.212]
Log Trade US$_{t-1}$			-1.112*** [0.003]	-1.103*** [0.004]			-0.566*** [0.004]	-0.571*** [0.004]
Log Trade Japan$_{t-1}$			-0.135 [0.603]	-0.183 [0.471]			0.267 [0.165]	0.245 [0.186]
Log Trade UK$_{t-1}$			-0.722** [0.025]	-0.627** [0.034]			-0.241 [0.172]	-0.248 [0.156]
Log Trade France$_{t-1}$			0.010 [0.976]	0.017 [0.956]			-0.223 [0.188]	-0.209 [0.221]
Log Trade Germany$_{t-1}$			1.974*** [0.000]	1.915*** [0.000]			0.818*** [0.001]	0.843*** [0.000]
UNGA Voting USA$_{t-1}$				1.612 [0.371]				0.356 [0.813]
UNGA Voting Japan$_{t-1}$				5.030 [0.428]				0.477 [0.855]
UNGA Voting UK$_{t-1}$				-4.284 [0.605]				3.241 [0.445]
UNGA Voting France$_{t-1}$				-4.474 [0.385]				-3.614 [0.142]
UNGA Voting Germany$_{t-1}$				0.985 [0.839]				1.001 [0.499]
UNSC				0.128 [0.693]				0.003 [0.984]
Constant	16.880* [0.075]	6.521 [0.287]	11.058* [0.061]	27.347** [0.021]	1.401 [0.684]	1.128 [0.742]	2.961 [0.352]	0.126 [0.977]
Observations	915	878	878	865	915	878	878	865
R^2	0.520	0.520	0.539	0.539				
McFadden R^2					0.121	0.117	0.123	0.121
BIC					2608	2552	2518	2487

Notes: The dependent variable is total number of trade conditions in project i. Standard errors are clustered at the country-level. All estimations include a time trend, sector and country dummies. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

Figure II.4: Marginal Effects of German and US Bilateral Trade on Trade Conditions



Notes: The plot is based on results presented in Table III.1 (column 7). The solid line shows the average marginal effect of German (left) and US (right) bilateral trade on the number of trade conditions over the German and US trade decentiles. The dashed lines indicate the 90% confidence interval.

Two interpretations are possible for the significantly negative coefficient in the medium to higher trade intensity area. First, it is possible that the need for further trade liberalization is lower as an already profound level of trade can be observed. However this interpretation seems to be weak as we control for the general level of trade openness. The second possible explanation is protection of the own trading routes and thus prevention of additional trade competition in the recipient country due to liberalization. To see whether this result can indeed be attributed to the bilateral relationship and is not driven by a similarity of trade flows with geo-strategic interests, we include UNGA voting behavior and a dummy for UNSC membership in the final specification of Table II.1. Our results are robust to the inclusion of these additional variables. Furthermore, geo-strategic interests do not seem to play a role for the extent of trade liberalization attached to a loan.

In the previous model we analyzed all conditions independently of their character (prior action or benchmark) and the financier (IBRD or IDA). Yet, loan agreements between a country and either the IDA or the IBRD might not be equally prone to being influenced by industrialized countries. First, stricter allocation rules apply to IDA projects which might also affect the freedom of conditionality design. And second, IBRD countries might be of higher interest due to their higher economic importance compared to IDA countries. To account for this possible discrepancy, we interact our trade interest variables with an IBRD dummy. Similarly a difference between prior actions and benchmarks

Table II.2: Negative Binomial for IBRD Interaction, Prior Action and Benchmarks Separately

	(1)	(2)	(3)	(4)	(5)	(6)
			Prior Action		Benchmark	
Log GDPpc$_{t-1}$	-0.323 [0.545]	0.021 [0.974]	-0.488 [0.419]	-0.298 [0.682]	-0.760 [0.406]	-0.148 [0.887]
Inflation$_{t-1}$	0.677 [0.178]	0.639 [0.246]	0.863 [0.109]	0.865 [0.139]	0.509 [0.504]	0.916 [0.267]
Current Account$_{t-1}$	0.015 [0.265]	0.020 [0.160]	0.032** [0.034]	0.036** [0.021]	0.003 [0.861]	0.007 [0.648]
Trade Openness$_{t-1}$	-0.000 [0.937]	-0.002 [0.696]	0.002 [0.757]	0.000 [0.952]	0.001 [0.859]	-0.001 [0.863]
RTA with USA	-1.082** [0.021]	-1.097** [0.020]	-0.700* [0.054]	-0.811*** [0.009]	15.131*** [0.000]	-14.689*** [0.000]
RTA with Japan	0.409 [0.526]	0.418 [0.506]	0.682 [0.366]	0.646 [0.395]	0.708 [0.477]	0.848 [0.382]
RTA with EU	-0.488 [0.381]	-0.546 [0.350]	-1.014* [0.064]	-0.950 [0.104]	-0.208 [0.803]	-0.341 [0.703]
GATT/WTO	0.042 [0.884]	0.017 [0.954]	-0.162 [0.485]	-0.170 [0.488]	-0.225 [0.583]	-0.307 [0.475]
Under IMF Program$_{t-1}$	-0.120 [0.388]	-0.107 [0.473]	-0.001 [0.996]	-0.014 [0.943]	-0.429** [0.022]	-0.375* [0.068]
Total no. of Conditions	0.010*** [0.002]	0.011*** [0.001]	0.002 [0.593]	0.002 [0.523]	0.020*** [0.000]	0.021*** [0.000]
Number of Prior Trade Conditions	-0.025*** [0.010]	-0.027*** [0.009]	-0.005 [0.684]	-0.007 [0.531]	-0.052*** [0.000]	-0.052*** [0.000]
Legislative Constraints$_{t-1}$	0.030 [0.462]	0.014 [0.744]	-0.057 [0.224]	-0.065 [0.195]	0.013 [0.841]	0.005 [0.933]
Election$_{t-1}$	0.169 [0.222]	0.183 [0.196]	0.293 [0.100]	0.300* [0.088]	0.107 [0.572]	0.167 [0.390]
Log Trade US$_{t-1}$	-0.515** [0.013]	-0.503** [0.016]	-0.612** [0.020]	-0.569** [0.025]	-0.511** [0.024]	-0.532** [0.021]
Log Trade Japan$_{t-1}$	0.153 [0.504]	0.108 [0.622]	0.441** [0.027]	0.418** [0.028]	0.105 [0.661]	0.074 [0.749]
Log Trade UK$_{t-1}$	0.022 [0.929]	0.026 [0.915]	-0.610*** [0.006]	-0.615*** [0.002]	0.236 [0.305]	0.255 [0.252]
Log Trade France$_{t-1}$	-0.076 [0.651]	-0.067 [0.704]	-0.092 [0.702]	-0.108 [0.658]	-0.230 [0.321]	-0.269 [0.237]
Log Trade Germany$_{t-1}$	0.485* [0.072]	0.507* [0.067]	0.925*** [0.000]	0.921*** [0.000]	0.632* [0.074]	0.704* [0.051]
IBRD	-1.095 [0.838]	-0.935 [0.863]				
Log Trade US$_{t-1}$ * IBRD	0.076 [0.809]	-0.024 [0.938]				
Log Trade Japan$_{t-1}$ *IBRD	0.130 [0.659]	0.191 [0.504]				
Log Trade UK$_{t-1}$ * IBRD	-0.547* [0.085]	-0.544* [0.092]				
Log Trade France$_{t-1}$ * IBRD	-0.407** [0.032]	-0.386* [0.053]				
Log Trade Germany$_{t-1}$ * IBRD	0.804* [0.076]	0.817* [0.074]				
UNGA Voting USA$_{t-1}$		0.614 [0.669]		1.853 [0.271]		-1.771 [0.353]
UNGA Voting Japan$_{t-1}$		0.625 [0.812]		4.727* [0.100]		-1.356 [0.686]
UNGA Voting UK$_{t-1}$		2.949 [0.498]		-7.288 [0.131]		12.025** [0.039]
UNGA Voting France$_{t-1}$		-3.509 [0.154]		2.166 [0.399]		-7.541* [0.055]
UNGA Voting Germany$_{t-1}$		0.954 [0.490]		2.462 [0.125]		-1.903 [0.161]
UNSC		-0.024 [0.894]		0.109 [0.568]		-0.113 [0.700]
Constant	2.223 [0.498]	-0.922 [0.832]	4.273 [0.219]	1.356 [0.787]	0.865 [0.875]	-3.312 [0.612]
Observations	878	865	878	865	878	865
McFadden R^2	0.123	0.120	0.154	0.152	0.0882	0.0858
BIC	2484	2447	1933	1855	1536	1521

Notes: Dependent variables: total number of trade conditions (columns 1 and 2), total number of trade prior actions (columns 3 and 4) and total number of trade benchmark conditions (columns 5 and 6) in project i. Standard errors are clustered at the country-level. All estimations include a time trend, sector and country dummies. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

is likely as prior actions are binding conditions that in general have an influence on the disbursement of the loan. We expect a stronger effect with respect to prior actions compared to the softer benchmark conditions.

Table II.2 shows the results for differentiating between these categories. With respect to the difference between the IDA and the IBRD (where we include blend lending[42]), the results support our hypothesis in general. Given that we find a significant effect for all donors except Japan, underlines the assumption that a difference between IBRD and pure IDA lending exists. For the UK, France and Germany there is only an effect of trade on the number of trade liberalization conditions observable if the lending is not provided by the IDA whereas for the United States the effect is present only for IDA lending (Table II.3).

Table II.3: **Marginal Effect of Bilateral Trade for IBRD and Non-IBRD Lending**

		(1)	(2)
Log Trade US_{t-1}	IBRD=0	-0.068** [0.043]	-0.070** [0.044]
	IBRD=1	-0.097 [0.266]	-0.125 [0.201]
Log Trade $Japan_{t-1}$	IBRD=0	0.020 [0.506]	0.015 [0.623]
	IBRD=1	0.062 [0.349]	0.071 [0.314]
Log Trade UK_{t-1}	IBRD=0	0.003 [0.929]	0.004 [0.915]
	IBRD=1	-0.116** [0.048]	-0.123* [0.054]
Log Trade $France_{t-1}$	IBRD=0	-0.010 [0.656]	-0.009 [0.708]
	IBRD=1	-0.107** [0.050]	-0.107* [0.067]
Log Trade $Germany_{t-1}$	IBRD=0	0.064 [0.118]	0.071 [0.117]
	IBRD=1	0.284*** [0.001]	0.314*** [0.001]

Notes: Marginal effects, calculated at the mean of all other variables, for the interactions derived from Table III.2, columns 1 and 2. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

In a second step, we divide the sample between prior actions and benchmark conditions (Table II.2, columns 3 to 6). Though the former should be more attractive for donors as a means of influence as their implementation is related to the loan disbursement, the coefficient for the United States differs only marginally between the two groups. For Germany, the effect of a log point change in trade on the number of trade conditions is 152% for prior actions, while it is 88% for benchmark conditions. In addition, when splitting the sample into subgroups, some of the UNGA voting controls become statistically significant. Interestingly, political alliances seem to matter more for the less binding benchmark conditions. However, the change in significance of the UNGA variables does not affect our trade variables.

[42] Blend countries are countries that are IDA eligible due to their low per capita income but are to some extent creditworthy and therefore qualify for IBRD lending as well. Blend lending therefore consists of both lending categories, IBRD and IDA lending. We observe 34 cases of blend lending of which 19 have a higher share of IBRD lending, 7 have a higher IDA lending share and 8 have an equal share of IBRD and IDA lending. We therefore decide to attribute blend lending to IBRD lending. However our results are robust to excluding blend-lending and to counting those projects with a higher share of IDA lending as IDA projects.

Table II.4: Heterogenity of G5 Interests

	(1)	(2)	(3)	(4)
Log GDPpc$_{t-1}$	-0.533 [0.362]	-0.542 [0.351]	-0.677 [0.247]	-0.734 [0.265]
Inflation$_{t-1}$	0.696 [0.196]	0.664 [0.224]	0.727 [0.171]	0.703 [0.169]
Current Account$_{t-1}$	0.020 [0.117]	0.021 [0.115]	0.023* [0.071]	0.022* [0.099]
Trade Openness$_{t-1}$	-0.001 [0.914]	-0.000 [0.926]	-0.001 [0.841]	-0.000 [0.994]
RTA with USA	-0.832** [0.046]	-0.778* [0.075]	-1.038** [0.024]	-0.920** [0.033]
RTA with Japan	0.602 [0.347]	0.618 [0.350]	0.448 [0.467]	0.593 [0.338]
RTA with EU	-0.573 [0.279]	-0.572 [0.284]	-0.608 [0.245]	-0.651 [0.242]
GATT/WTO	0.027 [0.919]	0.037 [0.892]	0.002 [0.993]	-0.014 [0.959]
Under IMF Program$_{t-1}$	-0.134 [0.314]	-0.131 [0.331]	-0.160 [0.246]	-0.140 [0.314]
Total no. of Conditions	0.010*** [0.002]	0.010*** [0.002]	0.010*** [0.002]	0.010*** [0.002]
Number of Prior Trade Conditions	-0.024** [0.015]	-0.024** [0.015]	-0.025*** [0.005]	-0.025*** [0.008]
Legislative Constraints$_{t-1}$	0.007 [0.867]	0.005 [0.904]	0.029 [0.508]	0.034 [0.429]
Election$_{t-1}$	0.167 [0.246]	0.164 [0.255]	0.161 [0.253]	0.177 [0.207]
Share Trade USA/G5$_{t-1}$	-1.251 [0.441]	-1.211 [0.466]		
Share Trade Japan/G5$_{t-1}$	0.993 [0.676]	1.057 [0.668]		
Share Trade UK/G5$_{t-1}$	-1.748 [0.424]	-1.692 [0.451]		
Share Trade France/G5$_{t-1}$	1.126 [0.547]	1.142 [0.547]		
Share Trade Germany/G5$_{t-1}$	3.290* [0.077]	3.304* [0.079]		
G5 Trade Heterogeneity$_{t-1}$	-1.112** [0.029]	0.412 [0.943]	-0.974 [0.846]	
Log Trade G5$_{t-1}$	0.182 [0.425]	0.239 [0.448]		
Log Trade G5$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$		-0.073 [0.791]		
Log Trade US$_{t-1}$			-0.663* [0.065]	-0.775*** [0.002]
Log Trade US$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$			0.198 [0.514]	
Log Trade Japan$_{t-1}$			0.792** [0.026]	0.269 [0.162]
Log Trade Japan$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$			-0.513* [0.091]	
Log Trade UK$_{t-1}$			0.143 [0.731]	-0.238 [0.187]
Log Trade UK$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$			-0.377 [0.390]	
Log Trade France$_{t-1}$			-0.266 [0.369]	
Log Trade France$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$			0.075 [0.791]	
Log Trade Germany$_{t-1}$			0.345 [0.444]	0.591** [0.020]
Log Trade Germany$_{t-1}$ * G5 Trade Heterogeneity$_{t-1}$			0.582 [0.234]	
Log Trade Germany$_{t-1}$ * G5 TradeUSA$_{t-1}$				0.011 [0.360]
Constant	1.766 [0.714]	0.566 [0.934]	-0.201 [0.973]	5.145 [0.196]
Observations	877	877	877	878
McFadden R^2	0.121	0.120	0.123	0.123
BIC	2438	2446	2448	2464

Notes: The dependent variable is total number of trade conditions in project i. Standard errors are clustered at the country-level. All estimations include a time trend, sector and country dummies. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

Given the contradicting pattern between the United States and Germany with respect to the treatment of trading partners it seems worthwhile to analyze the interactions between the G5 interests further. We follow Copelovitch (2010) and evaluate whether heterogeneity in the G5's commercial interests has an effect on the conditionality design. To do so, we construct two additional measures. The first one reflects the G5's combined interest in a country, measured as total bilateral trade of all five countries with the recipient. The second one indicates the heterogeneity of interests measured as the ratio of the combined variance of interest of each G5 country to the mean. In addition to these two measures the share of each G5 country's trade with the recipient relatively to the G5's total trade with the country is included.

Table II.4 presents the results for the heterogeneity analysis. Model 1 includes G5 trade intensity and heterogeneity. While the intensity does not have a significant influence on the dependent variable, we see that a higher heterogeneity leads to a lower number of trade conditions. This can be interpreted in two ways. Since from the previous regression we conclude that loans for countries the US have a stronger interest in include on average a lower number of trade conditions, it is possible that the US manages to achieve its preferred outcome even if interests are heterogeneous. On the other hand, this negative relation between heterogeneous interests and the number of trade conditions can be interpreted such that the "targeted" number of trade conditions is low and this level is achieved if the G5 have no homogeneous trade interests. This interpretation would also be in line with the previous finding (a lower number of trade conditions in the case of stronger US interest). As US citizens make up a large share of the World Bank staff, we might conclude that what we observe as "objective" behavior is in fact the special interest of the US pushed by the staff.

In model 2 we interact G5 interest intensity with interest heterogeneity to analyze whether heterogeneity is not equally important over the range of G5 interests. We cannot observe a statistically significant difference. Apparently, the negative effect of G5 heterogeneity on the number of trade conditions does not depend on the intensity of interests. Since we observed a conflicting relationship between US and German interests and the dependent variable, we interact each G5 state's bilateral trade with the heterogeneity variable in model 3. Through this interaction we may be able to determine whose strategy dominates. Surprisingly, both the US and the German trade strategy hold when interacting with G5 heterogeneity. When looking at the marginal effects at different levels of heterogeneity (not shown here), one can see that both pursue their strategies only at a medium level of heterogeneity. The effect of Germany is stronger and statistically significant over a broader range of heterogeneity. However, for both countries the interaction is not significant at a low level of interest heterogeneity. This implies that for those recipient countries in which both are interested, neither the US nor Germany succeed in pursuing their strategy. As the strategies of the US and Germany seem to be conflictive, it is reasonable that if both have an interest in a certain country they cannot both be successful in achieving their aim at the same time. Yet, if a certain level of heterogeneity exists, the data show that both are successful in their strategies. Since heterogeneity indicates that not all countries have the same trade interest in a recipient, it is not surprising that it becomes easier to fulfill one's own aim. Heterogeneous interests between the G5 thus seem to open up some leeway to pursue donor-specific trade strategies. These results differ from those of Copelovitch (2010) who finds that G5 interest heterogeneity does not significantly affect the number of conditions attached to an IMF loan, except when overall G5 interests in a country are low. His interpretation is more in line with ours when considering countries that both the US and Germany have a high interest in. Still, compared to his results for the IMF, the G5 countries seem to have significantly more influence over conditionality with respect to World Bank loans.

Table II.5: Marginal Effect German and US Trade Interaction

Log German Trade$_{t-1}$	Decentiles of US Trade$_{t-1}$	
	1	0.862 [0.199]
	2	0.558 [0.106]
	3	0.360** [0.032]
	4	0.253*** [0.006]
	5	0.179*** [0.001]
	6	0.113*** [0.001]
	7	0.075*** [0.008]
	8	0.052** [0.041]
	9	0.035 [0.108]
Log US Trade$_{t-1}$	**Decentiles of German Trade$_{t-1}$**	
	1	-0.015 [0.133]
	2	-0.024* [0.074]
	3	-0.040** [0.030]
	4	-0.066** [0.012]
	5	-0.109** [0.011]
	6	-0.227** [0.040]
	7	-0.321* [0.073]
	8	-0.465 [0.121]
	9	-0.867 [0.215]

Notes: Marginal effects of German trade (US trade) on the number of trade conditions at different decentiles of US trade (German trade). Coefficients are based on the results of Table II.4, column 4.

With Germany and the US being the two cases of interest, we interact their trade in column 5. The marginal effects at different decentiles of trade of the other respective G5 member (Table II.5) show that the effect of Germany's trade interest is most pronounced in the lower part of US trade. As our results suggested in the beginning, the US pursues a trade protection strategy rather than a trade creation one. Therefore, it has little interest in influencing conditions regarding countries that it does not trade extensively with. Hence, it is easier for Germany to follow its strategy when US trade intensity is low. For the United States it is the other way around. It is more successful in pursuing its strategy when German trade intensity is high. This result is in line with our findings in the baseline regression where it is shown that Germany follows a trade creation and promotion strategy and therefore is less interested in countries it already trades very intensely with. Consequently, the leeway for the US to succeed in its strategy is higher at the upper end of Germany's trade intensity distribution. The results so far show a consistent pattern for Germany's and the United States' interests reflected in World Bank conditionality.[43] We test for the robustness of our results in the next section.

[43] While we are able to establish a relationship in terms of overall interests in line with the G5 country strategies, it would have been very interesting to delve further into the "suspicious" conditions, such as countries being obliged to reduce or abolish trade barriers for sectors/products of specific interest to G5 countries. However, due to a lack of specificity in the conditions' description and a lack of adequate trade data, we were confined to a more general level of analysis.

Sensitivity analysis

As described above, the number of trade conditions declined sharply since the mid-1990s. This implies that the share of zeros in our observations increases dramatically for the later years. To ensure that our results are not driven by this trend, we restrict the sample to projects approved before 2001. This reduces our sample to 419 observations without any further distinctions, and to 183 IDA and 236 IBRD projects when additionally differentiating by the source of financing. As Table II.6 shows, our results are robust to this restriction of our dataset. Furthermore, the results hold for the interaction with the IBRD dummy. The overall results are not confirmed only with respect to IDA lending. Also, distinguishing between prior actions and benchmarks does not change our findings in the reduced sample. Additionally, we re-run our model separately for each region as the interests of the G5 might differ between regions (Table II.7).[44] For Germany, the results hold with respect to each different region, whereas concerning the US we only find our results confirmed for Latin America and the Caribbean and East Asia and the Pacific. It is well-known that Latin America is the most important trading region for the US. Therefore, it is not surprising that we find the strongest effect here.

In addition, we test the sensitivity of our analysis using formal alliances as an alternative measure for geo-strategic interests. We extracted data on formal alliances from the Correlates of War Dataset (COW 2013; Gibler 2009).[45] Including formal alliances does not change the overall results. Further, we do not find a significant effect of formal alliances on the number of trade conditions. We also test the robustness of our results by including economic sanctions on the recipient by the G5 countries (Hufbauer et al. 2008). The results for the US and Germany are robust to both additional tests. The sanctions themselves show a negative and significant impact, but only when the dataset is confined to the pre-2000 observations.[46,47]

[44] Middle East and North Africa as well as South Asia have too few observations to run a separate regression. The regions analyzed separately are: Latin America and the Caribbean, Sub-Saharan Africa, East Asia and Pacific as well as Europe and Central Asia.

[45] This measure has also been used by Berger et al. (2013) who analyzed the effect of CIA interventions on US trade. While we do not see a relationship between CIA interventions and trade conditions as it is a very special measure, formal alliances are more general and reflect broad geo-strategic interest.

[46] Export or import sanctions may be interpreted as extreme forms of political trade barriers. Consequently, it is intuitive that countries against whom sanctions are installed are not pushed towards liberalization through a different channel.

[47] In addition, we also included governments' political orientation in our model, assuming that left-wing governments would be more reluctant to push other countries towards trade liberalization. However, we do not find a significant effect in any specification.

Table II.6: Sample Limited to Projects Approved Between 1980 - 2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Prior Action		Benchmark	
Log GDPpc$_{t-1}$	-0.192 [0.817]	-0.372 [0.678]	-0.009 [0.993]	0.230 [0.797]	0.325 [0.752]	-0.929 [0.430]	-0.110 [0.945]
Inflation$_{t-1}$	1.579** [0.013]	1.598*** [0.009]	1.559** [0.018]	1.720** [0.011]	1.434* [0.061]	0.986 [0.243]	1.304 [0.157]
Current Account$_{t-1}$	0.006 [0.730]	-0.001 [0.937]	-0.002 [0.910]	0.013 [0.528]	0.012 [0.534]	-0.007 [0.768]	0.000 [1.000]
Trade Openness$_{t-1}$	-0.007 [0.284]	-0.007 [0.281]	-0.009 [0.199]	-0.008 [0.250]	-0.007 [0.325]	-0.001 [0.915]	-0.004 [0.742]
RTA with USA	-18.227*** [0.000]	-16.982*** [0.000]	-17.315*** [0.000]	-16.482*** [0.000]	-16.837*** [0.000]	-15.891*** [0.000]	-15.552*** [0.000]
RTA with EU	-1.103 [0.140]	-1.062 [0.178]	-0.918 [0.241]	-1.602 [0.187]	-1.406 [0.236]	-0.386 [0.618]	-0.470 [0.507]
GATT/WTO	-0.027 [0.911]	-0.062 [0.809]	-0.047 [0.861]	-0.003 [0.989]	0.080 [0.732]	-0.393 [0.399]	-0.536 [0.271]
Under IMF Program$_{t-1}$	-0.133 [0.393]	-0.077 [0.627]	0.008 [0.962]	0.000 [0.999]	0.133 [0.491]	-0.353* [0.074]	-0.380* [0.082]
Total no. of Conditions	0.003 [0.345]	0.003 [0.398]	0.003 [0.414]	0.000 [0.961]	0.000 [0.973]	0.011** [0.029]	0.011** [0.048]
Number of Prior Trade Conditions	-0.015 [0.270]	-0.014 [0.291]	-0.016 [0.202]	-0.004 [0.800]	-0.008 [0.586]	-0.039** [0.012]	-0.038** [0.017]
Legislative Constraints$_{t-1}$	-0.000 [0.993]	-0.008 [0.870]	-0.010 [0.855]	-0.075 [0.182]	-0.048 [0.416]	-0.007 [0.931]	-0.035 [0.671]
Election$_{t-1}$	0.232 [0.192]	0.237 [0.188]	0.227 [0.211]	0.237 [0.209]	0.224 [0.224]	0.197 [0.393]	0.254 [0.294]
Log Trade US$_{t-1}$	-0.635*** [0.003]	-0.578** [0.012]	-0.624*** [0.008]	-0.566* [0.059]	-0.630** [0.023]	-0.634** [0.018]	-0.674** [0.025]
Log Trade Japan$_{t-1}$	0.012 [0.963]	-0.118 [0.742]	-0.189 [0.609]	0.025 [0.929]	0.015 [0.960]	-0.093 [0.807]	-0.162 [0.681]
Log Trade UK$_{t-1}$	-0.380** [0.013]	0.046 [0.877]	0.092 [0.767]	-0.547*** [0.007]	-0.448*** [0.007]	0.003 [0.991]	-0.026 [0.909]
Log Trade France$_{t-1}$	-0.422* [0.078]	-0.340 [0.133]	-0.276 [0.208]	-0.227 [0.436]	-0.135 [0.606]	-0.564 [0.117]	-0.598 [0.117]
Log Trade Germany$_{t-1}$	1.044*** [0.001]	0.660* [0.073]	0.633* [0.100]	1.209*** [0.000]	1.110*** [0.001]	0.669 [0.116]	0.634 [0.168]
IBRD		-1.426 [0.862]	-1.983 [0.809]				
Log Trade US$_{t-1}$ * IBRD		0.034 [0.922]	-0.022 [0.951]				
Log Trade Japan$_{t-1}$ *IBRD		0.246 [0.583]	0.357 [0.435]				
Log Trade UK$_{t-1}$ * IBRD		-0.656* [0.067]	-0.620* [0.091]				
Log Trade France$_{t-1}$ * IBRD		-0.403 [0.100]	-0.441* [0.091]				
Log Trade Germany$_{t-1}$ * IBRD		0.879 [0.144]	0.860 [0.162]				
UNGA Voting USA$_{t-1}$			-0.515 [0.782]		-0.750 [0.705]		-0.092 [0.972]
UNGA Voting Japan$_{t-1}$			1.932 [0.549]		0.989 [0.768]		5.063 [0.214]
UNGA Voting UK$_{t-1}$			-1.221 [0.779]		-7.781 [0.108]		7.590 [0.151]
UNGA Voting France$_{t-1}$			-2.359 [0.345]		0.854 [0.758]		-6.192 [0.141]
UNGA Voting Germany$_{t-1}$			0.863 [0.423]		1.789 [0.179]		-1.518 [0.159]
UNSC			0.021 [0.931]		0.105 [0.622]		0.131 [0.728]
Constant	10.365** [0.023]	9.934 [0.111]	8.520 [0.245]	2.401 [0.674]	3.285 [0.609]	18.691** [0.011]	14.741* [0.096]
Observations	419	419	408	419	408	419	408
McFadden R^2	0.0702	0.0695	0.0628	0.0836	0.0799	0.0367	0.0290
BIC	1667	1669	1647	1394	1360	1046	1039

Notes: Dependent variables: total number of trade conditions (columns 1 -3), total number of trade prior actions (columns 4 and 5) and total number of trade benchmark conditions (columns 6 and 7) in project i. The sample is restricted to observations before the year 2001. Standard errors are clustered at the country-level. All estimations include a time trend, sector and country dummies. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

Table II.7: Projects by Region

	(1) Latin America & Caribbean	(2) Sub-Sahara Africa	(3) Europe & Central Asia	(4) East Asia & Pacific
Log GDPpc$_{t-1}$	0.283 [0.910]	-1.012 [0.198]	0.325 [0.880]	-0.009 [0.997]
Inflation$_{t-1}$	-0.714 [0.531]	1.436 [0.160]	1.574 [0.320]	0.193 [0.955]
Current Account$_{t-1}$	0.091*** [0.001]	0.028** [0.031]	-0.029 [0.450]	0.010 [0.797]
Trade Openness$_{t-1}$	0.000 [0.978]	-0.008 [0.287]	0.002 [0.949]	0.004 [0.875]
RTA with USA	-1.786** [0.030]			
RTA with Japan	14.557*** [0.000]			0.755 [0.323]
RTA with EU	-13.376*** [0.000]	-22.325*** [0.000]	-2.690*** [0.002]	
GATT/WTO	0.599 [0.161]	0.013 [0.965]	0.895 [0.197]	-0.941** [0.037]
Under IMF Program$_{t-1}$	-0.314 [0.397]	-0.213 [0.246]	-0.270 [0.517]	0.568 [0.483]
Total no. of Conditions	-0.004 [0.608]	0.016*** [0.000]	0.012* [0.068]	0.000 [0.985]
Number of Prior Trade Conditions	0.007 [0.672]	-0.034*** [0.000]	-0.176* [0.060]	-0.013 [0.623]
Legislative Constraints$_{t-1}$	-0.082 [0.523]	0.009 [0.877]	-0.210* [0.089]	-0.221 [0.729]
Election$_{t-1}$	0.978*** [0.010]	-0.114 [0.493]	0.958** [0.018]	0.121 [0.758]
Log Trade US$_{t-1}$	-1.681* [0.060]	-0.373 [0.136]	0.549 [0.444]	-1.210** [0.013]
Log Trade Japan$_{t-1}$	0.257 [0.614]	0.237 [0.240]	-0.547** [0.022]	-0.235 [0.682]
Log Trade UK$_{t-1}$	-0.725*** [0.003]	-0.655*** [0.000]	0.108 [0.719]	0.185 [0.886]
Log Trade France$_{t-1}$	-0.308 [0.550]	0.305** [0.038]	-0.741 [0.164]	-1.103* [0.067]
Log Trade Germany$_{t-1}$	2.577*** [0.000]	0.532** [0.012]	1.205* [0.071]	2.325** [0.016]
Constant	1.054 [0.963]	7.800* [0.093]	-15.178 [0.302]	5.638 [0.666]
Observations	240	273	156	80
McFadden R^2	0.172	0.0952	0.0984	0.0384
BIC	572.2	884.9	306.2	240.8

Notes: The dependent variable is total number of trade conditions in project i. Samples are restricted by region of the recipient: Latin America & Caribbean (column 1), Sub-Sahara Africa (column 2), Europe & Central Asia (column 3), East Asia & Pacific (column 4). Standard errors are clustered at the country-level. All estimations include a time trend, sector and country dummies. P-values are in brackets where *p<0.1 **p<0.5 ***p<0.01.

With respect to further robustness checks, we address some issues that might influence our results. We were concerned that while the negative binomial estimator performed quite well in light of the many zeros in the dependent variable, the influence of these zeros may still not be sufficiently controlled for. Therefore, we re-estimate our specifications using the Poisson Pseudo-Maximum-Likelihood (PPML) estimator (Santos Silva and Tenreyro 2006). The PPML-estimator in the version of Santos Silva and Tenreyro (2006) has been developed in the context of gravity estimations. Firstly, it performs well in the presence of a large number of zeros in the dependent variable. Secondly, it is also robust to heteroskedasticity processes in the data.[48] Our main results are robust to changing the estimation method to PPML. We find the same sign and significance as well as similar sizes of coefficients for the US and Germany.

We address two further issues: multicollinearity and outliers. Naturally, there is a correlation between the trade flows of the different G5 countries with the recipient countries, leaving some concern about whether this affects the identification of coefficients in extreme cases.[49] To address these concerns, we exclude the upper 30% (and 40% respectively) of the German trade distribution

[48] For the PPML estimator to be consistent, only the conditional mean has to be correctly specified. Since it does not make any specific assumptions about dispersion, it is not affected by a violation of equidispersion.
[49] Correlation of the G5 trade flows is between 0.7 and 0.8.

and re-estimate all specifications. For the US, we exclude the lower 30% (and 40% respectively) of its trade distribution.[50] In doing so, the correlation between trade flows of the G5 countries drops substantially, most notably between German and US trade flows. Still, our main results remain unchanged. The size of the coefficients varies to some degree, but qualitatively the results hold, including the margins over the different trade decentiles. In addition, we were also concerned with possible outliers, especially at high numbers of trade conditions. Therefore, we dropped the upper 10% and 20% of the trade conditions distribution, respectively. The overall coefficients for German trade remain positive and significant, while the coefficients for US trade are negative, but insignificant. However, when looking at the marginal effects over the decentiles of the US trade distribution, we again find the results of our main specifications confirmed.[51]

II.7. CONCLUSION

In order to alleviate poverty and foster economic and social development, the ability of international organizations to function as impartial providers of aid is vital to limiting the strategic behavior that has been found to accompany bilateral aid relationships. The World Bank and the IMF, as the main institutions to turn to in situations of need and economic turmoil, both use conditionality attached to loans and projects to streamline the use of the provided funds to the intended means. Yet, numerous studies suggest that within these organizations we can observe the influence of the most important shareholders. Studies have found that the number of conditions attached to an agreement depend on various factors that reflect a major shareholder's behavior, e.g., measures of geopolitical interests.

In this article, we take the analysis one step further, exploiting a newly available dataset that features the conditions attached to World Bank development policy loans approved during the last decades. Specifically, we focus on trade liberalization conditions. On the one hand, developing countries' economies typically depend on trade in a few selected products, and restrictions are seen as helpful in developing sectors where the potential for competition is high. On the other hand, the major industrialized countries also extensively rely on trade to sustain economic growth, rendering liberalized markets more desirable. We analyze the trade interests of the five main shareholders of the World Bank and find different and robust patterns for Germany and the United States. While trading partners of Germany on average face a significantly higher number of trade conditions attached to their loans, those of the United States have a lower number of trade conditions included in their agreements.

For Germany, we interpret this result as a trade intensification strategy. The effect is most pronounced close to the median of trade, which is the area where trade has already been established but can still be intensified. Placing trade liberalization as a condition for World Bank loans could be one instrument to achieve this objective. For the United States, we conclude that their behavior reflects

[50] This procedure implicitly yields an additional check for the overall robustness of our results, since we exclude the parts of the US and German trade distributions for which our results are strongest.
[51] The details for all results described in this section are available from the authors upon request.

a trade protection strategy. Through affecting World Bank loan conditions, those countries with which the US trades intensively are encouraged to avoid further liberalizing their markets in order to maintain entry barriers for competitors to US firms. Interestingly, we find a stronger effect for prior actions, which are binding conditions that influence the loan disbursement decision. The results confirm our expectation that it is more beneficial to influence this kind of condition as it is more likely to be implemented. Furthermore, our results are also in line with the general hypothesis that IDA lending is less prone to be exploited strategically.

Summing up, our estimations support the findings of numerous studies in the literature that major actors within multilateral aid agencies influence the design of lending agreements. As conditionality is supposed to ensure necessary reforms to improve the economic performance of the recipient country, the strategic influence of the main shareholders undermines this aim. Furthermore, recipient countries might be led to question the World Bank's advice and its legitimacy when commercial interests affect conditionality. Our finding thus contributes to the discussion on enhancing the transparency of the World Bank's Executive Board's decisions and on the distribution of power within the Bank.

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II.9. APPENDIX

Table A II.1: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
Dependent Variables					
Trade Conditions	915	2.07	4.20	0	35
Trade Conditions (Prior Actions)	915	1.30	3.07	0	31
Trade Conditions (Benchmarks)	915	0.76	1.97	0	25
General Controls					
GDPpc	915	1853.08	1982.06	102.20	10491.08
Inflation	915	0.12	0.15	-0.09	0.99
Current Account	915	-4.47	6.07	-42.05	14.89
Under IMF Program	915	0.30	0.46	0	1
Total Conditions in Project	915	32.37	24.82	1	190
Trade Openess					
Trade Openess	915	64.86	34.60	6.32	256.36
RTA with USA	915	0.06	0.24	0	1
RTA with Japan	915	0.03	0.18	0	1
RTA with EU	915	0.13	0.34	0	1
GATT/WTO	915	0.83	0.38	0	1
Sum of Prior Trade Conditions	915	24.09	22.04	0	92
Recipient Interest					
Legislative Constraints	878	6.17	1.58	1	7
Legislative Election	878	0.22	0.41	0	1
Commercial Interest					
Trade with US	908	11,700,000,000	41,000,000,000	0	316,000,000,000
Trade with Japan	908	2,500,000,000	6,230,000,000	0	56,200,000,000
Trade with UK	908	1,090,000,000	2,010,000,000	0	14,000,000,000
Trade with France	908	1,440,000,000	2,410,000,000	0	17,600,000,000
Trade with Germany	908	2,890,000,000	7,010,000,000	0	87,400,000,000
Geo-Strategc Interest					
UNGA voting with US	912	0.30	0.11	0.10	0.63
UNGA voting with Japan	912	0.73	0.06	0.49	0.88
UNGA voting with France	912	0.64	0.08	0.45	0.87
UNGA voting with UK	912	0.61	0.09	0.42	0.87
UNGA voting with Germany	912	0.69	0.09	0.47	0.92
UNSC Membership	905	0.10	0.30	0	1
Project Sectors					
Agriculture	915	0.06	0.23	0	1
Administration	915	0.43	0.50	0	1
Information&Communication	915	0.00	0.06	0	1
Education	915	0.04	0.20	0	1
Finance	915	0.11	0.32	0	1
Industry	915	0.13	0.33	0	1
Energy	915	0.04	0.20	0	1
Multisector	915	0.01	0.09	0	1
Transport	919	0.01	0.09	0	1
Social Services	915	0.06	0.24	0	1
Water	915	0.02	0.14	0	1

Table A II.2: Data Sources

Variable	Description	Source
Openness	Sum of imports and exports as share of GDP.	World Development Indicators, World Bank (2012c)
GDP p.c.	GDP per capita in constant 2000 USD.	World Development Indicators, World Bank (2012c)
Inflation	Inflation as annual % increase in consumer prices (CPI), transformed in the following: (CPI/100)/(1+(CPI/100)).	World Development Indicators, World Bank (2012c)
Current Account	The sum of net exports of goods, services, net income, and net current transfers as share of GDP.	World Development Indicators, World Bank (2012c)
Under IMF Program	Dummy coded 1 if country is under IMF program.	Dreher (2006); IMF annual reports
GATT/WTO Dummy	Coded as 1 beginning the year of joining the GATT/WTO, 0 otherwise.	WTO (2013a, 2013b)
RTA Dummy	Coded bilaterally for agreement partnering the USA, Japan and the EU. Coded as 1 if a regional trade agreement is in plaxce and 0 otherwise.	WTO (2013a)
Total Number of Conditions	Number of conditions in project *i* excluding trade conditions.	Development Action Database, World Bank (2012b)
Total Number of Trade Conditions	Number of conditions in project *i* grouped under "Trade and Integration" that include trade specific conditions.	Development Action Database, World Bank (2012b)
Number of Prior Trade Conditions	Sum of trade conditions in projects of country i until t-1.	Development Action Database, World Bank (2012b)
Legislative Constraints	Measure for political competitiveness in the legislature, ranges from 1 (no legislature) to 7 (largest party has less than 75% of seats).	Database of Political Institutions, Beck et al. (2001)
Legislative Elections	Dummy coded 1 in years of legislative elections.	Database of Political Institutions, Beck et al. (2001)
Bilateral Trade	Log of total trade of donor *i* with recipient *j*.	World Integrated Trade System, World Bank (2013)
UNGA voting	Share of recipient *i* voting in line with country *j* in the UN General Assembly.	Dreher and Sturm (2012)
UNSC	Dummy for being temporary member on the UN Security Council.	Dreher et al. (2009); www.un.org

CHAPTER III :

PRETENDING TO BE THE GOOD GUY – HOW TO INCREASE ODA INFLOWS WHILE ABUSING HUMAN RIGHTS

III.1. INTRODUCTION

Since the adoption of the Declaration of the Human Rights in 1948, numerous conventions focusing on different aspects of human rights have been approved by the members of the United Nations (UN). Although today a pool of widely accepted rules of human rights protection exists – 27 conventions, amendments and optional protocols are listed under the Human Rights Chapter in the United Nations Treaty Database – human rights abuses around the world continue to be reported on an almost daily basis. Apparently international commitments to human rights have not caused a corresponding increase in the protection of these rights.

Indeed, many studies have analyzed whether international human rights treaties (HRT) change the behavior of ratifying states – with an overall sobering result (e.g., Hathaway 2002; Hafner-Burton and Tsutsui 2007; Neumayer 2005). On the one hand, states with a strong civil society and a democratically accountable government show improvements in their respect for human rights after the ratification of international human rights conventions (Neumayer 2005). On the other hand, those states with oppressive governments – where a change in attitude would be most needed – fail to adjust their behavior (Hafner-Burton and Tsutsui 2007). This suggests that countries ratify these international laws without the intent or possibility of compliance.

Consequentially the question arises: Why do countries actually sign these conventions? Apparently, benefits must be connected with treaty ratification that convince countries to ratify even if their intrinsic motivation is low. One reason might be peer pressure and the threat of a loss of reputation by being one of the few who do not commit to a convention (Guzman 2002; Hill 2010). However it is questionable whether oppressive regimes are motivated by this sort of peer pressure or threat of reputation loss. Hathaway (2007) argues that apart from intrinsic motivation there are some collateral consequences that influence a country's decision to ratify HRTs. Examples are foreign trade, FDI and foreign aid. Especially in the context of the barely enforceable HRTs (Hafner-Burton 2005) the expectation of additional monetary benefits seems a valid argument for ratification.

Though the general relationship between human rights abuse and ODA has been analyzed in the literature,[52] the effect of human rights treaty ratification on ODA – which might be a strong

[52] For example on US aid allocation by Poe and Sirirangsi (1994), Apodaca and Stohl (1999) and Demirel-Pegg and Moskowitz (2009), on general bilateral and multilateral aid by Neumayer (2003a, 2003b), Carey (2007)

pecuniary incentive for ratification – has until recently been neglected in empirical studies.[53] In the following I am going to focus on this aspect and discuss two questions. First, do donors of the OECD's Development Assistance Committee (DAC) consider a country's ratification of international human rights treaties in their aid allocation decision? Second, is ratification of international HRTs a complement to or a substitute for actual respect for human rights at home? Though the first question is of interest as it analyzes the question why countries ratify international human rights treaties in general, the second question is even more important due to its high policy relevance. Empirical studies have shown that countries with low democratic standards do not usually comply with their international commitment to human rights (Neumayer 2005; Hafner-Burton and Tsutsui 2007). If treaty ratification is seen as a substitute for actual good behavior, DAC donors would risk rewarding those countries that have a low reputation of human rights protection for their most likely purported commitment to international law. Consequently, countries that pretend to comply would benefit more than countries that in fact have a better human rights record. In so doing, donors might achieve exactly the opposite of what they intended and support oppressive regimes that are not intending to make a real change.

The results of my study (presented in section III.5) suggest that countries are actually rewarded for their international commitment to human rights. Ratification of the two most central conventions, the *International Convention on Civil and Political Rights* and the *Convention Against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment* seems to matter most. The ratification of one additional convention of this group is rewarded with an increase in ODA of 11 – 19%. Further, I show that international commitment is most probably seen as a substitute to actual good behavior. Those countries with the highest level of human rights abuses benefit most from ratifying international treaties. Countries in a situation where political terror, including torture, murder and disappearances are a part of daily life can increase their ODA by around 18.5% on average by ratifying an additional core human rights treaty. When analyzing the largest DAC donors and the so-called like-minded donors separately, their behavior appears to be very similar. Germany, the United Kingdom, the Netherlands and Sweden clearly follow the substitution pattern. For Denmark and France the behavior seems to be similar however the results are not statistically significant. Only the United States and Japan differ in their behavior. The results suggest that ratification of international human rights treaties is an unimportant factor for the United States in their allocation decision independently of the domestic level of political terror. Japan, on the other hand, values international commitment but only as a complement to factual domestic respect for human rights.

The remainder of the study is organized as follows. Section III.2 discusses the literature on commitment to human rights treaties and how foreign aid allocation is related to respect for human

and Nielsen (2013), and on the relationship between resolutions against human rights violators and aid, Lebovic and Voeten (2007).

[53] I am aware of only one recently published study by Magesan (2013) to which I refer below. There is also some ongoing research by Nielsen and Simmons (2012) and Hawkins and Goodliffe (2012).

rights. Section III.3 presents the estimation strategy and section III.4 the data used. In section III.5, I present and discuss the findings of my analysis. Finally section III.6 provides a conclusion and discusses the policy implications drawn from the presented findings.

III.2. HUMAN RIGHTS COMMITMENT AND AID

Since the end of the Second World War the number of international conventions on human rights together with the number of states ratifying them has steadily increased. In the UN treaty database[54] a total of sixteen conventions are listed which are further extended by additional protocols and amendments. The rights covered within these treaties range from the prevention of genocide and the rights for different groups such as women, children or migrants to the general protection and provision of civil and political rights. After a treaty is adopted by the UN General Assembly, member states have the option to sign and then ratify it. In general, signing a treaty is a non-binding action that shows a willingness to commit to the agreed standards in the future. For a convention to become legally binding, a state has to ratify the convention. The same degree of formal commitment involves accession or succession to a treaty.[55] In the following I will only use the term ratification, referring to ratification, succession and accession alike. Though ratification signals a legally binding commitment to a treaty, the enforcement measures are weak with regards to UN human rights conventions (Hafner-Burton 2005). Usually a supervisory body is established that monitors the implementation of the respective convention based on regular implementation reports of the ratifying countries.[56] In addition, individuals can report misbehavior of their government to the supervisory body if the government does not comply with a ratified convention. However there is no sanctioning mechanism to enforce the implementation.[57]

This lack of enforcement might be one reason why, despite these numerous treaties, human rights abuses are still regularly reported. The persistent occurrence of human rights violations suggests that either international commitment to human rights has not changed the behavior of committing governments or that those countries that abuse human rights simply prefer to not ratify these treaties. A look at the list of committing countries clearly shows that the latter does not hold. The *Convention Against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment* (CAT), for example, was ratified by 46 countries who had at the time of ratification a political terror score of 3 or worse (Figure III.1) which means that at least "…extensive political imprisonment, or a recent history of such imprisonment […] Execution or other political murders and brutality may be common.

[54] I will focus in my study only on the conventions adopted by the United Nations as they can be ratified by all UN members alike.

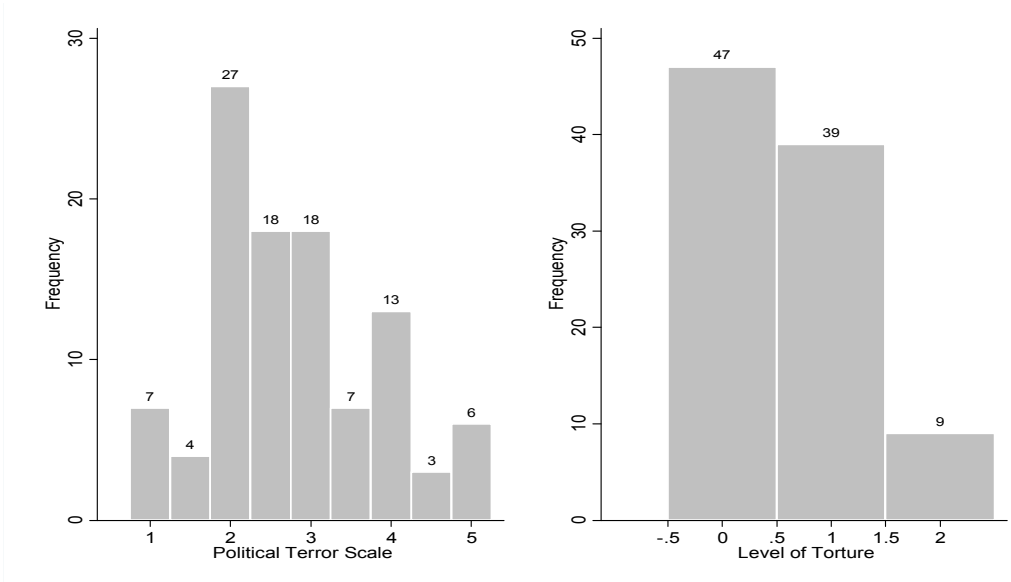
[55] Accession is the ratification after the convention has already entered into force and succession applies to countries that emanate from another state that has ratified the treaty previously.

[56] See information on the tasks of the human rights treaty bodies provided by the UN Office of the High Commissioner for Human Rights (http://www.ohchr.org/EN/HRBodies/HRTD/Pages/TBStrengthening.aspx).

[57] There is a debate in political and law science whether sanctions are needed with respect to international human right laws because they lack inherent material incentives for the implementing state. The counter-argument is that sanctions and thus coercion of these norms would derogate the actual willingness to commit to human rights and the implicit change in belief of oppressive regimes (see Hafner-Burton (2005) for an overview).

Unlimited detention, with or without a trial, for political views is accepted." (Gibney et al. 2013). For 47 countries that ratified the CAT, torture was practiced frequently at the time of ratification (Figure III.1). Vreeland (2008) also shows that among dictators, those who use torture are actually more likely to join the CAT than those who do not use torture. He argues that torture is more common in multi-party systems and governments in these systems need to make some concession to their opponents, where the ratification of the CAT might be a less binding one. Accordingly the probability to sign, accede or ratify the *International Convention on Civil and Political Rights* (ICCPR) and/or the CAT is almost the same between human rights repressors and protectors (Hafner-Burton and Tsutsui 2007). These findings suggest that the missing improvement in human rights protection is not due to an adverse selection to treaty ratification but due to a lack of compliance with the content of these rules.

Figure III.1: Political Terror Score and Torture Occurrence at Year of CAT Ratification



Political and law scientists have intensively studied the questions of who ratifies HRTs and what determines their compliance (e.g., Hathaway 2002; 2007; Powell and Staton 2009; Conrad 2013). This literature suggests that formal commitment to international conventions does not necessarily change a state's behavior. In contrast, countries ratifying international human rights conventions often show even lower compliance with the respective rights than countries that do not ratify (Hathaway 2002). However the changes in governments' behavior are not homogenous between different HRTs. According to Hill (2010), ratification has a positive impact on the respect for women's rights in the case of the *Convention on the Elimination of all Forms of Discrimination Against Women,* while countries ratifying the CAT are even more likely to use torture and deteriorate their behavior.

The decision to commit to an international treaty depends on both the will of the executives as well as the power of civil society and the legislatures at home. In the case countries face a strong legislative that does not share their view on protecting human rights, the commitment to an international convention can be used as an instrument to force the legislative to introduce the respective laws (Hathaway 2007). On the other hand if the executives do not want to comply with

international standards, a powerful legislature could prevent the executives from ratifying international treaties (Conrad 2013). This also applies if executives face a strong civil society at home who might hold them accountable for their international commitments (Neumayer 2005; Hafner-Burton and Tsutsui 2005). Consequently, executives that are unsure about their ability to comply with the international commitment will not ratify a convention especially if they are confronted with a strong civil society or legislatures at home. On the other hand, if the pressure at home is not intense, the executives can commit to the treaty without fearing enforcement pressure due to the international community lacking a real enforcement mechanism (as mentioned previously). Yet, Hathaway's approach does not explain why we observe countries that, despite their bad record of human rights violations, ratify UN conventions and do not subsequently change their behavior. Hathaway mentions some further considerations such as FDI, trade and aid, but she does not empirically test whether these factors have an influence on treaty ratification.

In fact, foreign aid might be a strong argument in a developing country's decision of whether or not to ratify HRTs. Many donors claim that human rights protection is one aspect they consider in their aid allocation decision and several studies have analyzed to what extent political, civil and human rights influence this bilateral aid allocation decision (e.g., Poe and Sirirangsi 1994; Svensson 1999; Neumayer 2003a; 2003b). Most of them conclude that respect for these rights is more important for the general decision of whether or not to give aid to a certain country ("gatekeeping stage") and less so for the question of how much aid a country receives. Neumayer (2003a) finds the role of human rights in total bi- and multilateral aid allocation to be relatively minor compared to other indicators like colonial past or need. Nevertheless, human rights seem to play an important role in the allocation decision for some donors, e.g., Canada, Denmark, Norway and Sweden (Svensson 1999). In a recent study, Nielsen (2013) finds that the effect of human rights violations on aid decisions might be more complex than previously shown. He argues that the importance of human rights for aid allocation depends on the recipient's political importance to the donor as well as on the importance of human rights violations to the general public. Consequently, political allies are less likely to be punished for human rights violations than non-allies. Additionally, donors react to external pressure – such as media coverage of human rights abuses by a certain regime – and reduce aid allocation to the repressive country (Nielsen 2013).

Given that donors take the actual human rights situation into account it is likely that they also consider HRT ratification and reward countries that commit to these treaties. As treaty ratification can be monitored easily it might even be a preferred indicator for the aid bureaucracy. Donors might take participation in HRTs as a reliable signal for the willingness of countries to improve their human rights behavior and reward the governments for changing their perception of this issue. Looking from a political economy perspective, the treaty ratification indicator could also be useful in another way. Special political or commercial interests in countries with a bad human rights reputation make it difficult for donors to defend aid payments towards its citizens and especially domestic civil society

organizations. However if the country has signed important human rights treaties, the donor can argue that the recipient government is at least willing to change its behavior and this willingness should be rewarded. For the recipient country, on the other hand, the economic benefit of increased bilateral aid is a reasonable incentive to ratify HRTs. Given that committing to these international treaties comes at low costs, ratifying HRTs is an easy way for a government to improve its image. This is of special interest for governments that are known as having a history of human rights violations. Possibly, the donor perceives ratification even as a promise for behavioral change and values the treaty ratification more than the actual behavior. In this case HRT ratification serves as a substitute for actual good behavior.

In the following, I will analyze weather i) DAC donors give more aid to countries that show a higher commitment in terms of international HRT ratification and ii) whether HRT ratification is in the eyes of the donors a substitute or a complement to a country's actual human rights behavior. Treaty ratification would be a complement if donors reward it in cases where the country already shows a certain respect for human rights at home. HRT ratification would be seen as a substitute when donors reward countries for their international commitment despite a situation of frequent human rights abuses at home.

III.3. ESTIMATION STRATEGY

My estimation strategy is a panel fixed-effects model covering the years 1977 – 2010 and up to 136 countries. I use a standard Ordinary Least Squares (OLS) estimation.[58] The list of countries are those that are both an Official Development Assistance (ODA) eligible country, as defined by the OECD DAC's Part I List,[59] and a member of the UN and therefore able to ratify HRTs. The estimation model to evaluate the effect of HRT ratification on ODA is:

(1) $Log(ODA)_{i,t} = \beta_0 + \beta_1 HRT_{i,t-1} + \beta_2 HR_{i,t-1} + \beta_3 X_{i,t-1} + \gamma_t + \delta_i + \varepsilon_{i,t}.$

All control variables relating to country i, treaty ratification (HRT), the recipient country's human rights situation at home (HR) and a set of additional control variables (X), are lagged by one period to account for the time needed to acquire information that can be used in aid allocation decisions.[60] Country (δ_i) and year fixed effects (γ_t) are included to control for time-invariant country characteristics and time-specific effects that affect all recipients in one year, e.g., a general decrease in aid commitments during times of economic crisis.

The monetary incentive for developing countries to ratify human rights treaties has been neglected in the literature so far. To the best of my knowledge, only one study by Magesan (2013)

[58] The results are robust to using the Poisson Pseudo-Maximum-Likelihood estimator.

[59] The DAC list contains all countries that are eligible for official development assistance along the DAC criteria. Eligible are all low and middle income countries, except G8 members, EU members, and countries with a firm date for entry into the EU.

[60] As a sensitivity analysis, three year averages have been used, following Neumayer (2003a). The results are robust to this change.

investigates this question.[61] However, Magesan uses aid disbursements as the dependent variable and thereby disregards two possible problems. First, disbursements depend not only on the situation in the recipient country at time t or t-1 but also on previous commitment decisions. It is therefore difficult to identify the right timing of the control variables to explain the disbursement decision. The second possible disadvantage is reverse causality. It is imaginable that the ODA disbursement is conditional on ratifying certain international human rights treaties. I circumvent these problems by using aid commitments and additionally test the robustness of my results by instrumenting treaty ratification. A second major contribution of my study is the investigation of the relationship between ratification of HRTs, domestic respect for human rights and aid flows as I will discuss below.

In a first step I will analyze how treaty ratification matters for DAC donors' aid allocation decisions. Based on this analysis I want to focus on the question whether rulers in developing countries can use these international treaties as a supplement for real respect for human rights. This would suggest that countries with a bad reputation in terms of human rights protection at home can "polish" their image by ratifying HRTs and thereby increase their aid inflows. The alternative would be that HRT ratification is a complement to actual behavior and only matters if a recipient also keeps a certain standard of actual human rights protection. This question is of high policy relevance as previous studies have shown that governments with a high level of political terror do not change their behavior following ratification of HRTs. Treaty ratification as a substitute for actual "good" behavior would imply that donors support these regimes which undermines donors' stated intent to improve the governance in recipient countries. To examine this question I will use an interaction between the treaty ratification measure and the actual situation of human rights protection:

$$(2)\quad Log(ODA)_{i,t} = \beta_0 + \beta_1 HRT_{i,t-1} + \beta_2 HR_{i,t-1} + \beta_3\, HRT_{i,t-1} * HR_{i,t-1} + \beta_4 X_{i,t-1} + \gamma_t + \delta_i + \varepsilon_{i,t}.$$

Empirical studies do not find much evidence for selectivity of bilateral aid donors with respect to institutional settings (e.g., Dollar and Levin 2006). Accordingly, if donors do not take general institutional changes into account in their allocation decision, the risk of an omitted variable bias due to some institutional change that simultaneously influences both the decision to commit to international HRTs and the aid decision is low. Further, I reduce the risk of reverse causality in both models by the choice of the dependent variable, as aid commitments are less likely to be conditional on certain behavior like ratification of HRTs than disbursements. Nevertheless I will show the robustness of my results to the application of an IV regression to further address potential endogeneity. For this purpose I will instrument the ratification of HRTs using a spatial lag variable that weights the ratification behavior of all other countries by their distance to the respective recipient (Neumayer and Plümper 2010) as well as a country's ratifying behavior with respect to a different but comparable set

[61] Magesan finds evidence that DAC aid increases after a country commits to international HRTs. As his group of human rights treaties differs from the one I analyze and he further measures treaty ratification as the behavioral distance between a country *i*'s ratification behavior and the distance weighted behavior of all countries except *i*. Our specifications therefore differ substantially which is why I do not use his set-up as a baseline.

of treaties. The first instrument assumes that neighboring countries' ratification behavior affects the behavior of recipient *i*. This assumption is based on the theory of Elkins and Simmons (2005), among others, and empirical evidence that shows governments are influenced in their decision making by the behavior of neighboring states. This finding holds true for several different types of government decisions. Examples include the adoption of economic reforms (Gassebner et al. 2011) or human trafficking policies (Cho et al. 2013). This spatial effect is arguably exogenous to the decision of aid commitments to country *i* as country i's ODA should not depend on the behavior of other countries.[62] The second instrument I use is a country's ratification of a set of six treaties listed under the "penal matters" chapter in the UN treaties database. These treaties include, for example, the *Supplementary Convention on the Abolition of Slavery* and the *Convention on the Safety of United Nations and Associated Personnel*.[63] Treaties in this chapter also cover security aspects and their content is therefore to a certain extent similar to the treaties in the human rights chapter. Presumably a country's ratification behavior of these two chapters is alike. On the other hand, these treaties cover more abstract security aspects and not specific personal rights, with the exception of the UN personnel's safety. It is therefore unlikely that donors are equally sensitive to the ratification of these treaties with respect to the HRTs. This is supported by the lack of these treaties' explanatory power for the dependent variable when included directly in the ODA estimation.

III.4. DATA

The dependent variable I use is DAC donors' total aid commitment in year *t* to recipient *i* in logarithms.[64] This information is provided by the OECD's International Development Statistics. Given that the total size of ODA commitments is the outcome variable it is important to control for the size of the recipient country by including total population (in logs) as a control variable. Following the previous literature on aid allocation, I include GDP per capita (in logs) to measure the recipient's need. This measure is highly correlated with other social needs measures like child mortality or literacy and has the advantage of being more widely available compared to these measures (Neumayer 2003a). In addition, given that the level of democracy and other state characteristics are arguably good predictors of the probability that a country will ratify human rights treaties (Hathaway 2007) and donor countries

[62] One could argue that ODA allocation might be regionally clustered. In this case it is possible that aid to country *i* depends on the ratifying behavior of other countries in the region. If other countries receive more aid because they ratify many HRTs, the aid to country *i* would decrease if there is a preset budget for the region. In this case I would underestimate the effect of treaty commitments. However it is questionable that a reduction (increase) of aid to several countries within one region automatically leads to an increase (reduction) of aid to other countries of the region in order to keep the regional budget stable irrespective of the usability of new funds in these countries. Furthermore the distance-weighted measure correctly mirrors a preset geographical region by the donor only for those countries in the center of this preset region. For a country at the boarder of a donor set region, the behavior of neighboring countries that belong to a different donor set region would have an important influence on its behavior. However, as they belong to a different donor region their behavior does not influence the regionally fixed aid budget.

[63] An overview of the included treaties can be found in the appendix (Table A III.6).

[64] The log is taken after adding 1 to the commitments in order to keep observations where the ODA commitments are zero.

claim to reward democratic behavior, it is important to control for democracy. Otherwise, treaty ratification might capture effects that reflect the institutional quality of the recipient. I use Polity IV's polity2 measure (Marshall and Jaggers 2003) imputed with freedom house's civil liberties measure (Teorell et al. 2011) to control for the political situation in the recipient country. The imputed measure has more observations than the original polity2 data and, according to Hadenius and Teorell (2005), is more reliable than the original polity2 index. To control for the donor's geo-strategic interests, the recipient's voting behavior in the UN General Assembly (UNGA) is included. I use voting in line with the G5[65] to proxy general alliance with the DAC countries as the G5 are the largest DAC donors. It is likely that countries that vote in line with the major bilateral donors are also more likely to sign international HRTs due to similar human rights protection preferences. The effect of UNGA voting and general political alliance could in this case be attributed to ratification when voting behavior is not controlled for.

Following the convention in the literature I take two alternative measures of human rights practices: the political terror scale (Gibney et al. 2013) and the physical integrity index (Cingranelli and Richards 1999). The political terror scale measures the violation of physical integrity rights in different countries around the world. The rights covered in this measure are those basic human rights that are enforceable by the government and do not depend on the general level of development (Neumayer 2003b). Both Amnesty International and the US State Department provide this index. I use the average measure of both indices combined.[66] The political terror scale ranges from 1 to 5 with 5 representing the worst form of political terror where "*Terror has expanded to the whole population. The leaders of these societies place no limits on the means or thoroughness."* (Gibney et al. 2013). The alternative measure, the physical integrity index provided by Cingranelli and Richards (1999) is a combined measure reflecting a country's situation with regards to the use of torture, extrajudicial killing, political imprisonment and disappearance. The indicator ranges from 0 to 8, where a score of 8 indicates highest respect for physical integrity. These measures of actual respect for human rights allow me to investigate the question whether human rights treaties are a substitute or complement to actual respect for human rights. Further, they account for a possibly different ratification behavior between human rights abusers and protectors.

Finally the main variable of interest is the ratification of HRTs. The commitment to international human rights treaties is measured with a simple count of the number of UN HRTs that a country has signed. The United Nations' treaty collection lists 27 conventions, amendments and optional protocols under the chapter *human rights*.[67] The first crude measure codes the ratification of

[65] Voting in line with the G5 is measured as the average of voting in line with the United States, Japan, Germany, the United Kingdom and France based on the data provided by Dreher and Sturm (2012).

[66] The results are robust to using the measure provided by the US State Department or by Amnesty International respectively.

[67] See the UN Treaties Database, http://treaties.un.org/Pages/Treaties.aspx?id=4&subid=A&lang=en.

all of these elements (*human rights treaties*).[68] However as this list includes treaties which are probably not equally important with respect to basic human rights, e.g., the International Convention Against Apartheid in Sports versus the International Covenant on Civil and Political Rights. In a second step I reduce the list of instruments therefore to the nine core treaties (*core treaties*) according to the Office of the High Commissioner for Human Rights.[69] As a third indicator, the list of human rights treaties is further reduced to the two most important human rights measures according to the vast literature on human rights (see, e.g., Hathaway 2002; Hafner-Burton and Tsutsui 2007), the *International Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment* (*CAT*) and the *International Covenant on Civil and Political Rights (ICCPR)*. I thus restrict my choice of human rights treaties to only those that are internationally recognized as being so.[70] I use a simple count of the number of treaties ratified as I assume that these treaties have an absolute value to donor countries. This approach differs from the one of the existing study by Magesan (2013) that uses the difference between the number of treaties ratified by country *i* and the distance-weighted average ratification of all countries excluding country *i*.

III.5. RESULTS

Table III.1 shows the results for the basic fixed-effects regression. The mostly statistically significant and positive coefficient of polity suggests that more democratic countries, on average, receive more aid. Accordingly, countries that can improve their polity score by one unit receive on average around 4% more ODA. As the political terror scale and the physical integrity index both measure human rights abuses in the recipient country, they are included separately. Throughout all models both measures are statistically significant at least at the five percent level. This suggests that the DAC donors consider the human rights situation in the recipient country when allocating their aid. While the literature so far has identified only a weak effect of human rights on the allocation of aid (Neumayer 2003a; 2003b) or an influence depending on the political importance of the recipient country towards the donor (Nielsen 2013) my results show a stable and quantitatively important effect. An increase of political terror by one unit, which is equivalent to one standard deviation in the sample, reduces ODA commitments on average by more than 9% which equals around 45.5 million USD (which is

[68] As many ratifications took place at the end of the year, as a robustness check I coded conventions as having being ratified in year t only if it was done so before July of the respective year.

[69] These are the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), the Convention on the Rights of the Child (CRC), the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (ICRMW), the International Convention for the Protection of All Persons from Enforced Disappearance (CPED) and the Convention on the Rights of Persons with Disabilities (CRPD). See http://www.ohchr.org/EN/ProfessionalInterest/Pages/CoreInstruments.aspx.

[70] In contrast, Magesan (2013) also includes some treaties that belong to other categories like cultural matters. I prefer staying strictly to this international nomenclature so as to avoid being arbitrary with regards to the choice of the analyzed treaties.

approximately equal to the total ODA to Costa Rica in 2009). This is an economically relevant size. On the other hand a country that manages to increase its respect for physical integrity rights by two units, which is again about equivalent to one standard deviation, receives an increase in committed aid by almost 7% on average (almost 31 million USD).

The coefficients for treaty ratification indicate how DAC donors react towards normative or, to use a more provocative phrase, *symbolic* respect for human rights. Models two and three include the most general measure for human rights treaties, namely all elements included under the chapter "Human Rights" in the UN treaty collection database. In both specifications the coefficient is not significant at conventional levels. However the narrower measure, which only captures treaties classified as core treaties with regards to respect for human rights, is statistically significant at the five percent level in model four. This suggests that ratifying an additional core treaty leads, on average, to a 6% rise in ODA.

In model five, where the physical integrity index is used instead, the measure is again not significant at conventional levels. However data for the physical integrity index are only available for a shorter period (since 1981), therefore the number of observations reduces substantially. The narrowest measure, capturing only the ratification of the ICCPR and the CAT, is significant in both models and shows the largest coefficient compared to the measures analyzed before. Further, the indicator for all other core treaties except ICCPR and CAT is not significant at conventional levels. It seems that these two conventions are indeed the most important for DAC donors. Ratification of one of these treaties increases the average ODA commitment by 11 – 19% which is equivalent to an increase in ODA of 58 – 97 million USD. Given that ratifying these treaties comes at low real costs, as their implementation is not enforced, the benefit a country can gain by ratification is substantial.

Interestingly, the two measures for the domestic human rights situation stay significant even after the inclusion of the treaty measures. This shows that both factors are of importance for the donor's decision. Therefore in the second step I analyze the relationship between these two measures asking the question whether the importance of international commitment depends on the actual respect for human rights at home, i.e., whether international commitment is a complement or a substitute to actual respect for human rights. Donors might assume that governments change their behavior and want to reward countries who signal their willingness to improve human rights standards by treaty ratification. Given the sobering empirical evidence however it is most likely that this wish, at least in non-democratic countries with a record of human rights violation, does not come true. If the aim is to reward human rights protection, treaty ratification should only be rewarded when it complements a state's actual behavior.

Table III.1: Basic Fixed-effects Specification, 1977-2010, OLS

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
GDP p.c. $_{t-1}$	0.011	[0.971]	-0.228	[0.216]	0.011	[0.971]	-0.263	[0.163]	0.014	[0.964]	-0.252	[0.175]	0.011	[0.972]	-0.246	[0.179]
Population $_{t-1}$	0.176	[0.644]	-0.344	[0.516]	0.173	[0.647]	-0.240	[0.652]	0.169	[0.653]	-0.263	[0.619]	0.144	[0.699]	-0.328	[0.522]
Polity $_{t-1}$	0.032	[0.113]	0.052***	[0.007]	0.026	[0.211]	0.050***	[0.006]	0.023	[0.272]	0.048***	[0.006]	0.021	[0.294]	0.043**	[0.012]
UNGA voting $_{t-1}$	3.293**	[0.011]	3.237***	[0.008]	3.076**	[0.012]	2.661**	[0.017]	3.149**	[0.011]	2.720**	[0.017]	3.115**	[0.014]	2.633**	[0.021]
Political Terror $_{t-1}$	-0.091***	[0.008]			-0.091***	[0.008]			-0.098***	[0.005]			-0.100***	[0.004]		
Physical Integrity $_{t-1}$			0.029*	[0.065]			0.032**	[0.038]			0.034**	[0.030]			0.034**	[0.026]
Human Rights Treaties $_{t-1}$					0.035	[0.108]	0.024	[0.368]								
Core Treaties $_{t-1}$									0.067*	[0.062]	0.046	[0.280]				
ICCPR & CAT $_{t-1}$													0.116*	[0.058]	0.193***	[0.001]
Core Treaties excl. ICCPR & CAT $_{t-1}$													0.035	[0.591]	-0.050	[0.418]
Constant	13.703**	[0.018]	23.788***	[0.007]	13.843**	[0.016]	22.777**	[0.011]	13.855**	[0.015]	23.020**	[0.010]	14.303**	[0.014]	24.124***	[0.005]
Observations	3,631		3,001		3,631		2,913		3,631		2,913		3,631		2,913	
Countries	136		142		136		134		136		134		136		134	
R-squared	0.057		0.051		0.060		0.058		0.061		0.058		0.062		0.064	

Notes: The dependent variable is Log Total ODA Commitments by all DAC Donors in constant USD. Country fixed effects and year dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table III.2: Interaction of Treaty Ratification with Human Rights Respect, 1977-2010, OLS

	(1)		(2)		(3)		(4)		(5)		(6)	
GDP p.c. $_{t-1}$	0.044	[0.883]	-0.292	[0.107]	0.049	[0.870]	-0.259	[0.139]	0.038	[0.901]	-0.243	[0.171]
Population $_{t-1}$	0.017	[0.962]	-0.342	[0.485]	0.034	[0.925]	-0.296	[0.545]	-0.017	[0.964]	-0.339	[0.496]
Polity $_{t-1}$	0.031	[0.104]	0.055***	[0.003]	0.027	[0.167]	0.051***	[0.003]	0.026	[0.158]	0.045**	[0.010]
UNGA voting $_{t-1}$	3.412***	[0.006]	2.892**	[0.010]	3.427***	[0.007]	2.809**	[0.012]	3.335***	[0.010]	2.670**	[0.018]
Political Terror $_{t-1}$	-0.395***	[0.001]			-0.409***	[0.002]			-0.264***	[0.001]		
Physical Integrity $_{t-1}$			0.150***	[0.002]			0.153***	[0.005]			0.086***	[0.007]
Human Rights Treaties $_{t-1}$	-0.104**	[0.010]	0.108**	[0.030]								
Human Rights Treaties $_{t-1}$ * Political Terror $_{t-1}$	0.053***	[0.003]										
Human Rights Treaties $_{t-1}$ * Physical Integrity $_{t-1}$			-0.019***	[0.006]								
Core Treaties $_{t-1}$					-0.159**	[0.026]	0.172**	[0.037]				
Core Treaties $_{t-1}$ * Political Terror $_{t-1}$					0.083***	[0.008]						
Core Treaties $_{t-1}$ * Physical Integrity $_{t-1}$							-0.029**	[0.011]				
ICCPR & CAT $_{t-1}$									-0.346**	[0.047]	0.367**	[0.011]
ICCPR & CAT $_{t-1}$ * Political Terror $_{t-1}$									0.177***	[0.008]		
ICCPR & CAT $_{t-1}$ * Physical Integrity $_{t-1}$											-0.050**	[0.029]
Constant	16.517***	[0.002]	23.867***	[0.004]	16.265***	[0.002]	22.965***	[0.005]	16.837***	[0.002]	23.955***	[0.004]
Observations	3,574		2,862		3,574		2,941		3,591		2,951	
Countries	133		131		133		138		133		138	
R-squared	0.088		0.077		0.086		0.073		0.076		0.069	

Notes: The dependent variable is Log Total ODA Commitments by all DAC Donors in constant USD. Country fixed effects and year dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

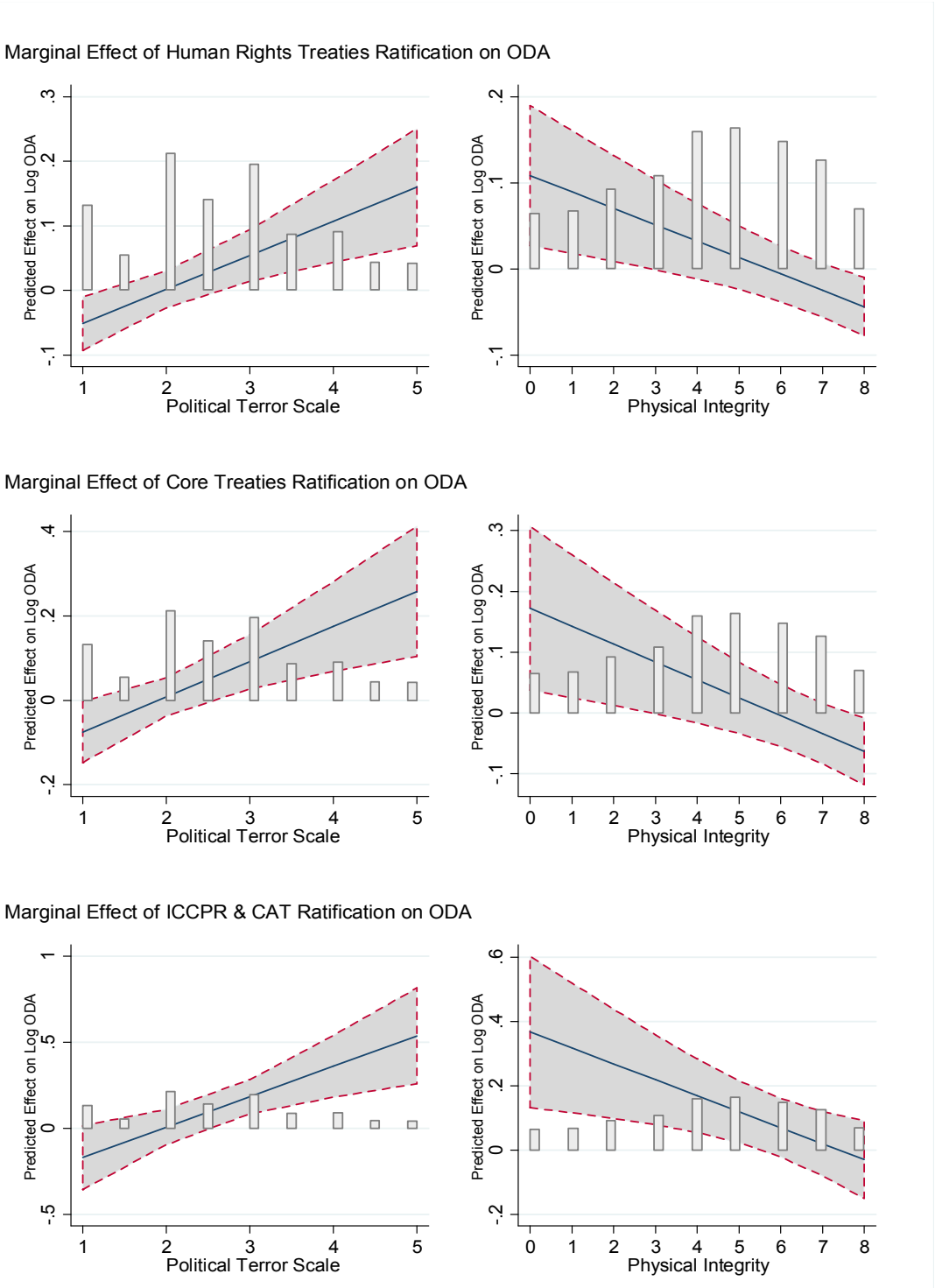
Table III.2 shows the results for the interaction of treaty ratification with the two measures of respect for and abuse of human rights respectively. For the political terror scale, an increase signifies an increase in human rights abuse while an increase in the physical integrity measure means that human rights are less abused. The results show two important things. First, the interaction is in almost all models statistically significant at least at the five percent level. In terms of ODA allocation decisions, this indicates the existence of an interaction of treaty ratification with the extent of the actual respect for human rights. Second, the signs of the coefficients indicate that treaty ratification has a stronger positive effect on ODA allocation if the actual protection of human rights in the recipient country is lower. This becomes clearer when we examine the marginal effect of treaty ratification at different levels of political terror and physical integrity graphically in Figures III.2.

For lower values of the political terror scale – situations where the government respects human rights – the ratification of human rights treaties has no additional effect on ODA commitments. However once the threshold of three in the political terror scale is reached, which corresponds to a situation where extensive political imprisonment occurs and "[…] execution or other political murders and brutality may be common […]" (Gibney et al. 2013), the ratification of human rights treaties increases ODA commitments. This pattern indicates a substitution effect.

Those countries with high political terror benefit from increased ODA by ratifying international treaties. The histogram included in the figures shows that it is not only a small number of countries that have this high political terror scale indicating that the result refers to a relevant share of countries. While countries with a terror scale of three cannot increase their aid with an average number of treaty ratifications (around six treaties/protocols), for the same amount of ratified treaties countries with a terror scale of five receive on average 26% more ODA. The effect reaches 54% for countries with a terror scale of five in the case of the ICCPR & CAT treaties. The same pattern holds true for the physical integrity index. As long as a country is in the lower third of the index, it receives increased international commitments of ODA. But as soon as the country has reached a certain level of protection of physical integrity rights, the effect of HRT ratification on ODA commitments becomes insignificant.

As discussed before, the treaty ratification measures might be endogenous. I therefore instrument treaty ratification with the distance weighted average ratification of the respective treaty group for all countries except country *i* and the number of ratified treaties with similar content. Table III.3 shows the results for the instrumented regression.

Figure III.2: Marginal Effect of Treaties Ratification on ODA at Different Levels of Political Terror and Physical Integrity



Notes: Plots are based on results presented in Table III.2. The dashed lines indicate the 90% confidence interval. The histogram shows the distribution of political terror (left) and physical integrity (right) as fraction of 1.

Table III.3: Interaction of Treaty Ratification with Human Rights Respect, 1977-2010, 2SLS, Marginal Effects

	(1)	(2)	(3)	(4)	(5)	(6)
GDP p.c. $_{t-1}$	0.057 [0.843]	-0.324* [0.083]	-0.206 [0.260]	-0.242 [0.175]	0.075 [0.811]	-0.195 [0.289]
Population $_{t-1}$	-0.054 [0.886]	-0.390 [0.433]	-0.525 [0.287]	-0.374 [0.425]	-0.319 [0.443]	-0.601 [0.194]
Polity $_{t-1}$	0.023 [0.256]	0.044** [0.026]	0.040** [0.050]	0.040** [0.045]	0.012 [0.631]	0.020 [0.408]
UNGA voting $_{t-1}$	3.197** [0.012]	2.575** [0.028]	2.524** [0.019]	2.734** [0.013]	3.302** [0.012]	2.361** [0.040]
Political Terror $_{t-1}$	-0.524*** [0.000]		-0.568*** [0.000]		-0.518*** [0.001]	
Physical Integrity $_{t-1}$		0.225*** [0.000]		0.251*** [0.000]		0.222*** [0.000]
Human Rights Treaties $_{t-1}$	-0.103 [0.145]	0.259*** [0.000]				
Human Rights Treaties $_{t-1}$ * Political Terror $_{t-1}$	0.075*** [0.000]					
Human Rights Treaties $_{t-1}$ * Physical Integrity $_{t-1}$		-0.031*** [0.000]				
Core Treaties $_{t-1}$			-0.132 [0.294]	0.396*** [0.000]		
Core Treaties $_{t-1}$ * Political Terror $_{t-1}$			0.118*** [0.000]			
Core Treaties $_{t-1}$ * Physical Integrity $_{t-1}$				-0.053*** [0.000]		
ICCPR & CAT $_{t-1}$					-0.760* [0.091]	1.341*** [0.000]
ICCPR & CAT $_{t-1}$ * Political Terror $_{t-1}$					0.429*** [0.003]	
ICCPR & CAT $_{t-1}$ * Physical Integrity $_{t-1}$						-0.173*** [0.000]
Observations	3,627	2,909	2,909	2,909	3,627	2,909
Countries	134	132	132	132	134	132
Partial R^2	0.1098; 0.2991	0.0973; 0.3504	0.0862; 0.2123	0.0841; 0.2682	0.0884; 0.1734	0.0616; 0.1328
F-Test First Stage	0.000	0.000	0.000	0.000	0.000	0.000
Hansen (p-value)	0.666	0.823	0.293	0.360	0.783	0.835
Kleiberg-Paap F-Statistic	17.14	11.49	10.44	10.45	9.770	5.042

Notes: The dependent variable is Log Total ODA Commitments by all DAC Donors in constant USD. Country fixed effects and year dummies are included. All treaty ratification measures are instrumented by a distance weighted spatial measure of treaty ratification of all other countries and the ratification of treaties under the "penalty matters" chapter of the UN treaty database. The first partial R^2 value refers to the treaty measures instrument and the second to the interaction-instrument. The first stage F-Test controls for the power of the instruments in the first stage. The Hansen (p-value) refers to the validity of the instruments which cannot be rejected. The Kleiberg-Paap F-Statistic rejects the hypothesis of underidentification of the endogenous variables. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

The reported F-Statistic for the first stage shows the explanatory power of the used instruments. Further the Kleibergen-Paap rank test rejects the null hypothesis of underidentification meaning that the instruments would not be correlated with the endogenous regressors and therefore lack explanatory power. Additionally, the Hansen J statistic does not reject the null hypothesis that the instruments are uncorrelated with the error term, which tests their exogeneity with respect to the dependent variable, i.e., their validity. The results of the previous regressions are robust to the instrumentation and the effect of international commitment at different levels of human rights protection at home becomes stronger.

As robustness check, I test a placebo regression with HRT commitment in $t+1$ as explanatory variable. Neither of the HRT measures with this timing have a significant effect on ODA allocation. Yearly aid commitments might be volatile as negotiations between the donor and the recipient do not always occur every year. Following Neumayer (2003b) I re-run the previous regressions using three-year averages of all the variables. Again, the results show that ratification of HRTs is rewarded and more so in countries with a bad record of human rights abuses.

It seems plausible that bureaucrats in bilateral aid agencies would make allocation decisions in such a way. Countries with low political terror already show a respect to human rights while those with a bad record have the potential to improve their behavior substantially. However, given the empirical evidence that international commitment to human rights seldom leads to real compliance in countries with low democratic standards and a weak civil society, it is a questionable choice to reward those countries for their promises to change. The situation would be different if the increase in aid was targeted to support the country's implementation of the international commitment. This ODA could potentially help to improve their domestic human rights situation in the medium term. Aid for this aim would most likely be directed to the government and the civil society.

To test whether this part of ODA causes the observed increase, I replicate the previous regressions with a new dependent variable that covers only this specific aid.[71] As I investigate only one part of ODA, the number of zeros in the dependent variable rises. This causes a skewed distribution and OLS might no longer be the most efficient estimator. I therefore use the Poisson Pseudo-Maximum-Likelihood (PPML) method, which is known for its good performance for

[71] Sectoral data are only available since 1995; therefore the number of observations is substantially lower.

Table III.4: Government and Civil Society Commitments, 1995 - 2010, PPML, Marginal Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GDP p.c. $_{t-1}$	-0.368* [0.086]	-0.374* [0.087]	-0.567** [0.028]	-0.367* [0.084]	-0.561** [0.026]	-0.363* [0.088]	-0.557** [0.024]
Population $_{t-1}$	-0.169 [0.820]	-0.151 [0.840]	-0.604 [0.462]	-0.177 [0.812]	-0.617 [0.450]	-0.027 [0.971]	-0.490 [0.558]
Polity $_{t-1}$	0.058* [0.059]	0.057* [0.060]	0.044 [0.152]	0.057* [0.061]	0.044 [0.150]	0.059* [0.054]	0.044 [0.151]
UNGA voting $_{t-1}$	-1.278* [0.064]	-1.282* [0.065]	-0.950 [0.258]	-1.260* [0.064]	-0.947 [0.256]	-1.207* [0.078]	-0.859 [0.309]
Political Terror $_{t-1}$	0.205*** [0.000]	0.206*** [0.000]		0.206*** [0.000]		0.205*** [0.000]	
Physical Integrity $_{t-1}$			-0.045** [0.025]		-0.045** [0.027]		-0.044** [0.033]
Human Rights Treaties $_{t-1}$		0.005 [0.819]	0.004 [0.881]				
Core Treaties $_{t-1}$				0.013 [0.749]	0.003 [0.942]		
ICCPR & CAT $_{t-1}$						-0.101 [0.242]	-0.104 [0.270]
Core Treaties except ICCPR & CAT $_{t-1}$						0.071 [0.161]	0.057 [0.279]
Constant	7.855 [0.531]	7.549 [0.548]	16.865 [0.225]	7.902 [0.528]	17.061 [0.218]	5.243 [0.681]	14.766 [0.296]
Observations	1,853	1,853	1,752	1,853	1,752	1,853	1,752
Countries	119	119	119	119	119	119	119
R^2	0.532	0.532	0.515	0.532	0.515	0.533	0.516

Notes: The dependent variable is Log Total ODA Commitments to the Government and Civil Society Sector by all DAC Donors in constant USD. Country fixed effects and year dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table III.5: Government and Civil Society Commitments, Interaction Ratification and Human Rights Respect, 1995 - 2010, PPML, Marginal Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GDP p.c. $_{t-1}$	-0.368* [0.086]	-0.367* [0.091]	0.528** [0.044]	-0.367* [0.085]	0.549** [0.030]	-0.367* [0.088]	0.556** [0.029]
Population $_{t-1}$	-0.169 [0.820]	0.026 [0.973]	-0.498 [0.560]	-0.135 [0.860]	-0.583 [0.485]	-0.103 [0.896]	-0.539 [0.524]
Polity $_{t-1}$	0.058* [0.059]	0.056* [0.064]	0.044 [0.152]	0.057* [0.060]	0.045 [0.147]	0.059* [0.054]	0.046 [0.140]
UNGA voting $_{t-1}$	-1.278* [0.064]	-1.411** [0.044]	-1.027 [0.216]	-1.290* [0.058]	-0.945 [0.256]	-1.290* [0.061]	-0.943 [0.264]
Political Terror $_{t-1}$	0.205*** [0.000]	0.354*** [0.006]		0.286 [0.101]		0.210** [0.031]	
Physical Integrity $_{t-1}$			-0.094 [0.116]		-0.081 [0.330]		-0.053 [0.287]
Human Rights Treaties $_{t-1}$		0.052 [0.154]	-0.022 [0.584]				
Human Rights Treaties $_{t-1}$ * Political Terror $_{t-1}$		-0.017 [0.167]					
Human Rights Treaties $_{t-1}$ * Physical Integrity $_{t-1}$			0.006 [0.361]				
Core Treaties $_{t-1}$				0.054 [0.493]	-0.026 [0.758]		
Core Treaties $_{t-1}$ * Political Terror $_{t-1}$				-0.015 [0.599]			
Core Treaties $_{t-1}$ * Physical Integrity $_{t-1}$					0.007 [0.639]		
ICCPR & CAT $_{t-1}$						-0.042 [0.802]	-0.092 [0.567]
ICCPR & CAT $_{t-1}$ * Political Terror $_{t-1}$						-0.004 [0.937]	
ICCPR & CAT $_{t-1}$ * Physical Integrity $_{t-1}$							0.006 [0.832]
Constant	7.855 [0.531]	4.258 [0.751]	15.131 [0.294]	7.007 [0.591]	16.562 [0.238]	6.825 [0.608]	15.859 [0.268]
Observations	1,853	1,853	1,752	1,853	1,752	1,853	1,752
Countries	119	119	119	119	119	119	119
R^2	0.532	0.532	0.515	0.532	0.515	0.532	0.515

Notes: The dependent variable is Log Total ODA Commitments to the Government and Civil Society Sector by all DAC Donors in constant USD. Country fixed effects and year dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

estimations with a large number of zeros (Santos Silva and Tenreyro 2006).[72] The results (Tables III.4 and III.5) suggest that aid to the sectors most relevant for implementation of the international conventions is neither affected by an increase of international commitment to HRs nor by the interaction with the actual human rights level. Given the previous result of an increase in total ODA, this finding indicates that donors increase other parts of aid as a reward to those countries that commit to international human right conventions.

Bilateral Analysis

The previous analysis pooled the aid of all 26 DAC donor countries. It is admittedly doubtful that the behavior and aid allocation decisions are the same for all bilateral donors. In the literature, two groups are often explicitly separated with regards to their foreign aid strategies. The "Nordic" or like-minded countries (Neumayer 2003b) – Canada, Denmark, the Netherlands, Norway and Sweden – and the largest DAC donors: France, Germany, Japan, the United Kingdom and the United States. While the former are usually described as more "benevolent" donors that especially take the recipients' need and merit into account, the latter are known for their more strategic aid giving – often allocating based on commercial or political interests. I will follow this distinction of donors and analyze the bilateral aid of each donor *j* to recipient *i* to evaluate how their behavior differs with regards to the recipient's international commitment to HRTs. To control for general patterns of aid allocation by the DAC donors or "herding" behavior, as additional control variable I include the total ODA to recipient *i* by all DAC donors except donor *j*. The smaller donors like Denmark have a smaller aid budget and are therefore more selective in their aid allocation, i.e., the number of countries receiving no ODA is higher than for the largest donors. This leads to an increase of zero observations in the dependent variable. To account for this skewed distribution I again use the PPML method as introduced above and in Chapter II (Santos Silva and Tenreyro 2006). The advantage of this method is that it does not require a two-step approach in order to model both the zeros and the values above zero.

Though the like-minded donors are usually assumed to be more needs- and merits based in their aid allocation, the results (Table A III.1, appendix) do not show a significant effect of political terror on aid allocation. This is remarkable as we observe this effect for the largest donors (Table A III.2, appendix) who are usually assumed to be more self-interest driven and care less for institutional settings in their aid allocation decision. With the exception of the United Kingdom and the United States, the big donors provide significantly less aid for countries with a higher political terror scale. The marginal effect ranges between -.16 and -.355 which is equivalent to a decrease of 16 to 35.5% of ODA with an increase of political terror by one category at the means of all other covariates. This translates to a reduction of German ODA commitments on average by 9 million USD (16%), of French ODA by almost 15 million USD (27%) and of Japanese ODA by 45 million USD (35.5%).

[72] The PPML estimator is widely used in the trade literature and becomes more common in other economic fields as well (e.g., Nunnenkamp et al. 2012; Dreher et al. 2013). See also Chapter II.

Interestingly, two of the like-minded countries (Canada and Sweden) react to the recipient's international commitment to HRTs but they do not consider the political terror in the country.

In a second step I again investigate the relationship between the domestic human rights situation and international commitment to human rights with respect to the donor's reaction. Figures A III.1 – A III.6 (appendix) show the marginal effect of HRT ratification at different levels of political terror on the bilateral allocation of aid. In general, the pattern for the previous pooled analysis is repeated, however the interaction is not statistically significant at conventional levels for most countries. The only exception is Japan. Its pattern is exactly the opposite of the other countries and suggests that HRT ratification is only met with an increase in ODA when it is a complement to actual respect for human rights. While countries with a good track record of human rights protection benefit from international commitment, those with high levels of domestic political terror cannot increase their Japanese ODA inflows by ratifying HRTs. However, the interaction is almost always statistically insignificant. It is only for the core treaties group that the positive impact of HRT ratification on ODA commitments for countries with low levels of political terror is significant at conventional levels. Nevertheless the Japanese allocation decision is remarkably different from those of the other donors analyzed. In the group of Nordic countries, the interaction pattern is statistically significant for the Netherlands and Sweden. For Sweden the effect becomes significant at a relatively low level of political terror. It seems that Sweden rewards the commitment to HRT in general and not only for those countries with poor protection of human rights at home. A similar pattern is observable for Germany and the United Kingdom. For the US, on the other hand, international commitment seems to be unimportant independently of the domestic political terror situation. Again this contradicts the perception that the US, apart from strategic interests, generally promotes human rights protection in other countries. When comparing the Nordic countries with the big donors there is no evidence for a significantly different behavior with regards to rewarding international commitment to HRTs. In both groups, some countries (Canada and Sweden; Germany and the UK) appear to consider international ratification of HRTs in general for their aid allocation decisions. Further, in both groups the general pattern that those countries with higher political terror benefit more from ratifying HRTs is observable. The only remarkable exception is Japan, which gives a greater reward to those countries with a better human rights record for their commitment to HRTs.

III.6. CONCLUSION

Many donor countries and especially the tax payers in these countries seem to be concerned about the extent of human rights abuses in developing countries. This can be seen by the stated aim of several bilateral donors to base their aid allocation decision on the human rights situation in the respective country. One easily available measure for a country's formal commitment to human rights is its participation in international human rights treaties. This study shows that DAC donors take a recipient's ratification of these treaties into account in their aid allocation decisions. However, it is not

only treaty ratification that is considered but also the actual human rights situation in the recipient country. At first sight it seems reasonable to reward countries for their ratification of these international conventions. Yet the data suggest that those governments who abuse human rights at home can benefit through increased ODA from DAC donors by ratifying international HRTs. This reward is probably built on the hope that the formal commitment will indeed change the government's actual behavior. However, history has shown that this hope is often not fulfilled. This implies that donors reward countries with poor human rights protection simply for signaling intents that these countries do not realize, because they lack political will or capacity. If donors want to sincerely account for human rights in their aid allocation decision they should primarily rely on information of the actual human rights situation in the recipient country provided by organizations like Amnesty International. Further, when rewarding countries for their international commitment, donors should wait until a real improvement is observable instead of providing benefits in the hope that the situation will ameliorate. This included also the recommendation to make treaty ratification not a condition of aid commitments as ratification does not necessarily imply implementation. On the other hand if donors take this international commitment seriously they should increase the amount of aid that is guided towards supporting the government in the implementation of its international commitments. This study shows that currently this type of aid does not increase after a country commits to international human rights conventions. This finding has important ramifications for policy decisions as the current pattern of rewarding specifically those countries with bad human rights record for international commitment implicitly means that oppressive regimes are rewarded for their window dressing behavior. Interestingly, I cannot find a difference in this behavior between the Nordic donors, that are known for their need- and merit-based aid, and the biggest donors, that are well known for their strategic aid decisions. The exception seems to be Japan which rewards only those recipients with a good record of human rights protection for their commitment to international human rights treaties. Given the empirical evidence on the lack of compliance with HRTs, Japan's strategy seems to be the best in terms of giving based on actual respect for human rights. As a next step it would be of interest and policy relevance to investigate whether human-rights-targeted aid might indeed help to implement international commitments on human rights protection. If this type of aid changes a government's behavior in the medium run there would be hope for the international community that a positive change towards respect for human rights in those countries where it is needed most is possible.

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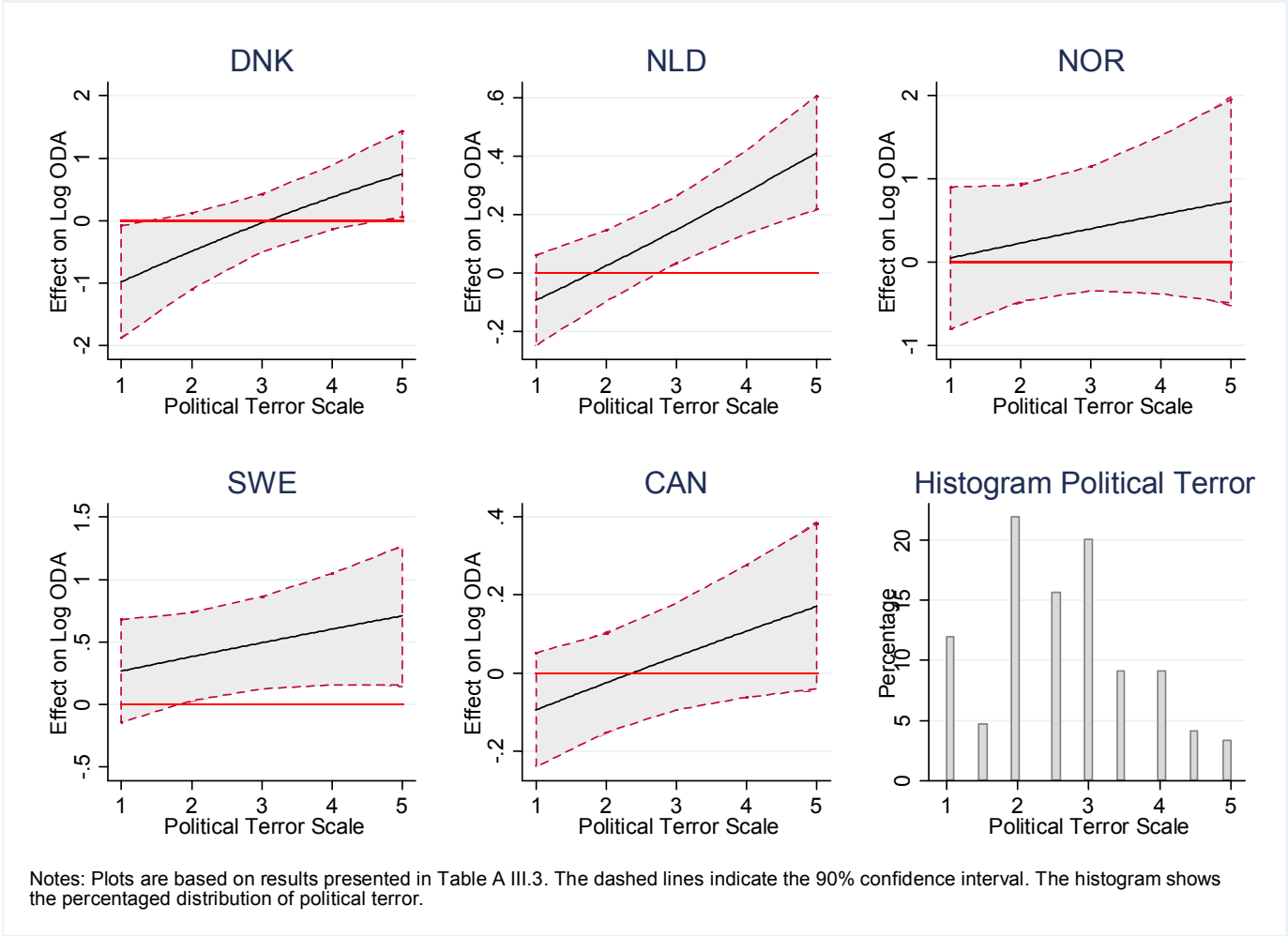
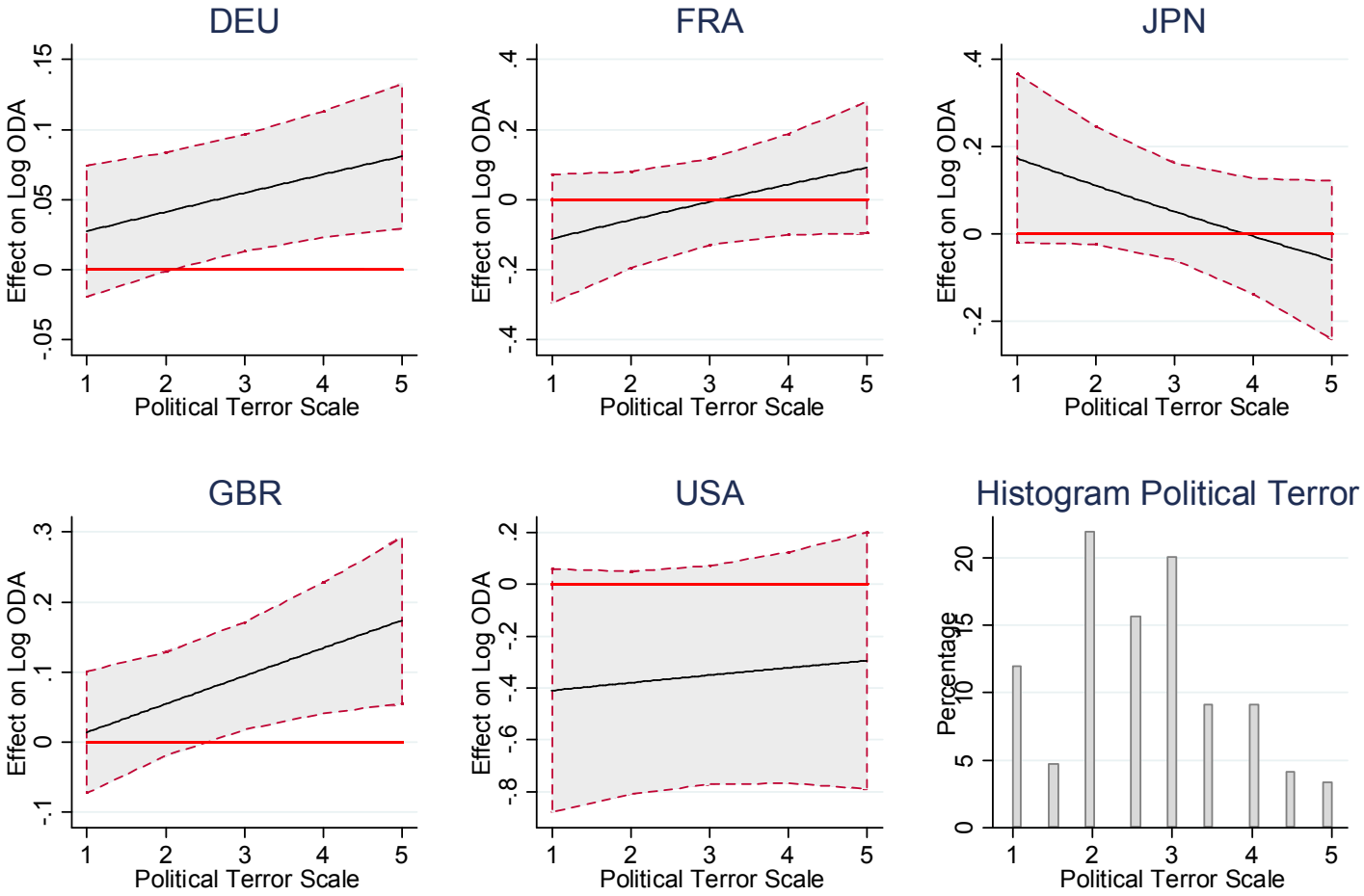
III.8. APPENDIX

Figure A III.1: Marginal Effect of Human Rights Treaties Ratification on ODA of Like-minded Donors at Different Levels of Political Terror



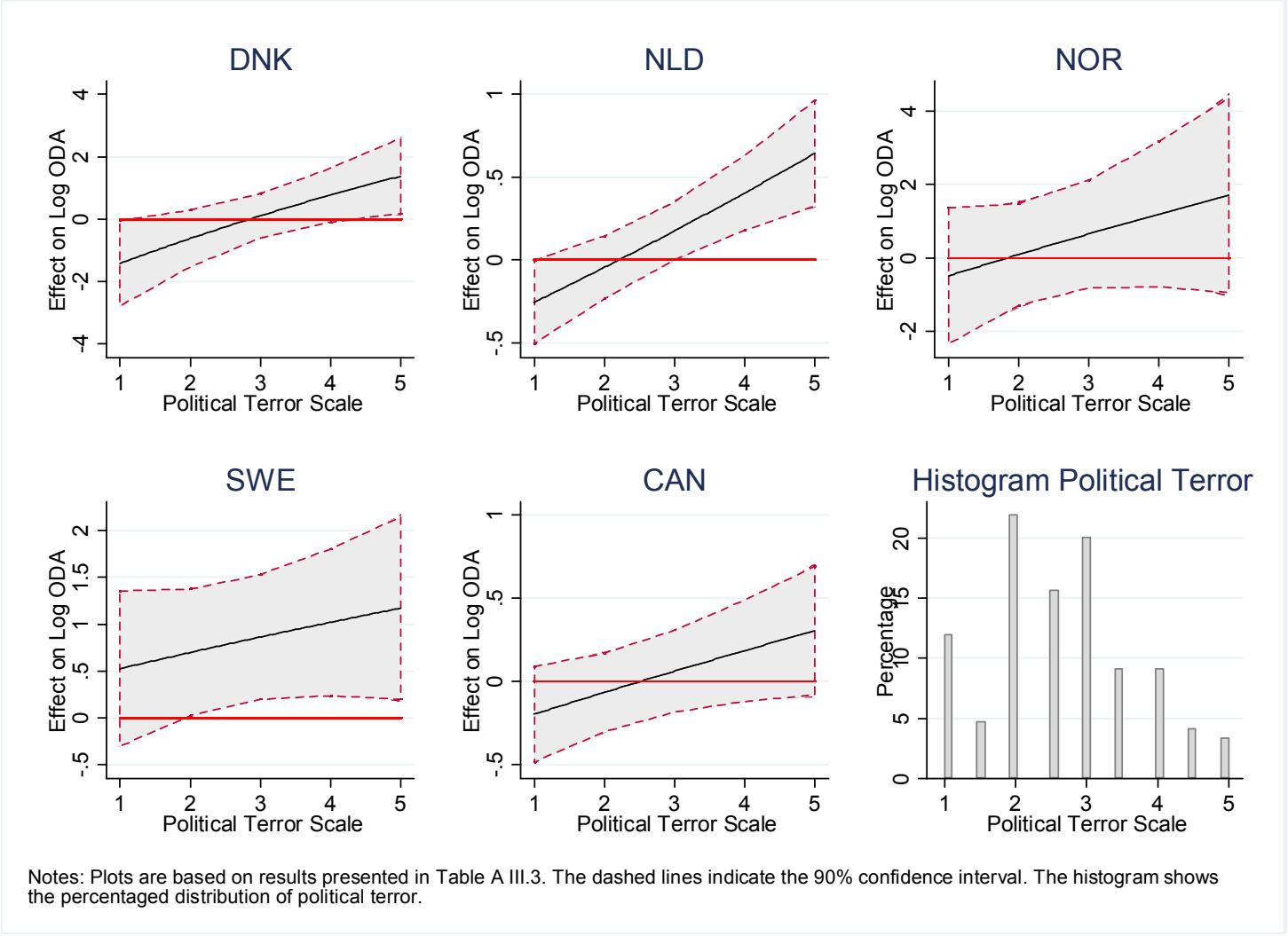
Notes: Plots are based on results presented in Table A III.3. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Figure A III.2: Marginal Effect of Human Rights Treaties Ratification on ODA of Largest DAC Donors at Different Levels of Political Terror



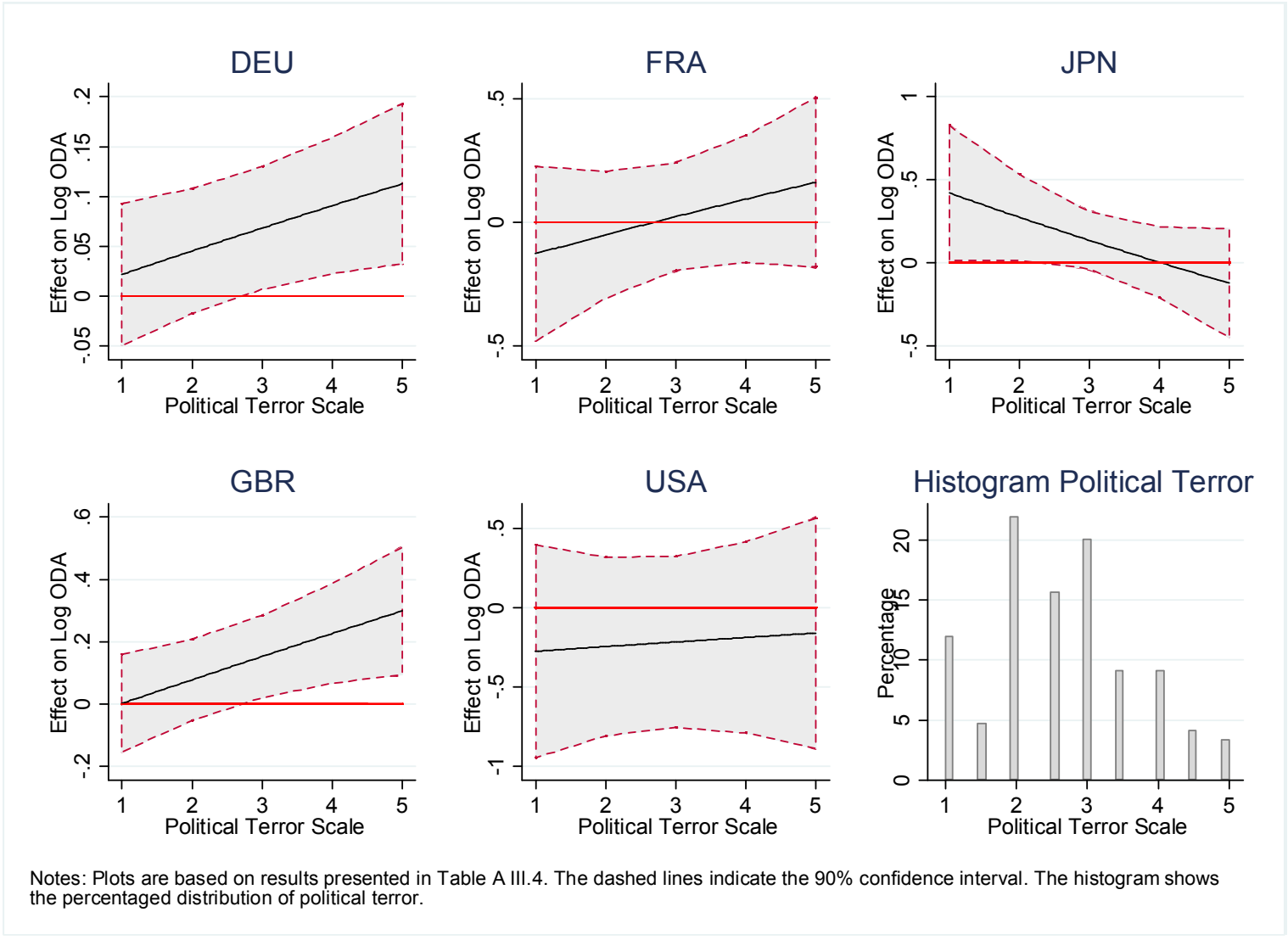
Notes: Plots are based on results presented in Table A III.4. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Figure A III.3: Marginal Effect of Core Human Rights Treaties Ratification on ODA of Like-minded DAC Donors at Different Levels of Political Terror



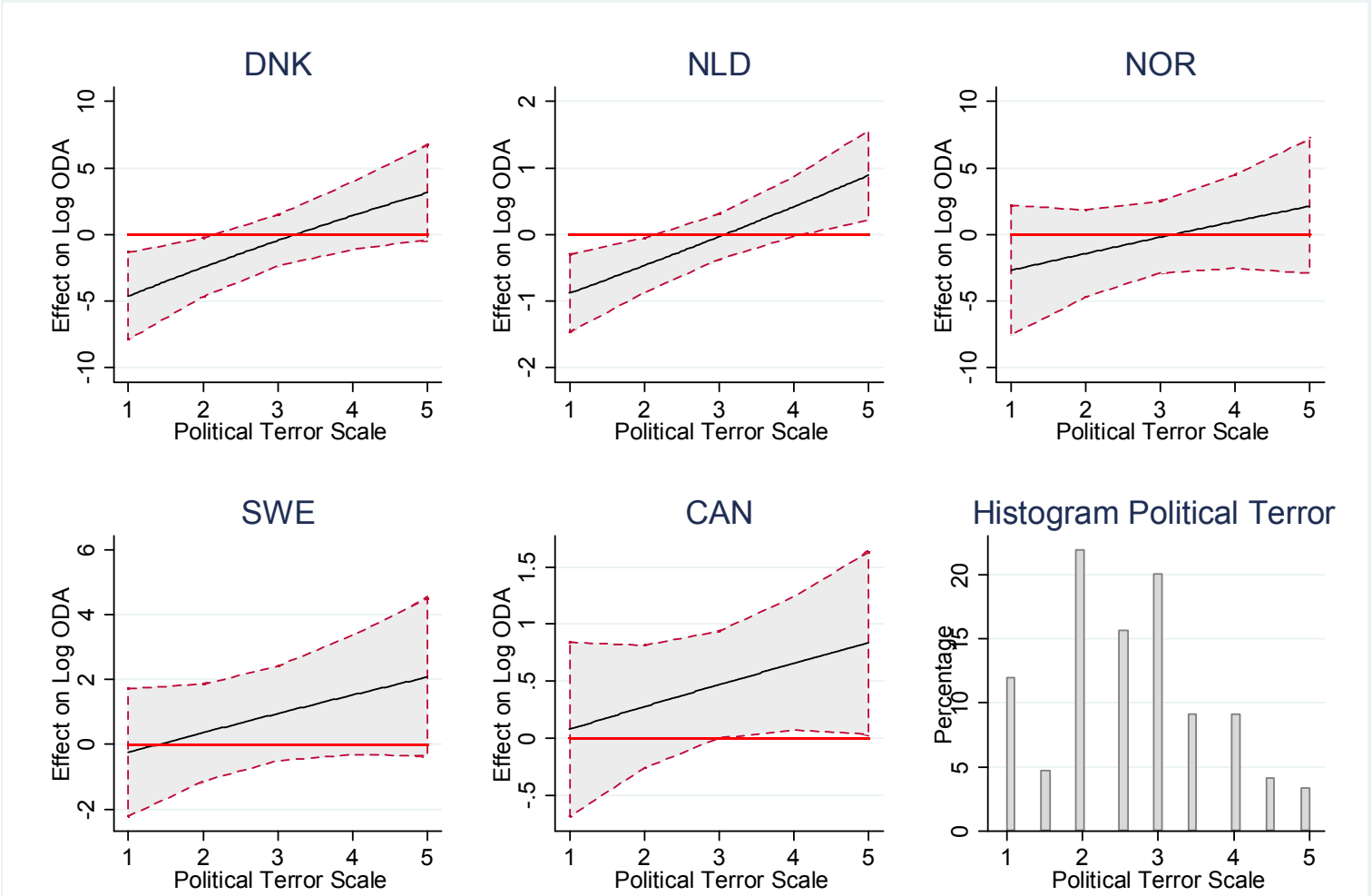
Notes: Plots are based on results presented in Table A III.3. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Figure A III.4: Marginal Effect of Core Human Rights Treaties Ratification on ODA of Largest DAC Donors at Different Levels of Political Terror



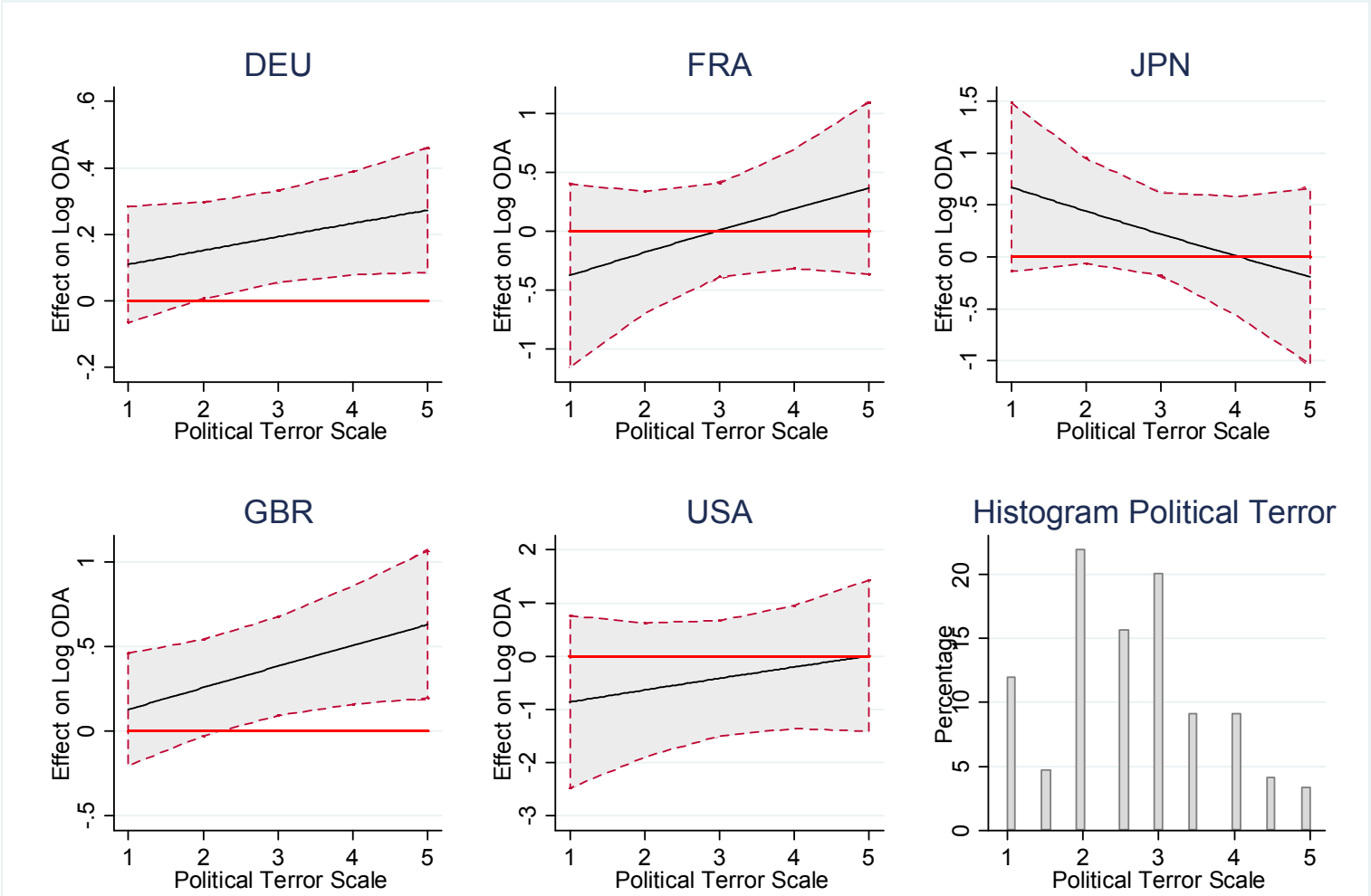
Notes: Plots are based on results presented in Table A III.4. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Figure A III.5: Marginal Effect of ICCPR & CAT Ratification on ODA of Like-minded DAC Donors at Different Levels of Political Terror



Notes: Plots are based on results presented in Table A III.3. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Figure A III.6: Marginal Effect of ICCPR & CAT Ratification on ODA of Largest DAC Donors at Different Levels of Political Terror



Notes: Plots are based on results presented in Table A III.4. The dashed lines indicate the 90% confidence interval. The histogram shows the percentaged distribution of political terror.

Table A III.1: Bilateral Aid Like-minded Donors, PPML, Marginal Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Canada				Denmark			
GDP p.c. $_{t-1}$	-0.740 [0.177]	-0.739 [0.178]	-0.739 [0.178]	-0.749 [0.172]	0.338 [0.413]	0.322 [0.430]	0.333 [0.413]	0.342 [0.399]
Population $_{t-1}$	-0.510 [0.756]	-0.526 [0.750]	-0.526 [0.751]	-0.685 [0.685]	1.238 [0.476]	1.193 [0.493]	1.229 [0.480]	1.305 [0.457]
Polity $_{t-1}$	0.005 [0.929]	0.003 [0.961]	0.003 [0.965]	-0.009 [0.877]	0.004 [0.959]	0.006 [0.926]	0.005 [0.945]	0.011 [0.870]
DAC aid $_{t-1}$	0.872*** [0.000]	0.872*** [0.000]	0.872*** [0.000]	0.856*** [0.000]	1.180*** [0.000]	1.181*** [0.000]	1.180*** [0.000]	1.188*** [0.000]
UNGA voting $_{t-1}$	5.620*** [0.005]	5.567*** [0.004]	5.596*** [0.004]	5.503*** [0.005]	5.029** [0.030]	5.162** [0.028]	5.055** [0.031]	5.021** [0.032]
Political Terror $_{t-1}$	-0.197 [0.178]	-0.196 [0.182]	-0.199 [0.171]	-0.209 [0.147]	-0.225 [0.109]	-0.229 [0.105]	-0.224 [0.108]	-0.219 [0.116]
Human Rights Treaties $_{t-1}$		0.016 [0.794]				-0.029 [0.604]		
Core Treaties $_{t-1}$			0.023 [0.838]				-0.012 [0.894]	
ICCPR & CAT $_{t-1}$				0.344* [0.091]				-0.135 [0.580]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.193 [0.258]				0.071 [0.681]
Observations	3,564	3,564	3,564	3,564	3,163	3,163	3,163	3,163
R-squared	0.599	0.599	0.599	0.600	0.514	0.514	0.514	0.514

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Netherlands				Norway			
GDP p.c. $_{t-1}$	-0.168 [0.865]	-0.152 [0.878]	-0.153 [0.878]	-0.139 [0.889]	-2.301*** [0.000]	-2.297*** [0.000]	-2.286*** [0.000]	-2.277*** [0.000]
Population $_{t-1}$	5.105* [0.058]	5.135* [0.053]	5.072* [0.057]	5.246** [0.049]	-3.682* [0.083]	-3.582* [0.087]	-3.668* [0.083]	-3.565* [0.091]
Polity $_{t-1}$	0.039 [0.634]	0.018 [0.825]	0.019 [0.810]	0.028 [0.716]	-0.091 [0.266]	-0.100 [0.218]	-0.101 [0.214]	-0.096 [0.235]
DAC aid $_{t-1}$	1.221*** [0.000]	1.213*** [0.000]	1.210*** [0.000]	1.218*** [0.000]	0.660*** [0.000]	0.661*** [0.000]	0.659*** [0.000]	0.669*** [0.000]
UNGA voting $_{t-1}$	-2.194 [0.457]	-2.925 [0.312]	-2.529 [0.390]	-2.484 [0.396]	2.976 [0.143]	2.694 [0.180]	2.801 [0.163]	2.784 [0.168]
Political Terror $_{t-1}$	0.177 [0.313]	0.180 [0.303]	0.161 [0.356]	0.169 [0.331]	-0.114 [0.519]	-0.109 [0.543]	-0.120 [0.492]	-0.115 [0.510]
Human Rights Treaties $_{t-1}$		0.155 [0.126]				0.069 [0.333]		
Core Treaties $_{t-1}$			0.175 [0.219]				0.096 [0.483]	
ICCPR & CAT $_{t-1}$				-0.087 [0.764]				-0.056 [0.853]
Core HRTs except ICCPR & CAT $_{t-1}$				0.354 [0.114]				0.198 [0.314]
Observations	3,592	3,592	3,592	3,592	3,524	3,524	3,524	3,524
R-squared	0.580	0.581	0.581	0.581	0.600	0.601	0.601	0.601

	(17)	(18)	(19)	(20)
	Sweden			
GDP p.c. $_{t-1}$	-3.503*** [0.001]	-3.456*** [0.001]	-3.383*** [0.002]	-3.385*** [0.002]
Population $_{t-1}$	3.367 [0.284]	3.821 [0.197]	3.494 [0.243]	3.481 [0.242]
Polity $_{t-1}$	0.158 [0.250]	0.120 [0.386]	0.106 [0.441]	0.105 [0.447]
DAC aid $_{t-1}$	0.658*** [0.001]	0.690*** [0.000]	0.670*** [0.000]	0.669*** [0.000]
UNGA voting $_{t-1}$	-1.532 [0.565]	-2.546 [0.315]	-2.161 [0.410]	-2.166 [0.409]
Political Terror $_{t-1}$	-0.085 [0.706]	-0.059 [0.793]	-0.114 [0.608]	-0.115 [0.606]
Human Rights Treaties $_{t-1}$		0.275** [0.022]		
Core Treaties $_{t-1}$			0.466** [0.017]	
ICCPR & CAT $_{t-1}$				0.483 [0.293]
Core HRTs except ICCPR & CAT $_{t-1}$				0.455* [0.079]
Observations	3,244	3,244	3,244	3,244
R-squared	0.528	0.533	0.532	0.532

Notes: Dependent variable is bilateral aid commitment. Shown are the marginal effects at the mean of all other covariates. UNGA voting refers to the voting behavior in the United Nations General Assembly between the recipient and the respctive donor. DAC aid is the total aid of all DAC donors except the respective donor whose aid is analyzed. The estimation method is Poisson Pseude-Maximum-Likelihood to account for excess zeros in the dependent variable. Standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A III.2: Bilateral Aid Largest DAC Donors, PPML, Marginal Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Germany				France			
GDP p.c. $_{t-1}$	-0.369 [0.485]	-0.363 [0.491]	-0.361 [0.496]	-0.372 [0.483]	0.161 [0.695]	0.162 [0.693]	0.161 [0.695]	0.162 [0.693]
Population $_{t-1}$	-0.440 [0.647]	-0.388 [0.688]	-0.419 [0.664]	-0.544 [0.574]	-4.978*** [0.002]	-4.982*** [0.002]	-4.978*** [0.002]	-4.966*** [0.002]
Polity $_{t-1}$	-0.011 [0.719]	-0.025 [0.421]	-0.025 [0.419]	-0.033 [0.296]	0.056 [0.267]	0.059 [0.251]	0.056 [0.282]	0.057 [0.280]
DAC aid $_{t-1}$	0.434*** [0.000]	0.427*** [0.000]	0.427*** [0.000]	0.418*** [0.000]	0.457*** [0.000]	0.458*** [0.000]	0.457*** [0.000]	0.458*** [0.000]
UNGA voting $_{t-1}$	2.016* [0.071]	1.690 [0.133]	1.883* [0.095]	1.816 [0.107]	3.286* [0.062]	3.367* [0.056]	3.286* [0.062]	3.296* [0.059]
Political Terror $_{t-1}$	-0.165** [0.021]	-0.164** [0.023]	-0.176** [0.012]	-0.184*** [0.008]	-0.275*** [0.002]	-0.275*** [0.002]	-0.275*** [0.002]	-0.274*** [0.003]
Human Rights Treaties $_{t-1}$		0.084** [0.012]				-0.017 [0.744]		
Core Treaties $_{t-1}$			0.103** [0.040]				0.000 [0.996]	
ICCPR & CAT $_{t-1}$				0.317** [0.017]				-0.020 [0.905]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.036 [0.676]				0.014 [0.919]
Observations	3,622	3,622	3,622	3,622	3,626	3,626	3,626	3,626
R-squared	0.780	0.780	0.780	0.780	0.647	0.647	0.647	0.647

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	United Kingdom				Japan			
GDP p.c. $_{t-1}$	-1.301* [0.081]	-1.289* [0.083]	-1.277* [0.086]	-1.297* [0.081]	0.947 [0.144]	0.953 [0.140]	0.960 [0.137]	0.957 [0.136]
Population $_{t-1}$	-3.706* [0.063]	-3.721* [0.058]	-3.721* [0.058]	-3.943** [0.046]	0.087 [0.953]	0.115 [0.938]	0.112 [0.939]	0.082 [0.954]
Polity $_{t-1}$	-0.102 [0.171]	-0.129* [0.082]	-0.135* [0.067]	-0.156** [0.034]	-0.010 [0.807]	-0.020 [0.631]	-0.029 [0.484]	-0.032 [0.462]
DAC aid $_{t-1}$	0.902*** [0.000]	0.892*** [0.000]	0.887*** [0.000]	0.867*** [0.000]	0.384*** [0.000]	0.376*** [0.000]	0.372*** [0.001]	0.369*** [0.001]
UNGA voting $_{t-1}$	5.438* [0.086]	4.627 [0.122]	5.092* [0.096]	4.889 [0.110]	3.555* [0.095]	3.373 [0.111]	3.394 [0.107]	3.382 [0.108]
Political Terror $_{t-1}$	-0.075 [0.657]	-0.068 [0.691]	-0.098 [0.557]	-0.116 [0.485]	-0.365*** [0.000]	-0.365*** [0.000]	-0.382*** [0.000]	-0.384*** [0.000]
Human Rights Treaties $_{t-1}$		0.166* [0.050]				0.060 [0.267]		
Core Treaties $_{t-1}$			0.256* [0.074]				0.146* [0.065]	
ICCPR & CAT $_{t-1}$				0.730** [0.017]				0.210 [0.278]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.054 [0.822]				0.105 [0.311]
Observations	3,588	3,588	3,588	3,588	3,627	3,627	3,627	3,627
R-squared	0.566	0.566	0.566	0.567	0.586	0.586	0.587	0.587

	(17)	(18)	(19)	(20)
	United States			
GDP p.c. $_{t-1}$	-1.029 [0.211]	-1.018 [0.219]	-1.032 [0.211]	-1.024 [0.217]
Population $_{t-1}$	-6.834** [0.014]	-6.966** [0.013]	-6.842** [0.014]	-6.775** [0.017]
Polity $_{t-1}$	-0.120 [0.212]	-0.095 [0.307]	-0.108 [0.236]	-0.103 [0.277]
DAC aid $_{t-1}$	0.790*** [0.000]	0.802*** [0.000]	0.796*** [0.000]	0.801*** [0.000]
UNGA voting $_{t-1}$	1.182 [0.578]	0.815 [0.708]	1.079 [0.617]	1.095 [0.613]
Political Terror $_{t-1}$	-0.195 [0.314]	-0.209 [0.279]	-0.188 [0.329]	-0.184 [0.341]
Human Rights Treaties $_{t-1}$		-0.165* [0.099]		
Core Treaties $_{t-1}$			-0.106 [0.476]	
ICCPR & CAT $_{t-1}$				-0.215 [0.502]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.034 [0.895]
Observations	3,597	3,597	3,597	3,597
R-squared	0.644	0.644	0.643	0.643

Notes: Dependent variable is bilateral aid commitment. Shown are the marginal effects at the mean of all other covariates. UNGA voting refers to the voting behavior in the United Nations General Assembly between the recipient and the respctive donor. DAC aid is the total aid of all DAC donors except the respective donor whose aid is analyzed. The estimation method is Poisson Pseude-Maximum-Likelihood to account for excess zeros in the dependent variable. Standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A III.3: Bilateral Aid Like-minded Donors, Interaction, PPML

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Canada				Denmark			
Political Terror $_{t-1}$	-0.016 [0.178]	-0.042** [0.046]	-0.048* [0.053]	-0.030 [0.148]	-0.056 [0.109]	-0.183*** [0.002]	-0.193*** [0.002]	-0.147*** [0.001]
Human Rights Treaties $_{t-1}$		-0.010 [0.145]				-0.065*** [0.008]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.004* [0.069]				0.021*** [0.004]		
Core Treaties $_{t-1}$			-0.021 [0.145]				-0.103** [0.014]	
Core Treaties $_{t-1}$*Political Terror $_{t-1}$			0.008* [0.077]				0.036*** [0.007]	
ICCPR & CAT $_{t-1}$				-0.008 [0.844]				-0.322*** [0.003]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.013 [0.306]				0.100*** [0.004]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.015 [0.284]				0.025 [0.551]
Constant	2.169 [0.344]	2.488 [0.281]	2.490 [0.279]	2.663 [0.256]	-8.853 [0.220]	-8.200 [0.252]	-8.947 [0.213]	-8.731 [0.233]
Observations	3,564	3,564	3,564	3,564	3,163	3,163	3,163	3,163
R-squared	0.599	0.600	0.601	0.600	0.514	0.515	0.514	0.515

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Netherlands				Norway			
Political Terror $_{t-1}$	0.016 [0.313]	-0.073*** [0.009]	-0.086*** [0.004]	-0.038 [0.112]	-0.017 [0.520]	-0.047 [0.296]	-0.078 [0.142]	-0.049 [0.163]
Human Rights Treaties $_{t-1}$		-0.028** [0.047]				-0.004 [0.846]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.015*** [0.000]				0.005 [0.365]		
Core Treaties $_{t-1}$			-0.060*** [0.009]				-0.027 [0.452]	
Core Treaties $_{t-1}$*Political Terror $_{t-1}$			0.027*** [0.000]				0.015 [0.170]	
ICCPR & CAT $_{t-1}$				-0.173*** [0.002]				-0.101 [0.212]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.056*** [0.001]				0.032 [0.201]
Core HRTs except ICCPR & CAT $_{t-1}$				0.037* [0.067]				0.031 [0.278]
Constant	-7.288* [0.093]	-6.524 [0.118]	-6.568 [0.116]	-6.992 [0.106]	12.370** [0.029]	12.272** [0.028]	12.455** [0.027]	12.278** [0.030]
Observations	3,592	3,592	3,592	3,592	3,524	3,524	3,524	3,524
R-squared	0.580	0.584	0.583	0.582	0.600	0.600	0.600	0.601

	(17)	(18)	(19)	(20)
	Sweden			
Political Terror $_{t-1}$	-0.013 [0.706]	-0.082 [0.260]	-0.086 [0.304]	-0.075 [0.202]
Human Rights Treaties $_{t-1}$		0.013 [0.647]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.011 [0.208]		
Core Treaties $_{t-1}$			0.029 [0.598]	
Core Treaties t-1*Political Terror $_{t-1}$			0.016 [0.337]	
ICCPR & CAT $_{t-1}$				-0.074 [0.580]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.052 [0.206]
Core HRTs except ICCPR & CAT $_{t-1}$				0.073* [0.067]
Constant	-4.049 [0.632]	-4.848 [0.551]	-4.507 [0.579]	-4.263 [0.597]
Observations	3,244	3,244	3,244	3,244
R-squared	0.528	0.534	0.533	0.533

Notes: All control variables included but not shown here. Dependent variable is bilateral aid commitment. UNGA voting refers to the voting behavior in the United Nations General Assembly between the recipient and the respctive donor. DAC aid is the total aid of all DAC donors except the respective donor whose aid is analyzed. The estimation method is Poisson Pseudo-Maximum-Likelihood to account for excess zeros in the dependent variable. Standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A III.4: Bilateral Aid Largest DAC Donors, Interaction, PPML

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Germany				France			
Political Terror $_{t-1}$	-0.010** [0.021]	-0.019** [0.016]	-0.021*** [0.008]	-0.016** [0.024]	-0.019*** [0.002]	-0.033** [0.017]	-0.033* [0.055]	-0.028** [0.015]
Human Rights Treaties $_{t-1}$		0.001 [0.679]				-0.007 [0.250]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.001* [0.081]				0.002 [0.217]		
Core Treaties $_{t-1}$			-0.000 [0.968]				-0.009 [0.480]	
Core Treaties $_{t-1}$*Political Terror $_{t-1}$			0.002* [0.072]				0.003 [0.375]	
ICCPR & CAT $_{t-1}$				0.007 [0.616]				-0.026 [0.382]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.005 [0.222]				0.009 [0.336]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.002 [0.706]				0.002 [0.873]
Constant	2.272** [0.011]	2.292** [0.010]	2.314*** [0.009]	2.435*** [0.006]	7.641*** [0.000]	7.811*** [0.000]	7.763*** [0.000]	7.747*** [0.000]
Observations	3,622	3,622	3,622	3,622	3,626	3,626	3,626	3,626
R-squared	0.780	0.780	0.780	0.780	0.647	0.647	0.647	0.647

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	United Kingdom				Japan			
Political Terror $_{t-1}$	-0.006 [0.657]	-0.045* [0.054]	-0.054** [0.033]	-0.030 [0.126]	-0.023*** [0.000]	-0.006 [0.612]	0.002 [0.853]	-0.014 [0.186]
Human Rights Treaties $_{t-1}$		-0.004 [0.684]				0.011*** [0.010]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.007** [0.019]				-0.003** [0.038]		
Core Treaties $_{t-1}$			-0.012 [0.531]				0.028*** [0.000]	
Core Treaties $_{t-1}$*Political Terror $_{t-1}$			0.012** [0.019]				-0.007*** [0.008]	
ICCPR & CAT $_{t-1}$				-0.000 [0.995]				0.043** [0.049]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.021* [0.081]				-0.010 [0.191]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.003 [0.873]				0.006 [0.353]
Constant	5.719** [0.013]	6.032*** [0.007]	6.075*** [0.006]	6.301*** [0.006]	1.991 [0.355]	1.721 [0.421]	1.670 [0.432]	1.832 [0.366]
Observations	3,588	3,588	3,588	3,588	3,627	3,627	3,627	3,627
R-squared	0.566	0.568	0.568	0.568	0.586	0.588	0.590	0.588

	(17)	(18)	(19)	(20)
	United States			
Political Terror $_{t-1}$	-0.015 [0.314]	-0.021 [0.320]	-0.018 [0.463]	-0.021 [0.272]
Human Rights Treaties $_{t-1}$		-0.015 [0.127]		
Human Rights Treaties $_{t-1}$*Political Terror $_{t-1}$		0.001 [0.744]		
Core Treaties $_{t-1}$			-0.010 [0.539]	
Core Treaties $_{t-1}$*Political Terror $_{t-1}$			0.001 [0.850]	
ICCPR & CAT $_{t-1}$				-0.038 [0.384]
ICCPR & CAT $_{t-1}$*Political Terror $_{t-1}$				0.008 [0.507]
Core HRTs except ICCPR & CAT $_{t-1}$				-0.002 [0.913]
Constant	10.808*** [0.002]	11.124*** [0.002]	10.880*** [0.002]	10.855*** [0.003]
Observations	3,597	3,597	3,597	3,597
R-squared	0.644	0.644	0.644	0.644

Notes: All control variables included but not shown here. Dependent variable is bilateral aid commitment. UNGA voting refers to the voting behavior in the United Nations General Assembly between the recipient and the respctive donor. DAC aid is the total aid of all DAC donors except the respective donor whose aid is analyzed. The estimation method is Poisson Pseudo-Maximum-Likelihood to account for excess zeros in the dependent variable. Standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A III.5: List of Human Rights Core Treaties

Instrument	Date of Adotion
International Convention on the Elimination of All Forms of Racial Discrimination	21 December 1965
International Covenant on Civil and Political Rights	16 December 1966
International Covenant on Economic, Social and Cultural Rights	16 December 1966
Convention on the Elimination of All Forms of Discrimination against Women	18 December 1979
Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment	10 December 1984
Convention on the Rights of the Child	20 November 1989
International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families	18 December 1990
International Convention for the Protection of All Persons from Enforced Disappearance	20 December 2006
Convention on the Rights of Persons with Disabilities	13 December 2006

Table A III.6: List of Selected Treaties from "Penal Matters" Chapter, Used for Human Rights Instrumentation

Treaty	Date of Adoption
Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery	07 September 1956
International Convention Against the Taking of Hostages	17 December 1979
International Convention Against the Recruitment, Use, Financing and Training of Mercenaries	4 December 1989
Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents	14 December 1973
Convention on the Safety of United Nations and Associated Personnel	9 December 1994
Rome Statute of the International Criminal Court	17 July 1998

Table A III.7: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
DAC ODA	3,631	503,000,000	1,000,000,000	0	24,000,000,000
GDP p.c.	3,626	2404.72	4125.78	54.51	61,374.75
Population	3,631	37,800,000	145,000,000	61,742.40	1,340,000,000
Polity	3,417	4.99	3.05	0	10
UNGA Voting	3,631	0.58	0.06	0.42	0.80
Political Terror	3,612	2.66	1.03	1	5
Physical Integrity	3,009	4.31	2.13	0	8
Human Rights Convention Ratification	3,631	6.50	3.86	0	19
Core Treaty Ratification	3,631	4.11	2.20	0	9
ICCPR & CAT Ratification	3,631	1.08	0.83	0	2
Core Treaties except ICCPR & CAT Ratification	3,631	3.03	1.49	0	7
Other Treaties (Instrument) Ratified	3,631	1.86	1.45	0	6
Spatial Effect Human Rights Convention Ratification	3,628	5.96	2.71	1.44	11.73
Spatial Effect Core Treaty Ratification	3,628	3.74	1.57	0.79	6.40
Spatial Effect ICCPR & CAT Ratification	3,628	1.01	0.44	0.17	1.72

Table A III.8: Data Sources

Variable	Description	Source
DAC ODA commitments (log)	Total DAC ODA commitments to country *i* in year *t* in constant 2011 US$, logged.	OECD Query Wizard for International Development Statistics, OECD (2013a)
DAC ODA commitments to government and civil society	DAC ODA commitments for government and civil society to country i in year t in constant 2011 US$.	OECD Creditor Reposting System, OECD (2013b)
GDP per capita (log)	GDP per capita in constant 2000 US$, logged.	World Bank, World Development Indicators (2013)
Population (log)	Total population, logged.	
Imputed Polity	With Freedom House Civil Liberties index imputed Polity IV. Index ranges from 0 – 10 where 0 reflects least democratic and 10 most democratic.	Teorell et al. (2011)
UNGA	Measure for recipient *i*'s voting in line with either the G5 (measured as the average of votin in line with each G5 country) or an individual donor *j* in the UN General Assambly.	Dreher and Sturm (2012)
Political Terror	Measures of political violence and terror that a country experiences in a particular year ranging from 1 to 5. The data used for the index come from Amnesty International and the U.S. State Department. The different values of the index are: 5: Terror has expanded to the whole population. The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals. 4: Civil and political rights violations have expanded to large numbers of the population. Murders, disappearances,and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas. 3: There is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without a trial, forpolitical views is accepted. 2: There is a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beatings are exceptional. Political murder is rare. 1: Countries under a secure rule of law, people are not imprisoned for their view, and torture is rare or exceptional. Political murders are extremely rare.	Gibney, Cornett, and Wood (2013)
Physical Integrity Index	This is an additive index constructed from the Torture, Extrajudicial Killing, Political Imprisonment, and Disappearance indicators. It ranges from 0 (no government respect for these four rights) to 8 (full government respect for these four rights).	The Cingranelli-Richards (CIRI) Human Rights Dataset, David L. Cingranelli and David L. Richards (2010)
Human Rights Treaty Ratification	Count measure of ratification of conventions and optional protocols listed under Chapter IV "Human Rights" of the UN Treaty Database, excluding: *Agreement establishing the Fund for the Development of the Indigenous Peoples of Latin America and the Caribbean* as it has only a regional focus and *Optional Protocol to the Convention on the Rights of the Child on a communications procedure* as it was adopted only in 2011.	United Nations Treaty Database (2013)
Core Treaty Ratification	Count measure of ratification of the nine core treaties on human rights (see conventions in Table A III.5).	
ICCPR & CAT Ratification	Count measure on the ratification of the ICCPR and the CAT.	

CHAPTER IV :

ENHANCING FOREIGN DIRECT INVESTMENT VIA TRANSPARENCY? EVALUATING THE EFFECTS OF THE EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE ON FDI

IV.1. INTRODUCTION

Resource-rich countries on average experience lower rates of economic growth than resource-poor countries (Sachs and Warner 1995). The existing literature identifies several aspects that influence the development of resource-rich countries negatively, e.g., currency appreciation, a lack of diversification of the economy or a rising probability of civil conflicts. However it is widely argued that the most important channel for the lack of development in resource-rich countries is low institutional quality (see Mehlum et al. 2006; Pitlik et al. 2010; Sala-i-Martin and Subramanian 2003). Different studies show that resource-abundance, mainly in the oil sector, retards the process of democratization (Ross 2001; Sala-i-Martin and Subramanian 2003; Tsui 2011). In addition, low institutional quality supports rent-seeking behavior in the natural resource sector, which leads to rising corruption and distorted allocation of public funds. Low institutional quality and low levels of democratization reduce the accountability of a government towards its citizens and increases the possibilities for corruption and misappropriation of public resources. Politicians and interest groups alike abuse the lack of institutional quality for their personal benefit. This is why it is especially important to increase transparency and impede rent-seeking behavior in resource-rich countries: to turn the resource curse into a blessing (Kolstad and Søreide 2009).

The Extractive Industries Transparency Initiative (EITI) was launched in 2003 to address this problem. The initiative aims to implement a transparency standard for payments from natural resources on a global scale (EITI 2012). The publishing and auditing of payments between resource sectors and governments intends to increase transparency and accountability of the government. This change should support economic development by improving the use of national natural resource endowments. Further, the EITI predicts that countries that join the initiative will experience a decrease of corruption in the medium term and subsequent enhancements in the investment climate through improved transparency. The voluntary decision to join the EITI can be interpreted as a signal of a government's willingness to reform. Governments of countries with a low level of democratization or a poor reputation might use this instrument to give their announcement greater reliability. Failing to comply with publicly announced commitments involves significant costs for a government – so called audience costs – especially if the announcement is given in an international setting (Lohmann 2003).

Prior research empirically supports this argument and shows that, for example, a country's credibility assessment improves with its membership in international organizations where it has to comply with negotiated agreements and rules (Dreher and Voigt 2011).

Using a sample of 81 developing countries over the 2004-2011 period, I test empirically whether joining the EITI sends out a credible signal to investors, which subsequently leads to an increase of FDI inflows in the respective country.[73] In the set-up I face two crucial econometric problems. First, the decision to join the EITI is made on a voluntary basis. Neglecting this fact might lead to a selection bias. Second, the possible endogeneity of the EITI candidate variable can be discussed. To take account of these problems I apply different estimation methods and model specifications. First, I use a treatment model that allows separate modeling of the decision to join the EITI and address the problem of a selection bias. Due to the fact that the timing of becoming EITI candidate cannot be perfectly controlled by the applying government due to the time lag between the countries' decision to join the initiative and the official approval by the EITI this risk of an omitted variable bias seems low. Nevertheless I further control for factors potentially influencing the dependent variable and the EITI candidate dummy simultaneously. In addition I evaluate the effect of the government's announcement to plan to join the EITI, which is more likely to coincide with other factors leading to an increase in FDI flows. The results stay robust to these additional controls. Foreign direct investment increases in countries joining the EITI on average by around two percentage points. Additionally, the government's announcement that it is willing to implement the EITI standard is not enough by itself to have an effect on FDI inflows. This supports the assumption that the EITI provides governments with an additional source of credibility. Consequently, countries joining the EITI do not only benefit from increased income from the resource-sector by reducing corruption and fraud, but also from the ameliorated perception of foreign investors.

The remainder of the study is structured as follows. In the following section IV.2, the EITI will be introduced with its organization and rules. Section IV.3 focuses on the connection between the EITI and FDI, which motivates the research question. In that section, first, important factors for the investment decision will be discussed followed by how these are influenced by the EITI. Further, the section gives an overview on the literature on signaling. Section IV.4 describes the estimation set-up as well as the strategy and presents the results of the estimation. The final section concludes and draws policy implications from the findings.

IV.2. THE EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE

"3.5 billion people live in resource-rich countries. Still, many are not seeing results from extraction of their natural resources. And too often poor governance leaves citizens suffering from conflict and corruption. The EITI was formed to change this." EITI 2012.

[73] I do not aim at answering the question whether the EITI is effective in improving transparency and thereby reducing corruption, as has been discussed by Kolstad and Wiig (2008), but only evaluating the signaling effect of joining the initiative on FDI inflows.

The Extractive Industries Transparency Initiative was launched in 2003, one year after Tony Blair announced plans for its founding at the World Summit for Sustainable Development in Johannesburg. The aim of the initiative is to fight the often-observed lack of transparency in the management of natural resource income by the public sector. This lack of transparency and the general low quality of governance in resource-rich countries is seen as the main reason for the low economic performance and development of many resource-rich countries today (Mehlum et al. 2006; Pitlik et al. 2010; Sala-i-Martin and Subramanian 2003; Williams 2011).

The EITI describes itself as the keeper of a transparency and good governance standard in the resource sector. It is a multilateral organization that consists of an *international secretariat* based in Oslo, the *EITI Board,* and the *multi-donor trust fund* (MDTF) that is administered by the World Bank. Members of the EITI are the governments of implementing and supporting countries, companies and investors in the resource-sector as well as civil society groups. The EITI Board is the executive organ of the initiative and consists of twenty members: nineteen members that represent all stakeholder groupings within the EITI and the EITI chair. The MDTF provides technical and monetary assistance to countries that are on the way to implement the EITI standard or plan to join in order to fulfill this task. Technical assistance includes the help of consultants in implementing the EITI's standard as well as sharing international best practices.

The member countries of the EITI can be divided into supporting countries and implementing countries. The former are those countries that support the idea of a global transparency standard for resource-rich countries and want to support the implementation of this standard although they may not necessarily be resource-rich themselves. Implementing countries are those resource-rich countries that decide to comply with the standard. They show this by implementing the six basic requirements the EITI has set up. These requirements (see Table A IV.1 in the appendix) include the regular reporting of payments by the resource-sector to the government and the revenues received by the government from the resource-extracting companies. These payment reports have to fulfill international auditing standards and are verified by an independent auditor. Furthermore, the civil society should be included in public dialogue and the process of transparency enhancement.

The first step to implementing the EITI is to set up a working group consisting of politicians, company representatives of the resource sector and civil society groups. This group develops a working plan on how to implement these requirements including a timeline and budgeting. Once this task is completed the country sends an official form to the EITI stating its intention to implement the EITI standard. The EITI board verifies whether the working group and working plan meet its requirements and, based on this decision, declare whether or not the country becomes a candidate country. A successful candidate country has 18 months to publish its first EITI report containing the audited payments between the resource-sector and the government. Furthermore it has a total of two and a half years to complete the validation process. This process verifies the accurate fulfillment of the basic requirements. A country that successfully completes this validation process receives compliant

status. The maintenance of this status depends on the continuing application of the EITI standard and criteria, which is assessed at least once every five years. If a country fails either to publish the EITI report or to complete the validation process in time, it may be granted a deadline extension. The Board can also suspend a country's candidate or compliant status if it observes behavior contradicting the EITI principles or has doubts that the country is willing or able to fulfill the requirements. This has occurred to both Yemen and Madagascar. The latter is still suspended.[74] By 2012, 35 countries have become implementing countries of which 14 have achieved compliant status (see Table A IV.2 in the appendix).

IV.3. FOREIGN DIRECT INVESTMENTS AND THE EITI

Foreign direct investments have become the preferred source of external finance for developing countries to fill the gap between domestic savings and needed investment for two main reasons: they have a lower volatility than other capital flows and possibly transfer knowledge which additionally spurs growth (e.g., Borensztein et al. 1998; Jensen 2003). These advantages are recognized by international institutions as well as developed and developing countries. In the UN Millennium Declaration the signing states explicitly named FDI as potentially providing the means to face the special needs of Africa.[75] Many governments offer special treatments like tax exemptions to multinational enterprises to attract more investments.

What determines FDI?

Foreign direct investments aim at establishing a long-term business relationship with an enterprise in the host country. The incentives to establish this relationship differ with the aims of the investor. First, the investor might want to reduce production costs or get better access to natural resources that are needed in the production process. In this case the investment is of the so-called *vertical* type and aims at reducing production costs and increasing the security of the chain of production (Helpman 1984). The final produced good is made for export to other markets. This form of FDI dominates between high-income and developing countries. The second type of FDI is *horizontal*. In this case, production of a good in the investor's country is duplicated in the host country and the investment aims at accessing a new market. As opposed to vertical investment, the good is produced for the local market. This type of FDI is especially relevant if exports to the host country are too expensive due to, for example, trade restrictions or highly-bureaucratized import procedures. Further, a relevant market size is needed to make the investment successful (Schneider and Frey 1985; Lipsey 1999).

Apart from these basic factors like resource endowments and trade restrictions that determine the general attractiveness of a country to foreign investors, there are other factors that influence the

[74] Madagascar has been suspended because the EITI Board does "not believe that the relationships necessary for effective EITI implementation in Madagascar are currently possible and capable of being sustained." (see http://eiti.org/Madagascar/implementation).

[75] See UN RES A/res/55/2. See: http://www.un.org/millennium/declaration/ares552e.htm, accessed on 10/09/2012.

investment climate and the final decision to invest. The investment climate is shaped by factors that influence the achievable rate of return. This depends to a large extent on the risks and quality of governance and institutions an investor faces in the respective country (e.g., Méon and Sekkat 2012; Jensen 2003). Political uncertainties, risk of expropriation, risk of social and political unrest, corruption or low bureaucratic quality are examples of factors that influence the cost of investment.

It is not always clear whether these factors positively or negatively influence the decision. The costs of corruption, for example, can be seen in two different ways. On the one hand corruption increases the cost of an investment as it leads to additional costs in the forms of bribes to officials. On the other hand corruption might facilitate an investment as bureaucratic processes can be accelerated ("greasing the wheels") allowing for faster and easier access to natural resources, for example through paying for extraction licenses rather than applying for them. The empirical evidence on this is mixed. Wei (2000) shows that FDI flows are significantly reduced if corruption rises. Accordingly, a rise in corruption from the level of Singapore to that of Mexico would decrease the FDI inflow to the same extent as an eighteen to fifty percentage point increase of the tax rate. Similarly is the initial decision whether to invest in a certain country influenced by the degree of corruption (Barassi and Zhou 2012). On the other hand Egger and Winner (2005) present empirical support to the hypothesis that higher levels of corruption can partially explain the growth of FDI stocks in developing and less developed countries. They argue in favor of the hypothesis that corruption might work as an incentive for investment.

Other indicators of the quality of governance such as bureaucratic efficiency, law and order or democratic accountability influence the investment climate as well. Busse and Hefeker (2007) show that the quality of these indicators is positively related to FDI. But again the empirical evidence is ambiguous. As with corruption, a lower quality of governance or bureaucracy might also have positive side-effects for investors. Asiedu and Lien (2011) show that for resource-rich countries the impact of democracy on investments seems to be different than for resource-poor countries. According to their study, for countries with a very high share of natural resource exports to total merchandise exports (>50%) democracy seems to be less attractive for foreign investors. Put differently, for less resource-dependent countries, democracy seems to support FDI inflows, whereas for resource-rich countries democracy does not promote investment behavior. Investments in the natural resource sector are related to high sunk costs for setting up the needed infrastructure to extract the resources. Investors therefore prefer a stable political environment. As government changes are more frequent in democracies, investors might favor stable autocracies instead. Furthermore, the government usually intensively controls the natural resource sector. Autocracies might provide an investor with more possibilities to establish close ties with the government and thus sway decisions to its own interest. In addition, the judgment on what a good investment climate is depends on competition for investments. In times when many investors look for investments abroad, for example due to low interest rates, they

seem to care less about the political risk in the host country (Méon and Sekkat 2012) compared to times with a lower urge for FDI.

How can the EITI influence FDIs?

Countries, especially developing countries that are competing for FDI can influence investor decisions by providing a favorable institutional surrounding. The EITI argues that by improving transparency and the government's accountability a country can enhance its investment climate and thus attract more investors (EITI 2005). Williams (2011) shows that a lack of transparency, resulting from an abundance especially of point resources, can indeed be linked to lower growth performance in resource-rich countries. Transparency might be especially important for foreign investors as they lack insider information of the economy. Countries joining the EITI can therefore expect to enjoy the two-fold effect of increased levels of FDI as well as the increased amount of revenues from the resource sector with the decreased chance for this money to be subject to fraud or misappropriation. However there exist also doubts on the effectiveness of the EITI's approach to decrease corruption (e.g., Kolstad and Wiig 2009).

Apparently some time is needed before the positive effects of the EITI on corruption and government transparency can become effective.[76] As explained before, a country must first set up a working group and an implementation plan before becoming a candidate country and then starting to publish and audit the payments between the resource and the public sector. Nevertheless one can argue that the action of joining the EITI alone sends a positive signal of willingness to reform and ameliorates the quality of governance in the eyes of investors (see EITI 2005; Pitlik et al. 2010).

But why should investors pay attention to a signal like becoming EITI candidate in the absence of real reforms being implemented? This can be attributed to the "audience cost" (Lohmann 2003). Pledges made in the international arena are considered as being more reliable by investors because failure to meet these commitments can result in international political or economic pressure being placed on the announcing government. This audience, which is greater than in the case of a local or unofficial announcement, can consist of domestic voters, foreign governments, international organizations and investors. Political pressure can be executed by demonstrations, reelection threat or, on the international level, by threatening with sanctions or even military intervention supported by the United Nations Security Council. At the domestic level the political costs are influenced by the political regime. In autocracies the domestic costs are clearly lower than the international costs. Fang and Owen (2011) argue that international institutions and arrangements might be an instrument by which non-democracies can make internationally accepted commitments. As in autocracies the domestic costs of failing to fulfill announcements is low, the credibility of these announcements is low as well. The international audience and the possibilities to punish misbehavior might therefore work as a mechanism to make commitments credible for countries that are otherwise lacking credibility.

[76] Kolstad and Wiig (2009) argue that the EITI probably does not reduce corruption after all as it focuses on revenues and not on expenditures whereas expenditure is the field where corruption is most common.

Empirical evidence supports the hypothesis that investors care for these kinds of signals. The IMF is a widely studied example (e.g., Bauer et al. 2012; Biglaiser and DeRouen 2010; Bird 2002; Bird and Rowlands 2009). Countries that implement IMF programs have to implement the attached structural adjustment conditions as well. Investors might take these reforms as the right way to ameliorate the economic fundamentals and to put the local economy back on track. Implementation of the conditions is likely as the country faces the risk that future loan tranches will not be delivered or the organization even restraints from giving further credits to the country if it fails to fulfill the conditions.[77] Investors can trust in the implementation of reforms due to the attached costs of failure for the recipient country. Biglaiser and DeRouen (2010) show that US investors use this information to assume amelioration in the economic situation of the recipient country and respond by increasing their FDI to those countries. The increased faith in a country under an IMF program depends both on the likelihood that it will be reprimanded for failing to comply with its conditions and its regime type. For instance, those countries that implement programs under the Poverty Reduction and Growth Facility (PRGF) do not receive a similar increase in FDI inflows. Investors know that the respective countries are so poor that the IMF is trapped in the Samaritan dilemma and will not punish the country if it does not comply. In terms of regime type, Bauer et al. (2012) show that the reliability of the IMF loan-recipient signal depends on the regime in the recipient country. Only democratic countries can commit themselves in a trustworthy way to the implementation of IMF conditions. Accordingly, acceptance of loans from the IMF has a catalytic and FDI-enhancing effect but only in democratic countries. This finding contradicts, to some extent, that of Fang and Owen (2011) who see the credibility-enhancing effect of international commitments as being especially strong for non-democracies.

The signaling effect of international commitments has not only been studied for the IMF. Dreher et al. (2010) and Dreher and Voigt (2011) show that membership in international institutions like the International Centre for the Settlement of Investment Disputes (ICSID) or the signing of the optional protocol on the abolition of the death penalty also have credibility- and FDI-enhancing effects. The country risk rating is one of the most important pieces of information determining investment decisions, with increases in the rating being linked to higher rates of investment into the economy. This number has been found to significantly improve with membership in international organizations. The authors show that the risk-rating of a country improves by 0.4 points when the number of organizations a country is a member of increases by ten. According to Dreher et al. (2010) membership in international organizations, also those without sanctioning costs, indeed gives a positive signal to investors and increases FDI inflows. This shows that investors take the membership in international organizations as sign for trustworthiness and credibility of the government. Trustworthiness of the host government is an important factor for the investment decision as it reduces the risks of unfavorable policy changes and expropriation.

[77] However Stone (2004) shows that cancellation of programs rather depends on a country's relationship with the United States than on its compliance.

Another aspect of the EITI that possibly causes positive effects on FDI is the reputational benefits it provides. The EITI is meant to enhance transparency, reduce corruption and strengthen accountability. Oil, gas and mining companies are known for being highly corrupt[78] and frequently presented in the media as reckless enterprises that deplete the natural wealth of developing countries. This negative image is a concern for the companies and led to an increased engagement in corporate social responsibility activities like community development programs. Slack (2012) argues that these activities often stay ineffective because they are primarily implemented for reputational and not philanthropic reasons. Extractive enterprises might perceive the EITI therefore as another way to "polish" their image and present themselves as responsible investors towards consumers and the media. This causes an increased attractiveness of countries that implement the EITI as host countries for FDI.

Hypothesis

I derive my hypothesis using the existing literature that shows the importance of international memberships and agreements on the credibility of a country. Becoming a candidate country of the EITI sends a credible signal to foreign investors that a government is willing to reform and improve its accountability and transparency standards which in turn influence FDI. Resource-rich countries that are willing to reform and improve the governance of their natural resource management find in the EITI an international association that addresses this issue and are able to use the EITI standard as instrument to achieve this goal. Countries that join the initiative as an implementing country therefore state publicly and internationally exactly this will to reform. As summarized in the previous section, transparency and corruption are important factors for foreign direct investment decisions. Although the EITI is a comparatively non-binding institution with no threat of direct economic or political sanctions following non-compliance, candidate governments can be seen as gaining credibility as they face considerable audience costs. These costs which are incurred upon failing to comply with the EITI rules, include first and foremost the loss in international credibility as they display their inability to fight corruption, to improve transparency and to stick to their commitments. Dreher et al. (2010) show that international institutions without sanctioning mechanism, e.g., conventions of the United Nations generate a signaling effect and increase FDI inflows as well. The hypothesis is therefore that becoming a candidate of the EITI has a direct influence on FDI inflows.

Formulating an expectation on the direction of the effect, however, is not clear-cut. By joining the EITI a government shows that it is committed to fighting corruption and increasing its transparency. According to the general findings, this signal should improve the investment climate in the respective country as the expected decrease in corruption reduces the achievable rent (Wei 2000). On the other hand, the EITI is designed for countries rich in natural resources. As discussed, for

[78] According to Transparency International's Bribe Payers Index 2011, mining, oil and gas are ranked 15th and 16th out of 19 ranked sectors where the lowest rank indicates the sector which is perceived as paying bribes most frequently.

investors in this specific sector, existing evidence suggests that corruption and lower transparency are in fact preferred. These characteristics give investors easier access to the valuable goods (Asiedu and Lien 2011; Egger and Winner 2005). It would be of interest to evaluate whether joining the EITI therefore differently affects resource and non-resource FDI. Especially as a recent study by Poelhekke and van der Ploeg (2013) shows that resource booms push non-resource FDI aside in favor of resource FDI. This raises concerns as non-resource FDI is more often of the horizontal type than resource FDI and therefore contributes to a higher extent to export diversification and long term economic development. As investors in the resource sector might benefit from a lack of transparency it would be of interest to see whether increased transparency might tip the balance in favor of rising non-resource FDI. Unfortunately there is hardly any data on sector-specific FDI flows for developing countries available, why I am not able to distinguish the two effects.

IV.4. DATA AND METHOD

I use a panel dataset of up to 81 developing countries,[79] covering the 2004-2011 period to analyze the signaling effect of implementing the EITI standard on FDI inflows. The EITI is designed for countries with extractable resources. To take account for this selection, the sample has been restricted to countries receiving rents from these natural resources. Countries that do not generate any rents from oil, gas, coal, or minerals are excluded from the sample as they have no reason to join the EITI. As the EITI was only established in 2003, implementing the standard was not possible before. This is why the study-period starts in 2004 as the candidate dummy enters lagged by one year. Some of the data are missing for certain country-year-combinations, leading to an unbalanced panel. As is commonly done in the existing literature, a dynamic panel structure is estimated to take account for the dependence between current and previous FDI. The estimated model specification has the following form:

$$(I)\quad Y_{i,t} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 EITI_{i,t-1} + \beta_3 X_{i,t-1} + \gamma_i + \delta_t + \varepsilon_{i,t}.$$

Where Y represents FDI inflows as share of GDP, $Y_{i,t-1}$ is the lagged dependent variable, *EITI* stands for the EITI membership dummy and X includes the control variables. All control variables are lagged by one year to account for the time lag between information gathering, decision taking and the execution of the investment. Investment decisions are presumably led as well by some country-specific characteristics that are not captured in the analysis, e.g., geographic factors. Further, there might be some time-specific general investment trends across countries (Méon and Sekkat 2012). Country fixed effects (γ) and year dummies (δ) are included to control for this.

[79] The results hold when the sample is not restricted to developing countries – the size of the main coefficient of interest then increases. However the research question is of more interest for developing countries, who are also the majority of countries joining the EITI; therefore in the rest of the analysis, the sample is restricted to developing countries.

Data[80]

The study analyzes whether implementing the EITI rules has a signaling effect for investors leading to an increase in FDI inflows. The dependent variable is net FDI inflows as a percentage of GDP. Net inflows are calculated as new investments less disinvestments as reported in the balance of payments. As I want to investigate the signaling effect of the EITI on investments, the main variable of interest is the dummy indicating whether a country is a candidate country of the EITI or not. The dummy c*andidate* turns 1 for all years a country is candidate of the EITI.[81] It is not further distinguished between candidate and compliant country for two reasons: first, one would assume that becoming a candidate gives a much stronger signal as it reflects a bigger change in the government's behavior than the change between being a candidate and a compliant country; second, the two first compliant countries, Azerbaijan and Liberia, reached this status only in 2009. Analyzing the effect of becoming compliant country would thus not be possible due to the restricted length of the data series.

As control variables, I generally follow Tobin and Rose-Ackermann (2011) and use *trade openness, GDP growth, population, country risk and natural resource rents*. These variables are the standard control variables in the FDI literature.[82] In addition to the control variables used by Tobin and Rose-Ackermann I include *corruption* as EITI membership might lead to a lower perception of corruption that could be the transmission channel for a change in FDI flows. I include corruption and thus close this channel to test whether EITI membership has a signaling effect beyond perceived corruption, i.e., in terms of a general intent to improve the quality of governance. *Trade openness* is measured as the sum of exports and imports of goods and services to GDP. This measure is used to account for trade restrictions that might influence FDI activity in the receiving country. A low share of trade to GDP can be an indication of trade restrictions. These restrictions incentivize foreign investors to invest in the country to gain access to the local market by circumventing these restrictions. On the other hand, investors seeking countries in which they can produce their goods more cheaply so as to export them to their target markets will be more attracted by countries with a higher degree of openness (Asiedu 2002).

Two measures for a recipient country's market potential are included: *GDP growth* and *population.* Market potential is important for horizontal investments. Countries with a higher GDP growth should be more attractive to investors as they promise higher returns to investment and are especially attractive for long-term FDI. Population (in logs) on the other hand shows the size of the market. A bigger population should be more attractive for investors as it reflects more potential consumers (Lipsey 1999; Tobin and Rose-Ackermann 2011).

Corruption measures the perception of corruption in the sense of public power being used for private advantages. It is exactly this type of corruption that should be reduced by strengthened

[80] The sources of all variables are listed in Table A IV.5 in the appendix.
[81] The memberships of Madagascar and Yemen were only suspended in 2011. This is not covered by the data as the EITI dummy is lagged by one period.
[82] I do not include GDP per capita as it will not provide intuitively interpretable information given that the change of GDP, GDP growth, and population (in logs) are already included.

transparency in the public sector. The measure ranges from -2.5 (low control of corruption) to +2.5 (strong control of corruption). Corruption usually makes investments more expensive through extra payments, protracted bureaucratic procedures and additional uncertainties. Foreign direct investments are in general assumed to be negatively affected by high corruption (Barassi and Zhou 2012; Wei 2000). As higher values of the measure indicate a better control of corruption, a positive outcome in the analysis would indicate that lower corruption is connected to higher investment flows. Corruption is one of the channels through which implementation of EITI can affect FDI flows as it should contribute to a reduction of corruption in the resource sector. *Country risk* measures the economic and political risks investors face when investing in a country. I measure country risk via the political risk rating of the International Country Risk Guide (PRS Group 2012). This measure evaluates twelve different indicators including political and economic indicators such as law and order, the investment profile or democratic accountability of the government. The index ranges from zero to 100 where higher values reflect a lower risk level. The amount of natural resource availability might have an influence on a country's attractiveness for foreign investors even if the sample is already reduced to countries having extractive resources. I include *natural resource rents as share to GDP* to account for this. Resource rents include rents from oil, coal, natural gas, forest and several minerals and ores.

Estimation strategy

Several econometric problems in the given model can lead to a bias of OLS estimators. This is why I apply a treatment regression and system GMM in addition to OLS. The first problem I face is that membership in the EITI is not randomly assigned but countries decide whether or not to implement the standard. A possible problem of self-selection with the candidate variable thus emerges. To solve this problem I use a binary treatment effect model.[83] This method takes account of the factors leading to the decision to join the EITI, and thus the non-random treatment assignment, and models it in a non-linear way. The non-linear prediction of the EITI candidate variable is then used in the linear estimation of FDI inflows. The treatment regression compared to the Heckman selection method (Heckman 1979) simulates the situation where both outcomes of the binary decision are observed. The Heckman selection, in contrast, is built for cases where only observations for one result of the decision process are observed and models the "missing" observations. In choosing the determinants of EITI membership I follow Pitlik et al. (2010). According to their study, GDP per capita, ethnic fractionalization, OPEC membership, voice and accountability, the share of fuel and mineral exports and control of corruption all have a robust influence on the decision to join the EITI.[84] I replace fuel and mineral exports by fuel and mineral rents to keep the measure consistent in the model.[85] These determinants of EITI membership are used in the first step of the treatment regression to estimate the probability of becoming candidate. I do not include country fixed effects in the first step as the average

[83] I use the *treatreg* command implemented in Stata 12.0.
[84] For a discussion on the determinats see Pitlik et al. (2010).
[85] Using resource exports instead does not change the main results.

number of years included in the regression is only seven years and the inclusion of country dummies would cause inconsistent estimates in the probit estimation. This problem is known as the incidental parameter problem (Neyman and Scott 1948). The estimated candidate variable is then included in the second step to measure the linear relationship between EITI membership and FDI inflows according to the estimation equation presented before. Though I have no variable that identifies EITI membership and has no influence on FDI, the regression is identified through the non-linearity of the treatment regression (Wooldridge 2010) if the normality assumption of the probit regression is fulfilled.[86]

Although the treatment regression addresses the selection bias, it does not solve a potential endogeneity problem due to a third variable influencing both EITI membership and FDI inflows. However, the risk of endogeneity appears to be small as a country has to fulfill certain initial reforms in order to receive candidate status. Consequently there is a time lag between the decision to be willing to join the EITI and the realization of membership that is not completely controllable by the government. Factors that might influence a government's decision to join the EITI should then only have an effect on FDI two to three years later. Although the probability of such a relationship is small, I nevertheless control for additional variables that might cause this problem. As an additional test for endogeneity and thus whether my results can be interpreted causally, I analyze the effect of the government's announcement to implement the EITI standard on FDI inflows. Here, only the government itself determines the timing and coinciding events affecting FDI inflows so that endogeneity is more likely. If I cannot find an effect of the announcement on FDI inflows it strengthens the assumption of a causal link between the EITI membership and FDI inflows as the existence of endogeneity is less likely there.

A last problem with the estimation strategy can arise due to the inclusion of country-fixed effects in a model comprising the lagged dependent variable with a rather short time dimension. According to Nickell (1981) the correlation between the lagged dependent variable and the fixed effects might cause inconsistent estimators. To take account of this possible bias, I use system GMM[87] with internal instruments (Arellano and Bond 1991; Arellano and Bover 1995; Blundell and Bond 1998) to eliminate this possible bias by instrumenting the lagged dependent variable. The system GMM estimator uses the lagged differences and the lagged levels of the variables as instruments of the endogenous and predetermined variables as these are not correlated with the error term. As proposed by Roodman (2006), I collapse the instrument matrix to prevent the problem of too many instruments. In all estimations the standard errors are clustered at the country level to account for possible correlation of a country's error terms over time and heterogeneity between the clusters.

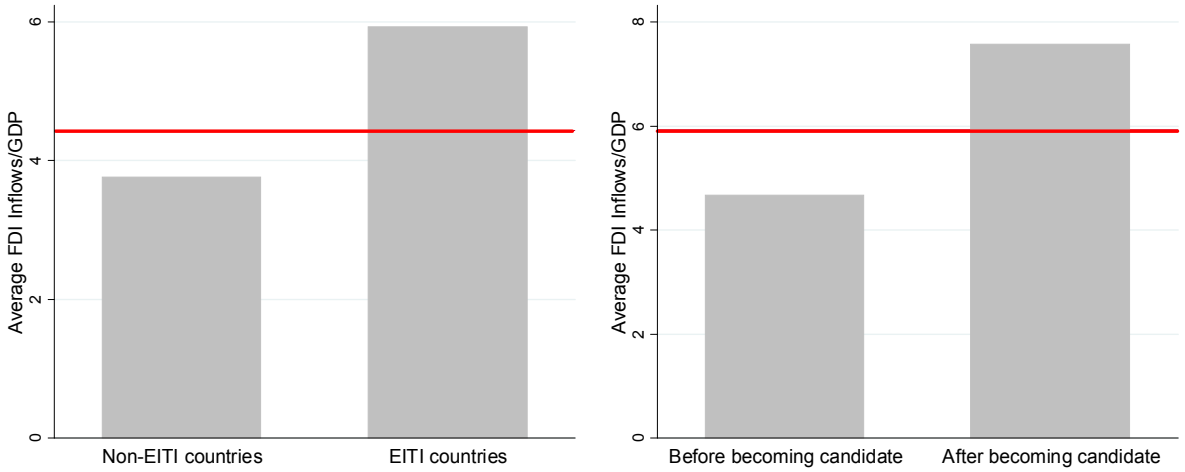
[86] I tested and verified the normality of the underlying probit estimation using the user-written Stata command *skprobit* by Diallo (2010).

[87] Estimations are based on Roodman's two-step estimator (Roodman 2003) including the finite-sample correction by Windmeijer (2005).

IV.5. RESULTS

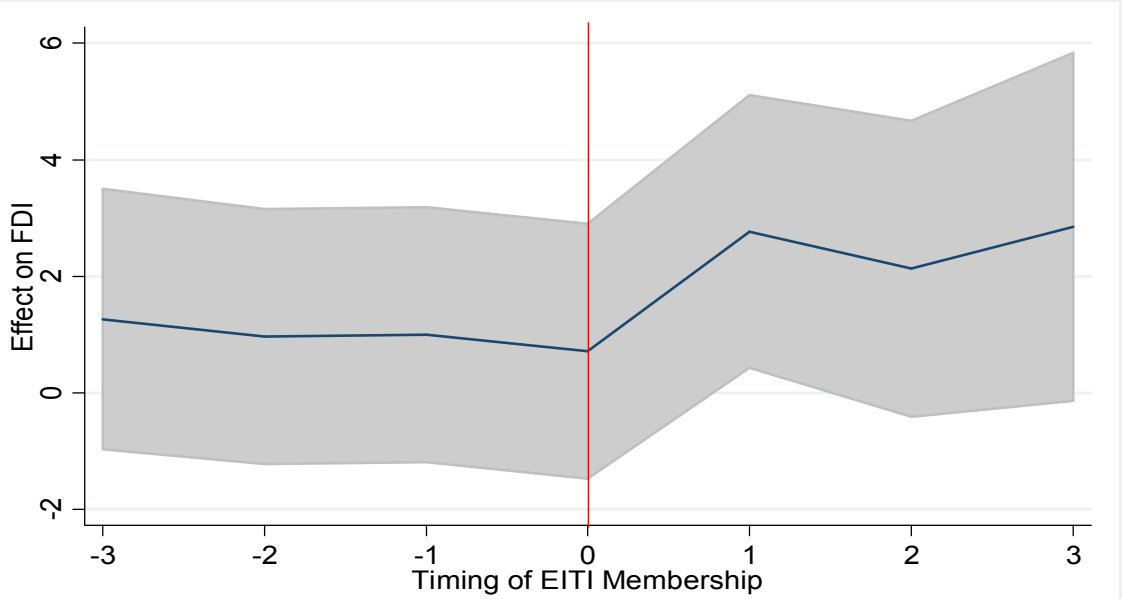
Figures IV.1 and IV.2 provide a first, descriptive look at the effect of joining EITI on FDI inflows. Figure IV.1 shows the average FDI inflows as share of GDP for those countries that do not join the EITI during the sample period compared to those that join the EITI. We can see that FDI inflows of the EITI countries are on average higher than those of the non-EITI countries. However this difference can be due to inherent differences between the two groups. The two bars on the right-hand side

Figure IV.1: Average FDI Inflows



Notes: The graph shows the average FDI inflows as share of GDP for non-EITI countries and EITI countries (left), and EITI countries before and after becoming candidate (right). The countries included are identical to the estimation sample. The horizontal lines report the average FDI/GDP ratio for either the whole sample (left) or the sample of EITI countries (right).

Figure IV.2: Effect of EITI Membership on FDI



Notes: The line shows the marginal effect of becoming EITI candidate on FDI net inflows to GDP. Point 0 marks the year a country becomes candidate of the EITI, the points on the left hand side the first, the second and the third year before becoming EITI candidate and the points on the right to 0, respectively, indicate the years after becoming EITI candidate. The gray area shows the 90% confidence interval.

therefore refer to a sample including only those countries that become EITI candidates and compares their average FDI inflows before and after becoming members. The average FDI inflows after the membership in the EITI are clearly higher than before. While the average share of FDI to GDP is almost five percent before membership, it increases to around seven percent after countries become EITI candidates. Figure IV.2 shows the results of an event-study approach where the effect of the timing of becoming EITI candidate on FDI inflows from three years before to three years after becoming candidate is visualized. A substantial increase in FDI inflows is observable from the year of becoming candidate to the first year after. Furthermore, a general increase in FDI inflows after becoming an EITI candidate can be observed.

These graphs only provide a first, descriptive insight into the relationship in question as I do not control for other country characteristics. Nevertheless it is in line with the following estimation results. Table IV.1 shows the results for the baseline regression. Models 1 and 2 show the results for the OLS estimation. The lagged dependent variable has a significant and positive effect at the one percent level, as expected. Surprisingly the effect of trade openness is not statistically significant at conventional levels. The assumption that vertical FDI dominates the investments in resource-rich developing countries implies that open countries should be more likely to receive FDI inflows. While GDP growth stays insignificant at conventional levels in all regressions, the second measure of market potential, (log) population, is positive and significant at the five percent level. Countries growing in size, i.e., those with expanding markets, on average receive higher FDI inflows. The measure for country risk shows the expected positive and significant sign at the ten percent level. Countries that reduce their financial, political and economic risk, i.e., a rise in the country risk measure, experience an increase in their FDI inflows. Increasing the country risk measure by ten points leads to a corresponding increase in the share of FDI to GDP by one percentage point. Resource rents do not seem to matter for the investment inflows to the countries under study. This is not too surprising as the sample is already reduced to only those countries with extractive natural resources and we are only looking at the effect of changes in the explanatory variables due to the included fixed-effects. For the main variable of interest, the candidate dummy, the relationship between the dummy and the dependent variable is highly significant and positive. The results support the hypothesis that becoming an EITI candidate increases FDI inflows in the following year. Countries that receive the candidate status experience on average an increase of FDI inflows as share of GDP by almost two percentage points. This is in line with the first descriptive result shown in Figure IV.1 where the average FDI to GDP ratio increased by 2.2 percentage points after becoming an EITI member. In Model 2, I include as additional explanatory variable *control of corruption*. This measure closes the possible transmission channel of a reduction in corruption when implementing the EITI standard. However the coefficient of perceived corruption is not significant at conventional levels whereas the effect of the EITI candidate dummy stays significant at the one percent level and changes the coefficient's magnitude only marginally. This supports the initial hypothesis that the fact of becoming EITI candidate sends a

positive signal to investors leading to higher investments. This effect does not depend on a perceived change in corruption or risk.

Models 3 and 4 show the results for the treatment regression. The upper part shows the results for the linear estimation of FDI inflows on the control variables. The results do not differ remarkably from those of the OLS estimation with the exception of political risk which becomes insignificant at conventional levels. The similarity of the results of the two estimation methods is a sign that the importance of the selection bias is rather negligible. However the Wald-Test indicates that the error terms of both equations are correlated. The two equation model should therefore be preferred to the single equation OLS model. The coefficient of the candidate dummy is larger than in the OLS estimation and is significant at the one percent level. Candidate countries receive on average around 2.5 percentage points more of FDI inflows. The lower part of the table shows the results for the non-linear treatment regression that estimates the probability to join the EITI. The results do in general support the findings of Pitlik et al. (2010). Richer countries have a significantly lower probability of becoming candidate countries of the EITI. On the other hand, countries with a higher ethnic fractionalization and a higher share of extractive resource rents with respect to their GDP have a higher probability to implement the standard. For voice and accountability, control of corruption and OPEC membership I do not find a significant influence on selection into the EITI. This might be attributed to the fact that Pitlik et al. (2010) use a cross-country estimation whereas I include the time dimension as well. Though voice and accountability might in general determine the probability to join the EITI, their change over time might be too small to make a prediction on the precise moment of joining the EITI.

As explained above, the previous estimations might be biased due to a correlation of the lagged dependent variable with the error term. This would cause coefficients of explanatory variables that are correlated with the lagged dependent variable to be biased as well. To address this problem, I use a system GMM approach (models 5 and 6). In addition to the predetermined lagged dependent variable, I assume natural resource rents to be predetermined. I further assume GDP growth and trade openness to be endogenous as FDI inflows can have a contemporaneous effect on these two variables. The Hansen-Test tests the exogeneity and hence the validity of the used instruments. A second important test to check the validity of the specification is the test for second order autocorrelation (AR2). AR2 must be absent to have consistent estimators. According to these tests, both model specifications are not rejected at conventional levels of significance.

The results support the findings of the OLS and treatment regressions and the estimated effect of becoming EITI candidate even increases in size and is significant at least at the five percent level. In addition, in the GMM estimation trade openness turns significant at the five percent level. Countries with a higher share of trade in GDP receive higher FDI inflows. Furthermore corruption turns

Table IV.1: Baseline Regression

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS		Treatment Regression		System GMM	
FDI $_{t-1}$	0.458*** [0.000]	0.459*** [0.000]	0.455*** [0.000]	0.456*** [0.000]	0.504*** [0.000]	0.484*** [0.000]
Trade $_{t-1}$	0.005 [0.780]	0.004 [0.817]	-0.010 [0.624]	-0.010 [0.627]	0.101** [0.013]	0.120*** [0.009]
GDP growth $_{t-1}$	0.001 [0.983]	-0.001 [0.981]	-0.019 [0.708]	-0.020 [0.693]	-0.107 [0.378]	-0.126 [0.289]
Population $_{t-1}$	15.458** [0.049]	15.527** [0.048]	15.626** [0.045]	15.694** [0.045]	0.700* [0.090]	1.013** [0.046]
Political Risk $_{t-1}$	0.107* [0.093]	0.093* [0.074]	0.074 [0.152]	0.066 [0.163]	-0.015 [0.775]	-0.124 [0.112]
Resource Rent $_{t-1}$	0.027 [0.674]	0.025 [0.694]	0.030 [0.660]	0.029 [0.668]	0.021 [0.648]	0.008 [0.820]
Corruption $_{t-1}$		1.057 [0.532]		0.710 [0.647]		2.182* [0.053]
Candidate $_{t-1}$	1.939*** [0.009]	1.889*** [0.008]	2.582*** [0.001]	2.553*** [0.001]	2.497** [0.015]	2.727*** [0.005]
Constant	264.239** [0.046]	263.899** [0.045]	258.620** [0.043]	258.397** [0.042]	-15.913 [0.108]	-14.554 [0.121]
Treatment Regression						
GDP p.c. $_{t-2}$			-0.741*** [0.000]	-0.741*** [0.000]		
Extractive Resource Rent $_{t-2}$			0.044*** [0.000]	0.044*** [0.000]		
Corruption $_{t-2}$			0.388 [0.239]	0.388 [0.238]		
Ethnic Fractionalization			1.266** [0.042]	1.265** [0.042]		
OPEC Membership			-0.866 [0.201]	-0.867 [0.200]		
Voice and Accountability $_{t-2}$			0.336 [0.293]	0.336 [0.293]		
Time trend			0.557*** [0.000]	0.557*** [0.000]		
Observations	566	566	524	524	566	566
Number of Countries	81	81	79	79	81	81
Number of Instruments					53	54
Within R^2	0.332	0.334				
Wald Test (p-value)			0.0597	0.0547		
Arellano-Bond AR2 (Pr>z)					0.349	0.342
Hansen (Pr>chi2)					0.897	0.885

Notes: The dependent variable is net FDI inflows/GDP. Country fixed effects and year dummies are included (except in the selection equation). The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

significant and positive at the ten percent level. Countries that manage to reduce the perceived corruption thus experience an increase in foreign investments. An increase of the control of corruption by one point, the equivalent of Lithuania increasing its control of corruption (0.15) to the level of the United States (1.15), increases the received FDI as share of GDP by around 2.2 percentage points. Although the increase of the control of corruption should have a much more pronounced effect on the investment climate, its estimated effect on FDI inflows is slightly lower than the estimated effect of joining the EITI. According to the GMM estimation, joining the EITI increase in FDI with respect to the years it was not yet a candidate by between 2.5 and 2.7 percentage points.

As discussed before, the decision to join the EITI might coincide or even be driven by other factors that also influence the investors' perception of a country. A third factor could influence both the implementation of the EITI standard as well as the rising FDI inflows. As Dreher and Voigt (2011) argue, this factor might be a general change in the government's behavior. Such behavior would include the government's decision to enhance the investment climate by inducing economic reforms including the fight against corruption via implementing the EITI. In this case the observed change in the investment flows might be attributed to the general change in the government's behavior and the economic reforms conducted rather than to the implementation of the EITI. Following Dreher and Voigt (2011), I test for this factor and proxy the occurrence of economic reforms by the changes in the index of economic freedom provided by the Heritage Foundation (2012). A second factor that could cause the change in the investors' behavior would be a change in the government that coincides with the decision to join the EITI. If a change in government occurs and the succeeding one acts in a more investor-friendly manner than the previous one or conducts needed business reforms, this might cause a surge in investments in the country. This is captured by the dummy variable suggested by Dreher and Voigt (2011), with the new government dummy being derived from the database of political institutions (Beck et al. 2001). Whenever the indicator measuring the years the party of the chief executive has been in power (*prtyin*) turns one, the new government dummy turns one as well and stays zero elsewise.[88]

The estimations in Table IV.2 include these additional control variables. As some time usually passes between the time of the decision to join the EITI and the date of becoming candidate due to time taken to implement the required reforms, longer lags for the additional control variables are tested as well. Compared to Table IV.1 without the additional control variables of government change and economic reforms, only a marginal change in the results can be observed. Both a change in economic freedom and a change in government in the previous years do not influence the share of inflowing FDI. Furthermore, and of particular interest, the inclusion of the two additional control variables does not substantially change the magnitude of the candidate dummy. Nevertheless an estimated increase of

[88] In the presented results the cases where the variable is not defined due to turmoil etc. the new government dummy is set zero. The results do not change when these observations are coded as missing.

Table IV.2: Control for Economic Reforms and New Governments

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	OLS			Treatment Regression			System GMM		
FDI $_{t-1}$	0.564*** [0.000]	0.567*** [0.000]	0.346*** [0.000]	0.562*** [0.000]	0.565*** [0.000]	0.329*** [0.000]	0.655*** [0.000]	0.667*** [0.000]	0.543*** [0.000]
Trade $_{t-1}$	-0.002 [0.919]	-0.004 [0.834]	0.020 [0.277]	-0.007 [0.719]	-0.009 [0.636]	0.018 [0.321]	0.050** [0.047]	0.079 [0.153]	0.073* [0.082]
GDP growth $_{t-1}$	-0.031 [0.499]	-0.032 [0.492]	-0.058 [0.286]	-0.031 [0.491]	-0.033 [0.473]	-0.058 [0.281]	0.010 [0.950]	-0.156 [0.158]	-0.173** [0.044]
Population $_{t-1}$	8.733 [0.230]	9.789 [0.176]	14.114 [0.238]	8.073 [0.261]	10.206 [0.156]	13.127 [0.284]	0.284 [0.223]	0.677 [0.243]	0.470 [0.270]
Political Risk $_{t-1}$	0.034 [0.369]	0.039 [0.289]	0.130** [0.024]	0.023 [0.557]	0.030 [0.437]	0.130** [0.034]	-0.020 [0.458]	-0.055 [0.512]	-0.040 [0.590]
Resource Rent $_{t-1}$	0.053 [0.408]	0.053 [0.408]	0.034 [0.518]	0.053 [0.447]	0.052 [0.445]	0.035 [0.544]	0.037 [0.545]	0.032 [0.536]	0.005 [0.933]
Corruption $_{t-1}$	0.180 [0.876]	0.142 [0.895]	-0.042 [0.972]	0.326 [0.783]	0.338 [0.763]	-0.014 [0.991]	1.062** [0.015]	1.451 [0.135]	1.532 [0.181]
Candidate $_{t-1}$	1.637** [0.031]	1.683** [0.025]	2.010** [0.017]	2.404** [0.013]	2.417*** [0.009]	2.607** [0.012]	1.706* [0.096]	1.930** [0.046]	1.996* [0.085]
Economic Reforms $_{t-1}$	-0.004 [0.470]			0.477 [0.347]			0.559 [0.118]		
New Government $_{t-1}$	0.284 [0.448]			-0.002 [0.724]			-0.001 [0.807]		
Economic Reforms $_{t-2}$		-0.002 [0.771]			-0.478 [0.199]			0.003 [0.992]	
New Government $_{t-2}$		-0.412 [0.200]			-0.005 [0.438]			0.000 [0.939]	
Economic Reforms $_{t-3}$			0.004 [0.434]			-0.331 [0.464]			-0.073 [0.874]
New Government $_{t-3}$			-0.274 [0.506]			0.004 [0.435]			0.002 [0.817]
Constant	-147.058 [0.226]	-165.067 [0.172]	-244.394 [0.222]	-133.144 [0.253]	-168.212 [0.149]	-222.657 [0.264]	-5.555 [0.241]	-10.886 [0.226]	-7.067 [0.293]
Treatment Regression									
GDP p.c. $_{t-2}$				-0.727*** [0.000]	-0.757*** [0.000]	-0.737*** [0.000]			
Extractive Resource R				0.046*** [0.000]	0.049*** [0.000]	0.049*** [0.000]			
Corruption $_{t-2}$				0.083 [0.773]	-0.071 [0.821]	-0.077 [0.787]			
Ethnic Fractionalizatic				1.020* [0.093]	1.008 [0.106]	1.020 [0.100]			
OPEC Membership				-1.002 [0.158]	-1.236 [0.115]	-1.187 [0.118]			
Voice and Accountab				0.458 [0.146]	0.564* [0.089]	0.578* [0.061]			
Economic Reforms $_{t-2}$					0.153 [0.724]				
New Government $_{t-2}$					0.015*** [0.009]				
Economic Reforms $_{t-3}$						-0.178 [0.709]			
New Government $_{t-3}$						0.011** [0.019]			
Time Trend				0.547*** [0.000]	0.564*** [0.000]	0.545*** [0.000]			
Observations	536	531	456	500	495	422	536	531	456
Number of Countries	79	76	76	78	75	75	79	76	76
Number of Instrument							56	56	55
Within R^2	0.430	0.434	0.323						
Wald Test (p-value)				0.0640	0.0365	0.287			
Arellano-Bond (Pr>z)							0.613	0.567	0.989
Hansen (Pr>chi2)							0.850	0.791	0.859

Notes: The dependent variable is net FDI inflows/GDP. Country fixed effects and year dummies are included (except in the selection equation). The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

FDI inflows of around 1.6 percentage points for the OLS and 2.4 percentage points for the treatment regression and 1.7 percentage points for the GMM estimation is observed for countries becoming EITI candidates. This result is robust to a longer lag structure of the additional control variables. Further the results do not change when both additional control variables are included separately (results not shown here, but available uponrequest). As the assumption is that both economic reforms and government change have a simultaneous effect on the FDI inflows and the EITI membership, they are included in both parts of the treatment estimation. While economic reforms have no effect on the decision to join the EITI, a new government seems to increase the probability to join the EITI. However this does not affect the significance and magnitude of the candidate dummy. Thus, the observed effect for becoming an EITI candidate does not seem to be the result of coinciding changes in the government or in the general reform behavior of the government. The results still support the hypothesis that investors react to the information of a country becoming an EITI candidate and its implied willingness to reform and enhance transparency in the resource sector and the perceived increase in the government's accountability.

In the first two specifications I tested that the positive effect on FDI depends neither on a change in the perception of corruption nor on changes in the government or its economic reform behavior. As a last step I want to further reinforce the signaling hypothesis by testing the effect of the governments' announcement to plan to join the EITI on FDI inflows. If the resulting positive effect on FDI inflows is not due to the improved credibility of the EITI statement but due to the simple will to reform, a positive effect on FDI should be observed already when the government announces its plan to join the EITI. Further, if a third factor influences the government's decision to join the EITI and the dependent variable simultaneously, the announcement should have a positive effect on FDI as well. Should the positive effect on FDI however be observable only for the official statement by the EITI, it gives additional support to the assumed causality of my results. I therefore replace in the following the candidate dummy by the *announcement* dummy. This announcement information covers only those countries that indeed became EITI candidates afterwards.[89] The dummy is coded 1 beginning in the year the government has announced its intent in joining the EITI until it has received the candidate status. Often it is only a period of one to two years between the announcement and the membership where the needed reforms to become candidate are conducted. As the treatment model is not applicable,[90] I use OLS for this estimation (Table IV.3).[91] In models 4 – 6, I control only for the single year the government announced its intent, i.e., the *announcement year*. This is to see whether the announcement perhaps has only a one-period effect that would not be observable with the

[89] I could gather information on the year of announcement for the majority but not all EITI candidate countries. The EITI countries without announcement information are: Democratic Republic of Congo, Guinea, Guatemala, Madagascar, Mali, and Togo.

[90] The treatment model could be used to predict the treatment effect, hence the time when the government announces its will to join the EITI. However the end of the treatment, the turn from announcement to becoming EITI candidate, would not be predictable.

[91] The GMM results support the OLS findings. Results are reported in Table A IV.3 in the appendix.

Table IV.3: Control for Announcement Effect, OLS

	(1)	(2)	(3)	(4)	(5)	(6)
FDI $_{t-1}$	0.466*** [0.000]	0.568*** [0.000]	0.570*** [0.000]	0.462*** [0.000]	0.561*** [0.000]	0.563*** [0.000]
Trade $_{t-1}$	0.003 [0.888]	-0.005 [0.813]	-0.007 [0.737]	-0.001 [0.954]	-0.008 [0.711]	-0.010 [0.639]
GDP growth $_{t-1}$	-0.003 [0.965]	-0.032 [0.512]	-0.033 [0.501]	-0.001 [0.992]	-0.030 [0.550]	-0.031 [0.530]
Population $_{t-1}$	20.547** [0.014]	13.161* [0.065]	14.305** [0.048]	21.061** [0.014]	13.673* [0.063]	14.974** [0.043]
Political Risk $_{t-1}$	0.108** [0.044]	0.045 [0.198]	0.050 [0.139]	0.108** [0.044]	0.046 [0.188]	0.051 [0.130]
Resource Rent $_{t-1}$	0.036 [0.572]	0.063 [0.303]	0.063 [0.303]	0.034 [0.599]	0.061 [0.345]	0.059 [0.352]
Corruption $_{t-1}$	1.270 [0.474]	0.245 [0.833]	0.201 [0.854]	1.254 [0.482]	0.232 [0.842]	0.165 [0.879]
Announcement $_{t-1}$	-1.038 [0.124]	-0.941 [0.249]	-0.935 [0.243]			
Announcement year $_{t-1}$				0.746 [0.595]	1.346 [0.239]	1.336 [0.244]
Economic Reforms $_{t-1}$		-0.004 [0.442]			-0.005 [0.364]	
New Government $_{t-1}$		0.319 [0.398]			0.402 [0.282]	
Economic Reforms $_{t-2}$			-0.002 [0.805]			-0.002 [0.804]
New Government $_{t-2}$			-0.436 [0.186]			-0.371 [0.259]
Constant	-348.559** [0.013]	-221.650* [0.062]	-241.148** [0.045]	-356.921** [0.013]	-230.078* [0.060]	-252.259** [0.040]
Observations	566	536	531	566	536	531
Number of Countries	81	79	76	81	79	76
Within R^2	0.325	0.422	0.426	0.323	0.424	0.428

Notes: The dependent variable is net FDI inflows/GDP. Country fixed effects and year dummies are included. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

announcement dummy. If a government's announcement is taken as seriously as the official EITI statement, a change in the FDI inflows should be observed with the government's announcement.

The coefficients of the control variables stay robust to this change. According to model 1, a government's announcement has no statistically significant effect at conventional levels on the FDI inflows that it receives in the following year. These results suggest that although the reforms needed to become an EITI candidate are already under way in the announcement period, investors do not react. Thus it is not the reforms themselves that lead to the investors' behavior. Models 2 and 3 include economic reforms and government change (see above) as further control variables. Even with these controls, a government's announcement does not have an effect on FDI inflows. Models 4 – 6 further show that not even a reaction only in the year following the announcement can be observed. Again the coefficient of the announcement year is not statistically significant at conventional levels. Thus neither the period of prior reforms nor a government's announcement has an effect on FDI inflows. The timing of the announcement is decided by the government itself; the lack of a significant effect of the announcement on FDI inflows further supports the assumption that a coincidence of EITI membership with other variables that might have an influence on FDI is unlikely. Only the official approval by the EITI is taken as a trustworthy signal. This supports the findings of Lohmann (2003) and Fang and Owen (2011) that the credibility of a statement is increased when done via an international institution such as the EITI.

In summary, throughout all model specifications and estimation techniques I find a robust positive effect of EITI membership on inflows of foreign direct investments that ranges between 1.6 and 2.4 percentage points. The announcement by the government to implement the EITI standard, on the other hand, does not cause any change in FDI inflows.

IV.6 CONCLUSION

The Extractive Industries Transparency Initiative, set up in 2003, aims at increasing transparency and accountability with regards to revenues and payments from the resource sector in resource-rich countries. The aim of the demanded reforms is to turn the resource curse in the respective countries into a blessing. This blessing comes in the form of both increasing public revenues and increasing foreign investment inflows. The demanded reforms are designed to contribute to lower degrees of corruption, more transparency in the public sector and thus a better quality of governance. They have the possibility to make the countries more attractive for foreign investors. Countries that want to join the EITI have to fulfill specific requirements before becoming a candidate country. Becoming a candidate country signals that the government has taken the first steps towards increasing transparency and fighting corruption. Furthermore, after joining the EITI it becomes more costly for governments to not further fulfill the EITI requirements, as they would internationally be recognized as a country unable to reform or honor their commitments.

Analyzing a panel dataset of 81 countries, this study shows that the signal of becoming an EITI member is indeed rewarded by the market with an increase in foreign direct investment inflows. The hypothesis has been confirmed that becoming an EITI candidate works as a signal for the willingness to reform. Investors recognize this signal of increased trustworthiness, which they reward by investing in the respective country. It is not enough to state the intention to join, as can be seen by the finding that the announcement of a government to plan to join the EITI is not rewarded. This shows that investors do not seem to trust the governments' announcements to the same extent as they trust the initiative. Becoming an EITI candidate country increases the share of FDI inflows to GDP on average by around 2 percentage points. This is a substantial increase given that the average share of FDI to GDP in the sample is around 4%. This result holds both when controlling for the self-selection of countries into the EITI and for possible endogeneity. As the EITI candidate status raises FDI inflows, improving transparency and accountability seem to be positive and important aspects for the investment decisions of foreign investors.

Countries joining the initiative thus do not only benefit from more transparency in the resource sector, which might increase public revenues via reduced possibilities of fraud of payments from the resource sector. They also benefit from the increased investment in their markets. As most of the implementing countries are developing countries – especially in Sub-Saharan Africa – this is even more important. Many of these countries lack access to capital, which FDI readily provides. Foreign investments are therefore a crucial source of finance for them and thus anything that can increase these inflows is desirable. Even if other studies were not yet able to show a significant effect of EITI on fighting corruption, this study shows that the initiative has been effective in supporting investments in the participating countries.

The findings of this study are important for policy makers in resource-rich countries as well as for the international community as it shows that improving domestic institutions and fighting corruption is rewarded by investors already in the short run given that the reforms are undertaken within an internationally accepted setting as the EITI. The study gives thus support to both the beneficial effect of joining international organizations on a government's credibility including the credibility of reform announcements and the positive effect of fighting corruption and increasing transparency in the resource sector.

This study has analyzed the impact of the EITI from a macro perspective. It would be interesting to have a more detailed look at single countries joining the initiative where sector-specific FDI data are available. This would allow evaluating the effect of the EITI membership on investments in different sectors given that corruption might be perceived differently harmful across sectors. I leave this for future research.

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IV.8 APPENDIX

Table A IV.1: EITI Criteria

1. Regular publication of all material oil, gas and mining payments by companies to governments ("payments") and all material revenues received by governments from oil, gas and mining companies ("revenues") to a wide audience in a publicly accessible, comprehensive and comprehensible manner.
2. Where such audits do not already exist, payments and revenues are the subject of a credible, independent audit, applying international auditing standards.
3. Payments and revenues are reconciled by a credible, independent administrator, applying international auditing standards and with publication of the administrator's opinion regarding that reconciliation including discrepancies, should any be identified.
4. This approach is extended to all companies including state-owned enterprises.
5. Civil society is actively engaged as a participant in the design, monitoring and evaluation of this process and contributes towards public debate.
6. A public, financially sustainable work plan for all the above is developed by the host government, with assistance from the international financial institutions where required, including measurable targets, a timetable for implementation, and an assessment of potential capacity constraints.

Source: EITI 2011

Table A IV.2: EITI Candidate and Compliant Countries

Candidate	Compliant*
Afghanistan (2010)	Azerbaijan (2007, 2009)
Albania (2009)	Central African Republic (2009, 2011)
Burkina Faso (2009)	Ghana (2007, 2010)
Cameroon (2007)	Kyrgyz Republic (2007, 2011)
Chad (2010)	Liberia (2007, 2009)
Côte d'Ivoire (2010)	Mali (2009, 2011)
Dem. Rep. Congo (2010)	Mongolia (2007, 2010)
Rep. Congo (2010)	Niger (2007, 2011)
Gabon (2005)	Nigeria (2007, 2011)
Guatemala (2011)	Norway (2009, 2011)
Guinea (2011)	Timor-Leste (2008, 2010)
Indonesia (2010)	
Iraq (2010)	
Kazakhstan (2007)	
Madagascar (2008)	
Mauretania (2007)	
Mozambique (2009)	
Peru (2007)	
Sierra Leone (2008)	
Tanzania (2009)	
Togo (2010)	
Trinidad and Tobago (2011)	
Yemen (2007)	
Zambia (2009)	

* The first year refers to the year of becoming candidate and the second to the year the country received compliant status.

Table A IV.3: Control for Announcement Effect, GMM

	(1)	(2)	(3)	(4)	(5)	(6)
FDI $_{t-1}$	0.528*** [0.000]	0.648*** [0.000]	0.699*** [0.000]	0.532*** [0.000]	0.641*** [0.000]	0.687*** [0.000]
Trade $_{t-1}$	0.111** [0.020]	0.033 [0.303]	0.052 [0.159]	0.099** [0.028]	0.033 [0.199]	0.043 [0.184]
GDP growth $_{t-1}$	-0.047 [0.750]	0.023 [0.885]	-0.116 [0.221]	-0.033 [0.822]	0.029 [0.841]	-0.105 [0.266]
Population $_{t-1}$	0.917** [0.049]	0.142 [0.515]	0.394 [0.266]	0.795* [0.060]	0.155 [0.376]	0.325 [0.280]
Political Risk $_{t-1}$	-0.110 [0.109]	-0.013 [0.682]	-0.028 [0.584]	-0.105* [0.088]	-0.011 [0.737]	-0.019 [0.723]
Resource Rent $_{t-1}$	0.028 [0.454]	0.045 [0.378]	0.059 [0.252]	0.020 [0.533]	0.033 [0.438]	0.042 [0.337]
Corruption $_{t-1}$	2.184* [0.057]	0.843 [0.120]	1.202 [0.109]	1.994* [0.082]	0.778 [0.113]	0.960 [0.158]
Announcement $_{t-1}$	-0.759 [0.440]	-0.389 [0.686]	-0.675 [0.493]			
Announcement year $_{t-1}$				0.819 [0.339]	0.973 [0.169]	1.299** [0.048]
Economic Reforms $_{t-1}$		0.479 [0.238]			0.406 [0.296]	
New Government $_{t-1}$		-0.002 [0.681]			-0.003 [0.485]	
Economic Reforms $_{t-2}$			-0.061 [0.846]			0.087 [0.834]
New Government $_{t-2}$			-0.000 [0.959]			-0.001 [0.855]
Constant	-13.342 [0.119]	-2.325 [0.603]	-6.177 [0.278]	-10.923 [0.188]	-2.636 [0.476]	-5.087 [0.291]
Observations	565	536	531	565	536	531
Number of Countries	81	79	76	81	79	76
Number of Instruments	54	56	56	54	56	56
Arellano-Bond (Pr>z)	0.337	0.532	0.454	0.357	0.717	0.672
Hansen (Pr>chi²)	0.780	0.861	0.872	0.754	0.919	0.908

Notes: The dependent variable is net FDI inflows/GDP. Country fixed effects and year dummies are included. The Arellano-Bond AR2 statistic tests for second order autocorrelation. AR2 must be absent to have consistent estimators. The Hansen-Test controls for the exogeneity of the used instruments. A significant test statistic indicates that exogeneity can be rejected. The standard errors are clustered at the country level. P-values in brackets, where ***p<0.01, **p<0.05, *p<0.1.

Table A IV.4: Summary Statistics

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
FDI (% GDP)	566	4.44	5.33	-14.37	46.38
Trade Openness	557	80.18	34.43	22.12	212.10
GDP Growth	566	5.46	4.56	-17.67	37.76
GDPpc	464	5,296.79	4,151.71	131.78	19,857.77
Population	566	66,000,000	194,000,000	493,236	1,340,000,000
Political Risk	566	61.98	8.58	37.83	81.75
Resource Rents (% GDP)	537	13.50	16.53	0.13	78.55
Extractive Resources (% GDP)	537	12.76	16.69	0.00	75.79
Corruption	537	-0.51	0.56	-1.48	1.50
Voice and Accountability	537	-0.43	0.73	-1.96	1.22
Ethnic Fractionalization	526	0.53	0.24	0.04	0.93
OPEC Membership	566	0.08	0.27	0	1
Economic Reforms	543	1.11	17.67	-61	68
New Government	533	0.06	0.24	0	1
Candidate	566	0.13	0.34	0	1
Announcement	566	0.06	0.24	0	1
Year of Announcement	566	0.03	0.17	0	1

Table A IV.5: Data Sources

Variable	Description	Source
FDI	Net FDI flows as share to GDP.	World Development Indicators, World Bank (2012)
Openness	Sum of imports and exports as share of GDP.	World Development Indicators, World Bank (2012)
GDP growth	Annual GDP growth.	World Development Indicators, World Bank (2012)
GDP p.c.	GDP per capita in logarithms.	Heston et al. (2011)
Population	Total population in logarithms.	World Development Indicators, World Bank (2012)
Resource Rents	Resource rents are calculated as: (Unit price – Extraction cost per unit) x Extracted volume; Resources covered: Bauxit, copper, lead, nickel, phosphate, tin, zinc, gold, silver, iron, hard coal, soft coal, oil, natural gas.	World Development Indicators, World Bank (2012)
Country Risk	Political risk measure combining twelve indicators: government stability, socioeconomic conditions, bureaucratic quality, investment profile, internal conflict, external conflict, military in politics, religious tensions, corruption, law and order, ethnic tensions, democratic accountability. The indicator ranges from zero (high risk) to 100 (low risk).	International Country Risk Guide, PRS Group
Corruption	Assessment of the perception of corruption. Ranging from -2.5 (low control of corruption) to +2.5 (high control of corruption).	Worldwide Governance Indicators, Kaufmann et al. (2009)
OPEC Member	1 in case the country is an OPEC member country, 0 otherwise.	OPEC webpage
Extractive Resource Rents	Sum of oil, gas and mineral rents.	World Development Indicators, World Bank (2012)
Ethnic Fractionalization	Average value for ethnic fractionalization based on five ethnolinguistic indices. Ranges from 0 to 1. Where a high value indicated higher fractionalization.	Alesina et al. (2003)
New Government	Derived from *prtyin* measure of the Database of Political Institutions. 1 in years prtyin turns 1, 0 otherwise.	Beck et al. (2001)
Reform	Difference in the Index of Economic Freedom from one year to the next.	Index of Economic Freedom, Heritage Foundation (2012)
Candidate	1 in years a country is candidate or compliant country to EITI, 0 otherwise.	EITI Homepage
Announcement	1 in years a country announced its intent to implement EITI but has not yet reached candidate status, 0 otherwise.	EITI Homepage, country specific EITI homepages
Announcement year	1 in the year a country announced its intent to implement EITI, 0 otherwise.	EITI Homepage, country specific EITI homepages