German Aid Allocation and Partner Country Selection

Development-orientation, self-interests and path dependency

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Abstract

This paper examines official country selection and resource allocation of German aid after the end of the Cold War and embeds the analysis into the broader debate about German foreign policy. Based on new data, we take into account several peculiarities of the German aid system. Overall, we find that neediness and democracy levels of recipients have been guiding principles in both country selection and resource allocation. Nevertheless, geostrategic considerations and the avoidance of conflict-affected countries have also impacted on country selection but less on resource allocation. Moreover, non-linear estimation techniques identify a relatively high threshold of income levels, below which the poverty orientation disappears – a finding that refines previous studies identifying a middle-income-country bias of German aid allocation. Finally, official selection decisions to concentrate aid on a reduced number of countries did not have the intended concentration effect. This strong path dependency and development orientation is compatible with research that sees German foreign policy after reunification as being subject only to very gradual changes and led by the role model of a civilian power.

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Figures and Tables

Abbreviations

AA	Auswärtiges Amt / Federal Foreign Office
BMWi	Bundesministerium für Wirtschaft und Technologie / Federal Ministry of Economics and Technology
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung / Federal Ministry for Economic Cooperation and Development
DAC	Development Assistance Committee
DFID	Department for International Development
EU	European Union
GAMs	Generalized Additive Models
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IMF	International Monetary Fund
KfW	Kreditanstalt für Wiederaufbau
NATO	North Atlantic Treaty Organization
NGO	Non-governmental Organization
ODA	Official Development Aid
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
UN	United Nations
US	United States

1   Introduction

In general terms, allocation patterns of foreign aid are said to limit aid effectiveness if they respond more to special interests of donor governments than to development-oriented factors such as neediness and the institutional environment of recipients (Svensson 1999; Collier / Dollar 2001). Unfortunately, many studies could not find strong evidence on development-oriented aid allocation. Instead, empirical evidence often showed a significant link between bilateral and multilateral aid allocation and donors' foreign policy interests.[1]

Still, research on aid allocation is everything but homogeneous in its findings. This heterogeneity is partly due to different statistical procedures, different periods under consideration and different measures of foreign aid. Moreover, donor countries differ with regard to their foreign policy traditions as well as their economic, geostrategic and bureaucratic peculiarities; thus, they face varying incentive structures for allocating aid and selecting recipient countries. This diversity across donor countries creates a need to complement broad cross-country studies of donors with specific case studies on individual donors. In the latter case, the econometric analysis of aid allocation and country selection should be embedded in a case study design that provides a more fine-tuned analysis of the specific features of the donor country under consideration.

Against this background, this paper analyses German country selection and aid-allocation processes after the end of the Cold War. Despite being among the largest bilateral donors, Germany has not been investigated extensively regarding aid allocation. Existing narratives and reviews generally criticise the fragmented structure of the German aid system with its many agencies and the resulting tendency towards project proliferation. While recent studies find some orientation towards neediness and governance, many prior studies found little evidence for a significant orientation of German aid allocation towards neediness and governance in partner countries.[2] Partially as a response to these critical findings, there have been some attempts of German governments in the last decade to improve the targeting of its resources and to reform its overall aid system. Beyond a narrow focus on the German aid system, some researchers (Schrade 1997) have also linked their findings to the more general debate on the course of German foreign policy after reunification (Peters 2001). This debate mainly focussed on the question whether "the increase in power experienced by Germany after unification" would lead to a more assertive foreign policy (Peters 2001, 11). In this regard, less development-oriented and more self-interested allocation patterns of German aid would contrast with the role model of a "civilian power" often associated with German foreign policy (Maull 1990).

This study tackles these questions by analysing country selection and resource allocation of German aid. Firstly, the study provides an analysis of three official initiatives of country selection in 2000, 2008 and 2011. Here, the German government explicitly defined a transparent partner country list; at least in 2000 and 2008, this was a unique procedure for

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1   See for instance Alesina / Dollar (2000) and Alesina / Weder (2002), for an emphasis on allocation patterns of multilateral agencies see Thacker (1999), Fleck / Kilby (2006), and Dreher / Jensen (2007).

2   Critical perspectives on the German aid system are provided by the 1998 and 2006 Peer Review Reports of the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD-DAC 1998, 2006). Allocation patterns of German aid have been analyzed in several studies but often have not embedded their econometric analysis in a more fine-tuned case study design, e.g. Zanger (2000), Gates / Hoeffler (2004), and most recently Nunnenkamp / Öhler (2011).

large OECD donors.[3] Given the critique of Germany's dispersive aid structures, these decisions aimed at concentrating the country's aid resources on a reduced number of recipients. This official partner country list allows for identifying which recipient country characteristics had a significant effect on the official selection decisions. Moreover, we also analyse to which extent the partner list, defined in 2000, led to the desired concentration effect up until 2008. Secondly, this study then compares the selection decisions with the material allocation patterns of German aid after reunification in two sub-periods prior to the selection decisions, namely from 1992 to 1999, and from 2000 to 2008. Here, we analyse whether aid resources were allocated according to the same criteria as the official selection of partner countries. Beyond testing for geopolitical, economic and diplomatic factors, this study uses newly constructed variables that control for the impact of bureaucratic interests of German aid agencies. Finally, another innovation of our study is that we not only employ standard linear estimation techniques but also more fine-tuned, non-linear estimators that have been used scarcely in aid-allocation literature.

Overall, we find that neediness and levels of democracy had a strong and persistent impact on both country selection and resource allocation. However, the employment of non-linear estimation techniques shows a strong non-linear effect with regard to country neediness, where poverty orientation of country selection and aid allocation disappear below a relatively high income-per-capita threshold. Beyond country neediness and democratic governance, the third variable of continuous influence was population size. The latter variable, unfortunately, is difficult to interpret, given that large developing countries could have been preferred either because they hosted larger numbers of poor people or because they were more relevant for Germany in terms of economic and other global interests.

Only in one selection decision (2008), but across the two allocation periods under investigation, geostrategic considerations also impacted on German aid selectivity. The controls for path dependency and bureaucratic influences are also highly significant for country selection and allocation patterns. However, due to problems of endogeneity, one should interpret these results very cautiously and avoid conclusions that those factors have obstructed the development-oriented selectivity of German aid. Finally, the selection of specific partner countries in 2000 has not yet led to an increased de facto concentration of aid towards these countries, casting serious doubts on the effectiveness of this formal selection process.

Overall, these results speak for a general development orientation of German aid after the end of the Cold War that was little influenced by changes in government. In this regard, our findings are compatible with those researchers who a) interpret German foreign policy as following the role model of a civilian power, and b) see only gradual alterations in German foreign policy after the country's reunification. Still, our findings also suggest that foreign policy considerations and special interests of aid agencies have not been absent from German aid allocation – a finding which also remains when only looking at allocation of resources exclusively under the responsibility of the Federal Ministry for Economic Cooperation and Development. Overall, the tension between "development orientation" and foreign policy interests and bureaucratic politics also prevailed in the German

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3   To our knowledge, among bilateral donors, only the Netherlands and Sweden have adopted a similar approach of openly differentiating between partner and non-partner countries. The United Kingdom recently published a list of "focus countries" (Department for International Development – DFID 2011, 20–21).

aid context – but to a lesser extent than previous criticism suggested. Beyond this, the preference for large countries and the strong path dependency of German aid also reflects the current insecurity of many donors to sharpen their selection and allocation criteria due to global changes of power and poverty during the last decade (Koch 2012).

The paper is structured as follows: In Section 2, we provide an overview on the aid-allocation literature, followed by a discussion of the German aid system. Section 3 explains our methodological proceedings and presents our empirical findings, while the last section concludes with an interpretation of our findings.

2 Aid allocation and the German case

2.1 Who gets aid and why: a short review

Aid selectivity – the selection of countries and the allocation of resources according to specific criteria – is crucial for aid to reach its developmental goals. Prominent research shows that aid's impact on growth increases when recipient countries are more democratic, less corrupt and more inclined towards sound macroeconomic policies (Svensson 1999; Burnside / Dollar 2000). While the robustness of these results has been challenged (Roodman 2007), institutional quality is still considered a critical factor conditioning aid effectiveness. Nevertheless, a one-dimensional perspective of selectivity on the institutional quality excludes the dimension of neediness. Because developing countries with good institutions are often among the less poor, selectivity should take into account both a country's economic neediness and its institutional quality (Collier / Dollar 2001; Knack et al. 2010; Faust 2011).

Regarding the level of interest within donor countries, this general allocation rule fits well with most citizens, who do not want their money to go to corrupt dictatorships but rather to poor countries that use it well (Lumsdaine 1993, 43). Nevertheless, aid is often said to be given for particular considerations of a donor government such as to promote economic interests, to strengthen political alliances or to heed the geopolitical considerations of the donor country. As realist scholars already speculated in the early days of foreign aid (Morgenthau 1962), these latter factors are the driving forces of aid allocation, while development orientation remains marginal.

Between 1970 and 1994, more open and democratic countries received more aid, but the political and strategic considerations of donors outweighed the effect of the recipient countries' policies or political institutions (Alesina / Dollar 2000). Moreover, for a similar period, countries with a comparatively low level of corruption were not systematically favoured over others (Alesina / Weder 2002). Indicators of human need, such as caloric intake and life expectancy, had no significant impact on aid allocation (Schraeder et al. 1998) and overall aid flows favoured relatively rich developing countries, although this effect diminished with increasing per capita income (Alesina / Dollar 2000). However, studies focussing on more recent periods identify at least a partial trend towards more development-friendly allocation, namely a country's neediness and its institutional quality (Dollar / Levin 2006; Claessens et al. 2009). Thus, the increasing criticism of the international aid industry, in combination with the end of the Cold War, could have impacted on policymakers' allocation decisions.

At the same time, these and other studies revealed significant differences between the allocation patterns of specific donors. Scandinavian states distributed their aid resources more according to criteria such as democracy levels or the respect for human rights (cf. Alesina / Weder 2002; Gates / Hoeffler 2004), while studies on US aid often identified that foreign policy interests systematically influenced allocation decisions (e.g. Drury et al. 2005). Former colonial powers, in turn, tended to systematically favour their former colonies (Alesina / Dollar 2000; Zanger 2000). With regard to multilateral organisations such as the IMF or the World Bank, the analyses almost consensually demonstrated the foreign policy impact of powerful member states on the lending and conditionality of these organisations.[4]

Against this background, studies on the specific case of Germany – generally among the top four of bilateral donor countries – paint a rather heterogeneous picture and only seldom treat German aid allocation as their principal matter of investigation (McKinlay 1978; Arvin / Drewes 2001; Nunnenkamp / Öhler 2011). With regard to recipient need, Mosley (1981) finds Germany to be responsive in the late 1970s. In a more recent study, Younas (2008) even identifies Germany as the only donor to be strongly poverty-oriented, a finding substantiated by other recent studies (Nunnenkamp / Thiele 2006; Nunnenkamp / Öhler 2011). In contrast, other studies found that German aid focussed on middle-income developing countries (Alesina / Weder 2002), a critique that also has been raised several times by OECD donor assessments (OECD-DAC 1998, 2006). Regarding aspects of good governance, findings are equally inconclusive. Carey (2007) notices that Germany rewards improvements in human rights. In contrast, Zanger (2000) does not find a significant impact of democracy levels or human rights on German aid allocation, while Berthélemy (2006, 191) classifies Germany as "moderately egoistic" regarding the connection between aid and trade.

Overall, this heterogeneity can have different causes. Beyond methodological shortcomings of some studies,[5] results may differ at least partly due to different time periods under consideration. In this regard, most studies either do not include the two decades after German reunification or do not link selected time periods to potential peculiarities of the German case. Therefore, the next section explores arguments that can be used for identifying competing hypotheses about German aid-allocation patterns after reunification.

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4   International Monetary Fund (IMF) lending during the heyday of structural adjustment in the 1980s and early 1990s was influenced by foreign policy interests of the United States (US) (Thacker 1999, 67). With regard to World Bank lending, a recipient's country alignment with US positions in the United Nations (UN) (Barnebeck et al. 2006) or greater US financial and commercial interests in a country (Fleck / Kilby 2006) increase the probability and the volume of World Bank funding. A more recent study (1997–2003) suggests that the number of conditions on IMF loans were lower for closer allies (as measured by accordance of the borrowing and the recipient country's voting patterns in the UN General Assembly) of the US and other G-7 countries, especially prior to elections (Dreher / Jensen 2007).

5   For instance, Schrade's analysis (1997) consists only of bivariate regressions and includes only the largest recipients of German aid, which creates strongly biased results.

2.2   Competing perspectives on German aid selectivity

2.2.1   Development orientation vs. national self-interests?

Germany's development assistance traditionally puts strong emphasis on its "development orientation" – a fact that should be reflected in country selection and resource allocation. This tradition is partly reflected by the creation of an own ministry for foreign aid already in 1961: the Federal Ministry for Economic Cooperation and Development (BMZ). Development orientation has been a major catchphrase of German aid officials from the beginning, insisting on aid efficiency over aid quantity. Other allies, especially the United States, also expected that German aid would be more need-oriented because – unlike France or the United Kingdom – the country had no large former empire that it was obliged to support. Moreover, the country started to use aid to promote its Hallstein Doctrine, claiming to be the only legitimate representative for the whole of Germany (Schmidt 2003, 478–488). In this context, policy-makers were concerned that the non-acceptance of the German Democratic Republic by the poorest countries depended in part upon the quality and honesty of West Germany's foreign assistance (Schmidt 2003, 488; Nuscheler 2007). This tradition also fits well with Germany's moderate and cooperation-oriented foreign policy in the post-war period.

According to one school of thought, post-war policy-makers slowly adopted the notion of a civilian power to enable Germany's return to the community of states (Maull 1990; Harnisch / Maull 2001; Tewes 2002). Properties of a civilian power are the preference for multilateral solutions, negotiations and economic sanctions rather than violent measures (Maull 1990). According to this interpretation, the abdication from an aggressive pursuit of interests in Europe and elsewhere continued after reunification. From such a perspective, military involvement in Bosnia – and even in Kosovo and Afghanistan – can be interpreted rather as a continuation of civilian politics with military measures, required by very adverse circumstances (Karp 2005). These military interventions were only approved after fierce domestic debates and are only perceived as legitimate when they have broad multilateral backing and are oriented towards the defence of civil goals – the major reasons for the refusal to support the US intervention in Iraq.

The concept of Germany as a civilian power has also been translated to the aid-related field of German democracy promotion (Wolff 2011), and also explicitly to the field of development policy (Schrade 1997). Given that the concept of a civilian power also includes elements of social justice and a preference for non-repressive political order, a civilian power would prefer to allocate aid to poor but relatively democratic countries. Moreover, Germany as a civilian power would be reluctant, or at least very cautious, to invest substantial aid in countries affected by war and civil conflict and would value multilateral initiatives to make aid more effective. From such a perspective, the BMZ would be the most important player to promote such a role model in Germany's development assistance; even more so to compensate for its relatively low political weight by positioning the German government as a champion of development-friendly aid (Nuscheler 2007, 683).

When looking at the post-reunification period, the official allocation strategy matches such a role model. Under the conservative coalition (Christian Democrats and Liberals) in 1991, the ministry defined criteria that were supposed to work as guiding principles for country selection and resource allocation. According to these criteria, German bilateral

development assistance should preferably engage with countries in need whose development-oriented policies are embedded in democratic, rule-of-law-based and transparent state structures (BMZ 1995, 69). These criteria were also adopted under the more leftist coalition (Social Democrats and Green Party) in 1998/1999 and only modestly reformulated in 2006 under the coalition of the Christian Democrats and Social Democrats, which put additional emphasis on cooperation with peaceful and cooperative states (BMZ 2007, 15). Therefore, neediness of recipients and rule-of-law-based democracy were official criteria for allocating German aid after the end of the Cold War, independent of changing government coalitions. The ministry also gave strong support to multilateral initiatives such as the Millennium Development Goals and the Paris Agenda of 2005; both initiatives aimed at promoting development-enhancing policies, respectively reforming international development cooperation towards more effective forms of interventions.

However, an exclusive focus upon these potential reasons favouring development-oriented selectivity of German aid would exclude other aspects of the country's international relations. Germany's prosperity heavily relies on its export industries. Moreover, the end of the Cold War has changed its geopolitical position. Much of the debate on German foreign policy after reunification centred on the question about whether and how the government should use the country's new political and economic weight (Peters 2001). Overall, a majority still perceive the European Union and other international organisations, such as the UN and North Atlantic Treaty Organization (NATO), as the multilateral organisations through which Germany's interests should be pursued. However, there has been a debate about whether the political and economic interests of the country should be followed more assertively. Advocates of such a position mainly belonging to the realist school of international relations (Schöllgen 2000; Hacke 2003).

Accordingly, German governments face incentives to use aid as a potential instrument for trade promotion. While development-oriented arguments for aid selectivity have prevailed in the domestic political debate, at least some conservative and liberal voices frequently have demanded that aid allocation should also be guided by Germany's economic interests. The observation that German aid in prior periods went disproportionally to middle-income countries could be explained by these countries' relevance for German exports (Alesina / Weder 2002; Berthélemy 2006). This could also be in line with the explicit recognition of the BMZ during the last decade, namely that regional powers – or so-called anchor countries – should have a special status regarding German aid: not only because they house a large proportion of the world's poor but also because of their importance for Germany's external relations (BMZ 2004).

Beyond trade interests, Germany's exposed position towards Eastern Europe and its relative closeness to the Balkans, Central Asia and the Caucasus could create a geographic bias in the distribution of aid. While during the Cold War period, relations with these regions were restricted, new patterns of interdependence through economic relations, migration and security issues made these regions especially relevant for German foreign policy (Duffield 1998, 83–112). In a similar vein, Germany's large share of Muslim migrants and the strategic importance of Turkey and northern Africa for the European Union could also impact on the country's aid allocation. Thus, one could expect a geostrategic pattern in German aid selectivity: a concentration of German partner countries and aid resources to countries in Germany's strategic environment.

2.2.2   Bureaucracy and organisational complexity

The debate on mainstream allocation studies centres on the tension between development orientation and national self-interests. However, there is also a bureaucratic dimension of the "aid industry" (e.g. Easterly 2002; Gibson et al. 2006). According to this bureaucratic perspective, the increase of national and international aid agencies during the past decades has created a "cartel of good intentions" (Easterly 2002), whose bureaucracies have developed special interests of their own. An analysis of a country's aid selectivity patterns therefore should try to include aspects of bureaucratic politics. In the German case, this dimension of foreign aid has mainly been characterised by the complex relationship between the Federal Foreign Office (AA) and the BMZ, as well as by the country's organisational complexity regarding its implementing agencies.[6]

Since its early stages, the BMZ has been struggling with the politically more important AA for more independence on the international stage (Schmidt 2003, 486). The resulting competition also has increased due to party politics. In most periods, the two ministries were headed by ministers from different coalition parties, with the junior coalition partner usually claiming the Foreign Office as second in rank after the Chancellery (Weller 2007, 217–218).

Rhetorically, the BMZ has acted as a promoter of development orientation, while the AA traditionally has put more emphasis on economic and geostrategic concerns. In this conflict, the BMZ attempted to augment its competences in foreign policy-making: for instance, in 1972, the ministry took charge of bilateral and multilateral financial cooperation, previously controlled by the Federal Ministry of Economics and Technology (BMWi). In 1998, the responsibility for dealing with the development policy of the European Union (EU) and the cooperation with eastern European and Newly Independent States followed (BMZ 2000, 31–32). That same year, the BMZ was promoted to constitute a member of the Federal Security Council (Weller 2007, 218). Yet, even though the ministry has enhanced its competences, central domains of development concern have remained beyond the ministry's reach, e.g. trade policy, the policy towards the IMF, international debt management and humanitarian aid (Nuscheler 2007, 672).

Despite its ambiguous position with regard to other ministries, the BMZ has maintained the advantage of disposing of the lion's share of German official development aid (ODA) and of controlling a network of parastatal implementing agencies active all over the developing world (Weller 2007, 218). In theory, with command over large financial resources and executing agencies, the ministry could have implemented its vision of development-oriented aid. In practice, the highly complex structure of state-owned agencies is said to have restricted the de facto assertiveness of the BMZ (Brombacher 2009).

Financial and technical cooperation is carried out by different agencies in Germany. The Kreditanstalt für Wiederaufbau (KfW) Development Bank is responsible for financial cooperation while the German Technical Cooperation agency and two minor agencies were responsible for technical cooperation.[7] Beyond this, large non-governmental organizations

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6   For a scenario analysis on how the German ministerial organization of development cooperation and foreign policy could be reformed see Faust / Messner (2012).

7   However, the three agencies of technical cooperation were merged into a single agency in 2011.

(NGOs) such as the German political foundations or the aid branches of the churches have also received large amounts of ODA from the BMZ. The resulting organisational complexity has been repeatedly criticised by the OECD-DAC in its peer reviews (OECD-DAC 1998, 2006). Not only has the organisational set-up with its corporatist elements created huge transaction costs in the administration of German aid flows. According to a common critique, this complex structure has also limited the ability of the BMZ to implement strategic decisions about content and allocation vis-à-vis implementing agencies, which have developed interests of their own (Nuscheler 2007).[8] Moreover, the high level of project proliferation (e.g. Acharya et al. 2006) across many sectors and countries has also been interpreted as being a result of this organisational complexity, where the division of resources among many parastatal agencies has dispersed activities and created strong path dependency rather than strategic focus.

While the technical aid agencies were merged only in 2011, the BMZ was already responding to dispersive allocation patterns in the late 1990s. The ministry initiated an explicit selection process to concentrate German aid resources on a reduced number of countries in order to enhance the leverage of German aid. In 2000, this process resulted in a list of 70 official partner countries (BMZ 2000, 65). After an internal analysis, this list was further reduced to 58 countries in late 2008. Both lists were approved by parliament and are openly available, thus being valuable information for an analysis of Germany's country selection process.

3   Empirical analysis

Given the previous arguments, one can derive competing hypotheses about the patterns of resource allocation and country selection in German aid after the end of the Cold War. There are arguments that suggest a strong development orientation of German aid. However, there are also context factors which make the hypothesis that German aid could have responded more to economic and geostrategic concerns more plausible. Finally, one can speculate about the impact of bureaucratic politics, which could not only have obstructed development-oriented selectivity patterns but which also could have made the implementation of formal policy changes more difficult. Without an evaluation of aid-selectivity patterns, however, one can freely choose which of these hypotheses meets one's own reality best. To obtain an assessment based on ample empirical evidence, the following sections will provide a statistical analysis of country selection and resource allocation.

3.1   Periods, variables and data

With regard to the selection of partner countries, the dependent variable is a dummy variable indicating partner countries, as defined by the BMZ in 2000 and 2008 (for data

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8   For example, the former German agency for technical cooperation (GIZ) has increased its revenue by providing services for other organizations than German ministries for why the agency is interested in maintaining a widespread network of local offices. The influence of BMZ over its aid agencies could also have been diminished by cuts on the personnel budgets of all federal ministries. These cuts led BMZ to outsource some of its competences to its technical and financial implementing agencies, while at the same time installing agency staff as consultants in the ministry.

sources, see Table A in the annex). For investigating allocation patterns, we divide the time after German reunification into two periods: 1992–1999 and 2000–2007.[9] In the first period, the BMZ was led by conservative politicians under the coalition of Christian Democrats and Liberals. In the second period, the BMZ was led by a Social Democrat, in a coalition with the Green Party until 2005, and thereafter as a junior partner in a coalition with the Christian Democrats. Another reason for splitting the periods at the year 2000 is the growing international pressure to increase development orientation, exemplified by the high-level fora in Rome (2003) and Paris (2005).

Dependent variables: In the allocation models, the dependent variable is gross disbursements of German ODA in constant 2007 US dollars. We also use BMZ data, measured in 1995 Euros. We chose gross amounts because they do not include repayments of credits and loans, which are highly dependent on previous aid flows or on recipients' country manoeuvring space with regard to delaying or advancing debt repayments. Thus, only gross amounts are controlled by the current administration, making this measure appropriate for identifying a donor country's determinants for aid allocation.[10]

Following the recent literature (e.g. Nunnenkamp / Öhler 2011, 313; Neumayer 2003), this study uses absolute amounts of ODA instead of per capita values because donor organisations will be more likely to allocate a fixed overall amount to a given country rather than distribute aid on a per capita basis. We do not exclude emergency aid, because even this type of aid is not fully determined by external events such as natural disasters; it is often distributed according to political considerations on the donor side (Drury et al. 2005; Fink / Redaelli 2011). We also include debt relief in our ODA measures. While debt relief is not an actual flow of funds, debt relief can enable disencumbered nations to translate the clearance of their debt into economic manoeuvring room. The amount of manoeuvring space gained per dollar of debt relief may differ across cases, but even if it is low, the debt relief constitutes an important political gesture. We disaggregate the dependent variable based on the expectation that the BMZ itself could be more inclined to distribute aid "altruistically".[11] *Total aid* is the officially acknowledged German contribution to less-developed countries. It is the standard dependent variable used in most allocation studies. In contrast, *BMZ aid* is calculated as total aid minus the funds channelled over federal ministries other than the BMZ, the federal states, churches, NGOs, political foundations, and debt relief and funds allocated to refugees in Germany. Thus, BMZ aid mainly comprises funds channelled through state-owned aid agencies of technical and financial cooperation. BMZ aid and total aid correlate at 0.55.

Independent variables: We test selection and allocation with regard to size, neediness, governance and the conflict situation in a given country as well as with regard to possible national and bureaucratic interests. To avoid common co-linearity problems in allocation

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9   For the main part of the analysis, we use data from OECD-DAC. For our analysis of BMZ-controlled allocation, we use disaggregate disbursement data from the BMZ, which is available only since 2000.

10 Still, we acknowledge that, for studies attempting to identify the effect of aid on development (aid as independent variable), net amounts are more appropriate than gross amounts. Moreover, we check the robustness of our results when using net amounts. Results are similar when downweighting outliers via robust regression.

11 Nunnenkamp provides disaggregated data on German aid but only for a relatively short time span (2005–2007). Few other studies disaggregate aid data further. Drury et al. (2005) look at humanitarian aid, Neumayer (2003) at food aid, and Dreher et al. (2008) use aid classified by sectors.

studies, which often result from including too many variables under the constraint of a limited number of observations (here 118), we attempt to construct a parsimonious model. More concretely, we do not include more than one variable for each potential factor of influence.

Regarding size and neediness, we follow the standard approach and use *population* and *income per capita* as independent variables. As a robustness check, we substitute income per capita with the *infant mortality* per 100,000 until the age of five, which is considered as one of the most appropriate measures for poverty. However, we think that income per capita is more appropriate to measure the neediness of a recipient country for aid-allocation considerations because it also accounts for the domestic redistribution potential: rich countries with high infant mortality rates should be able to support their populations without development aid. Governance is measured with the Worldwide Governance Indicators' *Voice and Accountability*, backed by the average of Freedom House's Civil Liberties and Political Rights and by the Polity IV score.

Possible German interests are measured with three variables: the economic importance as the value of German trade (exports plus imports); geographic proximity as the minimum distance to Germany; and political proximity as the degree of *UN voting accordance* with Germany when voting in the General Assembly. War is a dummy variable that takes the value "1" when a country experiences an armed conflict with more than 1,000 cumulated battle-deaths in any year of the considered period and "0" in the remaining cases. In alternative models, we also check the impact of post-war situations; post-war situations being defined as when a country has experienced a war in the five years preceding the year or period under investigation.

To test agency interests and path dependency, we include previous partner country status, previous German aid, German agency offices and German projects. Due to data availability constrains, we run these models only for the 2008 selection and the 2000–2008 allocation period. In the selection model, offices and projects are lagged by four to five years to circumvent problems of endogeneity.[12] In the 2000–2008 allocation model, we use information from 1999.

For most other control variables in the selection models, we use three-year averages with a lag of one or two years to the year of decision. In the allocation models, we use – where possible – eight-year averages ranging from 1991 to 1998 and 1999 to 2006 respectively, assuming that there are no problems of endogeneity with these controls. Finally, we restrict our analysis to developing countries as defined by the OECD and exclude micro-states with fewer than 500,000 inhabitants, as we expect that decision-makers do not consider these states to be important aid targets. This results in a list of 118 countries.[13]

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12 Agency offices and projects emerge where aid is directed to. In 1999, they correlate at 0.58 and 0.67 respectively with aid given from 1992 to 1999, but only at 0.30 and 0.35 with respectively with aid given from 2000–2007.

13 East Timor was excluded because it was not an independent country before 2002.

3.2 Empirical results and interpretation

3.2.1 Country selection

Taking into account only the countries in our sample, the German partner country list was reduced from 68 countries in 2000 to 55 in 2008 (dropping 22 and admitting 9) and to 46 in 2011 (dropping nine and admitting one). The latest drop-outs are Angola, Bosnia-Herzegovina, China, Madagascar, Nicaragua, Nigeria, Senegal, Sudan and Syria, while the latest admission is Togo.[14]

To investigate the effects of our independent variables on the probability of a developing country being selected as a partner country, we use logistic regression for the three selection years. In 2011, the logit model indicates a significant impact of country size and democracy level (see eq. 1 in Table 1). While the highly significant governance variable conforms with a developmental approach, country size is more difficult to interpret because large countries may be more important than smaller countries, regarding both recipient need and donor interest considerations. All else being equal, larger countries are more important in reducing global poverty and are more important for trade. Interestingly, our explicit measure for country neediness – income per capita – does not have a significant linear relationship with the probability of becoming a partner country. We suspect that there might be a non-linear relationship and thus turn to Generalized Additive Models (GAMs) with cubic splines (Hastie / Tibshirani 1990; Keele 2008). These models break variables into several sections and fit polynomials to these sections.[15] In the GAM, income turns out to be significant when allowing for a non-linear specification.[16] While the impact of income is still zero for the poorest countries, starting at around US$ 4,000 to 5,000 per capita, it becomes increasingly negative (see eq. 2 and Figure 1).

Thus, our basic approach of using the GAM instead of an ordinary least squares (OLS) estimator is better suited for specifying the apparent middle-income-country bias found by previous studies. While rich countries were less likely to become German partner countries, it did not make a difference if a country was poor or very poor. Moreover, for the 2011 partner country selection, we do not find any of our interest variables to have a strong correlation with the selection outcome.

In the GAM selection models for 2000 and 2008, population size, need and democratic governance were again strongly correlated with the selection of partner countries. Only, in 2008, two more variables turned out to be of statistical significance. The first was distance from Germany, with the expected negative sign, suggesting that geopolitical considerations have played a role in the selection process. Moreover, countries at war were significantly less likely to be selected as partner countries.

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14 Some of these countries are still listed as partners for "regional or thematic cooperation".

15 We also use GAMs to assess which independent variables should be logged to improve model fit. We find that logging population, income per capita, distance and trade provides better results.

16 Importantly, when comparing different GAM specifications with statistical tests (not shown), the model fit suggests for all years under consideration, that only income should be modelled in a semi-parametric fashion. Shape and threshold are very similar to the effect in 2011 (see Figure 1).

Table 1: Country selection

Partner country in	(1) Logit	(2) GAM	(3) GAM		(4) Joint GAM		(5) GAM	(6) GAM	(7) GAM	(8) GAM
	2011	2011	2008	2000	2008	2011	2011	2011	2011	2011
Population (ln)	1.299*** (3.386)	1.2011*** (2.905)	2.292*** (4.077)	1.163*** (2.890)	2.218*** (3.985)	1.203*** (2.920)	1.106*** (2.616)	0.766* (1.816)	0.838* (1.837)	0.582 (1.193)
GDP per capita (ln)	-0.549 (-1.485)	** (cubic spline)	*** (cubic spline)	*** (cubic spline)	*** (cubic spline)	** (cubic spline)	. (cubic spline)	. (cubic spline)	. (cubic spline)	. (cubic spline)
Voice & Accountability	0.867** (1.973)	1.107** (2.237)	2.077*** (2.913)	1.190** (2.434)	1.973*** (2.806)	1.105*** (2.254)	0.793 (1.521)	0.693* (1.406)	0.529 (1.087)	0.220 (0.384)
War	-0.505 (-0.804)	-0.347 (-0.583)	-2.001** (-2.387)	-0.786 (-1.200)	-1.878** (-2.277)	-0.349 (-0.545)	-0.333 (-0.507)	-0.596 (-0.890)	-0.423 (-0.616)	-0.791 (-1.004)
Distance (ln)	-0.170 (-0.351)	-0.067 (-0.130)	-1.211* (-1.821)	-0.203 (-0.403)	-1.043 (-1.628)	-0.059 (-0.199)	-0.168 (-0.302)	0.456 (0.808)	0.219 (0.410)	0.031 (0.051)
Trade (ln)	-0.434 (-1.587)	-0.283 (-0.931)	-0.554 (-1.627)	-0.171 (-0.551)	-0.481 (-1.411)	-0.283 (-0.947)	-0.352 (-1.099)	-0.414 (-1.351)	-0.309 (-0.856)	-0.669* (-1.764)
UN voting accordance	3.761 (1.635)	4.013 (1.608)	-1.208 (-0.393)	1.197 (0.616)	-0.562 (-0.187)	4.043* (1.659)	3.926 (1.421)	4.481* (1.702)	3.944 (1.743)	2.991 (1.074)
Partner country 2000 (dummy)							1.545** (2.492)			
Previous ODA (ln)								0.813*** (2.647)		
Agency offices dummy, lagged									3.652*** (3.137)	
# of German aid projects, lagged (ln)										2.858*** (4.449)
Constant	-3.193 (-0.566)	-9.800 (-1.592)	-2.208 (-0.290)	-6.841* (-1.798)			8.243 (-1.225)	-11.567* (-1.785)	-11.592* (-1.877)	-10.144 (-1.426)
Observations	118	118	118	351			118	118	118	118
R2 (adj.)	0.26	0.32	0.48	0.39			0.35	0.36	0.43	0.51

*z values in parentheses; * p < 0.10, ** p < 0.05, *** p < 0.01; see Figure 1 for spline graphs (not all shown).*

Figure 1: Non-linear effects in selection models
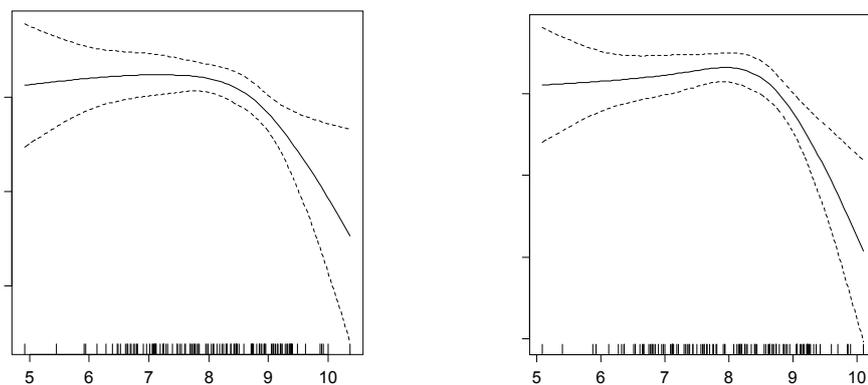
From left to right: income per capita 2011 (logged) (Table 1, eq. 2), income per capita 2008 (logged) (eq. 3).

In order to identify whether the strength of these factors concerning partner-country selection changed over time, we put all years into a joint model by appending one year's dataset to the other. The coefficients are then estimated using year dummies, allowing for a direct comparison of their size (eq. 5).[17] Over the three selection periods, the changes are modest and of little statistical relevance. Instead, the orientation towards poor and democratic countries is persistent with the democracy variable and is of special importance in 2008. For the same year, the avoidance of war-affected countries appears to be an exception.

The remaining models in Table 1 incorporate potential path dependencies. As expected, we find partner country status in 2011 to be dependent upon partner country status in 2000 and on previous aid flows (eq. 5 and 6). Also, countries that had German aid agency offices four years prior to the decision were more probable to become partner countries (eq. 7). The same is true for countries with many German aid projects (eq. 8). In all of these specifications, both per capita income and democracy levels lose explanatory power compared to our base model (eq. 1). However, it would be misleading to conclude that country neediness and governance has not played an important role in the selection of partner countries. It is important to note that this loss of significance regarding those two variables is very likely due to endogeneity. The establishment of agencies or the prior allocation of resources then is a function of selection and allocation decisions that have included criteria of development orientation. Thus, equations 5 to 8 are not evidence against development-oriented country selection but instead point to a high level of continuity and path dependency. To see whether criteria of development orientation and path dependency are not only relevant for political commitments but also are reflected in the de facto allocation of financial resources, we now turn to the study of allocation patterns.

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17 In the joint models, we exclude East Timor.

3.2.2   Allocation of aid

Has the selection of partner countries led to an increased concentration of funds towards these partner countries? Figure 2 shows gross German aid transfers. The dark grey sections of the bars represent funds received by year-2000 partner countries. The light grey sections represent funds going to other countries. The strong increase over time of total aid to non-partner countries (left-hand plot) was caused by the enormous amounts of debt relief going to Iraq (2005–2008), Botswana (2008), Liberia (2008) and others. But even without debt relief, neither total aid nor BMZ aid showed increased concentrations to partner countries (centre and right-hand plots). The partner-country share remained, from 2000 to 2008, at about 80 per cent of total aid, excluding debt relief. This stagnation implies that the decision to reduce partner countries has not (yet) had financial consequences.

What hinders implementation? It could be that Germany, as a large trading nation, has so many interactions with most countries around the world that it is just not politically feasible to cut aid ties in less than a decade. Another explanation could lie in the bureaucratic inertia deriving from the complex German aid agency structure that – for reasons of self-preservation – try to prevent or delay aid concentration. Unfortunately, simple descriptive statistics will not provide an answer to these questions. Thus, we investigate the allocation of aid using multivariate regression.[18]

Figure 2:   German ODA to partner countries, 2000–2008

Source: own calculations from BMZ data (billions of constant 1995 Euros).
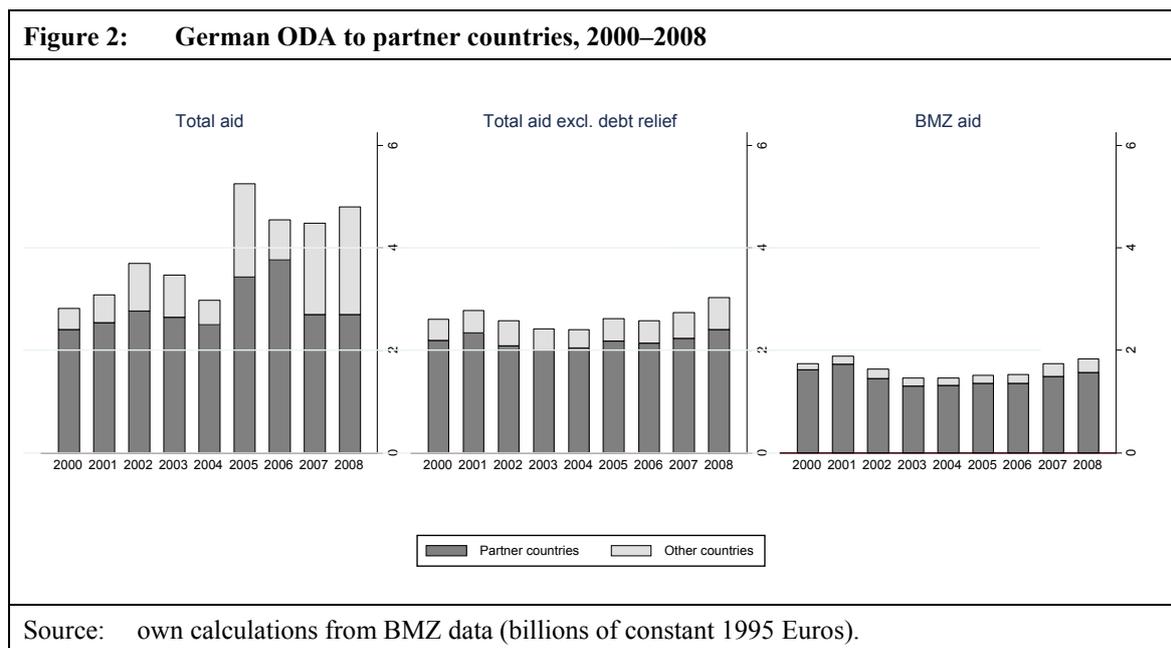
We first use an ordinary least squares (OLS) model to estimate the effects of our independent variables on the amount of aid that developing countries have received from

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18 Aid concentration curves are an alternative representation of overall poverty orientation (see Baulch 2006), but their reach is limited because they are bivariate and do not allow to control for other factors. Aid concentration curves of German aid (not shown) suggest that poverty orientation may be slowly increasing in the 2000-2008 period.

Germany.[19] We also apply GAMs to account for non-linearities and robust regression (RReg) to weight down the influence of outliers (Andersen 2008). To identify whether the selection decisions in 2000 and in late 2008 are determined by the same criteria as the concrete allocation patterns, we divide the post–Cold War phase into two periods, namely 1992–1999 and 2000–2008.

In the 1992–1999 period, population, income and democratic governance are highly significant with the expected signs (eq. 1 in Table 2). Both countries that trade more with Germany and war countries are predicted to receive higher aid amounts. The GAM results show the same pattern of significance, with income being non-linear (eq. 2). Only in the GAM does UN voting turn out to be significant, although with an unexpected negative sign. Figure 3 shows that income had an effect of zero up to an income of around US$ 4,000, which is about the threshold that the World Bank uses to distinguish lower-middle-income countries from upper-middle-income countries. In other words, doubling the income of a country from US$ 2,000 to 4,000 would not have changed the amount of aid a country could expect from Germany, while doubling the income from US$ 4,000 to 8,000 would have decreased the expectations significantly. An analysis of influential observations shows that our results might be influenced by some very unusual observations. Instead of completely excluding these observations, we weight them down, using robust regression. In the RReg model (eq. 3), both trade and UN voting lose much of their impact and distance becomes significant: countries geographically closer to Germany received more aid in the 1992 to 1999 period.

The 2000–2008 period shows similar results regarding population, income and governance (eq. 4–6). Distance is consistently significant across all specifications. The GAM results indicate a positive, significant and non-linear impact of trade, which levels off between US$ 40 and 150 million. While it is probable that trade actually picks up some German economic interests here, it could also be an indicator of absorptive capacity: most countries trade with Germany, and those few that trade less are, ceteris paribus, possibly not capable of taking part in complex international transactions, including aid reception.[20]

The joint allocation model (Table 2, eq. 7) shows not much difference in the impact of income and democracy levels in 2000–2008 compared to 1992–1999, but it shows a strongly increasing effect of distance. However, when testing for influential observations, we find that the OLS model may be biased. We thus run a joint robust regression model (eq. 8). In this model, democracy levels, population, income and distance are significant in both periods and the 1992–1999 coefficients are close to the 2000–2008 coefficients. As differences are small, however, there is not much evidence for changing allocation patterns – again suggesting a strong path dependence.

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19 Most aid allocation studies apply two-stage or tobit models to deal with the truncated nature of the dependent variable resulting from the fact that not all donors give aid to all recipients (Berthélemy / Tichit 2004; Neumayer 2003). As Germany gives aid not only to its partner countries, but to almost all countries in our sample, we can thus dispense of such a two-stage procedure. Countries which receive zero total aid in our dataset are the Comoros (2000–2008, OECD data), Belarus, Ukraine (both 1992–1999, OECD data) and Guinea-Bissau (2000–2008, BMZ data).

20 The countries with the lowest trade volumes with Germany include Bhutan, Guinea-Bissau, Somalia, Comoros, Solomon Islands and Central African Republic.

Table 2: Aid allocation: base models

Total gross aid (OECD data) (ln)	(1) OLS 1992–1999	(2) GAM 1992–1999	(3) RReg 1992–1999	(4) OLS 2000–2008	(5) GAM 2000–2008	(6) RReg 2000–2008	(7) Joint OLS 1992–1999	(7) Joint OLS 2000–2008	(8) Joint RReg 1992–1999	(8) Joint RReg 2000–2008
Population (ln)	0.407***	0.377***	0.577***	0.620***	0.594***	0.466***	0.407***	0.623***	0.579***	0.495***
	(3.446)	(3.179)	(4.496)	(5.013)	(5.241)	(3.382)	(3.409)	(5.124)	(4.168)	(3.464)
GDP per capita (ln)	-0.563***	*** (cubic spline)	-0.477***	-0.419***	*** (cubic spline)	-0.499***	-0.574***	-0.410***	-0.469***	-0.600***
	(-4.232)		(-3.374)	(-2.974)		(-3.444)	(-4.326)	(-2.985)	(-3.095)	(-3.656)
Voice & Accountability	0.684***	0.621***	0.729***	0.524***	0.528***	0.463**	0.710***	0.498***	0.708***	0.482***
	(4.341)	(4.027)	(4.267)	(3.439)	(4.017)	(2.535)	(4.823)	(3.611)	(4.095)	(2.922)
War	0.412*	0.346*	0.300	0.104	0.066	0.088	0.407*	0.109	0.296	0.083
	(1.970)	(1.680)	(1.328)	(0.453)	(0.332)	(0.319)	(1.930)	(0.484)	(1.215)	(0.316)
Distance (ln)	-0.110	-0.070	-0.495**	-0.563***	-0.617***	-0.479*	-0.156	-0.511***	-0.453**	-0.524***
	(-0.615)	(-0.401)	(-2.392)	(-2.862)	(-3.611)	(-1.976)	(-1.067)	(-3.340)	(-2.537)	(-2.901)
Trade (ln)	0.170*	0.196*	0.057	0.074	*** . (cubic spline)	0.210*	0.166	0.075	0.060	0.210*
	(1.681)	(1.907)	(0.521)	(0.705)		(1.668)	(1.625)	(0.731)	(0.513)	(1.728)
UN voting accordance	-1.1095	-1.292*	-0.400	0.094	-0.677	0.423	-1.218*	0.262	-0.315	0.279
	(-1.616)	(-1.933)	(-0.544)	(0.111)	(-0.899)	(0.409)	(-1.881)	(0.352)	(-0.416)	(0.315)
Constant	3.590*	-1.022	5.770**	4.893**	3.673	4.655*	4.207***		5.22***	
	(1.771)	(-0.514)	(2.559)	(2.231)	(2.002)	(1.768)	(2.828)		(3.010)	
Observations	118	118	118	118	118	118	236		236	
R2 (adj.)	0.54	0.57	0.51	0.57	0.68	0.51	0.56		0.51	

t values in parentheses; * p < 0.10, ** p < 0.05, *** p < 0.01; see Figure 2 for spline graphs (not all shown).

Figure 3:   Non-linear effects in allocation models

From left to right: income per capita 1992–1999 (logged) (Table 2, eq. 2), income per capita 2000–2008 (logged) and trade 2000–2008 (logged) (eq. 5).
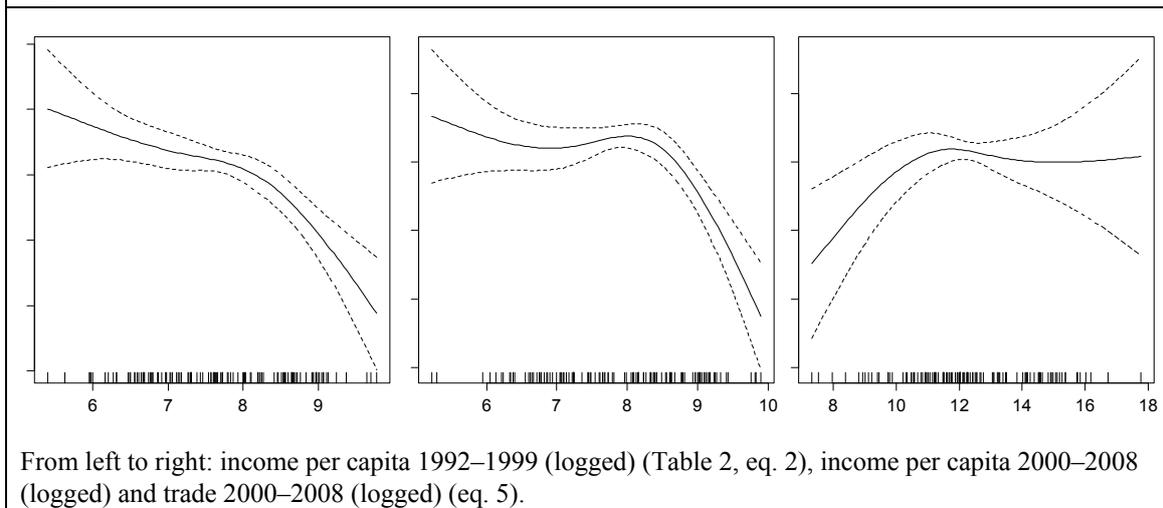
Moving from temporal to institutional disaggregation, we look at total aid versus BMZ aid (Table 3). Was the ministry's allocation pattern different from the overall allocation pattern? We use BMZ data now because it allows for a better identification of resources controlled by the ministry. Using BMZ data on total aid in the OLS and GAM specifications does not change any substantial results as compared to using the OECD data (eq. 1 and 2). Population, income, democracy levels, distance and – only in the GAM specification – trade have a significant impact on allocation. Looking only at aid flows controlled by the BMZ (eq. 3 and 4), we find distance to be significant only in the GAM model. The remaining variables do not change much either, implying that aid resources directly under the responsibility of the ministry were not allocated in a more development-friendly way than overall German aid.[21]

How do the total aid results hold when testing for path dependency and agency interest? All newly introduced variables are highly significant (Table 3, eq. 5–9), but they do not change the effects of the other variables substantially as compared to the GAM base model (eq. 2). Previous ODA has a non-linear effect, which sets in after an average of EUR 4 million per year. Income and trade approximately retain the functional form of previous models. Our path dependency and agency interest models probably suffer from endogeneity problems, but the fact that the other effects remain stable gives strong support to the hypothesis that need and governance are actually taken into account by the decision-makers.

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21 We also tested how aid that is not controlled by BMZ (*total aid* minus *BMZ aid*) is allocated and found that it produces a pattern that is very similar to *total aid* (results not shown).

Table 3: Aid allocation: total vs. BMZ aid, path dependency and agency interests

Gross aid (BMZ data) (ln)	(1) OLS Total aid 2000–2008	(2) GAM Total aid 2000–2008	(3) OLS BMZ aid 2000–2008	(4) GAM BMZ aid 2000–2008	(5) GAM Total aid 2000–2008	(6) GAM Total aid 2000–2008	(7) GAM Total aid 2000–2008	(8) GAM Total aid 2000–2008
Population (ln)	0.801***	0.813***	0.951***	0.904***	0.711***	0.569***	0.718***	0.529***
	(4.303)	(5.769)	(4.686)	(5.686)	(5.026)	(4.738)	(4.974)	(3.920)
GDP per capita (ln)	-0.560***	*(cubic spline)*	-1.002***	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*
	(-3.045)	***	(-4.336)	***	***	***	***	***
Voice & Accountability	0.691***	0.698***	1.021***	1.038***	0.569***	0.260*	0.626***	0.414***
	(3.476)	(4.279)	(4.083)	(5.638)	(3.443)	(1.838)	(3.826)	(2.686)
War	0.103	0.0236	-0.031	-0.142	0.120	-0.109	0.105	0.081
	(0.344)	(0.095)	(-0.083)	(-0.507)	(0.493)	(-0.559)	(0.425)	(0.366)
Distance (ln)	-0.802***	-0.892***	-0.358	-0.500**	-0.875***	-0.876***	-0.846***	-0.877***
	(-3.127)	(-4.196)	(-1.108)	(-2.086)	(-4.237)	(-5.219)	(-4.034)	(-4.626)
Trade (ln)	0.105	*(cubic spline)*	0.017	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*	*(cubic spline)*
	(0.768)	***	(1.100)	***	***	***	***	***
UN voting accordance	-0.048	-1.064	2.731*	0.877	-1.067	-0.492	-1.594*	-1.136
	(-0.043)	(-1.136)	(1.959)	(0.830)	(-1.173)	(-0.665)	(-1.681)	(-1.360)
Partner country 2000 (dummy)					0.661***			
					(2.814)			
German ODA amount, lagged (ln)						*** *(cubic spline)*		
German agency offices dummy, lagged							0.672**	
							(2.349)	
Number of German aid projects, lagged (ln)								1.145***
								(5.642)
Constant	12.315***	10.465***	9.456***	4.543*	10.784***	12.033***	10.728***	10.908***
	(4.303)	(4.586)	(2.627)	(2.576)	(4.859)	(6.726)	(4.778)	(5.368)
Observations	118	118	118	118	118	118	118	118
R^2 (adj.)	0.58	0.71	0.55	0.75	0.73	0.83	0.72	0.77

t values in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$; see Figure 2 for spline graphs (not all shown).

4   Conclusion and outlook

From a more general perspective, the previous analysis of country selection and resource allocation of German aid has introduced several new features to the study of aid-allocation patterns by a) explicitly examining official partner country lists, b) using new estimation technique to identify non-linear effects of explanatory variables and c) by explicitly considering bureaucratic agency interests. These features allowed for a more encompassing analysis of aid selectivity of one of the most important bilateral donors and can at least partially be applied to other donor countries or organisations.

With respect to the German case, there is significant evidence that neediness and democracy levels of developing countries have indeed played a crucial role, both in the selection and in the allocation process. These findings support the notion that development orientation has been a crucial feature of German aid. They also support those who argue that German foreign policy is guided by the principles of a civilian power. Yet, while neediness and democracy levels (as measures of development orientation) have played the most important role, they are far from determining country selection and aid allocation.

Explicit variables on economic self-interest and political allies have not been identified as significant factors. Yet, the significant impact of a developing country's size can be interpreted ambiguously, because large countries not only have larger numbers of poor people, but generally they are are also more important in economic and political terms. Moreover, the non-linear models confirm that per-capita aid matters for decisions on allocation, but they also refine this very coarse message: they show that the positive effect sets in only at a relatively high threshold of US$ 4,000. Below that threshold, any greater level of need has no additional impact. All else being equal, low-income and lower-middle-income countries must expect the same chances of becoming a partner country and they must expect the same amount of aid. These findings might be related to recent debates on how to allocate aid in a changing world, where large middle-income countries are not only relevant for poverty alleviation because they host most of the world's poor people, but also because of their rising importance in global affairs directly linked to German foreign policy interests.

Additionally, the only donor interest variable that has a more or less robust effect on the 2008 selection and recent allocation patterns is geographic distance. This finding can be explained by the changing international context following the country's reunification process, which has not only changed its geopolitical position but also increased the potential for Germany to react, via its aid policy, to the increasing interdependencies with countries neighbouring the European Union. However, given the impact of neediness and democracy levels as crucial development-oriented criteria of aid selectivity, this finding does not necessarily contradict the relevance of the civilian power concept for German aid.

Finally, our analysis also highlighted the path dependency of German aid selectivity. A large percentage of German aid goes where it has gone before. The strong impact of partner country status in the year 2000 on aid allocation in the 2000–2008 period might at first sight be interpreted as proof of aid concentration to partner countries. However, descriptive statistics show that the impact is mainly due to the fact that just those countries that were receiving the vast majority of aid at the time of decision were chosen as partner countries. The relative amount of aid going to these countries has not increased noticeably

since then. We also detect a strong influence of agency interests for both selection and allocation. Despite unresolved concerns of endogeneity, these two results jointly support the hypothesis that the complex German aid agency structure makes it difficult to change allocation patterns. A complex institutional arrangement with many veto players has probably led to a lock-in effect of development orientation of German aid allocation – a finding that fits with the general interpretation of the overall path dependency of German foreign policy. Yet, one should be very cautious when inferring from selectivity patterns of a donor country on the effectiveness of these resources for, e.g., economic growth or poverty alleviation. Even if there is a relatively broad consensus that aid resources are particularly effective for promoting economic development in relatively poor but relatively well-governed countries, fulfilling certain allocation criteria are at best necessary but not sufficient criteria for improving the effectiveness of foreign aid.

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Annex

Table A:	Data sources
Variable	**Source**
Total aid / BMZ aid / German ODA amount, lagged	OECD 2012; BMZ (various years)
Partner country 2000 / 2008	BMZ 2000, 2008
Population (ln)	Heston / Summers / Aten 2009; Gleditsch 2002
GDP per capita (ln)	Heston / Summers / Aten 2009; Gleditsch 2002
Voice & Accountability	Kaufmann et al. 2008
War / post-war	Gleditsch et al. 2002; Harbom / Wallensteen 2010
Distance (ln)	Gleditsch / Ward 2001
Trade (ln)	Statistisches Bundesamt 2009
UN voting accordance	Gartzke 2008
German agency offices dummy, lagged	GTZ (various years); KfW (various years)
Number of German aid projects, lagged (ln)	Nielson et al. 2010
Infant mortality (ln)	IHME 2010
Freedom House	Freedom House 2010
Polity	Marshall / Jaggers 2010

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