German Arms Exports: Between Normative Aspirations and Political Reality

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Deciding on arms exports is a delicate matter in western democracies. Potential economic and security gains have to be weighed against normative and security concerns. This article explores how this tension is solved in Germany, a country that holds strong moral aspirations but at the same time lists among the top arms exporting nations worldwide. Using a newly compiled dataset, we quantitatively analyse German exports of major conventional weapons (MCWs) from 1992 to 2013. Our statistical findings do not support the claim that the human rights situation in recipient countries plays an important role for German arms export decisions. Our two-stage model therefore supports a trading state rather than civilian power reading of Germany, at least when it comes to arms export practices.

INTRODUCTION

In western democracies arms exports are a politically sensitive issue. Decision-makers regularly weigh normative concerns against economic and/or geostrategic opportunities, which can arise through selling arms abroad. While Germany has a strong rhetoric on human rights, and actively promotes restrictive arms exports regulation at the international level,[1] it is among the world's leading suppliers of major conventional weapons (MCWs). The official justification accounting for this obvious discrepancy is that Germany has set up a tight system of control for preventing exports to countries in which a misuse of weapons is likely. In this article, we use a new dataset on German exports of major conventional weapons from 1992 to 2013 to test whether criteria such as democratic governance and respect for human rights in recipient states actually shape German arms export decisions in practice.

Theoretically, the article draws on classic International Relations (IR) theories, which structure the debate on the determinants of arms exports. It thereby builds on and possibly contributes to the vivid debate which has been going on between realists, liberals and constructivist about what type of foreign policy actor Germany is.[2] After reunification, realists and neo-realists suspected that Germany's regained sovereignty and increased size would lead it to adopt the behaviour of a militaristic, power-oriented state.[3] In contrast, liberals and constructivists expected continuity rather than change to prevail in German foreign policy. For the adherents of commercial liberalism Germany represented a paradigmatic case of a trading state,[4] primarily governed by domestic economic interests.[5] Constructivists in turn perceived Germany to be guided by normative and ideational concerns.[6] A prominent group of constructivist

scholars resorted to role theory and characterised Germany as a civilian power.[7] While the realist, military power scenario at least for the time being has hardly been substantiated by empirical evidence, the competition between the trading state and the civilian power concepts has proven more robust. This seems due to important theoretical overlaps between the two accounts. And related to this, most empirical analyses so far have not identified critical testing grounds for a decisive showdown of the two theories. While we do not argue that arms exports allow a final word on this question, we maintain that the issue can contribute to highlighting some important characteristics of German foreign policy making.

The article is structured as follows: after introducing the legal framework for arms exports in Germany, we derive a set of hypotheses on German arms exports. We then introduce our data and methodology before turning to the quantitative test of the theoretical predictions. The empirical analysis shows that normative issues play only a minor role in German arms export decision making: after controlling for economic and security-political factors, we find that higher levels of democracy and respect for human rights do not make German arms exports more likely. Since German arms transfers are strongly correlated with overall civilian exports, we take this as first evidence supporting a trading state rather than a civilian power reading of Germany. Commercial and security interests appear to (at least partially) outweigh normative considerations.

EXPORTING ARMS IN GERMANY   THE LEGAL BACKGROUND

The export of military goods and weapons of war is strictly controlled in Germany. According to Article 26 of the German *Grundgesetz*, '[w]eapons designed for warfare may be manufactured, transported or marketed only with the permission of the Federal Government'.[8] The guidelines for the licensing authorities are further substantiated in the *Policy Principles of the Government of the Federal Republic of Germany for the Export of War Weapons and Other Military Equipment*. These principles explicitly state that the government desires 'to pursue a restrictive policy on arms exports'[9] and, since revision in 2000, feature the human rights situation in the recipient country as a key factor for the granting of export licences. In addition, the principles state that exports to so-called third states[10] will be handled restrictively, 'unless in a specific case this is exceptionally warranted on particular foreign and security policy grounds, having due regard to Alliance interests'.[11]

The Weapons of War Control Act and the German Foreign Trade and Payments Act of 1961 further amplify the legal framework of German arms exports. With the 1998 EU Code of Conduct on Arms Exports (respectively the 2008 EU Common Position) as well as the 1993 OSCE Principles Governing Conventional Arms Transfers (and since 2013 with the United Nations Arms Trade Treaty), Germany also commits itself on the international level to taking into account the respect for human rights in the country of destination. Though these legal documents leave room for interpretation, in principle German arms export decisions are embedded in a highly legalised framework aiming at the protection of peace as well as human rights.

Within Germany, the deciding authority over arms exports is distributed over multiple institutions. The Federal Office of Economics and Export Control is in charge of

the overall export control, including arms exports. More delicate export projects are presented to the Federal Security Council, which is a permanent cabinet committee headed by the Chancellor and consisting of several ministers as well as the head of the federal chancellery. In practice, the arms industry submits licence requests, which are discussed within the Council as part of the 'core area of execute responsibility'.[12] The Council's meetings take place in confidentiality and only approvals of licence requests are published in the Annual Report on Military Equipment Exports.

While some scholars point out that the laws and regulations that govern the German arms export policy are 'textually rather brief and basic compared to that of other European countries',[13] they earned Germany the reputation of a high-regulation country.[14] Even though state-ownership in the arms industry is totally absent, the country is said to enact a strict export control and to be by tradition a restrictive supplier promoting restrictive regulation policies on the international level. However, while there are rigid legal restrictions limiting German arms exports on paper, human rights activists still regularly criticise that Germany does not live up to its moral aspirations.[15]

THEORY

German foreign policy has received strong attention after reunification. In a quasi-experimental set-up, the Federal Republic's population size increased almost overnight by 16 million people. Therefore reunification provided a valuable testing ground for International Relations theories. According to realist and neo-realist IR theory this development should have impacted on Germany's power inside Europe and should more generally have affected its foreign policies.[16] However, most academic accounts have found continuity rather than change to dominate in German foreign policy making after reunification.[17] Furthermore, a substantive amount of these accounts sees German foreign policy to be driven by ideational factors; notably its post-World War II identity is often argued to be a core driving force behind the country's external relations. While not engaging in depth with the continuity versus change debate, in this article we draw on the theories predominantly used in this debate for explaining German foreign policy, namely neo-realism, liberalism and constructivism.

We argue that the question of arms exports can be considered a useful testing ground for identifying the nature of Germany's foreign policy. The reason for this is that different IR theories generate distinguishable predictions for arms export practices. Accordingly we ask whether German arms exports are primarily driven by security, economic or ideational concerns and therefore whether Germany behaves more like a security seeking state, a trading state or a civilian power.

Neo-Realism: Germany as a Military Power

Neo-realist theory initially was conceived as a theory of international politics and not of foreign policy.[18] Despite this, neo-realism has increasingly been used for the analysis of foreign policy.[19] As is well known, neo-realism assumes utility-maximising behaviour of states that are treated as unitary actors. The world is organised in a decentralised and anarchic system of states, concerned with relative gains and acting according to self-help logic. Because of the security dilemma, they are forced to maximise their power in terms of capacity in order to assure security and survival. In a

neo-realist reading, arms exports may serve two principal goals. The first is to strengthen its allies. Arms should therefore be exported to states that may potentially use them for balancing against a common threat.[20] Since exporting arms to allies produces a positive security externality, arms may be used to buttress or win an ally, arm the 'enemy of my enemy' or strengthen an alliance.[21] At the same time today's ally may be tomorrow's enemy and therefore the armament should not be unlimited: '[e]xporters need to be concerned about how the weapons will be used by the receiving state as exerting ex post control is extremely difficult; thus, exporters account for the capabilities they transfer'.[22] This also underlines that states are more likely to export weapons to states, which are unlikely to pose a security threat in the future, possibly because of a very distant geographical location.

Another reason for exporting arms is that states in a neo-realist world view have strong interests in securing their armament industry's survival and their defence industrial base.[23] The production of arms is an immensely capital- and technological-intensive industry, which requires significant investment in research and development, production facilities and skilled personnel.[24] Arms exports allow for the lengthening of production runs and lower unit costs, enabling producing states to reach economies of scale and thereby to maintain their defence industrial base. Especially exporting weapons to financially strong states may therefore be a way to enable the maintenance of a state's own weapon production.

Therefore, according to neo-realism we expect Germany to export arms mainly to its NATO and EU partners or, alternatively, to states that are unlikely to wage a war against Germany in the future.

> H1: If a state is an ally to Germany, more arms are exported by Germany to this state.
> H2: The less threatening a state to German security interests, the higher the amount of arms Germany will export to this state.

Liberalism: Germany as a Trading State

Andrew Moravcsik has summed up liberalism's core assumptions:[25] liberals assume the primacy of societal actors. Their interests are aggregated in an institutional context and externally represented by rational governmental actors. Since societal interests are shaped by the structure of international interdependence, structural variables affect state behaviour. In general, states are assumed to strive for wealth and they therefore care more about absolute instead of relative gains.[26] Commercial liberalism 'focuses on incentives created by opportunities for transborder economic transactions'.[27] In such a reading arms should primarily be treated as an economic good. Wulf for instance argues that while for major powers such as the United States (USA) or the Soviet Union (SU), strategic goals and spheres of influence matter for explaining arms exports, smaller states often use arms exports mostly for economic reasons.[28] Purely on economic grounds, we can assume that arms producers have incentives to export as much as possible. As Johnson puts it: '[e]xporters' economic concerns come from the high cost of research, development, and production of arms there is an economic push for export despite the security risk'.[29] Similarly, strong exports may also serve states' economic interests; arms sales can generate tax

revenues, savings in procurement expenditures and create employment.[30] From a government's perspective, these factors should augment its chances of being re-elected. The strong export-orientation is a key characteristic of a trading state, a concept coined by Richard Rosecrance in the 1980s.[31] A trading state is geared towards maximising its economic power, and since it is deeply integrated into a highly interdependent world economy, its government needs to ensure general trade openness. In fact, the Federal Republic with its strong export orientation has regularly been classified as a prototype of a trading state in the past.[32] More recently, taking up Luttwak's terminology, authors like Hans Kundnani and Stephen Szabo have characterised Germany as a 'geo-economic power'.[33] This concept builds on the idea of a trading state by defining the national interest foremost in economic terms. However, it goes beyond the trading state's economy-centred outlook by claiming that geo-economic powers use their 'economic power to impose national preferences on others'[34] or even to 'hollow out the international system'.[35] Since our data do not allow a test of the geo-economic reading of what Szabo calls 'Germany, Inc', we refrain from systematically testing the claims of the geo-economic strand of the literature in this article. Because we cannot estimate whether Germany has 'become more willing to impose its economic preferences on others'[36] we remain agnostic about the ultimate motivations driving a state's trade outlook. Note however, that both readings, the trading state versus the geo-economic power, should expect that Germany has strong interests to have good relations with resource rich countries in order to keep its economy flourishing. Therefore, we expect that arms exports to countries which possess natural resources are more likely.

Liberalism could be accused of naïveté if it easily discarded any security concerns that governments might have. Of course, arms exports to a state representing a direct threat should be prohibited by a government. Liberal theory teaches that there are two factors which can reassure a government of lasting peaceful relations; first, the existence of close economic ties and second, the democratic political system of a partner state. According to capitalist peace theory, two countries will not go to war with each other if they have strong trade interdependence, open capital markets and share a set of liberal economic norms. In line with this, the peace-through-trade hypothesis states 'that economic interdependence in the form of bilateral or multilateral trade between states reduces the risk of conflict between and within states'.[37] Fearful of the domestic political consequences of losing the benefits of trade, policy-makers avoid the use of force against states with which they trade. As, according to this logic, war in case of high economic interdependence is a highly unlikely event of collective irrationality,[38] arms exports within dyads that trade heavily with each other should not pose a security risk. Therefore, arms transfers should be positively correlated with civilian trade flows.

In addition, the literature on the democratic peace teaches us that two democracies do not fight wars with one another.[39] Following this logic, democratic supplier states export their arms to other democracies with fewer concerns. Finally, an open trading state with a strong multilateral outlook, should refrain from exporting arms to countries that are subject to international sanctions. Violating arms embargoes would call for responses by the international community and thus harm the state's economy.

The following hypotheses summarise our expectations based on liberal IR theory.

H3: The more natural resources a country possesses, the more German arms will be exported to this country.

H4: The closer a state's trading partnership with Germany, the more arms will be exported to this country.

H5: The more democratic a state, the higher the likelihood that it will receive German arms.

H6: Germany will not export arms to countries that are subject to international arms embargoes.

Constructivism: Germany as a Civilian Power

For constructivists 'identities are the basis of interests'.[40] Whereas neo-realism and liberalism assume rational and utility maximising actors, constructivists believe that actors are mostly guided by a 'logic of appropriateness'.[41] As to foreign policy, state behaviour should be strongly determined by its core actors' norms, values and identities. As to identities, a prominent branch of the literature has used role theory for explaining foreign policy behaviour.[42] For the case of Germany, Hanns W. Maull arguably is the most visible scholar referring to Germany as a civilian power.[43] Following the civilising societal processes identified by sociologist Norbert Elias, civilian powers are described as states which hold strong attachments to principles of non-military (but not pacifist), value-oriented multilateral foreign policies. Kirste and Maull stress that civilian powers should strongly care for the respect of human rights and conduct a value-oriented foreign policy.[44]

In line with the civilian power concept, human rights play a key role in the official German foreign policy discourse. For example, the coalition treaty of the CDU, CSU and FDP from the seventeenth legislative period stresses that 'human rights policy is a central constant of German Foreign and Security Policy',[45] as do the already cited *Policy Principles* for German arms exports. Schrade has argued that the respect of human rights ought to be considered as crucial by civilian powers in the context of development policy,[46] and we expect this to similarly apply to the case of arms exports. If Germany were a civilian power, it should take the human rights situation into account when deciding on arms exports.

H7: The more a state respects human rights, the more arms are exported to this state by Germany.

DATA, OPERATIONALISATION AND METHODOLOGY

The arms trade has attracted the attention of both economists and political scientists for decades. Works that date back to the cold war era and the 1990s deal with the topic in a semi-theoretical way,[47] while more recent publications analyse arms transfers empirically. Blanton's study of US arms exports finds that higher levels of respect for human rights and democracy are positively correlated with US arms transfers after the end of the cold war.[48] Erickson analyses MCW-exports of EU countries between 1990 and 2004, finding no support for an ethical arms export policy of the European suppliers neither before nor after the introduction of the Code of Conduct in 1998.[49] Her study is in line with several other contributions on the effects of the Code and the

Common Position.[50] Johanssen and Martínez-Zarzoso find 'that political closeness between countries is an important determinant of transfers in arms and that economic and strategic interests are not the only drivers of the transfers'.[51] However, their econometric model suggests that the impact of the political variables changes with the end of the cold war, when the difference in Polity scores of the supplier and the recipient is no more a significant predictor of arms transfers.

While there is some literature on German arms exports, most accounts are either descriptive and/or normative.[52] Brzoska points out the tension between the general principle of restrictive supply and the high overall levels of German arms exports. The author interprets the evidence of exports to Saudi Arabia not as an abrupt change of policy, but rather as a slow, but continuous move away from a restrictive pattern of supply to exports more in line with security policy goals.[53] In her case study on recent exports of Leopard battle tanks to Qatar and Saudi Arabia, Simmel attributes an observed change in German arms export policy to third countries to 'the deteriorated economic situation of Germany's weapons manufacturers'.[54]

The only other quantitative analysis of German arms exports we are aware of is the work by Perkins and Neumayer who compare German, French, British and US-American arms exports for the period of 1992 to 2004. The findings of their two-stage model provide 'very little evidence that Western countries have systematically discriminated against states with poor levels of human rights or democratic freedoms',[55] with Germany only being a partial exception. We depart from their study by (1) theoretically anchoring our analysis of German arms export practice in the more general debate about German foreign policy, (2) covering a larger time period as well as (3) a sample of all potential recipients of German arms exports[56] and (4) control for a larger set of covariates.

Data and Operationalisation

The hypotheses developed in the theoretical part will be tested on a unique cross-section time series dataset, covering German MCW-exports for the period 1992 to 2013. On the recipient side, the sample covers all countries that the Stockholm International Peace Research Institute (SIPRI) reports to have at least once imported MCWs by any supplier within the sample period. The 174 sovereign countries that fulfil this criterion can be reasonably expected to qualify as potential recipients of German arms exports and provide us with sufficient variance concerning our explanatory variables. The dataset has a pooled time series structure with repeated observations (years) on fixed units (exporter importer dyads). The year 1992 was chosen as the starting year since it marks the end of the cold war (often considered a watershed moment for the trade in arms). Furthermore, 1992 is the first year after German reunification.

Data for the dependent variable come from SIPRI,[57] a standard source for publications on the arms trade. SIPRI has developed a trend indicator value (TIV), which is based on both the volume and the military value of bilateral arms transfers in order to allow for comparisons and identifying general trends over time. It covers actual deliveries of MCWs with an intended military purpose and destined for armed forces. MCWs are defined to include arms such as aircraft, air defence systems, armoured vehicles and artillery missiles. There are some drawbacks when relying on SIPRI-data: transfers of small arms and light weapons (SALWs) are not

covered, measurement relies on public sources of information supplied by the media and governments and the TIV has been criticised to be subject to measurement error as it is based on unit production costs of a core set of weapons, which are hard to measure.[58] Nevertheless, SIPRI is acclaimed to be the most thoroughly researched database available on annual cross-national arms transfers and has in fact a monopoly on cross-section time series data on arms transfers. As MCWs are the arms category in which most measured trade takes place, we decided to base our analysis on this imperfect, but nevertheless carefully collected data.

Data for the regime type of a state come from the Polity IV project.[59] As the Polity project evaluates the competitiveness, openness and the level of participation of a state's elections, this variable reflects the institutional dimension of democratic rule. We use the Polity 2 index, a combined score of measures for democracy and autocracy, ranging from 10 (fully autocratic) to +10 (fully democratic).[60] Data on human rights levels come from the Political Terror Scale (PTS).[61] The PTS measures the degree to which personal integrity rights are observed in a country and is based on two sources, annual US State Department and Amnesty International reports, which we combine into an average score.[62] Limiting the definition of human rights to physical integrity rights allows for an operational distinction between human rights on the one hand and democracy on the other.[63] In order to make interpretation more intuitive, we mirror the original scale: a score of 5 indicates a situation where severe human rights violations occur on a daily basis and affect the whole population while a score of 1 is ascribed to countries under a secure rule of law.

Data on armed conflicts come from the Uppsala/Peace Research Institute Oslo (PRIO) conflict dataset.[64] The dummy variable takes on the value of one if a country was reported to be involved in a minor conflict or an actual war in a given year. The basic assumption is that states involved in an armed conflict have a higher demand for arms. Data for alliances come from the Correlates of War project.[65] The variable is coded as a dummy variable with a value of one if Germany and the other state of a dyad were part of a defence alliance in a given year and a value of zero otherwise.[66] As an additional control variable, we include a measure for corruption. The data come from the Transparency International (TI) Corruption Index.[67] Since coverage is sparse especially for those countries suspected to be the most corrupt, we decided to use the 2013 index as a proxy of corruption for the whole sample period. The (mirrored) measure ranges from 0, indicating extreme corruption, to 100, indicating the absence of corruption.

SIPRI supplies data on arms embargoes[68] and on military expenditures (MEs).[69] The United Nations (UN) and European Union (EU) arms embargo variables are coded as dummies with the value of one if the importer country is under an embargo in a given year and zero otherwise. Only complete embargo years are coded as one. Although MEs will not be completely spent on importing arms, the level is expected to capture the willingness of a state to spend on weapon systems and hence a supplier's economic incentive to export to this country.[70] Concerning the demand for arms imports, we expect MEs to have a non-linear effect: on the one hand, higher levels of MEs should be connected to higher levels of imports, as a country can simply afford to buy more weapons. On the other hand, however, this relationship is likely to hold only up to a certain point: at some level of military

spending a country will begin to produce arms domestically.[71] Even though it will still import certain kinds of weapons that it cannot or does not want to produce itself, after this point is reached, higher levels of MEs should be generally connected with lower levels of arms imports. In order to control for this effect, a squared term of the ME-variable along the original term is included in our model.

Gravity models of international trade flows are based on measures of the gross domestic product (GDP), population, GDP per capita (p.c.) and distance. Though arms are not a normal commodity, these factors are likely to influence the flow of arms as well. Data on GDP and population come from the World Bank.[72] The GDP p.c. measure is computed as the ratio of the two measures. The distance measure captures the distance between two capitals in kilometres.[73] While in traditional gravity models distance is expected to be negatively correlated with trade flows due to transportation costs, we expect the opposite effect for arms transfers: since states fear being attacked with their own arms in the future, they should be more likely to export to countries that are more distant and thus less likely to conduct an attack. Data for overall bilateral trade flows come from the UN Comtrade Database.[74] We include dyadic deflated and logged annual German export and import flows separately.[75] Due to economic incentives, arms may be traded for natural resources. One such resource is oil, which countries generally perceive to be tightly connected with strategic and economic security concerns. We therefore include a control for national oil production, which we obtain from the US Energy Information Administration (EIA).[76]

Methodology

In the sample, arms exports are a rare event: the dependent variable contains a large number of zeros, with many dyads only having zero values. In other words, the arms transfer data are lumpy, with high values in few dyad-years and small or zero values in the majority of dyad-years. In order to account for both the excess zeros and the skewed distribution of the non-zero values of the dependent variable, we apply a two-stage model to the sample. In the first stage, we run a logistic regression on a dummy variable that captures whether MCWs were exported in a given country-dyad-year, regardless of the amount. As this step of the analysis captures the supplier country's selection of recipient countries, it is henceforth called the selection-stage. In the second stage, we run a linear regression on the logged TIV, excluding the zero-observations by setting them to missing values. This step of the analysis thus reflects the supplier country's decision about the amount of arms transferred and is henceforth called the amount- or allocation-stage. An obvious drawback of the two-stage model is the limits it imposes on the informative value of the results: while in the first stage the explanatory variables are regressed on an arms transfer-dummy that does not capture the amount of arms exported, the amount-stage is limited to the non-zero observations in the dependent variable. However, the two-stage approach appears to be the least problematic for the specific structure of the data. Other authors actually argue that a two-stage model is warranted not only for methodological,[77] but also for theoretical reasons: as suppliers are likely to screen out potential recipients in a first step before deciding about the amount of arms to export, a two-stage model captures the actual decision-making process more closely.[78]

The Heckman model applied by Blanton[79] is used to correct for sampling effects by the inclusion of the non-selection hazard rate (lambda) as an independent variable in stage two. However, the Heckman model has come under criticism for its onerous identification requirements,[80] which are not addressed by Blanton. 'This is problematic', as Brandt and Schneider argue, 'because a failure to properly identify the selection process can lead to biases that are as bad as the original sample selection problem that researchers are trying to correct'.[81] Given the potential correlation of the error term of the two equations and a high degree of censoring of the data, the Heckman estimator is argued to be inefficient and subsample Ordinary least squares (OLS) more robust.[82] Vance and Ritter even explicitly suggest using two-part models when dealing with arms exports.[83] For these reasons, we perceive the two-step model to present a tighter conceptual fit for our analytical objectives.

As arms exports follow from prior decisions about the need for arms and the willingness to grant an export licence, we lag the time-variant variables (except for the embargo-variables) in our regression models by one year. To correct for heteroscedasticity in the dyadic data, robust standard errors (SEs) are calculated and clustered on recipient countries. We do also control for time effects by including year-dummies.

EMPIRICAL ANALYSIS

Table 1 shows the summary statistics of the variables used in the analysis. In a first step, we plot the Polity and PTS scores of German MCW recipients over the years. Figure 1 shows that the majority of the export destinations rank fairly high on the democracy scale, with an average score of about +5 over the period under observation. However, we see as well that there is a fair amount of export destinations that ranks below 0 and even below 5, indicating less and non-democratic states. Figure 2 shows the PTS score of the recipients of German MCWs: again, many destination countries lie in the upper half of the scale, with a mean PTS score between 3 and

TABLE 1
SUMMARY STATISTICS

Variable	Mean	Std. Dev.	(Basic) units
Arms transfer yes/no	0.161	0.367	0,1
Ln arms transfer amount	3.029	1.506	Count
Polity democracy	13.178	6.595	10 to 10
PTS human rights	2.531	1.122	5 to 1
War	0.466	0.765	0,1,2
Alliance	0.143	0.35	0,1
Ln distance	8.351	0.913	Kilometres
UN arms embargo	0.017	0.129	0,1
EU arms embargo	0.06	0.237	0,1
Corruption	42.03	19.81	100 to 0
Ln oil supply	2.696	2.88	Thousand barrels per day
Ln MEs	6.563	2.392	Constant 2011 US dollars
Ln GDP p.c.	7.878	1.623	Deflated US dollars/total population
Ln German exports	19.275	2.917	Deflated US dollars
Ln German imports	18.75	3.365	Deflated US dollars

Note: Ln Natural logarithm.

FIGURE 1
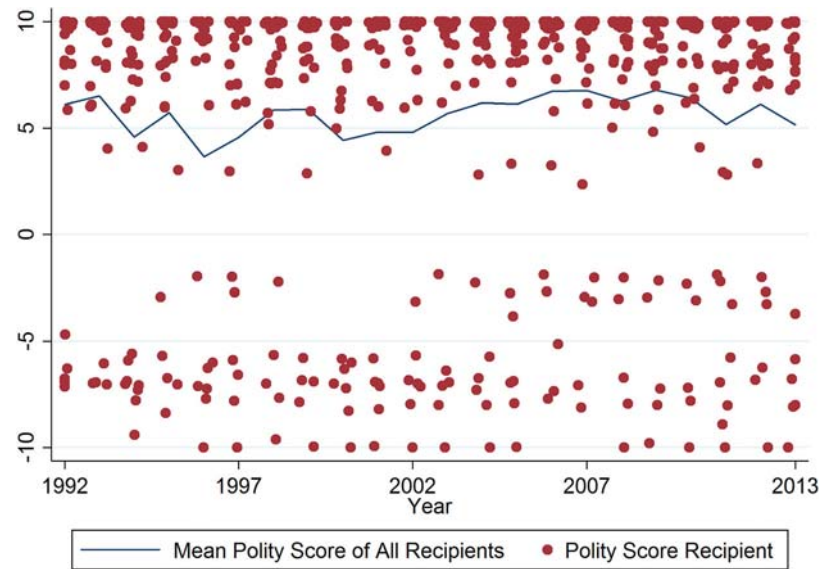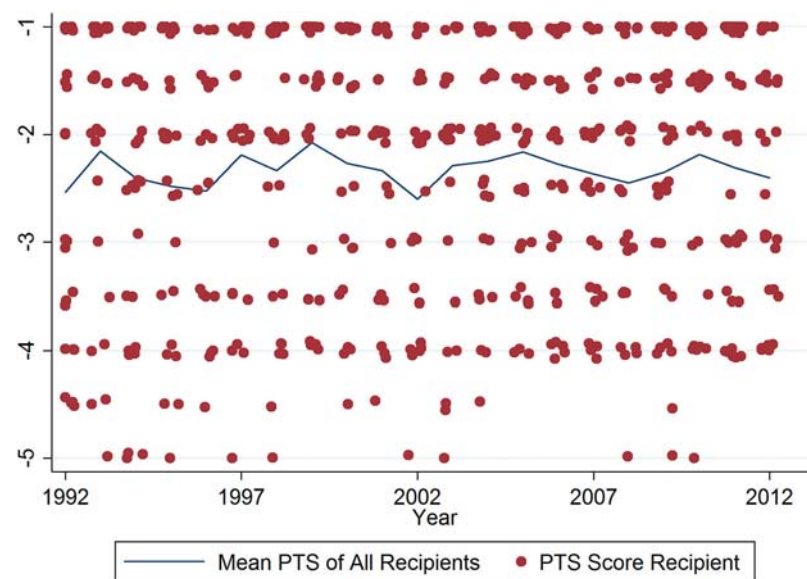POLITY SCORES OF RECIPIENT COUNTRIES OVER TIME

FIGURE 2
PTS SCORES OF RECIPIENT COUNTRIES OVER TIME

2. However, exports to destinations in the lower half of the scale are not uncommon, indicating states where 'murders, disappearances, and torture are part of life' (4) or the terrors 'have been extended to the whole population' (5).[84] Both figures show that the majority of German export destinations are states that are located in the upper half of the democracy- as well as the human rights-scale a picture in line with Germany's reputation as a high-regulation country that conducts a restrictive arms export policy. However, Germany does also export arms in a regular manner to what Holm[85] describes as 'countries of concern', drawing into question the true extent of restrictiveness in German arms export policy.

Evidence on the Security-Seeking State

Tables 2 and 3 show the results of our two-stage estimation model. Neo-realists expect an arms exporting state to be primarily concerned with its own security and power. And in fact, our results offer some support for the realist hypotheses: while being a defence ally does not appear to make a country more likely to receive German arms, results suggest that among the recipient countries allies receive a significantly higher amount of arms (H1). Interpreting distance as a proxy for threat, we see a similar pattern at work: while distance appears not to be an important factor in the selection of recipient countries, more distant countries receive a higher amount of German arms exports (H2).

Evidence on the Trading State

Commercial liberals see economic incentives as the driving force behind arms exports (H4). Concerning trade relations, the two-stage model offers strong support for this explanatory approach: the logged dollar value of dyadic German exports is a positive

TABLE 2
SELECTION-STAGE – LOGIT-MODEL GERMANY

	Arms transfer yes/no
Polity democracy	0.005 (0.026)
PTS human rights	0.362 (0.179)**
Conflict	0.048 (0.208)
Alliance	0.054 (0.506)
Ln distance	0.270 (0.220)
EU arms embargo	0.082 (0.790)
TI corruption	0.026 (0.015)*
Ln oil supply	0.024 (0.073)
Ln MEs	0.832 (0.700)
Ln MEs^2	0.034 (0.041)
Ln GDP p.c.	0.028 (0.234)
Ln German exports	0.650 (0.216)***
Ln German imports	0.175 (0.123)
Constant	19.077 (4.425)***
Year dummies	Yes
Pseudo R^2	0.328
Observations	2691

Notes: robust SEs in parentheses, clustered at recipient countries. TI Transparency International.
*$p < .1$; **$p < .05$; ***$p < .01$.

TABLE 3
ALLOCATION-STAGE – LINEAR REGRESSION-MODEL GERMANY

	Ln arms transfer amount
Polity democracy	0.035 (0.016)**
PTS human rights	0.285 (0.097)***
Conflict	0.004 (0.158)
Alliance	0.831 (0.221)***
Ln distance	0.618 (0.110)***
EU arms embargo	0.813 (0.337)**
TI corruption	0.006 (0.005)
Ln oil supply	0.091 (0.033)***
Ln MEs	0.380 (0.169)**
Ln MEs^2	0.026 (0.010)***
Ln GDP p.c.	0.028 (0.083)
Ln German exports	0.502 (0.133)***
Ln German imports	0.180 (0.093)*
Constant	11.041 (2.145)***
Year dummies	Yes
R^2	0.226
Adjusted R^2	0.176
Observations	555

Notes: robust SEs in parentheses.
$^*p < .1$; $^{**}p < .05$; $^{***}p < .01$.

and statistically significant factor in both stages, suggesting that German export markets are both more likely to receive German arms and to buy a higher amount. The same does not hold for import levels. Moreover, the data do not support the notion that resource wealth is positively correlated with German arms exports: higher levels of oil supply do actually slightly reduce the amount of German arms a country receives (H3). Due to negative reputational effects, liberals would expect Germany not to export MCWs to countries under an arms embargo (H6), which holds for UN-embargoes: the respective dummy variable drops out of the regression model as the data do not report any exports for countries sanctioned by the UN. The same is not true for the EU embargo-dummy, indicating that Germany has exported MCWs to countries under an EU-embargo.[86] However, being subject to an EU-embargo significantly reduces the amount of arms a country receives. Finally, from a liberal perspective, for a democratic supplier country such as Germany democracy levels of the recipient should be positively correlated with arms exports (H5). This notion is only partially supported by our statistical results: in stage one, the Polity-coefficient is close to zero and statistically insignificant, while it is positively signed and statistically significant in stage two. Thus, higher levels of democracy do not increase the chances of becoming a recipient of German arms and only slightly increase the amount of arms received.

Constructivism

Constructivists stress the importance of norms and values that should be mirrored in an export activity centring on states that share similar values to the Federal Republic in terms of democracy and human rights. Our two-stage model does not support this

notion. The human rights coefficient is in fact negative and statistically significant in both stages. Thus, after controlling for economic and security-political covariates, higher levels of human rights protection appear to actually negatively influence both the likelihood of receiving German arms and the amount (H7).

Concerning the remaining control variables, involvement in a military conflict as well as GDP p.c. levels appear to have little influence on German arms exports. The latter finding is in line with the evidence of Yesilyurt et al., who find that higher levels of GDP p.c. are correlated with higher levels of arms production.[87] With regard to corruption levels, more corrupt countries appear to be slightly less likely to receive German arms exports. The military expenditure coefficients are only statistically significant in stage two. This makes intuitive sense, as the purchasing power of a potential recipient country should primarily influence the amount of exports. As the original ME-coefficient is positive significant and the sign of the squared term is negative, the results suggest that the relationship between MEs and the amount is indeed non-linear, in the form of inverted U.

Results appear to be largely insensitive to various robustness tests, for which we do not display tables here: first, we checked whether the different coalition governments since 1992 handled arms exports differently with regard to our key variables, democracy and human rights. Our evidence does not support the notion of partisan differences, in the sense that the left-leaning government coalition of the Social Democrats and Greens between 1998 and 2005 was more prone to an ethical arms export policy than the right-leaning government coalitions of the Christian Democrats and the Liberals of 1992 to 1998 and 2010 to 2014. Second, as neo-realists expect supplier countries to be more likely to sell arms to their allies and we assume that involvement in an armed conflict increases the demand for arms, we include an interaction term of the alliance and the conflict variable into the model. The sign of the coefficient is positive in both stages, but it is not statistically significant at conventional levels. Third, results are largely robust when comparing different operationalisations: while significance levels vary, the coefficient signs point in the same direction when introducing the PTS and the Polity variable separately into the model, as well as when replacing the PTS with the Cingranelli-Richards measure and the Polity with the Freedom House score. Fourth, results are also robust to introducing an 'autarky-index', which we use as a proxy for national arms production capabilities. As there are no data available on national arms production levels, we calculate the index as the ratio of annual MCW-imports and MEs: the higher the index, the less self-sufficient a country is. The coefficient is positive and highly significant in both stages, but absorbs mainly the variance of the other economic covariates, except for trade levels. Fifth, coefficients are largely robust to estimating a robust regression, a Tobit and a Heckman model (with EU arms embargoes as the exclusion variable).

Overall, the results suggest a significant gap between the strict export regulations and the restrictive rhetoric of German government and the export practice after the cold war. As we conducted a purely observational study, we treat the results with caution. Nevertheless, after isolating the effects of human rights and democracy levels, our evidence suggests that Germany acts more in the logic of a trading state and, to a lesser

degree, a military power than a civilian power, regardless of which government is in power.

CONCLUSION

In this article, we have analysed German MCW-exports from 1992 to 2013. The purpose was to test whether Germany as a major arms exporting country acts rather according to the logic of a military, or security-seeking state, a trading state or a civilian power. We argue that arms exports are a useful testing ground for comparing neo-realist, liberal and constructivist expectations of foreign policy. While Germany claims to enact a restrictive arms export policy and is therefore often perceived as a civilian power, the SIPRI-data rank Germany as the third largest MCW-exporter for the period under observation, only outnumbered by the USA and Russia.

Our large-N analysis reveals that after controlling for economic and political-security factors, Germany does not discriminate against human rights-violating and less- or non-democratic countries. Especially human rights issues seem less important in arms export practices than on paper: the results even suggest that, holding other factors constant, lower levels of human rights seem to increase the chances of receiving German MCWs as well as the amount of arms exported. While it can be argued that German MCWs are not used for executing human rights violations, our data do not allow testing this.[88] Instead, arms exports appear to be strongly correlated with civilian export flows. We take this as cautious evidence for a liberal trading state reading of German foreign policy.

The results of our two-stage model also allow for a realist understanding of German arms exports: both being a defence ally and being located further away from Germany appear to increase the amount of German arms exports. However, the overall high level of rather indiscriminate MCW-exports is hard to reconcile with the reasonably restrictive neo-realist expectations: arms stay while regimes change and today's enemy may turn out to be tomorrow's foe.

We do not claim to offer a definitive answer to the nature of Germany's post-cold war foreign policy with this analysis of MCW-export practices. However, we do at least consider our article to be an important methodological contribution to the field of study: we argue that it is important to look at decisive policy issues when testing foreign policy models. For many policies, the predictions that can be generated from, for example, liberal and constructivist theory are hard to distinguish. In our view, arms exports are a useful testing ground for models of foreign policy not just because quantification is possible, but also because the predictions generated by the three schools differ.

Concerning the literature on arms exports in general, our article is limited to the case of Germany. Future research should analyse the role of democracy and human rights in arms export decisions in a comparative perspective. Like Germany, most western states claim to take normative concerns into account when deciding on arms exports, while suppliers such as Russia or China do not claim to care for such issues. The question remains as to whether democratic and non-democratic supplier states differ systematically in their export practices and if other western states live

up to their moral aspirations. Lastly, our analysis highlights, that it should be deeds, not words, which should be considered when analytically classifying a state's foreign policy.

ACKNOWLEDGEMENTS

The authors thank the anonymous reviewers for their comments.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

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NOTES

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