Online Supplementary

Tables

Table A1: Countries in the Sample 1
Table A2: Variables & Sources 5
Table A3: Estimation Results for Different Sample Periods 8
Table A4: Robustness Tests 10

Figures

Figure A1: Product Structure of German MCW Exports 11
Figure A2: 5-Year Moving Average of German MCW Exports by Weapon type, 1955-2013 11
Figure A3: Z-Standardized Relevance of MCW Weapon Types in German Exports, 1953-2013 12

Table A1: Countries in the Sample

State	Since	Until
Afghanistan	1953	2013
Albania	1953	2013
Algeria	1963	2013
Angola	1975	2013
Argentina	1953	2013
Armenia	1991	2013
Australia	1953	2013
Austria	1953	2013
Azerbaijan	1991	2013
Bahrain	1971	2013
Bangladesh	1971	2013
Belarus	1991	2013
Belgium	1953	2013
Benin	1960	2013
Bolivia	1953	2013
Bosnia and Herzegovina	1992	2013
Botswana	1966	2013
Brasilia	1953	2013
Bulgaria	1953	2013
Burkina Faso	1960	2013
Burundi	1962	2013
Cambodia	1953	2013
Cameroon	1960	2013
Canada	1953	2013
Cap Verde	1975	2013

Central African Republic	1963	2013
Chad	1960	2013
Chile	1953	2013
China	1953	2013
Columbia	1953	2013
Comoros	1975	2013
Costa Rica	1953	2013
Croatia	1991	2013
Cuba	1953	2013
Czech Republic	1993	2013
Czechoslovakia	1953	1992
Denmark	1953	2013
Djibouti	1977	2013
Dominican Republic	1953	2013
DR Congo	1960	2013
Ecuador	1953	2013
Egypt	1953	2013
El Salvador	1953	2013
Equatorial Guinea	1968	2013
Eritrea	1963	2013
Estonia	1991	2013
Ethiopia	1953	2013
Finland	1953	2013
France	1953	2013
Gabon	1958	2013
Gambia	1965	2013
Georgia	1991	2013
German Democratic Republic	1953	1990
Ghana	1957	2013
Great Britain	1953	2013
Greece	1953	2013
Guatemala	1953	2013
Guinea	1953	2013
Guinea-Bissau	1974	2013
Haiti	1953	2013
Honduras	1953	2013
Hungary	1953	2013
India	1953	2013
Indonesia	1953	2013
Iran	1953	2013
Iraq	1953	2013
Ireland	1953	2013
Israel	1953	2013
Italia	1953	2013
Ivory Coast	1960	2013
Jamaica	1962	2013
Japan	1953	2013
Jordan	1953	2013

Kazakhstan	1991	2013
Kenia	1963	2013
Kuwait	1961	2013
Kyrgyzstan	1991	2013
Laos	1953	2013
Latvia	1991	2013
Lebanon	1953	2013
Lesotho	1966	2013
Liberia	1953	2013
Libya	1953	2013
Lithuania	1991	2013
Macedonia	1991	2013
Madagascar	1960	2013
Malawi	1964	2013
Malaysia	1957	2013
Mali	1960	2013
Mauretania	1960	2013
Mauritius	1968	2013
Mexico	1953	2013
Moldavia	1991	2013
Mongolia	1953	2013
Montenegro	2006	2013
Morocco	1955	2013
Mozambique	1975	2013
Myanmar	1953	2013
Namibia	1990	2013
Nepal	1953	2013
Netherlands	1953	2013
New Zealand	1953	2013
Nicaragua	1953	2013
Niger	1960	2013
Nigeria	1960	2013
North Korea	1953	2013
Norway	1953	2013
Oman	1953	2013
Pakistan	1953	2013
Panama	1953	2013
Paraguay	1953	2013
Peru	1953	2013
Philippines	1953	2013
Poland	1953	2013
Portugal	1953	2013
Qatar	1971	2013
Republic Congo	1960	2013
Romania	1953	2013
Ruanda	1962	2013
Russia	1991	2013
Sao Tome und Principe	1975	2013
Saudi-Araba	1953	2013
Senegal	1960	2013

Serbia	2006	2013
Serbia and Montenegro	2003	2005
Seychelles	1976	2013
Sierra Leone	1961	2013
Singapore	1953	2013
Slovakia	1993	2013
Slovenia	1991	2013
Somalia	1960	2013
South Africa	1953	2013
South Korea	1953	2013
Soviet Union	1953	1991
Spain	1953	2013
Sudan	1956	2013
Swaziland	1968	2013
Sweden	1953	2013
Switzerland	1953	2013
Syria	1953	2013
Taiwan	1953	2013
Tajikistan	1991	2013
Tanzania	1961	2013
Thailand	1953	2013
Togo	1960	2013
Trinidad und Tobago	1962	2013
Tunisia	1956	2013
Turkey	1953	2013
Turkmenistan	1991	2013
Uganda	1962	2013
Ukraine	1991	2013
United Arab Emirates	1971	2013
Uruguay	1953	2013
USA	1953	2013
Uzbekistan	1991	2013
Venezuela	1953	2013
Vietnam	1953	2013
Yemen	1953	2013
Yugoslavia	1953	2002
Zambia	1964	2013
Zimbabwe	1965	2013

Table A2: Variables & Sources

Variable	**Description**	**Source**
MCW Export	*arms exports in Mill. TIV*	SIPRI (2015c): Arms Trade Register, http://armstrade.sipri.org/armstrade/page/trade_register.php Accessed 10 February 2015
International Conflict	at least 500 conflict-related deaths due to international conflict, intensity scale 0 to 10	Major Episodes of Political Violence (MEPV) and Conflict Regions, (Marshall, M. (2014). Major Episodes of Political Violence (MEPV) and Conflict Regions 1946-2013, http://www.systemicpeace.org/inscr/MEPVcodebook2013.pdf).
Ethnic Conflict	at least 500 conflict-related deaths due to domestic ethnic conflict, intensity scale 0 to 10	
Civil Conflict	at least 500 conflict-related deaths du to domestic civil conflict, intensity scale 0 to 10	
Regional Conflict	sum of the conflict scores of all neighbouring states	
#Borders	number of bordering states	
HR	*Human rights situation, 1 (very good) to 5 (very bad), data coverage 1976-2013*	*Political Terror Scales dataset, (*Wood, R. & Gibney, M. (2010). The Political Terror Scale (PTS): A re-Introduction and a Comparison to CIRI, in: http://www.politicalterrorscale.org/datafiles/hrq%20pts.pdf Accessed 11 February 2015.*)*
Embargo	1 Embargo by EU 2 Embargo by UN 3 Joint embargo by EU & UN	SIPRI (2015a): Multilateral Arms Embargoes, http://www.sipri.org/databases/embargoes/research/armaments/transfers/controlling/embargoes Accessed 29 January 2015
Log-GDP/pc Importer	GDP per capita of importing country in constant 1990 US-dollars using purchasing power parity conversion rates	The Maddison-Project (2013). New Maddison Project Database, http://www.ggdc.net/maddison/maddison-project/home.htm Accessed 10 February 2015.
GDP-Germany Growth	Annual real GDP growth per capita in Germany	
Military Expenditure	annual growth in German military expenditures	1953-2007: COW v4.0 (Singer, J. D., Bremer, S., Stuckey, J. (1972). Capability Distribution, Uncertainty, and Major Power War, 1820-1965 – Version 4.0. In B. Russett

		(Ed.): Peace, War, and Numbers (pp. 19-48). Beverly Hills: Sage.) 2008-2013: SIPRI (SIPRI (2015): Military Expenditure Database, http://www.sipri.org/research/armaments/milex/milex_database Accessed 16 December 2015.
Geographical Distance	Distance (in km) between the capitals of Germany and potential importing country divided by 100	CEPII GeoDist database (CEPII (2015: GeoDist, in: http://www.cepii.fr/ CEPII/en/bdd_modele/presentation.asp?id=6 Accessed 10 January 2015).
Partner	Dummy indicating whether conutry is member of NATO or EU	
Regime Difference	squared difference between the Polity IV value for Germany (10 for the whole period) and the value of the (potential) importing country. The resulting scale ranges from 0 (total congruence) to 400 (total dissimilarity)	Marshall, M., Gurr, T., Jaggers, K. (2014), Polity IV Project, http://www.systemicpeace.org/inscr/p4manualv2013.pdf Accessed 10 February 2015.
CINC $CINC^2$	Military capabilities of potential importer; Scale 0-100; Military capabilities squared; extrapolation for the period 2008-2013	Comparative Indicator of National Capabilities provided by the COW Project (Singer, J. D., Bremer, S., Stuckey, J. (1972). Capability Distribution, Uncertainty, and Major Power War, 1820-1965 – Version 4.0. In B. Russett (Ed.): Peace, War, and Numbers (pp. 19-48). Beverly Hills: Sage).
Oil	Dummy indicating whether country is an international top 15 oil producers in a given year.	BP (2014). Historical Data Workbook, http://www.bp.com/en/global/corporate/about-bp/energy-economics/statistical-review-of-world-energy.html Accessed 11 February 2015
#Trade Partners	number of potential trading partners for Germany in a given year	
Sovereign Years	number of years a potential trading partner is sovereign since entering the pool of potential trading partners	
Government Ideology	Ideology of government, ranges from -100 (extremely left-wing) to +100 (extremely right-wing). In	CMP (2015): Germany, https://manifestoproject.wzb.eu/countries/Germany Accessed 08 February 2015

	the most common case of a coalition government, a weighted overall ideology score was calculated based on the respective values of coalition partners and their vote shares relative to the overall vote share of the governing coalition.
Israel	Country dummy indicating whether importing country is Israel
Saudi Arabia	Country dummy indicating whether importing country is Saudi Arabia

Table A3: Estimation Results for Different Sample Periods

	Extensive Margin					Intensive Margin				
Variables	**Prior 1966**	**Post 1966**	**Post 1972**	**Post 1982**	**Post 2000**	**Prior 1966**	**Post 1966**	**Post 1972**	**Post 1982**	**Post 2000**
International Conflict	0.006	**-0.100****	**-0.134****	-0.088	**0.167****	**-0.898***	0.045	-0.005	-0.108	0.082
Ethnic Conflict	0.137	0.045	0.056	**0.066***	0.084	-0.175	0.089	0.069	0.079	-0.110
Civil Conflict	0.061	0.013	0.013	0.032	0.012	**2.243*****	**-0.138***	**-0.127***	**-0.199****	**-0.227***
Regional Conflict	0.007	**0.009****	**0.011****	0.006	**0.030****	-0.162	0.002	0.003	0.014	-0.005
Borders	**-0.114****	**0.046****	0.035	0.027	**0.047***	0.409*	0.063	0.073	0.093	**0.131****
HR[a]	-	-	-	-0.019	0.028	-	-	-	**0.216***	0.252
Embargo										
EU not UN	-	-0.142	-0.145	-0.139	-0.219	-	-0.569	-0.780	-1.183	**-2.864*****
UN not EU	-	0.523	**0.585***	**0.576***	**-3.745*****	-	**-1.827*****	**-1.833*****	**-2.462*****	-
EU & UN overlapping	-	**-5.561*****	**-5.206*****	**-5.635*****	**-5.050*****	-	-	-	-	-
GDP-Germany Growth	0.021	0.008	0.005	-0.005	-0.006	-	-	-	-	-
Military Expenditure	-0.006	**0.013***	0.005	0.012	0.014	-0.003	-0.014	-0.000	0.001	0.014
Log-GDP/pc Importer	**-0.320***	**0.241*****	**0.250*****	**0.285*****	**0.488*****	-0.227	**0.307****	**0.288****	**0.375*****	0.152
Geographical Distance	**-0.008*****	-0.000	-0.001	-0.001	-0.000	-0.008	**0.004***	**0.005***	**0.005***	**0.005***
Partner	**0.903*****	**0.228***	0.153	0.086	0.089	-	-	-	-	-
Regime Difference	-0.000	0.000	0.000	0.001	0.000	0.000	**-0.002****	**-0.002****	-0.002	-0.001
CINC	**0.795***	**0.203*****	**0.202*****	**0.234*****	0.130	**-3.227*****	-0.143	-0.088	-0.045	0.125
CINC2	**-0.216****	**-0.011*****	**-0.011*****	**-0.012*****	-0.005	**0.975****	0.006	0.003	0.001	-0.006
Oil	0.444	-0.051	-0.014	-0.192	-0.195	-	-	-	-	-
#Trade Partners	**0.033***	-0.001	-0.008	**-0.023*****	-0.115	0.018	-0.007	-0.004	-0.000	0.085
Sovereign Years	**0.115*****	**0.022*****	**0.021*****	**0.019*****	**0.019*****	0.142	**0.016***	**0.016****	**0.019****	**0.021****
Government Ideology	**-0.013****	-0.002	-0.002	-0.002	0.015	-	-	-	-	-
Israel	**1.819*****	**0.516*****	**0.445*****	**0.308****	**5.481*****	**1.516***	**-1.020*****	**-1.104*****	**-0.745*****	0.141
Saudi Arabia	**-3.477*****	-0.243	-0.236	-0.150	0.530	-	**-1.324*****	**-1.576*****	**-1.644*****	**-1.932*****

a - Given limited data availability of the human rights variable to the years 1976-2013, the reported coefficients were estimated for post 1982 and post 2000 only.

Robustness Checks

To test the robustness of our results, we also estimated dynamic models with a LDV. Given that for this specification the Wald tests indicated statistical independence of the two decision stages, we estimated the two equations separately. Hence in one set of tests, we estimated the extensive margin equation by pooled probit and the intensive margin equation by pooled OLS – both with robust clustered standard errors. Alternatively, we also estimated separate dynamic fixed-effect models including a fixed-effects logit for the first stage. This, of course, changed the set of our independent variables, since the parameters of time invariant variables can no longer be estimated in a fixed-effect specification. A LDV specification with fixed-effects is, however, not without problems since it is well-known to produce biased parameter estimates because the LDV is correlated with the error term (Nickell 1981). The bias should be very small however given that it decreases in T and we analysed a fairly long time period. Note also, that inclusion of a LDV can potentially suppress the effects of the other independent variables and soak up explanatory power. Models where the parameter of the LDV is close to 1 should therefore be interpreted with caution.

As our final robustness tests, we also estimated both random-effects as well as mixed random-fixed effects Heckman models. In particular, the extensive margin was estimated by a static random-effects probit model, which included all our time-related effects. Based on this estimation the "non-selection hazard rate/inverse mills ratio" was computed for each observation. The inverse mills ratio was then included in a static linear fixed/random effects panel regression to control for potential selection bias. For these specifications we opted to not include a lagged dependent variable to avoid the above mentioned problems. We are confident that taken together these sets of alternative models should ensure the robustness of our findings and enhance our understanding of the results.

Table A4: Robustness Tests

	Extensive Margin						Intensive Margin							
	1953-1989			1990-2013			1953-1989				1990-2013			
Variables	**I-E**	**II-E**	**III-E**	**I-E**	**II-E**	**III-E**	**I-I**	**II-I**	**III-I**	**IV-I**	**I-I**	**II-I**	**III-I**	**IV-I**
Exports$_{t-1}$	1.263***		2.110***	1.417***		2.032***	0.722***			0.520***	0.596***			0.436***
International Conflict	-0.109***	-0.102*	-0.100				0.072	0.238**	0.211**	0.153				
Civil Conflict											-0.066	-0.303***	-0.528***	-0.426***
Regional Conflict	0.011***	0.013***	0.014											
Borders	0.055**	0.071***	-0.006								0.074*	0.095	-0.082	-0.090
EU Embargo	-1.409**	-1.494*	-2.179	-0.036	-0.056	0.733	0.299	0.911	0.411	-0.040	-0.847	-1.139	-	-
UN Embargo	0.794**	1.243***	14.445	-0.189	0.156	0.244	-0.389**	-0.959	-0.572	-	-1.162***	-3.703***	-4.353***	-2.069**
EU & UN Emb.[a]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Military Expenditure							-0.015**	-0.020***	-0.018**	-0.017**				
Log-GDP/pc				0.359***	0.450***	0.199								
Importer														
Geographical Distance											0.003*	0.007**	-	-
Partner	0.427***	0.411**	-0.926*											
Regime Difference							-0.000	-0.001	0.000	0.000				
CINC	0.181***	0.317***	0.728	0.182***	0.305***	-0.347								
CINC2	-0.013***	-0.022***	-0.045	-0.008*	-0.014***	0.005								
#Trade Partners	0.021**	0.026**	0.079***	-0.036***	-0.032**	-0.042*								
Sovereign Years	0.030***	0.030**	-0.082	0.017***	0.024***	-0.049					0.012**	0.013	0.001	-0.039
Israel	0.618***	0.790	-	0.596***	0.956	-	-0.579**	-0.726	-	-				
Saudi Arabia	-0.509***	-0.555	-								-0.823**	-2.139**	-	-

Model I-E is a dynamic pooled probit model with clustered standard errors. Model II-E is the static random-effects probit model. Model III-E is the dynamic fixed-effects logit. Model I-I is a dynamic pooled OLS Regression with clustered standard errors. Model II-I is the static random effects Regression including the non-selection hazard rate of Model II-E of the extensive margin. Model III-I is the static fixed effects regression which includes the non-selection hazard rate of Model II-E of the extensive margin. Model IV-I is a dynamic fixed effects regression. [a]: The joint effect of UN & EU embargoes cannot be calculated due to the perfect prediction of failure during the post-cold war period (there is no variance on dependent variable). In the cold-war period there are no cases of joint embargoes!

Figure A1: Product Structure of German MCW Exports

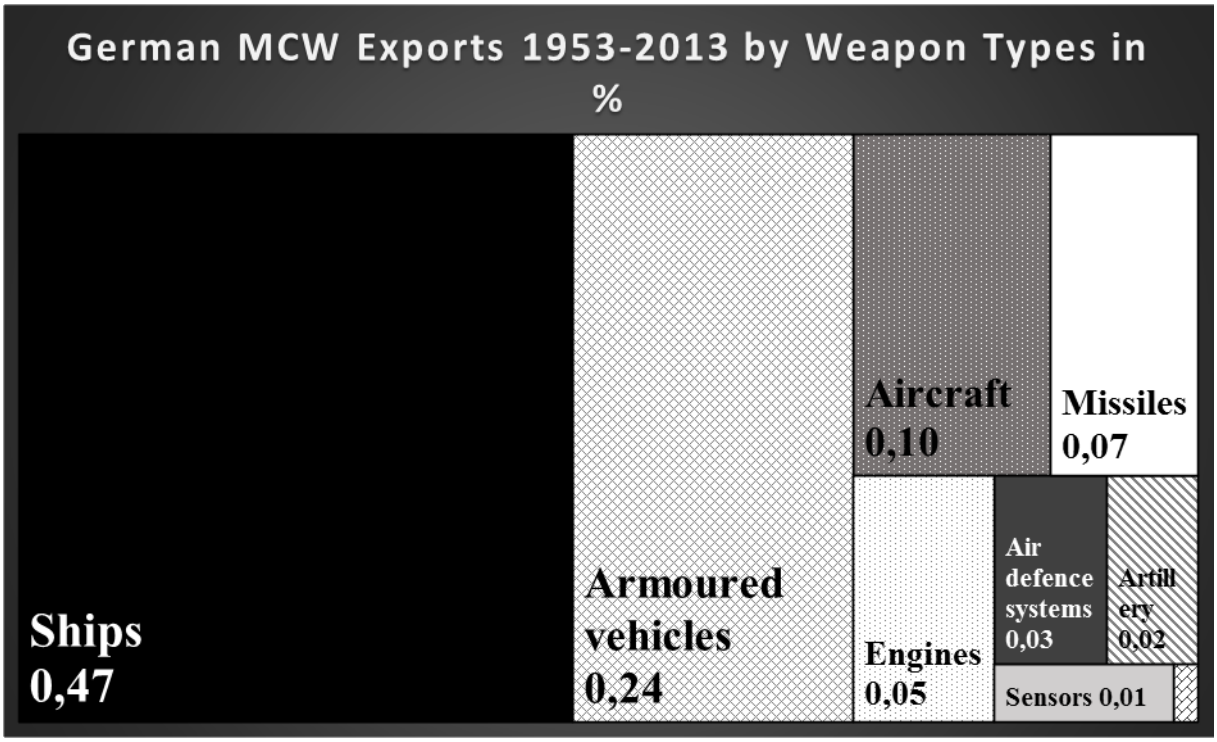

Figure A2: 5-Year Moving Average of German MCW Exports by Weapon type, 1955-2013

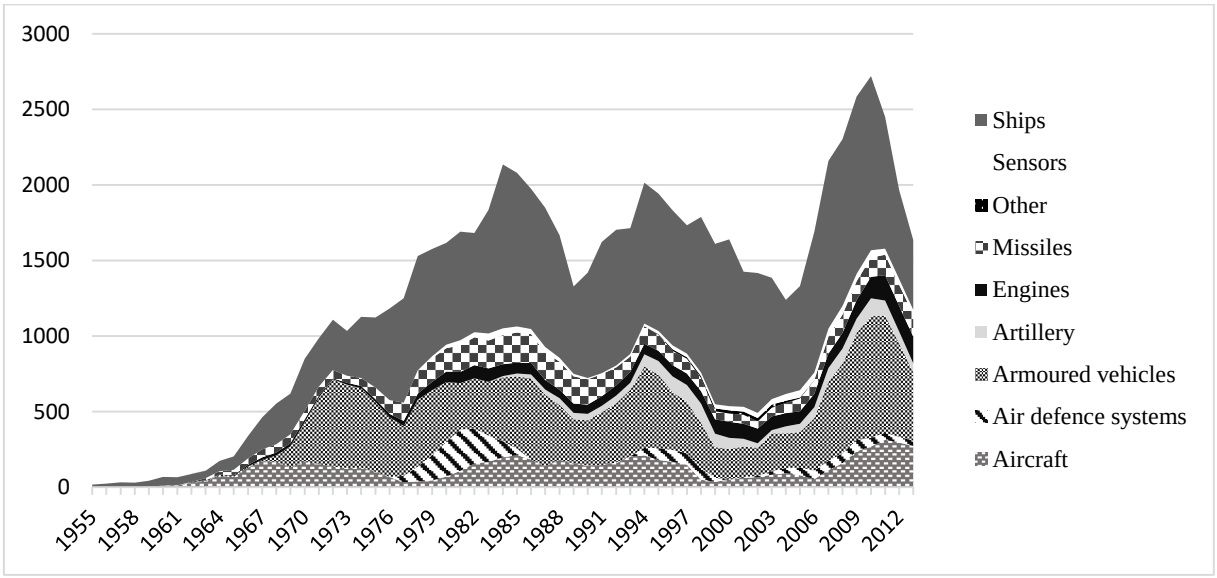
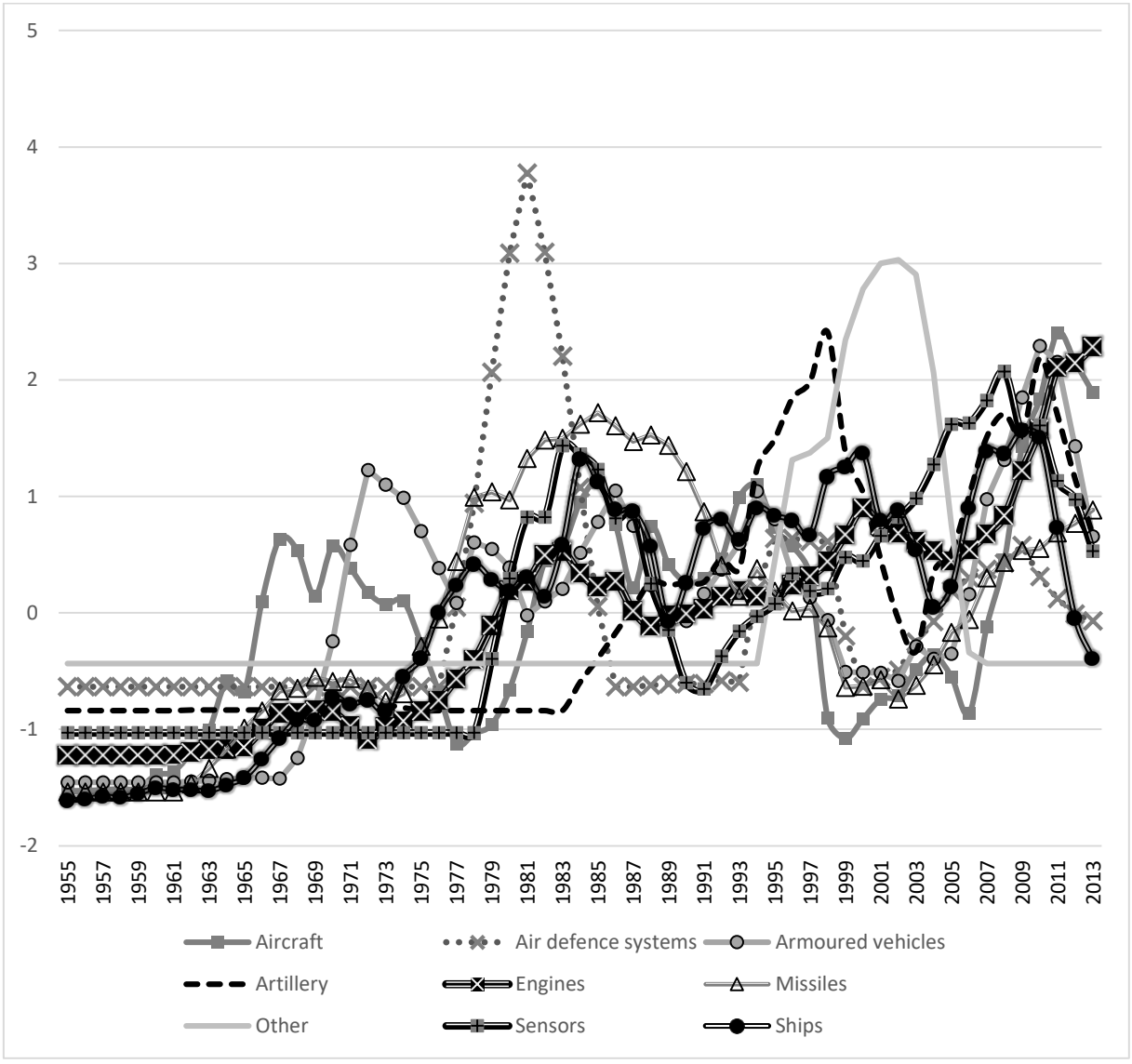
Figure A3: Z-Standardized Relevance of MCW Weapon Types in German Exports, 1953-2013