

III. The financial value of states' arms exports

MARK BROMLEY AND JOHANNA TRITTENBACH

There has long been a strong interest in measuring the financial value of states' arms exports, as a means of assessing both the cost of arms transfers for importing states and the economic benefits for exporting states. The SIPRI Arms Transfers Database was not developed to measure the financial value of the international arms trade. Rather, the trend-indicator value (TIV) data produced by the database is designed to serve as an indicator of the volume of military equipment transferred (see section I). The only source of data on the financial value of states' arms exports is official data provided by governments. However, there are significant limitations on using official national data to measure the financial value of the international arms trade. In particular, the data is based on national definitions and methodologies and is thus not necessarily comparable.¹ Nevertheless, as long as these limitations are understood, the data can act as an important source of information.

Official data on the financial value of states' arms exports in the years 2007–16 is presented in table 5.6. The countries included in the table are those that provide data on the financial value of 'arms exports', 'arms export licences', 'arms export agreements' or 'arms export orders' and for which the average of the values given exceeds \$10 million. The data is taken from reports by—or direct quotes from—national governments. The stated data coverage reflects the language used by the original source. National practices in this area vary, but the term 'arms exports' generally refers to the financial value of the arms actually delivered; 'arms export licences' generally refers to the financial value of the licences for arms exports issued by the national export licensing authority; and 'arms export agreements' or 'arms export orders' refers to the financial value of contracts or other agreements signed for arms exports. Conversion to constant (2016) US dollars is made using the market exchange rates of the reporting year and the US consumer price index (CPI).

According to the SIPRI Arms Transfers Database, countries that produce official data on the financial value of their arms exports account for over 90 per cent of the total volume of deliveries of major weapons. It is possible therefore to use the data in table 5.6 to attain a rough estimate of the financial value of the global arms trade. However, using the data in this way is

¹ There is no internationally agreed definition of what constitutes 'arms' and governments use different lists when collecting and reporting data on the financial value of their arms exports. In addition, there is no standardized methodology concerning how to collect and report such data, with some states reporting on export licences issued or used and other states using data collected from customs agencies.

problematic. First, as noted above, the data sets used are based on different definitions and methodologies and are not directly comparable. Second, several states (such as the United Kingdom) do not release data on arms exports but only on arms export licences, while other states (such as China) do not release any data on arms exports, licences, agreements or orders. Nonetheless, by adding up the data that states have made available on the financial value of their arms exports, as well as estimates for those that only provide data on arms export licences, agreements or orders, it is possible to estimate that the total value of the global arms trade in 2016 was at least \$88.4 billion.² However, the true figure is likely to be higher.

² When calculating this total, figures for arms exports were used where they are available. In the case of Canada, the figure for arms exports has been doubled, as the arms export figures for Canada exclude exports to the USA, which the Canadian authorities claim account for more than half of Canada's exports of military technology. Where figures for arms exports in 2016 are not available but figures for 2015 are available, the 2015 figure has been used. Where figures for arms exports are not available in 2016 or 2015, figures for arms export agreements or orders in 2015 have been used if available. Based on an analysis of past cases in which states have released data on both arms exports and arms export agreements or orders, the full figure for arms export agreements or orders has been used, but with a one-year lag. Where figures for arms export agreements or orders are not available, figures for arms export licences in 2016 have been used if available. Based on an analysis of states that release data on both arms exports and arms export licences, half the figure for arms export licences, for the current year, has been used. This export licence-based estimate has also been used for Germany, even though it provides figures for arms exports. Germany's arms export figures only include exports of 'weapons of war', a much more limited category of goods and services than is generally covered by export licences. These figures therefore underestimate the total value of German arms exports.

Table 5.6. The financial value of states' arms exports according to national government and industry sources, 2007–16

Figures are in constant (2016) US\$ m. Years are calendar years unless otherwise stated.

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Explanation of data
Austria	196	343	541	544	638	611	720	722	377	707	Arms exports
	2 185	1 545	3 497	2 577	2 421	2 087	3 247	1 215	1 217	4 403	Arms export licences
Belgium	1 426	2 180	1 713	1 462	1 239	1 301	839	6 070	1 252	1 381	Arms export licences
Bosnia and Herzegovina	..	46	36	15	61	55	53	..	..	..	Arms exports
	60	95	71	41	85	62	153	..	..	..	Arms export licences
Bulgaria	234	245	225	376	343	294	321	543	1 574	1 122	Arms exports
	599	776	491	431	331	469	672	1 113	718	1 392	Arms export licences
Canada ^a	351	583	530	437	685	1 090	681	731	535	541	Arms exports
Croatia	..	..	..	79	52	68	118	95	44	82	Arms exports
	..	..	348	649	227	320	974	648	429	419	Arms export licences
Czech Republic	276	310	272	316	271	368	394	575	632	762	Arms exports
	756	346	606	657	513	356	449	673	833	380	Arms export licences
Denmark	311	266	392	548	352	298	1 070	197	150	224	Arms export licences
Estonia	5	10	5	<1	4	<1	1	4	4	4	Arms exports
	5	10	12	3	519	4	4	5	16	10	Arms export licences
Finland	119	152	135	86	144	78	305	300	110	146	Arms exports
	90	550	291	89	273	158	471	305	407	108	Arms export licences
France	7 158	5 129	5 736	5 409	4 491	4 491	5 308	5 174	6 805	7 721	Arms exports
	8 967	10 751	12 688	7 461	9 666	6 470	9 403	11 054	19 004	15 420	Arms export licences
Germany	2 392	2 330	2 081	3 089	1 906	1 271	1 276	2 452	1 746	2 767	Arms exports ^b
	13 817	13 609	10 939	8 005	16 012	11 922	11 408	8 768	14 396	7 638	Arms export licences ^c
Greece	52	78	353	430	335	457	..	..	..	..	Arms export licences
Hungary	27	24	26	28	27	36	42	45	52	21	Arms exports
	152	194	197	201	231	363	702	581	1 441	651	Arms export licences
India ^d	96	220	77	..	..	90	121	165	325	223	Arms exports
Ireland	52	51	70	35	40	63	85	116	48	70	Arms export licences

Israel	..	..	7 719	7 925	7 469	7 809	..	..	..	..	..	Arms exports
	6 482	7 052	8 279	8 035	6 210	..	6 738	5 738	5 772	6 500	6 500	Arms export agreements
Italy	2 007	2 902	3 427	898	1 517	4 043	3 792	4 479	3 609	3 157	3 157	Arms exports
	7 516	9 244	10 402	4 739	7 806	5 587	2 940	3 566	8 853	16 188	16 188	Arms export licences
Korea, South	978	1 153	1 304	1 308	2 542	2 460	3 519	3 662	3 586	2 548	2 548	Arms export agreements
Lithuania	70	51	68	22	71	26	22	25	30	45	45	Arms exports
	100	77	123	34	76	27	30	21	66	102	102	Arms export licences
Montenegro	..	28	12	9	..	4	4	12	4	..	..	Arms exports
	49	33	12	15	6	7	8	15	12	..	..	Arms export licences
Netherlands	1 385	816	881	985	1 145	1 104	346	337	665	626	626	Arms exports
	1 136	2 054	2 044	1 331	617	1 264	1 317	2 778	980	1 566	1 566	Arms export licences
Norway	632	769	801	668	681	697	579	473	410	427	427	Arms exports
Pakistan ^e	22	58	16	19	11	14	13	17	61	..	..	Arms exports
	56	27	..	37	26	29	23	57	95	..	..	Arms export agreements
Poland	455	601	2 162	666	1 259	850	1 174	1 237	1 425	1 357	1 357	Arms export licences
Portugal	..	116	25	29	37	42	241	211	214	660	660	Arms exports
	43	124	44	31	46	70	200	343	76	270	270	Arms export licences
Romania	97	93	110	135	140	87	182	161	163	181	181	Arms exports
	196	133	185	167	196	187	305	252	223	241	241	Arms export licences
Russia	8 566	9 308	9 509	11 007	14 618	15 889	16 175	15 816	14 683	15 000	15 000	Arms exports
Serbia	147	366	227	281	243	207	317	360	..	..	..	Arms exports
	475	949	726	1 105	547	618	1 051	995	..	..	..	Arms export licences
Slovakia	59	62	68	22	15	34	42	49	64	66	66	Arms exports
	117	116	166	85	44	98	167	360	318	230	230	Arms export licences
Slovenia	5	10	8	9	13	5	4	12	12	18	18	Arms exports
	8	10	19	16	18	12	12	4	35	48	48	Arms export licences
South Africa	657	796	1 031	1 252	1 350	1 350	337	278	217	283	283	Arms export licences
Spain	1 478	1 525	2 093	1 644	3 606	2 623	5 346	4 308	4 178	4 481	4 481	Arms exports
	3 108	4 125	4 962	3 262	4 258	10 698	5 911	4 931	11 990	6 138	6 138	Arms export licences

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Explanation of data
Sweden	1 645	2 148	1 982	2 099	2 286	1 506	1 889	1 176	896	1 283	Arms exports
	1 170	1 624	1 623	2 020	1 791	1 224	1 555	662	594	7 224	Arms export licences
Switzerland	448	743	748	677	1 049	780	512	624	470	418	Arms exports
Turkey	486	642	750	698	872	1 254	1 432	1 673	1 681	1 678	Arms exports
United Kingdom	22 353	8 929	12 637	9 913	9 231	14 523	15 784	14 190	11 912	7 961	Arms export orders ^f
	2 079	4 027	5 380	4 136	10 387	3 578	7 157	3 478	9 005	4 369	Arms export licences
Ukraine	810	892	895	1 053	1 071	1 070	1 030	..	577	770	Arms exports
United States ^g	24 571	50 418	23 993	20 035	20 870	18 347	20 948	19 696	21 524	21 665	Arms exports ^h
	19 297	30 433	32 412	23 375	27 618	65 629	24 260	31 873	45 516	27 532	Arms export agreements ⁱ
	28 396	38 114	40 244	37 516	46 813	35 094	21 426	63 905	74 883	49 840	Arms export licences ^j

.. = not available or not applicable.

Note: The countries included in this table are those that provide official data on the financial value of either 'arms exports', 'contracts signed for arms exports', 'arms export orders placed' or 'licences for arms exports' for at least 6 of the 10 years covered and where the average of the values given in at least 1 of the data sets exceeds \$10 million. The arms export data for the different states in this table is not necessarily comparable and may be based on significantly different definitions and methodologies.

^a Figures for Canada exclude exports to the USA.

^b These figures only include exports of 'war weapons' as defined under German legislation.

^c These figures include arms export licences for international collaborative projects.

^d Figures for India for 2007–2008 and 2012–16 cover the period 1 Apr.–31 Mar. (e.g. the figure for 2016 covers the period 1 Apr. 2016–31 Mar. 2017). The figure for 2009 covers the period 1 Apr. 2009–31 Dec. 2009.

^e Figures for Pakistan cover the period 1 Apr.–31 Mar. (e.g. the figure for 2016 covers the period 1 Apr. 2016–31 Mar. 2017).

^f These figures cover defence equipment and additional aerospace equipment and services.

^g Figures for the USA cover the period 1 Oct.–30 Sep. (e.g. the figure for 2016 covers the period 1 Oct. 2015–30 Sep. 2016).

^h These figures include items sold under the government-to-government Foreign Military Sales programme and sales by US industry directly to foreign governments as direct commercial sales.

ⁱ These figures only include items sold under the government-to-government Foreign Military Sales programme.

^j These figures only include sales by US industry directly to foreign governments as direct commercial sales.

Sources: Reports by—or direct quotes from—national governments. For a full list of sources and all available financial data on arms exports see the SIPRI website.