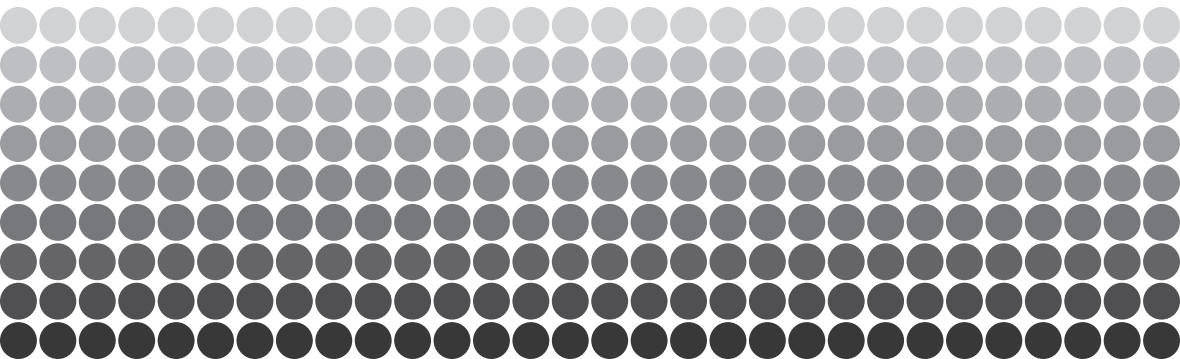


SIPRI YEARBOOK 2013

Armaments, Disarmament and International Security

Global developments in military expenditure

SAM PERLO-FREEMAN, CARINA SOLMIRANO AND HELÉN WILANDH



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I. Global developments in military expenditure

SAM PERLO-FREEMAN, CARINA SOLMIRANO AND HELÉN WILANDH

World military expenditure fell in 2012, for the first time since 1998. The world total is estimated to have been \$1756 billion, which is 0.4 per cent lower in real terms than in 2011. Military expenditure as a share of global gross domestic product (GDP)—the global ‘military burden’—also remained stable, at around 2.5 per cent (see table 3.1). The 2008 global financial crisis and subsequent economic turmoil, combined with the winding down of wars in Afghanistan and Iraq, has clearly led to an end to the overall trend of rising military spending that started in 1999.

At the regional level, there was a definite shift in the balance of spending. Significant falls in North America and Western and Central Europe (part of ongoing austerity measures) were offset by increases in Eastern Europe and most of the developing world, excepting sub-Saharan Africa (see figure 3.1 and table 3.2). Military spending in the West has been falling since 2009, and while it has been increasing elsewhere, the rate of growth since 2009 has been considerably slower in most regions than in the preceding years (see figure 3.2). In Central and South Asia, North America, Oceania, and Western and Central Europe, increases in the period 2003–2009 were followed by decreases in 2009–12; in sub-Saharan Africa, East Asia, and Latin America, there was a major slowdown in the growth rate, with smaller slowdowns in Eastern Europe and South East Asia. In contrast, the rate of growth accelerated in the Middle East and North Africa. The overall effect on the world total was a lowering in growth in 2010–11, now followed by the fall in 2012.¹

Regional trends

In Western and Central Europe, the trends from 2011 continued in 2012.² Overall spending declined by 1.6 per cent in real terms, with the largest decreases generally coming in Central Europe and the most debt-blighted countries of Southern Europe, with the possible exception of Greece.³

¹ The totals for certain regions or subregions are dominated by particular countries (e.g. Algeria in North Africa, Brazil in South America, Russia in Eastern Europe, India in Central and South Asia, and Saudi Arabia in the Middle East). However, general trends in these regions or subregions in 2012 were broadly similar to those in the dominant country: with the exception of Central and South Asia, the relative growth rates in each region or subregion before and after 2009 are similar when the dominant country is omitted. In the case of Central and South Asia, the rates of growth are broadly similar in each subperiod, implying that the slowdown in that subregion is particular to India.

² Perlo-Freeman, S., ‘Europe and the impact of austerity on military expenditure’, *SIPRI Yearbook 2012*.

³ Greece’s defence budget increased by 4% in real terms in 2012, but its implementation is uncertain. In recent years, actual expenditure has been significantly below the budget amount.

Table 3.1. Military expenditure by region, by international organization and by income group, 2003–12

Figures for 2003–12 are in US\$ b. at constant (2011) prices and exchange rates. Figures for 2012 in the right-most column, marked *, are in current US\$ b. for 2012. Figures do not always add up to totals because of the conventions of rounding.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2012*
World total	1 291	1 364	1 423	1 470	1 528	1 609	1 715	1 744	1 749	1 742	1 756
<i>Geographical regions</i>											
Africa	20.7	23.2	24.2	25.9	(26.7)	(30.4)	(31.8)	(33.8)	(37.8)	(38.3)	(39.2)
North Africa	7.0	7.6	7.9	7.9	8.5	10.1	(11.1)	(12.0)	(15.1)	16.2	16.4
Sub-Saharan Africa	13.7	15.6	16.3	(18.0)	(18.1)	(20.4)	(20.7)	(21.8)	(22.8)	(22.0)	(22.7)
Americas	571	620	651	665	685	737	793	817	808	770	782
Central America and the Caribbean	5.1	4.7	5.1	5.6	6.2	6.3	7.1	7.7	8.0	8.6	8.5
North America	524	571	598	607	625	671	724	743	735	694	708
South America	41.8	44.8	48.7	52.0	54.6	59.5	62.2	66.3	65.2	67.6	65.9
Asia and Oceania	234	247	260	275	296	313	349	356	369	382	390
Central and South Asia	38.2	43.4	46.0	46.6	47.9	52.8	60.6	61.7	62.9	61.9	59.8
East Asia	151	157	167	180	194	204	229	235	247	259	268
Oceania	21.4	22.3	23.0	24.3	25.7	26.6	28.6	29.0	28.5	27.5	28.2
South East Asia	24.2	23.8	24.3	24.9	28.3	28.9	30.3	30.0	31.3	33.2	33.7
Europe	380	383	387	397	408	419	428	419	411	419	407
Eastern Europe	46.2	48.3	55.5	63.0	70.0	76.6	78.9	80.2	87.0	100	100
Western and Central Europe	333	334	331	334	338	343	349	338	324	318	307
Middle East	85.4	91.3	100	107	113	110	112	(118)	(123)	(134)	(138)
<i>Organizations</i>											
African Union	23.4	25.8	26.7	28.4	(29.0)	(32.1)	(33.1)	(34.7)	(38.0)	(38.9)	(40.1)
Arab League	66.5	72.9	79.1	83.7	93.4	96.6	101	108	115	(127)	(131)
CIS	47.2	49.5	56.9	64.5	72.1	77.5	80.2	81.9	88.9	103	103
CSTO	44.0	45.9	52.4	58.7	64.8	71.0	74.5	76.1	81.7	94.6	94.8
ECOWAS	2.2	2.2	2.1	2.2	2.6	3.1	3.3	3.6	3.8	3.6	3.8

European Union	280	299	298	300	307	312	317	307	291	285	274
NATO	827	881	906	918	938	990	1 051	1 059	1 036	990	994
NATO Europe	302	311	308	311	314	319	327	316	302	296	286
OSCE	905	954	986	1 006	1 035	1 092	1 154	1 164	1 148	1 116	1 118
SADC	7.6	7.6	8.9	9.4	8.9	10.0	10.0	10.3	10.2	10.7	10.7
SCO	101	109	123	142	161	177	202	211	227	251	260
<i>Income group</i>											
Low	4.8	(5.1)	(5.2)	(5.5)	(5.7)	(6.1)	(6.3)	(7.2)	(7.6)	(7.3)	(7.7)
Lower middle	65.2	71.5	74.4	76.1	81.6	87.4	94.7	97.2	101	103	101
Upper middle	203	215	237	263	284	306	336	349	370	399	407
High	1 019	1 073	1 106	1 125	1 156	1 209	1 277	1 290	1 270	1 234	1 240
<i>World military spending per capita (current US\$)</i>											
	144	160	172	181	199	222	228	238	251	249	
<i>World military burden (i.e. world military spending as a % of world gross domestic product, both measured in current US\$)</i>											
	2.4	2.4	2.4	2.4	2.4	2.4	2.7	2.6	2.5	2.5	2.5

() = total based on country data accounting for less than 90% of the regional total; . . . = available data accounting for less than 60% of the regional total.

Notes: The totals for the world, regions, organizations and income groups are estimates, based on data in table 3.11 for the countries covered by the SIPRI Military Expenditure Database. When military expenditure data for a country is missing for a few years, estimates are made, most often on the assumption that the rate of change in that country's military expenditure is the same as that for the region to which it belongs (see also 'Sources and methods' below). When no estimates can be made, countries are excluded from the totals. The countries excluded from all totals here are Cuba, North Korea, Myanmar, Somalia and Zimbabwe. Totals for regions and income groups cover the same groups of countries for all years. Totals for organizations cover only the member countries in the year given. The coverage of the geographical regions and subregions is based on the grouping of countries in tables 3.10–3.12. Income groups are based on the World Bank World Development Indicators 2012, with a gross national income per capita in 2011 of \$1005 or less for low-income countries; \$1006–\$3975 for lower-middle-income countries; \$3976–\$12 275 for upper-middle-income countries; and more than \$12 275 for high-income countries.

Sources: SIPRI Military Expenditure Database, <<http://www.sipri.org/databases/milex/>>; International Monetary Fund (IMF), *World Economic Outlook: Coping with High Debt and Sluggish Growth* (IMF: Washington, DC, Oct. 2012); and United Nations Population Fund (UNFPA), *State of World Population, 2003–12* (UNFPA: New York, 2003–12).

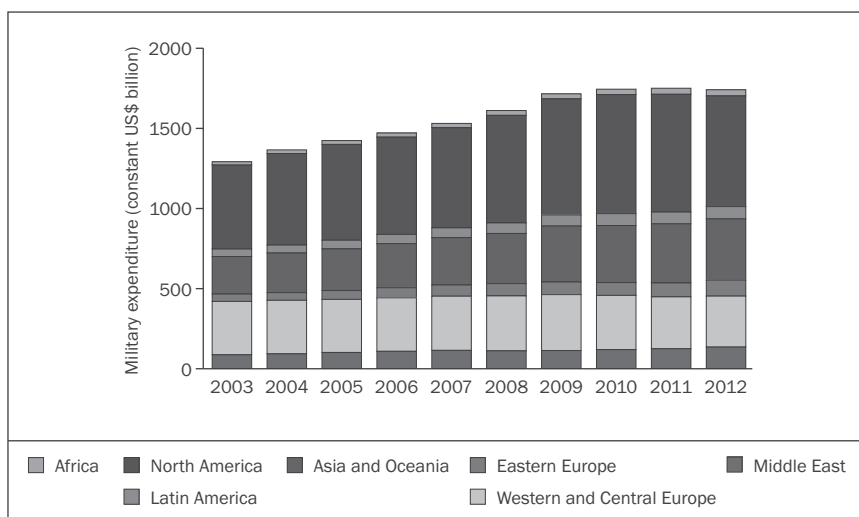


Figure 3.1. World military expenditure by region, 2003–12

Between 2008 and 2012, 20 of the 37 countries in Western and Central Europe reduced military spending by more than 10 per cent in real terms, including all countries in Central Europe apart from Bosnia and Herzegovina, Montenegro, and Poland. The countries that increased military spending between 2008 and 2012 include Poland and Turkey (including increases in 2012) and, at a more modest rate, the Nordic countries. Among the major spenders in Western and Central Europe, between 2008 and 2012 the United Kingdom cut spending by 5.2 per cent and France by 3.8 per cent, while Germany increased its spending by 2.6 per cent, although this follows several years of falling spending prior to 2008. The UK's spending is expected to fall further in the period up to financial year 2014/15, by perhaps as much as 10 per cent in real terms, including an expected reduction on spending in Afghanistan.⁴ Germany plans for spending to be constant in nominal terms up to 2016, implying a moderate fall in real terms.⁵ Overall, military spending in Western and Central Europe was 6.9 per cent lower in 2012 than when the financial crisis struck in 2008, while that of the 26 European members of the North Atlantic Treaty Organization (NATO) was 7.5 per cent lower.

Military expenditure has continued to increase in Asia and Oceania in recent years, although unevenly. The rate of increase has been slower since 2009, following the global financial crisis. Despite tensions on the India–

⁴ Chalmers, M., 'Mid-term blues? Defence and the 2013 spending review', RUSI Briefing Paper, Feb. 2013, <<http://www.rusi.org/publications/other/ref:N512B80F201A9B/>>.

⁵ German Parliament (Bundestag), 'Finanzplan des Bundes 2012 bis 2016' [The federal budget 2012 to 2016], Briefing by the Federal Government, Drucksache 17/10201, 10 Aug. 2012, p. 13.

Table 3.2. Key military expenditure statistics by region, 2012

Region/ Subregion	Military expenditure, 2012 (US\$ b.)	Change (%) ^a		Major changes, 2012 (%) ^b			
		2011–12	2003–12	Increases		Decreases	
<i>Africa</i>	(39.2)	1.2	85	Zimbabwe	53	Uganda	-57
North Africa	16.4	7.8	133	Côte d'Ivoire	22	South Sudan	-42
Sub-Saharan Africa	(22.7)	-3.2	61	Ghana	20	Nigeria	-12
				Tunisia	20	Botswana	-7.0
<i>Americas</i>	782	-4.7	35	Paraguay	42	El Salvador	-9.0
Central America and Caribbean	8.6	8.1	70	Venezuela	39	Jamaica	-8.2
North America	708	-5.5	32	Peru	16	Ecuador	-7.8
South America	65.9	3.8	62	Colombia	11	USA	-5.6
<i>Asia and Oceania</i>	390	3.3	63	Kazakhstan	[30]	Afghanistan	-12
Central and South Asia	59.8	-1.6	62	Viet Nam	26	Sri Lanka	-9.6
East Asia	268	5.0	72	Mongolia	24	Australia	-4.0
Oceania	28.2	-3.7	28	Indonesia	24	Thailand	-3.4
South East Asia	33.7	6.0	37				
<i>Europe</i>	407	2.0	10	Ukraine	24	Hungary	-20
Eastern Europe	100	15	117	Estonia	17	Portugal	-18
Western and Central Europe	307	-1.6	-4.5	Bosnia	17	Slovenia	-15
				Russia	[16]	Spain	-13
<i>Middle East</i>	(138)	8.3	57	Oman	51	Iraq	-3.6
				Saudi Arabia	12	Egypt	-2.6
				Kuwait	10		

() = uncertain estimate; [] = SIPRI estimate.

^a Changes are in real terms.

^b The list shows the largest increases or decreases for each region as a whole, rather than by subregion. Countries with a military expenditure in 2012 of less than \$100 m., or \$50 m. in Africa, are excluded.

China border, in the South China Sea and on the Korean Peninsula, China and South Korea increased military spending at a significantly slower rate between 2009 and 2012, while India actually cut spending (see figure 3.3). Nonetheless, in 2012 China's military spending increased at a substantial rate—7.8 per cent in real terms—and it passed some significant milestones in its military technological development, including the commissioning of its first aircraft carrier and the successful landing of an aircraft on it, and the test flight of a second prototype stealth combat aircraft.⁶ China has

⁶ Erickson, A. and Collins, G., 'China aircraft carrier style! Assessing the first take-off and landing', China Real Time Report, *Wall Street Journal*, 27 Nov. 2012, <<http://blogs.wsj.com/chinarealtime/2012/11/27/china-aircraft-carrier-style-what-first-takeoff-and-landing-means/>>; and Foster, R., 'China's latest stealth fighter takes to the air', *Jane's Defence Weekly*, 7 Nov. 2012, p. 4. See also chapter 5, section I, in this volume.

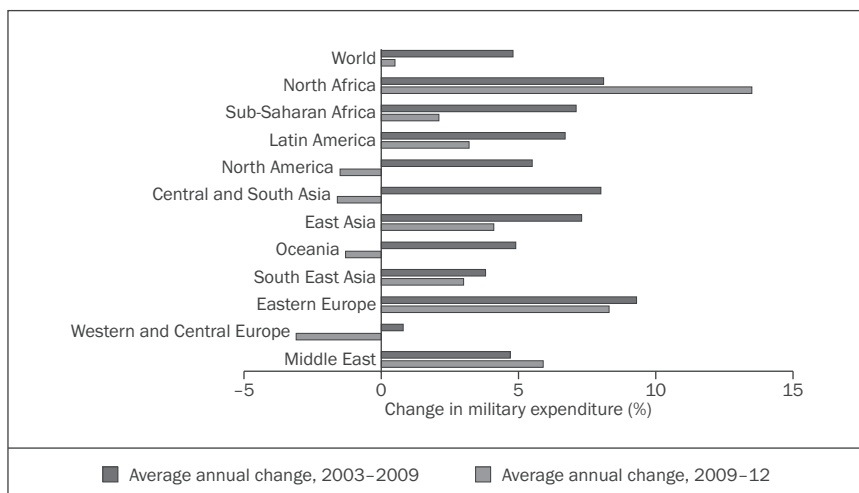


Figure 3.2. Average annual changes in military expenditure, by region or subregion, 2003–2009 and 2009–12

announced a further increase of 10.7 per cent for 2013, which in real terms is likely to be roughly in line with targeted GDP growth of 7.5 per cent.⁷

Thailand and Cambodia reduced spending in 2012, as their border dispute, which led to violent border skirmishes in 2010 and 2011, eased.⁸ Similarly, Sri Lanka has cut spending since the end of its civil war in 2009. In contrast, Indonesia and Viet Nam maintained high rates of military spending growth, with respective increases of 130 per cent and 73 per cent between 2003 and 2012. Viet Nam is investing heavily in major naval and aircraft acquisitions, motivated by the need to counter China's growing military power and ambitions in the South China Sea, in what could now be regarded as a naval arms race.⁹ Indonesia is undertaking a major military modernization, especially in the naval sphere, as it seeks to build up a 'minimum essential force' to control its vast archipelago and territorial waters by 2024.¹⁰ In the absence of any obvious threat, this can perhaps be seen as a way of reorienting the Indonesian armed forces towards external defence as it withdraws from politics and business (see also section V below).

⁷ 'China's defense budget to grow 10.7 pct in 2013', *Global Times*, 5 Mar. 2013.

⁸ Jamaluddin, J. M., 'ASEAN meeting cools Thai-Cambodia border tensions', *Asian Defence Journal*, Mar. 2011, pp. 4–6. See also chapter I, section II, in this volume.

⁹ Wezeman, S. T., 'The maritime dimension of arms transfers to South East Asia, 2007–11', *SIPRI Yearbook 2012*.

¹⁰ Grevatt, J., 'Island ambition', *Jane's Defence Weekly*, 11 July 2012, pp. 22–27; and Supriyanto, R. A., 'Indonesia's naval modernisation: a sea change?', S. Rajaratnam School of International Studies (RSIS) Commentaries no. 020/2012, 27 Jan. 2012, <<http://www.rsis.edu.sg/publications/commentaries.asp?selYear=2012>>.

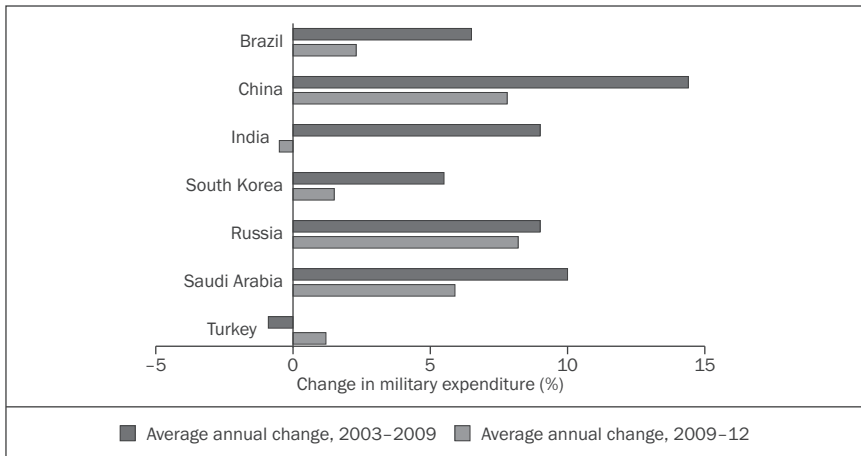


Figure 3.3. Average annual changes in military expenditure of emerging powers with the highest military spending, 2003–2009 and 2009–12

The largest military spenders in 2012

The list of the top 15 military spenders worldwide in 2012 includes the same countries as in 2011, with some changes in order (see table 3.3). The shift in spending from the West to other parts of the world is reflected in this list: the spending of the established powers in the list—Australia, Canada, France, Germany, Italy, Japan, the UK and the United States—either fell significantly or changed only slightly (by less than 1 per cent), while the spending of most of the emerging powers in the list—China, South Korea, Russia, Saudi Arabia and Turkey—increased. India was the only emerging power in the list whose spending decreased in 2012, while Brazil’s changed by less than 1 per cent. While the USA remained by far the world’s largest military spender, its share of the total decreased to 39 per cent, the first time it has fallen below 40 per cent since the collapse of the Soviet Union in 1991. Nonetheless, US military spending in 2012 was still roughly equal to the spending of the next 11 countries combined.

Turkey was the only one of the emerging powers in the top 15 whose rate of increase of military spending rose in 2009–12 compared with 2003–2008. In most other cases, the rate of increase fell; in the case of India, spending fell (see figure 3.3). This further illustrates how the global financial crisis has affected military spending even in regions not directly affected by its consequences: by reducing export demand in the developed world, it has slowed economic growth also in emerging regions, with a knock-on effect on military expenditure.

Table 3.3. The 15 countries with the highest military expenditure in 2012

Spending figures are in US\$, at current prices and exchange rates. Countries are ranked according to military spending calculated using market exchange rates (MER).

Rank			Spending, 2012 (\$ b., MER)	Change, 2003–12 (%)	Share of GDP (%) ^a		World share, 2012 (%)	Spending, 2012 (\$ b., PPP) ^b
2012	2011	Country			2012	2003		
1	1	USA	685	32	4.4	3.7	39	685
2	2	China	[166]	175	[2.0]	[2.1]	[9.5]	[249]
3	3	Russia	[90.7]	113	[4.4]	[4.3]	[5.2]	[116]
4	5	UK	60.8	4.9	2.5	2.5	3.5	57.5
5	6	Japan	59.3	-3.6	1.0	1.0	3.4	46.0
Subtotal top 5			1 062	..	..	..	60	..
6	5	France	58.9	-3.3	2.3	2.6	3.4	50.7
7	8	Saudi Arabia	56.7	111	8.9	8.7	3.2	63.9
8	7	India	46.1	65	2.5	2.8	2.6	119
9	9	Germany	[45.8]	-1.5	[1.4]	1.4	[2.6]	[42.8]
10	11	Italy	[34.0]	-19	1.7	2.0	1.9	31.0
Subtotal top 10			1 304	..	..	..	74	..
11	10	Brazil	33.1	56	[1.5]	1.5	[1.9]	[34.4]
12	12	South Korea	31.7	44	2.7	2.5	1.8	44.2
13	13	Australia	26.2	29	1.7	1.9	1.5	16.3
14	14	Canada	[22.5]	36	[1.3]	1.1	[1.3]	[18.3]
15	15	Turkey ^c	[18.2]	-2.1	2.3	3.4	[1.0]	[25.9]
Subtotal top 15			1 436	..	..	..	82	..
World			1 756	35	2.5	2.4	100	..

[] = estimated figure; GDP = gross domestic product; PPP = purchasing power parity.

^a The figures for national military expenditure as a share of GDP are based on estimates for 2012 GDP from the International Monetary Fund's (IMF) World Economic Outlook database, Oct. 2012.

^b The figures for military expenditure at PPP exchange rates are estimates based on the projected implied PPP conversion rates for each country from the IMF World Economic Outlook database, Oct. 2012.

^c It is possible that the United Arab Emirates (UAE) would be in 15th position in place of Turkey, but data is not available for the UAE in 2012. In 2011, the UAE's military spending (in current prices) was estimated by SIPRI to have been \$19.2 billion.

Sources: SIPRI Military Expenditure Database, <<http://www.sipri.org/databases/milex/>>; and IMF, World Economic Outlook database, Oct. 2012, <<http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx>>.