

I. Global developments in military expenditure

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Between 1998 and 2010 total world military expenditure increased every year in real terms, but that growth stopped in 2011 as spending reached \$1738 billion. The fastest growth was between 2001 and 2009, when the average annual increase was 5 per cent. The rate of growth slowed in 2010 and fell to just 0.3 per cent in 2011, which, given the uncertainties in the estimate, is not significantly different from zero.¹ Military spending in the United States, the main component in global increases since 2001, fell slightly in 2011, for the first time since 1998. Elsewhere, increases in Africa, the Middle East, and Asia and Oceania were countered by falls in Latin America (see table 4.1). In Europe, substantial increases in Eastern Europe—by Azerbaijan and Russia in particular—were offset by a second year of falls in Western and Central Europe.

The list of the top 15 military spenders worldwide in 2011 includes the same countries as in 2010, but the order has changed somewhat (see table 4.2). In contrast to most of the 2000s, the majority—9 of the 15 countries—cut military spending in real terms in 2011. The spending of one, Japan, remained constant, while China, South Korea, Russia, Saudi Arabia and Turkey increased military spending. Over the period 2002–11, however, 10 of the 15 increased military spending, with falls in Japan and most of the European countries: France, Germany, Italy and Turkey. In contrast, military spending as a share of gross domestic product (GDP)—the ‘military burden’—fell in 10 of the 15 countries between 2002 and 2011, most notably Turkey, whose military burden fell from 3.9 per cent to 2.3 per cent. Four countries increased their military burdens, with the largest increase being by the USA, from 3.4 per cent to 4.7 per cent. The USA remained by far the world’s largest military spender, with military spending roughly equal to that of the next 14 countries combined.

Over the period 2002–11 there were significant increases in military spending in all regions and subregions other than Western and Central Europe, where there was virtually no change. The increases were especially pronounced in North Africa and Eastern Europe. The picture of increases and decreases in 2011 is mixed, both within and between regions (see table 4.3).

Globally, the financial and economic crisis has led to a significant change in military expenditure trends. Between 2002 and 2008, 78 per cent of countries for which data is available increased their military spending, but

¹ These uncertainties include estimates for countries with missing data for 2011, the fact that most figures for 2011 are based on budgeted rather than actual expenditure and the fact that the economic data for 2011 used to convert figures into constant (2010) US dollars is provisional.

Table 4.1. Military expenditure by region, by international organization and by income group, 2002–11

Figures for 2002–11 are in US\$ b. at constant (2010) prices and exchange rates. Figures for 2011 in the right-most column, marked *, are in current US\$ b. Figures do not always add up to totals because of the conventions of rounding.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2011*
World total	1 146	1 218	1 286	1 340	1 383	1 436	1 513	1 613	1 629	1 634	1 738
United States	432	492	536	562	571	586	629	680	698	690	711
Rest of the world	713	725	750	777	812	850	884	934	931	945	1 026
<i>Geographical regions</i>											
Africa	19.5	19.4	21.8	22.7	23.7	(24.5)	(27.9)	(28.6)	(29.6)	(32.2)	(34.3)
North Africa	6.3	6.5	7.1	7.3	7.3	8.0	9.4	(10.0)	(10.5)	(13.1)	(13.9)
Sub-Saharan Africa	13.2	12.9	14.8	15.4	16.3	(16.6)	(18.5)	(18.6)	(19.1)	(19.1)	(20.4)
Americas	497	552	600	631	644	664	714	768	791	780	809
Central America and the Caribbean	4.9	4.8	4.4	4.7	5.1	5.7	5.8	6.4	6.5	6.7	7.0
North America	448	508	552	579	588	605	650	701	721	713	736
South America	44.9	40.1	43.1	47.2	51.0	53.5	58.6	60.3	63.6	61.1	66.0
Asia and Oceania	204	213	224	236	249	267	283	317	322	330	364
Central and South Asia	34.5	35.5	40.4	42.8	43.5	44.9	49.3	56.6	57.4	55.9	61.7
East Asia	131	137	143	151	162	175	185	208	212	221	243
Oceania	18.1	18.5	19.2	19.8	20.9	22.2	22.9	24.6	24.9	24.6	28.6
South East Asia	19.9	22.0	21.6	22.0	22.5	25.6	26.2	27.5	27.4	28.2	31.0
Europe	347	352	354	356	365	373	384	392	375	376	407
Eastern Europe	38.7	41.4	43.3	47.9	53.4	58.9	64.9	66.4	65.5	72.1	80.5
Western and Central Europe	308	310	311	308	311	314	319	325	310	304	326
Middle East	78.0	81.5	86.3	94.3	101	107	104	(108)	(111)	(116)	(123)
<i>Organizations</i>											
African Union	22.1	22.1	24.2	25.0	26.1	(26.9)	(29.6)	(30.1)	(30.8)	(33.1)	(35.3)
Arab League	63.0	65.1	71.0	77.0	81.6	91.1	94.3	98.5	102	(109)	(114)
CIS	39.5	42.3	44.4	49.1	54.8	60.8	66.8	67.6	67.0	73.9	82.4

CSTO	36.9	39.3	41.0	45.0	49.5	54.2	59.8	62.3	61.7	67.2	75.1
East African Community	0.9	0.9	0.9	1.0	1.0	1.2	1.2	1.2	1.3	1.1	1.2
ECOWAS	2.8	2.2	2.2	2.2	2.2	2.5	2.9	3.1	3.4	3.5	3.8
European Union	255	259	277	276	278	285	289	294	279	271	293
NATO	728	790	842	866	879	897	947	1 006	1 011	996	1 039
NATO Europe	281	283	290	287	291	293	297	305	290	283	303
OSCE	795	860	908	936	954	980	1 035	1 094	1 098	1 091	1 145
SADC	6.7	7.3	7.4	8.5	9.0	8.7	9.7	9.8	10.0	10.0	10.8
SCO	84.3	90.8	98.1	109	125	141	155	178	182	195	217
<i>Income group</i>											
Low	(4.7)	4.8	(5.1)	(5.2)	(5.5)	(6.0)	(6.2)	(6.3)	(6.7)	(6.8)	(7.4)
Lower middle	112	120	131	141	154	172	189	217	223	232	255
Upper middle	131	128	134	144	156	161	170	176	178	186	202
High	896	965	1 017	1 049	1 067	1 096	1 148	1 214	1 222	1 209	1 274
<i>World military spending per capita (current US\$)</i>											
	126	145	162	173	182	200	222	228	236	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	2.4	2.7	2.6	2.5	

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

Notes: The world total and the totals for regions, organizations and income groups are estimates, based on data in table 4.9 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, Equatorial Guinea, Guyana, Haiti, North Korea, Myanmar, Somalia, Trinidad and Tobago, 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 sub-regions is based on the classification of countries in tables 4.8–4.10.

Sources: Table 4.9; *Income groups* (based on 2009 gross national income per capita): *World Development Report 2011: Conflict, Security and Development* (World Bank: Washington, DC, 2011); *Population, State of World Population 2011: People and Possibilities in a World of 7 Billion* (UNFPA: New York, 2011); and *GDP: International Monetary Fund (IMF), World Economic Outlook: Slowing Growth, Rising Risks* (IMF: Washington, DC, Sep. 2011).

Table 4.2. The 15 countries with the highest military expenditure in 2011

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		Country	Spending, 2011 (\$ b., MER)	Change, 2002–11 (%)	Share of GDP (%) ^a		World share, 2011 (%)	Spending, 2011 (\$ b., PPP) ^b
2011	2010				2011	2002		
1	1	USA	711	59	4.7	3.4	41	711
2	2	China	[143]	170	[2.0]	[2.2]	[8.2]	[228]
3	5	Russia	[71.9]	79	[3.9]	[4.5]	[4.1]	[93.7]
4	3	UK	62.7	18	2.6	2.5	3.6	57.5
5	4	France	62.5	-0.6	2.3	2.5	3.6	50.1
Subtotal top 5			1 051	..	..	..	61	..
6	6	Japan	59.3	-2.5	1.0	1.0	3.4	44.7
7	9	India	48.9	66	2.6	2.9	2.8	117
8	7	Saudi Arabia ^c	48.5	90	8.7	9.8	2.8	58.8
9	8	Germany	[46.7]	-3.7	[1.3]	1.5	[2.7]	[40.4]
10	11	Brazil	35.4	19	1.5	1.9	2.0	33.8
Subtotal top 10			1 290	..	..	..	74	..
11	10	Italy	[34.5]	-21	[1.6]	2.0	[2.0]	[28.5]
12	12	South Korea	30.8	45	2.7	2.4	1.8	42.1
13	13	Australia	26.7	37	1.8	1.9	1.5	16.6
14	14	Canada	[24.7]	53	[1.4]	1.2	[1.4]	[19.9]
15	15	Turkey	[17.9]	-12	[2.3]	3.9	[1.0]	[25.2]
Subtotal top 15			1 425	..	..	..	82	..
World			1 738	43	2.5	2.4	100	..

[] = SIPRI estimate; 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 2011 GDP from the International Monetary Fund (IMF) World Economic Outlook database, Sep. 2011.

^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, Sep. 2011.

^c The figures for Saudi Arabia include expenditure on public order and safety and might be slight overestimates.

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

for the period 2008–11 this share fell to 56 per cent. In contrast, slow growth or falls in GDP due to the crisis mean that military spending as a share of GDP followed an opposite trend. Between 2002 and 2008, 25 per cent of countries for which data is available increased their military burdens, while 63 per cent reduced them and they stayed constant in 12 per cent. However, between 2008 and 2010, 43 per cent increased their military burdens, 41 per cent reduced them and they remained unchanged in 17 per

Table 4.3. Key military expenditure statistics by region, 2011

Changes are in real terms.

Region/ Subregion	Military expenditure, 2011 (US\$ b.)	Change (%)		Major changes, 2011 (%) ^a			
		2010–11	2002–11	Increases		Decreases	
<i>Africa</i>	(34.3)	8.6	65	Zimbabwe	50	Lesotho	-24
North Africa	(13.9)	25	110	Algeria	44	Ghana	-23
Sub-Saharan Africa	(20.4)	-0.1	44	Congo, DR	15	Côte d'Ivoire	-16
				Madagascar	12	Kenya	[-16]
<i>Americas</i>	809	-1.4	57	Paraguay	34	Dominican	-9.4
Central America and Caribbean	7.0	2.7	36	Chile	[12]	Republic	
North America	736	-1.2	59	Guatemala	7.1	Argentina	[-8.9]
South America	66.0	-3.9	36	Mexico	5.7	Brazil	-8.2
						Venezuela	-7.4
<i>Asia and Oceania</i>	364	2.2	61	Afghanistan	36	Philippines	-8.7
Central and South Asia	61.7	-2.7	62	Indonesia	12	Viet Nam	-6.9
				Kazakhstan	[9.7]	Sri Lanka	-6.5
East Asia	243	4.1	69	Malaysia	9.4	Brunei	-4.6
Oceania	28.6	-1.2	36			Darussalam	
South East Asia	31.0	2.7	42				
<i>Europe</i>	407	0.2	8.3	Azerbaijan	89	Bulgaria	-19
Eastern Europe	80.5	10	86	Switzerland	12	Georgia	[-18]
Western and Central Europe	326	-1.9	-1.5	Norway	[11]	Slovakia	-14
				Russia	9.3	Slovenia	-13
<i>Middle East</i>	(123)	4.6	49	Iraq	(55)	Oman	-17
				Bahrain	14	Egypt	-4.2
				Kuwait	9.8	Jordan	-4.2

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

^a The list shows the largest increases or decreases for each region as a whole, rather than by subregion. Countries with a military expenditure in 2011 of less than \$100 m., or \$50 m. in Africa, are excluded.

cent. Thus, in the period of generally high world economic growth, most countries increased military spending more slowly than their economies grew, but during the crisis this trend changed.

In Asia and Oceania military spending increased modestly in 2011. The largest national increase was in Afghanistan—36 per cent—due to continued expansion of the Afghan National Army.² China's increase of 6.7 per cent in real terms, or \$8 billion, was equal to the entire regional increase. Some concerns have been expressed that China's increased military power may be driving a regional arms race.³ However, a brief survey of military

² Afghan Ministry of Finance (MOF), *1390 National Budget* (MOF: Kabul, 2011), pp. 12, 14. The figures do not include military aid from the USA and other international donors.

³ E.g. Sharma, A. et al., 'Asia's new arms race', *Wall Street Journal*, 12 Feb. 2011.

spending trends shows a mixed picture.⁴ India's military spending has increased by 59 per cent since 2002, with rivalry with China as a key driver.⁵ Viet Nam has also increased its spending, by 82 per cent since 2003, amid tensions over the South China Sea.⁶ However, Japan has cut its military spending by 2.5 per cent since 2002, while Taiwan's increase was just 13 per cent, as relations with China have warmed. The Philippines, which has also had tensions with China over the South China Sea, has made only modest increases. Indeed, some of the largest increases in South East Asia since 2002 are unrelated to China: Indonesia's 82 per cent increase reflects efforts to achieve a 'Minimum Essential Force' to control its vast archipelago, and may also reflect the continued political influence of the military.⁷ Increases by Cambodia (70 per cent) and Thailand (66 per cent) are partly related to their border dispute, which saw numerous violent incidents in 2010 and 2011, and in Thailand's case to a long-running insurgency in the south and continuing domestic unrest following the military coup in 2006.⁸

The fall in military spending in South America in 2011 was the first since 2003. This is accounted for by an 8.2 per cent fall in Brazil, which cut its initial discretionary military budget (which includes spending on new equipment, but not, e.g., salaries) by 25 per cent as part of efforts to control inflation.⁹ Elsewhere in the region there was a mixture of increases and decreases (see table 4.3). The increase in Central America is largely the result of increasing military involvement in dealing with spiralling armed violence from drug cartels.¹⁰ Mexico in particular increased military spending by 52 per cent in real terms between 2002 and 2011. Partly due to the ineffectiveness and corruption of the police force, 45 000 troops have been deployed nationwide to support law enforcement efforts.¹¹ The extra spending has been used to increase salaries, to combat high desertion rates

⁴ For a more extended discussion of trends in East and South East Asia see Perlo-Freeman, S. and Solmirano, C., 'Wettlauf ohne Sieger' [Race without winners], *Welt Sichten*, no. 9-2011 (Sep. 2011), pp. 29-33.

⁵ Perlo-Freeman, S. et al., 'Military expenditure', *SIPRI Yearbook 2011*, pp. 166-70.

⁶ Data for Viet Nam is not available before 2003. On arms acquisitions by South China Sea littoral states see chapter 6, section III, in this volume.

⁷ Anderson, G. and Grevatt, J., 'Island vision', *Jane's Defence Weekly*, 28 Sep. 2011, pp. 28-32.

⁸ Chachavalpongpun, P., 'Internal conflicts now shaping defence policy', *South China Morning Post*, 14 Mar. 2011. See also Melvin, N. J., *Conflict in Southern Thailand: Islamism, Violence and the State in the Patani Insurgency*, SIPRI Policy Paper no. 20 (SIPRI: Stockholm, Sep. 2007).

⁹ Lima, M. S., 'Gobierno oficializa corte de R\$ 50 bi no orçamento de 2011' [Government formalizes cut of R\$50 billion in the 2011 budget], *Folha* (São Paulo), 9 Feb. 2011.

¹⁰ For lists of recently active conflicts in Central America see chapter 2, section III, in this volume. Aside from Mexico, El Salvador, Guatemala and Honduras have all given the military a role in combating drug-related violence. Infodefensa, 'Militarización de la Seguridad Pública en Centroamérica' [Militarization of public security in Central America], 14 Dec. 2011, <<http://www.infodefensa.com/?opinion=militarizacion-de-la-seguridad-publica-en-centroamerica>>.

¹¹ Fainaru, S. and Booth, W., 'As Mexico battles cartels, the army becomes the law', *Washington Post*, 2 Apr. 2009.

and, to a lesser extent, for new arms acquisitions to support counter-narcotics operations.¹² However, military efforts have not staunched the increase in deaths from armed violence and have led to accusations of human rights abuses.¹³

The estimate for the Middle East in 2011 is highly uncertain, due to the absence of data for key countries, in particular Iran and the United Arab Emirates. Among the countries for which data is available, the largest increase was in Iraq, at 55 per cent. However, in recent years Iraq has consistently underspent its initial military budget, so the actual increase may be considerably smaller. A 2010 US Government Accountability Office (GAO) report found that, from 2005 to 2009, the Iraqi security ministries failed to spend \$2.5–5.2 billion of budgeted funds, including \$1.2–3.4 billion for arms procurement.¹⁴

Military spending in the USA, Africa and Europe is discussed in detail in sections III, IV and V, respectively.

¹² Guevara Moyano, I., *Adapting, Transforming, and Modernizing under Fire: The Mexican Military 2006–11* (US Army War College, Strategic Studies Institute: Carlisle, PA, Sep. 2011). See also e.g. US Embassy in Mexico City, 'U.S. delivers \$43.3 million dollars in equipment support to Mexican Navy as part of Merida Initiative', Press release, 1 Dec. 2011, <<http://mexico.usembassy.gov/press-releases/equipment-merida-initiative.html>>.

¹³ Freedom House, 'Mexico', *Freedom in the World 2011* (Freedom House: Washington, DC, 2011); and Carlsen, L., 'Phase 2 of the drug war', Panama News, 10 Apr. 2010, <http://www.thepanama.com/pn/v_16/issue_05/opinion_01.html>.

¹⁴ Government Accountability Office (GAO), *Iraqi–U.S. Cost-sharing*, GAO-10-918 (GAO: Washington, DC, Sep. 2010), p. 5.