5. Military expenditure

SAM PERLO-FREEMAN, CATALINA PERDOMO, ELISABETH SKÖNS AND PETTER STÅLENHEIM

I. Introduction

Global military expenditure in 2008 is estimated to have totalled $1464 billion. This represents an increase of 4 per cent in real terms compared to 2007, and of 45 per cent over the 10-year period 1999–2008.[1] Military expenditure comprised approximately 2.4 per cent of global gross domestic product (GDP) in 2008, or $217 per capita.[2]

Section II of this chapter presents overviews of the main regional and subregional trends in military expenditure and of the 15 major spenders. Section III discusses developments in the military spending of the United States during the time in office of President George W. Bush, in particular spending on the 'global war on terrorism'. Sections IV–VIII survey regional trends in military spending in Europe, Asia and Oceania, Africa, South America and the Middle East, with particular focus on countries where there have been noteworthy developments. In particular, section VIII gives one of the first systematic accounts of spending on the Iraqi security forces. Conclusions are presented in section IX.

Appendix 5A presents SIPRI data on military expenditure for 168 countries for 1999–2008, along with the sources and methods used to produce this data. As well as world and regional totals, data for individual countries is provided in local currency at current prices for 1999–2008, in constant (2005) US dollars for 1999–2008, in current US dollars for 2008 and as a share of GDP for 1999–2007. Appendix 5B presents the military expend-

[1] The figure for world military expenditure in 2008 is in current US dollars. The large increase (12%) in the current dollar figure compared to 2007 is due in part to the lower value of the US dollar in 2008 against other major currencies. The real-terms increase is based on expenditure in US dollars at constant (2005) prices and exchange rates. Figures in constant dollars are used to assess the trends in spending, while figures in current dollars are used for analysing shares of spending, such as country shares of regional totals and country or regional shares of the world total. All figures in US dollars are calculated using the average annual market exchange rates. On the choice of exchange rate see appendix 5A, section II. SIPRI provides figures in current dollars for the most recent year only. See tables 5A.1 and 5A.3 in appendix 5A.

[2] The share of GDP is based on a projected figure for world GDP in 2008 of $62 054 billion at market exchange rates. International Monetary Fund (IMF), *World Economic Outlook: Financial Stress, Downturns, and Recoveries* (IMF: Washington, DC, Oct. 2008), p. 259. The per capita spending figure is calculated by dividing world military spending by world population, estimated at 6750 million in 2008, with no national weighting. United Nations Population Fund (UNFPA), *State of World Population 2008: Reaching Common Ground—Culture, Gender and Human Rights* (UNFPA: New York, 2008), p. 90.

Table 5.1. World and regional military expenditure estimates, 1999–2008

Figures are in US$ b., at constant (2005) prices and exchange rates. Figures in italics are percentages. Figures may not add up because of the conventions of rounding.

Region[a]	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	% change, 1999–2008
Africa	14.6	13.6	14.2	15.1	15.1	16.8	17.3	17.8	(18.6)	(20.4)	*+40*
North Africa	4.0	4.0	5.2	5.2	5.4	5.9	6.1	6.1	6.6	7.8	*+94*
Sub-Saharan Africa	10.6	9.5	9.1	9.9	9.7	10.9	11.2	11.7	(11.9)	(12.6)	*+19*
Americas	368	383	388	430	482	523	549	559	576	603	*+64*
Caribbean	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Central America	3.7	3.9	3.9	3.8	3.8	3.6	3.6	3.4	4.5	4.5	*+21*
North America	341	354	357	399	453	493	516	525	540	564	*+66*
South America	22.7	24.8	27.4	27.2	25.3	26.6	29.0	30.2	32.1	34.1	*+50*
Asia and Oceania	136	139	147	154	160	169	177	186	196	206	*+52*
Central Asia	0.5	. .	. .	. .	. .	. .	. .	. .	. .	. .	
East Asia	101	104	110	116	122	127	133	140	149	157	*+56*
Oceania	12.3	12.2	12.7	13.2	13.5	14.0	14.5	15.4	16.2	16.6	*+36*
South Asia	21.9	22.8	23.5	23.6	24.2	27.5	28.9	29.2	29.9	30.9	*+41*
Europe	281	287	289	298	302	303	303	309	314	320	*+14*
Eastern Europe	15.9	21.4	23.3	25.8	27.6	28.9	32.0	35.7	39.3	43.6	*+174*
West and Central	265	266	265	272	274	274	271	273	275	277	*+5*
Middle East	48.6	53.8	56.9	54.8	56.4	59.3	66.0	70.4	76.5	75.6	*+56*
World	**847**	**877**	**895**	**952**	**1015**	**1071**	**1113**	**1142**	**1182**	**1226**	*+45*
Annual change (%)		*3.5*	*2.1*	*6.3*	*6.7*	*5.5*	*3.9*	*2.6*	*3.5*	*3.7*	

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

[a] For the country coverage of the regions, see appendix 5A, table 5A.1. Some countries are excluded because of lack of data or of consistent time series data: Africa excludes Equatorial Guinea and Somalia; the Americas excludes Cuba, Guyana, Haiti and Trinidad and Tobago; Asia excludes North Korea and Myanmar; and the Middle East excludes Qatar. World totals exclude all these countries.

Source: Appendix 5A, tables 5A.1 and 5A.3.

iture of members of the North Atlantic Treaty Organization (NATO) devoted to equipment and personnel. Appendix 5C presents statistics on the reporting by governments of their military spending to SIPRI and the United Nations

II. Regional trends and major spenders

SIPRI estimates for world, regional and subregional military expenditure are presented in table 5.1. These figures are based on information available in open sources, primarily supplied by governments. They represent a low estimate; the true level of military spending is certainly higher, for a number of reasons.[3] Nonetheless, SIPRI estimates almost certainly capture

[3] E.g. (*a*) some countries with significant military forces—such as North Korea and Qatar—are excluded from the total due to a complete absence of available data; (*b*) many countries exclude cer-

the great majority of global military spending and give an accurate picture of the overall trends.

Almost all regions and subregions have shared in the general increase in global military expenditure over the period 1999–2008. The major exception is Western and Central Europe, where modest economic growth rates and the lack—as perceived by most countries—of a threat susceptible to conventional military responses has led to almost flat levels of real military spending. Within this overall trend, some Central European countries' aspirations for NATO membership and interoperability have led to increased spending.

In contrast, the subregion with the most rapid growth in military expenditure between 1999 and 2008 was Eastern Europe, with a 174 per cent increase.[4] The bulk of this growth (87 per cent) is accounted for by the Russian Federation, whose military spending has been driven by high economic growth and the desire to re-establish its major power status. The other subregions with the largest increases since 1999 are: North Africa (94 per cent), North America (66 per cent), East Asia (56 per cent) and the Middle East (56 per cent). All countries in North Africa have made substantial increases, but the majority of the subregional increase is due to Algeria, driven by strong economic growth, a growing regional political role and a worsening insurgency. The North American increase is almost entirely due to US spending, fuelled by two wars and ongoing modernization programmes. In East Asia, China had both the largest absolute and the largest relative increase. China's increase has roughly paralleled its economic growth and is also linked to its major power aspirations. However, all significant spenders in East Asia other than Japan have had substantial increases. Ongoing conflicts in the Middle East and the resulting tensions and insecurities—along with high oil prices—have encouraged most countries to make substantial increases. South America's military expenditure also increased by 50 per cent over the decade, led by Brazil's long-term push for regional power status and Colombia's escalating spending related to its internal conflict.

While most of these longer-term trends continued in 2008, spending in the Middle East fell for the first time since the start of the conflict in Iraq, but this is likely to be temporary. Spending in Eastern Europe, North and South America and East Asia continued to rise at broadly similar levels to recent years, while North Africa's spending growth accelerated sharply—

tain items from their reported military expenditure, such as military pensions and paramilitary forces, and do not provide separate data for these to allow their inclusion; and (*c*) some countries use off-budget sources of military expenditure, such as funds from natural resource revenues or the proceeds of military-run businesses, for which estimates can only rarely be made. See also appendix 5A, section II.

[4] Eastern Europe includes Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia and Ukraine.

Table 5.2. The 15 countries with the highest military expenditure in 2008

Spending figures are in US$, at current prices and exchange rates.

Rank	Country	Spending ($ b.)	World share (%)	Spending per capita ($)	Military burden, 2007 (%)[a]	Change, 1999–2008 (%)
1	USA	607	*41.5*	1 967	*4.0*	*66.5*
2	China	[84.9]	*[5.8]*	[63]	*[2.0]*	*194*
3	France	65.7	*4.5*	1 061	*2.3*	*3.5*
4	UK	65.3	*4.5*	1 070	*2.4*	*20.7*
5	Russia	[58.6]	*[4.0]*	[413]	*[3.5]*	*173*
Sub-total top 5		**882**	***60***			
6	Germany	46.8	*3.2*	568	*1.3*	*–11.0*
7	Japan	46.3	*3.2*	361	*0.9*	*–1.7*
8	Italy	40.6	*2.8*	689	*1.8*	*0.4*
9	Saudi Arabia[b]	38.2	*2.6*	1 511	*9.3*	*81.5*
10	India	30.0	*2.1*	25	*2.5*	*44.1*
Sub-total top 10		**1 084**	***74***			
11	South Korea	24.2	*1.7*	501	*2.7*	*51.5*
12	Brazil	23.3	*1.6*	120	*1.5*	*29.9*
13	Canada	19.3	*1.3*	581	*1.2*	*37.4*
14	Spain	19.2	*1.3*	430	*1.2*	*37.7*
15	Australia	18.4	*1.3*	876	*1.9*	*38.6*
Sub-total top 15		**1 188**	***81***			
World		**1 464**	***100***	**217**	***2.4***	***44.7***

[ ] = estimated figure.

[a] A state's military burden is military spending as a share of gross domestic product (GDP). The figures are for 2007, the most recent year for which GDP data is available.

[b] The figures for Saudi Arabia include expenditure for public order and safety and might be slight overestimates.

Sources: *Military expenditure*: Appendix 5A; *Population:* United Nations Population Fund (UNFPA), *State of World Population 2008: Reaching Common Ground—Culture, Gender and Human Rights* (UNFPA: New York, 2008).

again dominated by Algeria, which is now Africa's biggest military spender (see section VI).

The world's top 15 military spenders in 2008 are listed in table 5.2.[5] The top 15 spenders accounted for 81 per cent of world military spending, while the top 5 accounted for 60 per cent; these shares are similar to those for

[5] The military spending figures in table 5.2 are converted into current US dollars using 2008 market exchange rates. In *SIPRI Yearbook 2008* (as in previous editions) the table of the top 15 military spenders was based on conversion of military expenditure into US dollars using constant (2005) prices and exchange rates. This means that the rankings and shares for 2007 shown in *SIPRI Yearbook 2008* are somewhat different from those discussed here, due to exchange rate movements between 2005 and 2007. The identities of the top 15 spenders for 2007 remain unchanged regardless of which conversion method is used.

2007. The USA—with 42 per cent of the total—accounted for the largest share by far, with China, France and the United Kingdom far behind.

The 15 biggest spenders in 2008 are the same as in 2007, although some rankings have changed. In particular, in 2008 China was for the first time the world's second highest military spender and France narrowly overtook the UK. The top 15 spenders display a wide variation in their rates of military expenditure per capita and as a share of GDP as well as in their rates of increase since 1999. Saudi Arabia's military burden—that is, military expenditure as a share of GDP—was 9.3 per cent in 2007 (the latest year for which figures are available), which was exceeded only by Oman, while the Republic of Korea (ROK, or South Korea), Russia and the USA also exceeded the global average of 2.4 per cent. At the other end of the spectrum Australia, Canada, Brazil, Germany, Italy, Japan and Spain all had military burdens below 2 per cent. France, Germany, Italy and Japan have had slow or even negative real-terms growth in military expenditure since 1999. The spending of the other top 15 countries increased substantially. China and Russia increased their spending most rapidly, with each nearly tripling their spending since 1999. South Korea, Saudi Arabia and the USA also increased spending by more than 50 per cent.

SIPRI uses market exchange rates to convert national military expenditure figures into US dollars, as this provides the most easily measurable standard by which international comparisons of military spending can be made. An alternative would be to convert figures using purchasing power parity (PPP) exchange rates, which better represent the volume of goods and services that can be purchased with a given sum of money within each country. If GDP-based PPP rates were used, a somewhat different picture of the top 15 spenders would appear.[6] Using this measure, developing countries and countries in transition would generally have a higher relative level of military spending. In the list, Russia would move up to third place, India to fourth and Saudi Arabia to sixth, after the UK. Iran and Turkey would enter the top 15, replacing Australia and Spain. While the USA would still be far ahead, its relative dominance would diminish: using market exchange rates, the ratio of US to Chinese military spending is 7.2 : 1, while using PPP rates would halve the ratio to 3.6 : 1.

However, while GDP-based PPP exchange rates measure the volume of goods and services purchasable in the general economy of each country, this does not mean that they are a better measure than market exchange rates of the volume of military goods and services that may be obtained. In

[6] The information given in this paragraph is based on conversion into US dollars using constant 2005 PPP exchange rates (as 2008 rates are not currently available) based on comparisons of prices for goods and services in a typical GDP basket. As PPP rates take into account changes in general price levels in each country, there is much less of a difference, in relative terms, between using current or constant dollars than is the case for market exchange rates.

particular, PPP rates are unlikely to reflect the relative costs of advanced weapons technology and systems in each country.[7]

III. The United States

During the eight-year presidency of George W. Bush, US military expenditure increased to the highest level in real terms since World War II. This was the result of the rapidly rising budgets for the conflicts in Afghanistan and Iraq, under the heading 'global war on terrorism'. Contrary to the practice during the USA's previous long-lasting wars, these conflicts have been funded primarily through emergency supplemental appropriations outside the regular budgetary process long after the initial years and have been financed through borrowing.[8] These conflicts will continue to require major budgetary resources in the near future, even if the new administration of President Barack Obama implements early withdrawals of US troops from Iraq. Another legacy of the Bush Administration is the reversal of the budget outcome from a surplus to a major deficit, causing the national debt to soar. The increase in military spending was one contributing factor, even if its precise impact is contested.

Official US military expenditure (national defence outlays) increased from $294.4 billion in financial year (FY) 2000, the year preceding the term of the Bush Administration, to an estimated $607.3 billion in FY 2008 (see table 5.3).[9] The FY 2009 budget, which was the last budget submitted by the Bush Administration, was expected to result in national defence outlays of $675 billion, implying a real-terms increase in US military spending of 71 per cent during the period FYs 2000–2009. Despite strong economic growth rates, national defence has accounted for a rising share of GDP, increasing from 3.0 to 4.5 per cent between FYs 2000 and 2009. Furthermore, since the anticipated costs for military operations in Afghanistan and Iraq in FY 2009 were not fully funded, another supplementary budget request was expected, which would raise the overall increase even further.[10] The largest increases were in military construction, arms procurement, and operations and maintenance, in that order.

[7] On the choice of market exchange rates over PPP rates see also appendix 5A, section II.

[8] In US budget terminology, funds are provided to US Government agencies for specified purposes through an annual *appropriations* act or a permanent law. A *supplemental appropriation* may provide additional funds. See e.g. the glossary in US Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2008 to 2018* (US Congress: Washington, DC, Jan. 2008), pp. 165–81.

[9] An *outlay* is a payment made. An outlay may be for payment of an *obligation*—a legally binding commitment (e.g. an order or contract) by the US Government—incurred in previous financial years. A *budget authority* is the authority to incur obligations on the US Government. A budget authority may result in immediate or future outlays. US Congressional Budget Office (note 8).

[10] The second supplemental for FY 2009 was expected to be $80 billion, including $50 billion for acquisitions. 'DoD readies $80 billion supplemental request', Forecast International, 25 Nov. 2008.

Funding for the 'global war on terrorism'

The policy designated the 'global war on terrorism' resulted in total spending of an estimated $797 billion during the period FYs 2001–2008 (see table 5.4). The major part of this, or $749 billion, was for the Department of Defense (DOD). The operations in Iraq were by far the most costly activity, accounting for $603 billion, while the cost of the operations in Afghanistan and other countries amounted to $160 billion. As of July 2008, the monthly obligations of the DOD for contracts and salaries averaged $9.9 billion for Iraq and $2.4 billion for Afghanistan.[11] By the end of 2008, spending for the Iraq war far exceed the initial expectations of the Bush Administration and the Congress. In 2002 the Congressional Budget Office (CBO) estimated the budgetary cost of a potential war with Iraq at $44 billion and the statement by Lawrence Lindsay, President Bush's chief economist, that the war would cost $100–200 billion was refuted by the director of the White House Office of Management and Budget (OMB) as 'very, very high'.[12] The main reasons for this severe underestimation was that the operation was expected to be short: the CBO estimate was based on a scenario consisting of 30 days of combat plus 75 days of post-combat presence in the region.

Never before in US history have 6–8-year-long wars been funded through emergency supplemental appropriations.[13] During the period FYs 2001–2009, the major part (90 per cent) of the DOD's funds were provided as emergency funds through supplemental or additional appropriations. Only 10 per cent of DOD funding was provided through regular defence acts or transfers from regular appropriations, while most foreign aid and diplomatic operations were funded in the regular way, rather than through emergency appropriations. The use of emergency supplementals for funding military operations has been problematic because it has exempted war funding from the spending ceilings that apply to regular (discretionary) spending and since it has reduced congressional oversight.[14] These and other problems have been pointed out in several reports by the US Government Accountability Office, which has made a number of recommendation

[11] Belasco, A., *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations since 9/11*, Congressional Research Service (CRS) Report for Congress RL33110 (US Congress, CRS: Washington, DC, 15 Oct. 2008).

[12] US Congressional Budget Office, 'Estimated costs of a potential conflict with Iraq', Sep. 2002, <http://www.cbo.gov/doc.cfm?index=3822>. For a retrospect account of the furore caused by Lindsey's prediction see Lindsey, L. B., 'What the Iraq war will cost the U.S.', *Fortune*, 11 Jan. 2008.

[13] Kosiak, S. M., *Cost of the Wars in Iraq and Afghanistan, and other Military Operations through 2008 and Beyond* (Center for Strategic and Budgetary Assessments: Washington, DC, 2008), pp. vi, 59–68.

[14] Belasco (note 11), p. 9. *Discretionary* spending is budget authority that is provided and controlled by appropriation acts and the outlays that result from that budget authority. In contrast, *mandatory* (or direct) spending is the budget authority provided by laws other than appropriation acts and the outlays that result from that budget authority, such as the more long-term rules for pensions and healthcare. US Congressional Budget Office (note 8).

Table 5.3. US outlays for the Department of Defense and total national defence, financial years 2000–2009

Figures are in US$ b. Years are financial years (running for 12 months from 1 Oct. of the previous year).

	2000	2001	2003	2005	2007	2008[a]	2009[a]
Outlays at current prices[b]							
DOD, military	281.1	290.2	387.2	474.1	529.8	583.1	651.2
Military personnel	76.0	74.0	106.7	127.5	128.8	137.4	129.1
O&M	105.8	112.0	151.4	188.1	216.6	225.1	241.5
Procurement	51.7	55.0	67.9	82.3	99.7	130.5	142.8
RDT&E	37.6	40.5	53.1	65.7	73.1	74.7	78.6
Military construction	5.1	5.0	5.9	5.3	7.9	10.2	15.1
Family housing	3.4	3.5	3.8	3.7	3.5	4.3	3.4
Other[c]	1.5	0.3	–1.6	1.5	0.2	0.8	40.8
DOE, military	12.1	12.9	16.0	18.0	17.1	17.8	18.2
Other, military	1.2	1.6	1.6	3.2	5.7	6.4	5.7
Total national defence	**294.4**	**304.8**	**404.8**	**495.3**	**552.6**	**607.3**	**675.1**
Outlays at constant (FY 2000) prices							
Total national defence	294.4	297.2	364.4	407.3	426.4	463.9	504.7
Outlays as a share of gross domestic product (%)							
Total national defence	*3.0*	*3.0*	*3.7*	*4.0*	*4.0*	*4.2*	*4.5*

DOD = Department of Defense; DOE = Department of Energy; FY = financial year; O&M = operations and maintenance; RDT&E = research, development, test and evaluation.

[a] Figures for 2008 and 2009 are estimates.

[b] Outlays are money spent in a given year (i.e. expenditure), as a result of budget authority provided.

[c] A negative number in this category is the result of difficulties in classifying budget activities according to function rather than to spending agency or organization. The high figure for 2009 is not explained in the source but is likely to be the result of difficulties in making a functional categorization of the FY 2009 supplemental appropriation for the DOD of $66 billion.

Source: US Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2009: Historical Tables* (Government Printing Office: Washington, DC, 2008), pp. 60–61, 125–26.

to the DOD intended to improve the transparency and reliability of DOD cost reporting.[15]

Furthermore, the conflicts in both Afghanistan and Iraq have also been more costly than other recent US military operations. The most important cause of the increasing size of war-related spending over the past few years has been the Bush Administration's adoption of a progressively broader definition of the 'global war on terrorism'. According to one comprehensive

[15] See e.g. Pickup, S. L., 'Global War on Terrorism: reported obligations for the Department of Defense', GAO-08-1128R, US Government Accountability Office (GAO), 15 Sep. 2008, <http://www.gao.gov/products/GAO-08-1128R>.

Table 5.4. Estimated funding for the 'global war on terrorism', financial years 2001–2008

Figures are Congressional Research Service estimates for budget authority, in US$ b., at current prices. Years are financial years (running for 12 months from 1 Oct. of the previous year).

	2001–2002	2003	2004	2005	2006	2007	2008	Total
Funding by agency								
DOD	33.0	77.4	72.4	102.6	116.8	165.0	181.2	748.6
Department of State/USAID	0.8	3.7	21.7	4.8	4.3	5.0	5.1	45.4
VA Medical	0.0	0.0	0.0	0.2	0.4	1.0	1.3	2.9
Total	**33.8**	**81.1**	**94.1**	**107.6**	**121.5**	**171.0**	**187.7**	**796.8**
Funding by operation								
Iraqi Freedom[a]	0.0	53.0	75.9	85.5	101.7	133.6	153.5	603.2
Enduring Freedom[b]	20.8	14.7	14.5	20.0	19.0	36.9	34.0	159.8
Noble Eagle[c]	13.0	8.0	3.7	2.1	0.8	0.5	0.2	28.3
Unallocated	0.0	5.5	0.0	0.0	0.0	0.0	0.0	5.5
Total	**33.8**	**81.1**	**94.1**	**107.6**	**121.5**	**171.0**	**187.7**	**796.8**
Annual change (%)	. .	*140*	*16*	*14*	*14*	*41*	*10*	

DOD = Department of Defense; USAID = US Agency for International Development; VA Medical = Veterans Affairs Medical funding.

[a] Operation Iraqi Freedom began in the autumn of 2002 with the build-up of troops for the Mar. 2003 invasion of Iraq and continued with counter-insurgency and stability operations.

[b] Operation Enduring Freedom covers the conflict in Afghanistan and other 'global war on terrorism' operations ranging from the Philippines to Djibouti that began immediately after the Sep. 2001 terrorist attacks on the USA.

[c] Operation Noble Eagle provides enhanced security for US military bases and other homeland security.

Source: Belasco, A., *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations since 9/11*, Congressional Research Service (CRS) Report for Congress RL33110 (US Congress, CRS: Washington, DC, 15 Oct. 2008), tables 1 and 2.

analysis of the war costs, it is impossible to estimate precisely how much funding for weapons procurement might be reasonably attributed to the conflicts in Afghanistan and Iraq and how much might be more appropriately attributed to long-term modernization requirements.[16] It argues that this is because, starting with the supplemental request for the 'global war on terrorism' in FY 2007, the DOD began taking a much more expansive view of the kinds of costs that could be covered through supplemental appropriations. New DOD guidance allowed supplementals to include any DOD efforts related to the 'global war on terrorism', and thus removed any principled distinction between what should be included in special war-

[16] Kosiak (note 13), p. v.

Table 5.5. US budget outlays, receipts, surplus or deficit and national debt, financial years 2000–2009

Figures are in US$ b. at current prices and for financial years (running for 12 months from 1 Oct. of the previous year). Figures in italics are percentages. Figures are as of March 2008.

	2000	2001	2003	2005	2007	2008[a]	2009[a]
Total outlays[b]	**1 789.2**	**1 863.2**	**2 160.1**	**2 472.2**	**2 730.2**	**2 931.2**	**3 107.4**
National defence	294.4	304.8	404.8	495.3	552.6	607.3	675.1
Debt interest payment (gross)	361.9	359.5	318.1	352.3	430.0	459.2	487.3
Debt interest payments (net)	222.9	206.2	153.1	184.0	237.1	243.9	260.2
Total receipts	**2 025.4**	**1 991.4**	**1 782.5**	**2 153.9**	**2 568.2**	**2 521.2**	**2 699.9**
Individual income taxes	1 004.5	994.3	793.7	927.2	1 163.5	1 219.7	1 259.0
Surplus or deficit	**236.2**	**128.2**	**–377.6**	**–318.3**	**–162.0**	**–410.0**	**–407.4**
On-budget[c]	86.4	–32.4	–538.4	–493.6	–343.4	–602.2	–611.1
Off-budget[c]	149.8	160.7	160.8	175.3	181.5	192.2	203.7
National debt at year end	5 628.7	5 769.9	6 760.0	7 905.3	8 950.7	9 654.4	10 413.4
As a share of GDP (%)	*58.0*	*57.4*	*62.5*	*64.6*	*65.6*	*67.5*	*69.3*
National defence as a share of government outlays (%)	*16.5*	*16.4*	*18.7*	*20.0*	*20.2*	*20.7*	*21.7*
Share of discretionary spending (%)							
National defence	*48.0*	*47.1*	*49.1*	*51.0*	*52.7*	*53.1*	*55.4*
Education	*5.5*	*5.8*	*6.2*	*6.1*	*5.7*	*5.5*	*5.1*
Health	*4.9*	*4.7*	*5.4*	*5.2*	*5.0*	*4.8*	*4.6*
Income security[c]	*6.7*	*6.8*	*6.2*	*5.6*	*5.4*	*5.2*	*4.8*

[a] Figures for 2008 and 2009 are estimates.

[b] Outlays are money actually spent in a given year (i.e. expenditures), as a result of budget authority provided.

[c] The on-budget surplus or deficit results from the revenues and outlays of the ordinary US Government budget. The off-budget surplus or deficit results from off-budget spending and revenues, which are excluded from the budget totals by law. Examples of off-budget revenues and outlays are those of the Social Security trust funds (for pensions), the Medicare trust fund (for healthcare), and the transactions of the Postal Service.

[d] Income security includes general and government employee retirement and disability insurance (excluding social security), unemployment compensation, housing assistance and food assistance.

Source: US Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2009: Historical Tables* (Government Printing Office: Washington, DC, 2008), pp. 22, 60–61, 31, 128, 154–55.

related appropriations and what should be included in the base defence budget.[17] Since then, supplemental appropriations have included substantial funding for programmes and activities unrelated to the military operations in Afghanistan and Iraq, which makes it difficult to assess the long-term costs and budgetary consequences of these activities and has under-

[17] England, G., Deputy US Secretary of Defense, 'Ground rules and process for FY '07 spring supplemental', 25 Oct. 2006, cited in Kosiak (note 13), p. 53.

mined and weakened the DOD's long-term planning and budgeting process.[18]

The impact of military expenditure on the US budget

The budgetary impact of the strong increase in US military spending depends partly on how it is financed. As pointed out above, the Bush Administration used an entirely different approach from previous administrations for financing the conflicts in Afghanistan and Iraq.[19] While earlier US war costs have, with a few exceptions, been financed through a combination of tax increases, cuts in non-defence spending and borrowing, the Bush Administration neither raised taxes nor implemented major cuts in non-military spending to finance the conflicts. Instead, they were financed primarily by borrowing (see table 5.5). However, while non-defence spending was not cut, it represented a declining share of total outlays, as national defence as a share of total outlays increased from 17 per cent in FY 2000 to an estimated 22 per cent in FY 2009. National defence as a share of discretionary spending increased even more, from 48 to 55 per cent.[20] Thus, in relative terms there was indeed some trade-off between defence and non-defence spending. Among the main non-defence categories, the trade-off was greatest for income security, but less significant for spending on health and education.

The use of borrowing to finance the conflicts in Afghanistan and Iraq has taken place simultaneously with the transformation of an annual budget surplus of $236 billion in FY 2000 to an estimated deficit of $407 billion in FY 2009. The on-budget deficit is even greater, suggesting that the increase in the overall deficit has been mitigated by continued surpluses in the social security system, as reflected in the figures for the off-budget deficit (see table 5.5). As a result of the soaring budget deficit, the USA's national debt has almost doubled from $5.6 trillion in FY 2000 to an estimated $10.4 trillion in FY 2009, which is equivalent to 69 per cent of GDP. While the increase in military expenditure is not the only reason for the increases in the US budget deficit and national debt, it has clearly made a significant contribution.[21]

The deepening of the financial crisis in the second half of 2008 and the policies to mitigate its effects will result in a further increase in the budget deficit. According to CBO projections released in January 2009, the budget deficit will increase from $455 billion, or 3.2 per cent of GDP, in FY 2008

[18] Kosiak (note 13), pp. 52–58.
[19] Kosiak (note 13), pp. 59–68.
[20] On the term discretionary see note 14.
[21] However, due to the reduction of interest rates, net interest payment as a share of US Government outlays has not increased.

(which is slightly higher than the March 2008 projections given in table 5.5) to a staggering $1.2 trillion, or 8.3 per cent of GDP, in FY 2009.[22] While this projection includes the estimated cost of the government take-over of two government-sponsored mortgage enterprises in 2008, it does not include the effects of any future legislation, such as an economic stimulus package (as proposed by President Obama) or additional war-related funding. The latter is likely to lead to significant additions to the deficit, since the CBO projections were based on extrapolations of outlays from budget decisions by January 2009, which were nearly $120 billion lower than total war-related appropriations for FY 2008 and additional supplemental appropriations are anticipated later in the year.[23] In any event, the FY 2009 budget deficit is likely to exceed by far the previous post-World War II record of 6.0 per cent of GDP in 1983.[24]

While some of the announced changes in national security policy of the Obama Administration are likely to reduce the high level of US military spending, this will take some time. According to two budget scenarios for future deployment of US forces to Afghanistan, Iraq and elsewhere, provided in the CBO outlay projections for the period 2010–19, annual outlays would begin to fall compared with current projections only in 2012 or 2016, depending on the rate of troop withdrawals.[25]

Speaking before the Senate Armed Services Committee in January 2009, the US Defense Secretary, Robert Gates, stated that the 'spigot of defense funding opened by 9/11 is closing' and that the budgetary pressures resulting from the economic crisis would impose 'hard choices' on the armed forces.[26] However, for the reasons discussed, significant cuts in military expenditure will be difficult to achieve in the short term.

IV. Europe

Military expenditure in Europe totalled $413 billion in 2008, an increase of 1.4 per cent in real terms over 2007.[27] Spending in Eastern Europe increased by 11 per cent, continuing a long-term rising trend, while in Western and Central Europe it increased by 0.6 per cent. Between 1999 and

[22] US Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2009 to 2019* (US Congress: Washington, DC, Jan. 2008), p. 16. In most years, the amount of debt that the US Treasury issues roughly equals the annual budget deficit, although a number of other factors also affect the size of the debt. However, for FYs 2008 and 2009 the Treasury's actions to stabilize the financial markets resulted in substantial additional borrowing needs ($300 billion in FY 2008 and $200 billion in FY 2009) on top of the borrowing necessary to finance the budget deficit.

[23] US Congressional Budget Office (note 22), p. 13.

[24] US Congressional Budget Office (note 22), p. 11.

[25] US Congressional Budget Office (note 22), pp. 21–24.

[26] Gates, R. M., Secretary of Defense, Submitted statement, Armed Services Committee, US Senate 27 Jan. 2009, <http://armed-services.senate.gov/e_witnesslist.cfm?id=3614>.

[27] See appendix 5A, table 5A.1.

2008 the regional total increased by 14 per cent in real terms, with growth of 174 per cent in Eastern Europe and of 4.5 per cent in Western and Central Europe.

Western and Central Europe

Western and Central Europe's fairly flat military spending trend continued in 2008, the result of the lack of a serious military threat, modest economic growth and the desire to minimize budget deficits. The largest percentage increases were mostly made by recent or prospective NATO members: military spending increased by more than 10 per cent in Romania and Slovenia, which joined NATO in 2004, and in Albania and Croatia, which are expected to join in 2009.[28] A common pattern in much of the region is of significant shifts of resources within military budgets towards equipment and research and development, as forces seek to adapt themselves to more interventionist, expeditionary missions and to exploit new information and communication technologies.

Military budgets for 2008 were determined well before the scale of the global financial crisis emerged in September 2008. However, a number of countries—including Italy, Latvia, Lithuania, Serbia, Spain and Sweden—are planning budget cuts for 2009, often as a result of these economic conditions. In Sweden's case, this follows a 6.6 per cent cut in 2008 that prompted the resignation of the Defence Minister, Mikael Odenberg.[29]

Despite increasing its military expenditure by 3 per cent in real terms in 2008 and by 21 per cent since 1999, the United Kingdom faced a significant military budget shortfall in 2008. This was due partly to involvement in two conflicts, in Afghanistan and Iraq, which are projected to have cost a total of £12 billion ($18 billion) by 2009.[30] It is also partly due to commitments to numerous developmental weapon projects that lack clear funding plans. Government officials put the shortfall at £1.5–2 billion for the period 2009–11.[31] To close this gap, the government opted in 2008 to reduce or postpone, rather than cancel, a number of projects.[32]

[28] 'NATO to take in Croatia, Albania', BBC News, 9 July 2008, <http://news.bbc.co.uk/2/7497350.stm>.

[29] 'Odenbergs avgång en protest mot nedskärningar' [Odenberg's resignation a protest against cuts], *Dagens Nyheter*, 5 Sep. 2007.

[30] British House of Commons, *Hansard*, 8 July 2008, columns 1457W–1458W; and Agence France-Presse, 'Wars to cost Britain 12 billion pounds by '09', *Defense News*, 8 July 2008.

[31] Ripley, T., 'UK industry chiefs move to mitigate budget budget cuts', *Jane's Defence Weekly*, 30 Jan. 2008; Norton-Taylor, R., 'Defence chiefs plan equipment cuts amid £2bn hole in budget', *The Guardian*, 16 Sep. 2008; and Chuter, A., 'U.K. industry expects delays, not cancellations', *Defense News*, 18 Nov. 2008.

[32] Darling, D., 'Dark days for U.K. defense as program delays are announced', Forecast International, 12 Dec. 2008, <http://emarketalerts.forecast1.com/mic/eabstract.cfm?recno=154919>.

France, which published a new defence White Paper in June 2008, reduced its military spending slightly in 2008. This is a result of efforts to minimize the budget deficit, which was nonetheless forecast to exceed in 2008 the limit of 3 per cent of GDP agreed by European Union (EU) member states. Ministers made clear that the Ministry of Defence was, like other departments, expected to find savings, and 6000 job cuts were expected in 2008. In addition, some equipment projects were put on hold in anticipation of the White Paper.[33]

The White Paper outlined a new overall national security strategy for the coming 15 years, in the context of a world that was 'not necessarily more dangerous, but certainly less predictable, less stable and more contradictory' and where the traditional boundary between 'internal' and 'external' security was obsolete.[34] The White Paper sets out five key strategic tasks for the military: knowledge and anticipation, prevention, deterrence, protection, and intervention.[35] This implies a move away from territorial defence as the military's primary task, in favour of more expeditionary tasks in cooperation with the USA and other NATO and EU partners. In this regard, the most striking proposal was for France to rejoin NATO's military command structures.[36]

French force structures are to be reorganized, with a reduction in permanent deployments overseas and a reduction of troop numbers of 46 500 by 2014 (out of 271 000 at present), and another 7500 from civilian posts. The goal is to be able to deploy a force of 30 000 troops within six months, and sustain it for one year.[37] New equipment spending will focus on command, control, communications, computers, intelligence, surveillance and reconnaissance (C^4ISR) technology—in particular space technology, which is to receive a doubling of spending—force protection, strategic mobility, submarine warfare, and deep strike capabilities. However, lower numbers of certain new major weapons platforms are to be acquired.[38]

According to the White Paper, the French military budget will remain constant in real terms up to 2012 and will thereafter increase by 1 per cent a year in real terms up to 2020. This is an exception to plans to hold total

[33] Chuter, A. and Tran, P., 'Hard budget choices freeze U.K., French equipment picks', *Defense News*, 14 Apr. 2008; and Budget deficit data from International Monetary Fund (IMF), World Economic Outlook Database, Oct. 2008.

[34] French Government, *Défense et sécurité nationale: Le livre blanc* [Defence and national security: the White Paper] (Odile Jacob: Paris, June 2008). English translation: French Government, *The French White Paper on Defence and National Security* (Odile Jacob: New York, 2008), pp. 14, 55.

[35] French Government (note 34), pp. 60–61.

[36] French Government (note 34), pp. 101–104.

[37] French Government (note 34), pp. 279, 305.

[38] French Government (note 34); and Hébert, J.-P., 'L'incertaine logique économique du livre blanc' [The uncertain economic logic of the White Paper], Centre Interdisciplinaire de Récherches sur la Paix et d'Etudes Stratégiques (CIRPES), 16 June 2008, <http://cirpes.net/article232.html>.

government spending constant in nominal terms until 2012.[39] Within the military budget, equipment expenditure is to increase from an annual average of €15.5 billion ($22.7 billion) in constant 2008 prices over the period 2003–2008 to an average of €18 billion ($26.4 billion) over the period 2009–20.[40] Despite the subsequent outbreak of the global financial crisis in September 2008, the draft military planning law (*loi de programmation militaire*) presented in October, which sets out military spending plans for 2009–14, has kept to the spending levels proposed in the White Paper for 2009.[41]

The White Paper represents a significant break with past French military thinking. It has been criticized as aping an 'Americanized' view of the world: disparate threats are gathered together without analysis or political context, and a unilateralist, 'securitized' response is offered to these threats—both in terms of wars overseas and harsh internal policies towards immigrants and terrorism suspects.[42]

Eastern Europe

While military expenditure in Eastern Europe increased by 11 per cent in real terms in 2008, only three of the seven states—Armenia, Azerbaijan and Russia—increased their spending. The other four—Belarus, Georgia, Moldova and Ukraine—decreased theirs.

After several years of rapidly increasing military spending, Georgia decreased its military budget in 2008 to alleviate the military burden on its strained budget.[43] The reduction in spending in 2008 came despite the con-

[39] French Government (note 34), pp. 276–78. The White Paper was published before the outbreak of the global financial crisis, in response to which an economic stimulus package has been announced involving €26 billion ($38 billion) of spending on support for industry, public sector investment in infrastructure, transport, housing, education, research and other areas including the military, measures to boost employment, and social security. French Prime Ministry, 'Stimulus package: 1,000 projects across France', 10 Feb. 2009, <http://www.premier-ministre.gouv.fr/en/information/latest_news_97/stimulus_package_1_000_62594.html>.

[40] It has been pointed out that this increase appears to be dependent on savings being achieved in other areas. Hébert (note 38).

[41] French Ministry of Defence, Projet de loi relatif à la programmation militaire pour les années 2009 à 2014 et portant diverses dispositions concernant la défense [Draft military planning law 2009–2014 and diverse defence measures], DEFX0824148L/Bleue-1, <http://www.defense.gouv.fr/defense/enjeux_defense/politique_de_defense/programmations/>; and Zecchini, L., 'La loi de programmation militaire 2009–2014 veut ignorer la crise' [The military planning law 2009–2014 ignores the crisis], *Le Monde*, 30 Oct. 2008.

[42] See e.g. Joxe, A. 'Cohérence du Livre Blanc sur la sécurité nationale' [Consistency of the White Paper on national security], Centre Interdisciplinaire de Récherches sur la Paix et d'Etudes Stratégiques (CIRPES), 29 June 2008, <http://cirpes.net/article229.html>. The opposition Socialist Party also levelled similar criticisms. Zecchini, L. 'Le Livre blanc sur la défense revoit à la baisse le format des armées' [The Defence White Paper reduces the size of armies], *Le Monde*, 16 June 2008.

[43] Brunnstrom, D, 'Georgia PM vows to cut defense spending', *Defense News*, 5 Dec. 2007.

flict with Russia in August 2008 and a supplementary budget in October aimed at rebuilding military infrastructure.[44]

Russia's military budget in 2008 was 13 per cent higher in real terms than actual expenditure in 2007. The budget was revised four times during the year following the conflict with Georgia, the outbreak of the global financial crisis and the fall in oil prices.[45] Despite the crisis, the official national defence budget for 2009, approved by the lower house of the Russian Parliament (the Duma) in November 2008, increased by over 20 per cent to 1.3 trillion roubles ($50 billion).[46] There have been reports that government spending will be cut by 15 per cent following the outbreak of the financial crisis; but the State Defence Order for 2009–11 announced in December 2008—which covers all material inputs (i.e. all supplies) for military and paramilitary forces and totals 4 trillion roubles ($142 billion) over the three years—includes a 28 per cent increase for 2009.[47] Within the military budget, the Russian Prime Minister, Vladimir Putin, intends to raise the share of 'development' expenditure to 70 per cent, compared with 30 per cent in 2006.[48] The government has also put together a $5.4 billion package of emergency aid for the Russian arms industry, including increased advance payments for equipment procured, loan guarantees and equity injections.[49]

The high priority given to the military by Putin and Russian President Dmitry Medvedev reflects a long-standing goal of reforming and modernizing Russia's armed forces and arms industry.[50] This goal was sharpened by the experiences of the conflict with Georgia, which exposed weaknesses in Russia's military preparedness and its lack of modern information, com-

[44] 'Saakashvili: extra defense spending not for arming', *Civil Georgia*, 19 Sep. 2008, <http://www.civil.ge/eng/article.php?id=19558>. On the Georgia–Russia conflict see chapter 2, section V, in this volume.

[45] See Zatsepin, V., 'Defense in the 2008 federal budget', *Russian Economy: Trends and Perspectives November 2008*, Monthly bulletin (Institute for the Economy in Transition: Moscow, Nov. 2008), p. 57.

[46] See Cooper (note 45); Russian Ministry of Finance, Federal budget, <http://www1.minfin.ru/ru/budget/federal_budget/> (in Russian); and 'Russia military spending to hit $50 bln in 2009', Ria Novosti, 16 Oct. 2008, <http://en.rian.ru/russia/20081016/117784473.html>. The Russian national defence budget excludes many items of military expenditure, including military pensions, spending on military housing, health and education, paramilitary forces, and some military research and development. The SIPRI estimate for total Russian military expenditure is based on an analysis by Professor Julian Cooper of the University of Birmingham. See Cooper (note 45).

[47] Netreba, P., [Industrial mobilization], *Kommersant*, 23 Dec. 2008, English translation, Russian Government, Media review, 23 Dec. 2008, <http://premier.gov.ru/eng/premier/press/ru/1679.html>.

[48] The rest of the budget is current expenditure. Bogdanov, S., 'Resilience of the Russian economy', *Moscow Krasnaya Zvezda*, 8 July 2008, Translation from Russian, World News Connection.

[49] Anderson, G., 'Will $5.4 billion package keep Russian reform on track?', *Jane's Defence Industry*, 9 Dec. 2008.

[50] On the post-cold war decline of the Russian arms industry see Cooper, J., Developments in the Russian arms industry', *SIPRI Yearbook 2006: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2006).

munications and precision weapon technology.[51] Planned procurements over the coming years cover all categories of major weapons. Military modernization plans outlined in 2008 also include cuts in the number of senior officers while increasing officer pay, and the reorganization of military structures to improve mobility and rapid reaction capability.[52] However, several commentators have expressed doubts about the capacity of the Russian arms industry to match the goals set out in the funding and procurement plans since it is hampered by ageing machinery.[53]

The plans also depend on government budgets being maintained at current levels. Russia's economy was said to be in recession already by the end of 2008, and it is heavily dependent on commodity exports, whose prices have fallen sharply. The 2009 budget was set on the basis of a projected average oil price for 2009 of $95 a barrel, compared to levels of $35–50 in January 2009.[54] Nonetheless, statements by Russia's leaders suggest that they place a high priority on maintaining their plans for the military despite these economic problems.[55]

V. Asia and Oceania

Combined military expenditure in Asia and Oceania reached $248 billion in 2008, an increase of 5 per cent in real terms. This continues a long-lasting trend in the region, with spending having increased by 52 per cent since 1999. The increasing trend is seen in all subregions.[56] China, India, South Korea and Taiwan accounted for the bulk of the increase while Japan, Indonesia and Pakistan made significant reductions.

[51] Saradzhyan, S., 'Reforming Russia's military', International Relations and Security Network (ISN), Security Watch, 28 Oct. 2008, <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?id=93199>; and Felgenhauer, P., 'Will more money help buy more modern weapons?', *Eurasian Daily Monitor*, 18 Sep. 2008.

[52] Ritchie, M. 'Russian procurement budget soars amid uncertain strategic posture', Forecast International, 23 Dec. 2008, <http://emarketalerts.forecast1.com/mic/eabstract.cfm?recno=155247>; 'Russia's military spending jumping—but can its industry?', *Defense Industry Daily*, 25 Sep. 2008; Saradzhyan (note 51); and 'Army pay to soar under 3-year plan', *Moscow Times*, 20 Oct. 2008

[53] Felgenhauer (note 51); 'Russia's military spending jumping—but can its industry?' (note 52); and 'Russia confirms recession to come', BBC News, 12 Dec. 2008, <http://news.bbc.co.uk/2/7779132.stm>.

[54] Sestanovich, S. 'Russia and the global economic crisis', Expert Brief, Council on Foreign Relations, 25 Nov. 2008, <http://www.cfr.org/publication/17844/>; and Financial Times, Market data, 12 Feb. 2009, <http://markets.ft.com/tearsheets/performance.asp?s=us@cl.1>.

[55] 'Putin outlines measures to support defence sector', Moscow Interfax, 15 Jan. 2009, Translation from Russian, World News Connection; and Agence France-Presse, 'Russia to fully finance army despite crisis', *Defense News*, 27 Jan. 2009.

[56] While the data for Central Asia is too weak to make any meaningful assessment of the regional increase, it is clear that spending has increased considerably over the past decade. See e.g. 'Arms spending of post-Soviet Central Asian countries rose by 50% in 2007', Ferghana.Ru, 23 Jan. 2007, <http://enews.ferghana.ru/article.php?id=1808>.

East Asia

In 2008 military spending in East Asia totalled $189 billion dollars, representing a 5.7 per cent real increase over 2007 and 56 per cent since 1999. East Asia's military expenditure has increased continuously since at least 1988.[57] The three main contributors to the rapid increase in 2008 were China, South Korea and Taiwan, which increased spending by $5.6 billion, $1.7 billion and $1.7 billion, respectively. In relative terms, China, Taiwan and Thailand increased the most, by 10, 22 and 17 per cent, respectively.

SIPRI estimates China's military expenditure to have been 590 billion yuan ($84.9 billion) in 2008, an increase of 10 per cent in real terms over 2007.[58] China both has a massive share of total East Asian military spending and, with an annual average increase of almost 13 per cent during the past 10 years, is the major contributor to the subregional increase. In January 2009 China presented its 2008 Defence White Paper, the most detailed since the first was published in 1995.[59] As with earlier editions, the White Paper states that the bulk of the additional funds for the People's Liberation Army (PLA) has gone to personnel costs and to cover increased prices.[60] The White Paper does not discuss arms acquisitions, although China is continuing to acquire both domestic and foreign arms as it seeks to equip its armed forces for conditions of modern 'informationalized' warfare.[61] As well as further development of combat aircraft and air defence systems, major programmes include short- and medium-range missiles (aimed primarily at Taiwan), submarines and space and satellite technology.[62]

[57] The SIPRI Military Expenditure Database has consistent military expenditure data back only to 1988. The increasing trend may have started prior to 1988.

[58] China's official military budget in 2008 was 418 billion yuan, but this excludes numerous significant items, including arms imports. The actual level of China's military spending is a matter of considerable debate, with Western researchers putting the figure at 40–70% higher than the military budget, and some Western intelligence analysts suggesting a figure 2–3 times higher than the budget. E.g. the US DOD estimates Chinese military spending for 2007 at $97–139 billion, compared to an official budget of $46 billion. US Department of Defense (DOD), *Military Power of the People's Republic of China 2008*, Annual report to Congress (DOD: Washington, DC, 2008). Estimates differ both in their assessments of what items should be excluded and in their method for calculating the dollar values for China's military spending. For a discussion of the issues relating to Chinese military spending, including the basis of SIPRI's estimate see Wang, S., 'The military expenditure of China, 1989–98', *SIPRI Yearbook 1999: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 1999).

[59] Chinese State Council, *China's National Defense in 2008* (Information Office of the State Council of the People's Republic of China: Beijing, Jan. 2009).

[60] Chinese State Council (note 59), chapter XII; and Chinese State Council, *China's National Defense in 2006* (Information Office of the State Council of the People's Republic of China: Beijing, Dec. 2006), chapter IX.

[61] 'Informationalized' warfare involves the extensive use of high-tech information technology, precision weapons and communications technology. Expenditure on arms import is not included in China's official military budget, although an estimate for this is included in SIPRI's estimate.

[62] Spencer, R., 'China's military ambition fuels Asian arms race', *Daily Telegraph*, 13 Sep. 2008; and Kopp, C., 'Advances in PLA air defense capabilities challenge strategic balance in Asia', *China*

In Taiwan, the change of government in May 2008 and the subsequent redirection of the country's foreign and security policies had significant consequences for the armed forces, arms purchases and military funding.[63] While President Ma Ying-jeou has achieved improved relations with mainland China, he also stated an ambition to increase military spending to 3 per cent of GDP.[64] However, the impact of the global financial crisis has made the goal of increased spending less realistic (although a sharply falling GDP may mean that military spending as a share of GDP share will rise without there being an increase in actual spending). This has prompted fears among some Taiwanese analysts that the military will be unable to defend the island.[65] The US Government announced in 2008 that it had approved arms sales to Taiwan worth \$6.4 billion. Parts of this sale were originally proposed by the USA in 2001 but were stalled for seven years by opposition from both the Taiwanese Parliament (partly on financial grounds) and from China.[66]

Following the military coup in September 2006, Thailand increased its military spending by 25 per cent in real terms in 2007 and by 17 per cent in 2008. In the wake of the hostilities on the border with Cambodia in 2008, both Thailand and Cambodia announced sharply increased military budgets for 2009.[67]

Indonesia decreased its military spending in 2008 by 7 per cent in real terms. The main reasons given were a lack of resources and high oil prices. At the same time the Ministry of Finance announced a major loan from a French investment bank to cover 85 per cent of the cost of buying six Sukhoi aircraft from Russia, a deal which had been previously deferred due to a lack of funds.[68] A further decrease is planned for 2009, with the global financial crisis a factor.[69]

Japan also decreased its military spending in 2008, by \$709 million or 1.6 per cent in real terms, continuing a gradual decrease since 2003, more

Brief vol. 8, no. 20 (23 Oct. 2008). On China's nuclear capable missile forces see chapter 8, section V, in this volume.

63 'Highlights: Taiwan Ministry of National Defense report', World News Connection, 14 Apr. 2008.

64 Phipps, G., 'Taiwan president to re-open peace talks with China', *Jane's Defence Weekly*, 2 Apr. 2009.

65 Anderson, G. et al., 'Over the horizon: 2008 annual defence report', *Jane's Defence Weekly*, 10 Dec. 2008, p. 38.

66 Phipps, G., 'US deal breaks "freeze" on arms sales to Taiwan', *Jane's Defence Weekly*, 15 Oct. 2008.

67 Madra, E., 'Cambodia doubles military budget after Thai clash', Reuters, 29 Oct. 2008, <http://uk.reuters.com/article/worldNews/idUKTRE49S23V20081029>; and 'Bt115-bn budget for defence as transport takes a Bt622m cut', *The Nation* (Bangkok), 12 Dec. 2006.

68 Grevatt, J., 'Indonesia agrees loan for Russian fighter purchases', *Jane's Defence Weekly*, 1 Oct. 2008; and Mahadzir, D., Pape, A. and Caffrey, C., 'Facing the future', *Jane's Defence Weekly*, 9 Apr. 2008, p. 35.

69 'Indonesian military told to set priority scale following defense budget cut', *Jakarta Detikcom*, 1 Dec. 2008, Translation from Indonesian, World News Connection.

or less in line with changes in its GDP. However, for the 2009 budget the Japanese military requested a spending level above 1 per cent of GDP for the first time. Japan has strictly adhered to a limit of 1 per cent of GDP for military spending (excluding pensions), and any change would be a significant break with tradition. Given the financial situation, this may nonetheless mean a decrease in absolute terms.[70]

South Asia

Military expenditure in South Asia increased by 3.3 per cent in real terms in 2008, to a total of $37.3 billion. Indian military spending—which increased in 2008 by 5 per cent in real terms to $30 billion—dominates both the total and the trend of this subregion. Over the 10-year period 1999–2009, South Asian military expenditure increased by 41 per cent.

Sri Lanka, with its 7.7 per cent real increase, was the South Asian country that increased its military expenditure the most. This increase was linked to the Sri Lankan Government's military offensive against the Liberation Tigers of Tamil Eelam (LTTE) separatist movement in the north.[71]

Following the transfer of power to a civilian government in March 2008, Pakistan's 2008/2009 defence budget decreased. For the first time since 1965, the budget includes a detailed breakdown of the proposed spending, instead of just an overall total.[72] It includes information on spending for each branch of the military and is also divided into economic subcategories.[73] Nonetheless, transparency in the Pakistani budgetary process in general and in the military part in particular remains limited.[74]

Pakistan is in the midst of a process of military transformation aimed at developing its counter-insurgency capability in addition to improving traditional military capabilities, in response to a growing threat from Taliban forces along the border with Afghanistan.[75] This transition is progressing slowly, largely due to a lack of funding. The acquisition of additional precision weapons and the modernization of the Pakistani Air Force are cen-

[70] Agence France-Presse, 'Japanese military seeks budget increase', *Defense News*, 29 Aug. 2008.

[71] Ramachandran, S., 'Sri Lanka takes off the gloves', *Asia Times*, 5 Jan. 2008; Athas, I., 'Sri Lanka vows to crack down on Tamil Tigers', *Jane's Defence Weekly*, 9 Jan. 2008; and Anderson et al. (note 65), p. 37. On the conflict see chapter 2, section IV in this volume. On arms transfers to Sri Lanka see chapter 7, section III, in this volume.

[72] Hasan, S. S., '"Historic" defence move', BBC News, 17 Jun. 2008, <http://news.bbc.co.uk/2/7459867.stm>.

[73] The latter breakdown was for both 2007 and 2008 as well as a preliminary estimate of actual spending for 2007. Pakistani Ministry of Finance, 'Budget in Brief', 11 June 2008, <http://www.finance.gov.pk/finance_federal_budjet.aspx>.

[74] E.g. in 1999 military pensions were removed from the definition of military expenditure and no alternative source of information for this item has been provided since then.

[75] On the conflict in Afghanistan see chapter 4 in this volume.

tral to the transformation.[76] In 2006 Pakistan requested new and refurbished F-16 aircraft from the USA. Because of financial constraints after the 2005 Kashimir earthquake, Pakistan reduced the planned order of 36 new aircraft to 18—lowering the value of the deal from $5.1 billion to $3.1 billion.[77]

VI. Africa

Military expenditure in Africa increased by 10.2 per cent in real terms in 2008 to reach $25.8 billion. This is the highest increase since 2004, when military expenditure rose by 11 per cent in real terms following a small decrease in 2003. Over the past decade, military spending in Africa has increased by 40 per cent due mainly to increases in North Africa. The two largest spenders are Algeria and South Africa, respectively, with 20 and 15 per cent of African military spending.

Despite African military spending reaching a new high, the average military burden (i.e. military expenditure as a share of a country's GDP) has decreased over the past decade. On average, military spending in African countries was 1.8 per cent of GDP in 2007, down from 3.7 per cent in 1999. A few countries had shares well above the 2007 average, such as Burundi (4.9 per cent), Djibouti (4.1 per cent) and Angola (3.9 per cent). The military burden of some countries—including Angola, Burundi, Ethiopia, Rwanda and Sierra Leone—has fallen heavily since 1999 (e.g. Angola's was 17.3 per cent).[78] However, no data is available for 2007 for some of the countries with the highest military burdens in earlier years, including Eritrea whose military burden was 34.4 per cent in 1999. Data for most countries in Africa should be viewed with caution as many have significant off-budget expenditure.[79] The impact of armed conflict on military expenditure is also not always fully reflected in the available data.

In some countries, pressure from international institutions to improve budget balances has lowered the military burden.[80] The decreasing economic burden of military expenditure also reflects rising GDP growth rates across the region, both in oil and resource exporters and in non-resource-

[76] Gill, A., 'Retooling Pakistan Army', Asian Tribune, 17 Feb. 2008, <http://www.asiantribune.com/?q=node/9655>.

[77] Camp, D., US Department of State, 'Defeating al-Qaeda's Air Force: Pakistan's F-16 program in the fight against terrorism', Statement before the US House of Representatives Foreign Affairs Subcommittee on South Asia, 16 Sep. 2008, <http://2001-2009.state.gov/p/sca/ci/af/2008/109757.htm>.

[78] See appendix 5A, table 5A.4.

[79] On military budgeting practices in Africa see Omitoogun, W. and Hutchful, E. (eds), SIPRI, *Budgeting for the Military Sector in Africa: The Processes and Mechanisms of Control* (Oxford University Press: Oxford, 2006).

[80] McDonald, C. and Drummond, P., 'Africa growing rapidly, but faces risks', *IMF Survey*, vol. 37, no. 3 (Mar. 2008).

rich countries.[81] In 2007 Africa's economy grew at its fastest rate in decades, by 6.5 per cent, partly due to rising oil production and prices, high global demand for commodities, and debt relief packages to many countries. Greater capital flows, particularly from emerging investors such as China, also contributed to the growth.[82]

Algeria

Algeria is an example of a country whose military spending has increased sharply over the past 10 years while military spending as a share of GDP has fallen due to high economic growth.[83] Algeria, with its large oil and gas reserves, is a regional power in North Africa and it has been developing its political influence by becoming a main ally of the USA in the 'global war on terrorism'.

Military expenditure in Algeria in 2008 is estimated to have been $5.2 billion, the highest in Africa. This represents an 18 per cent increase in real terms over 2007, the largest increase over the past 10 years. As in previous budgets, allocations for national defence were higher than for any other sector; resources allocated for health were less than half those for the military. Major arms deals signed by Algeria since 2002–2004, including those for a large quantity of Russian military hardware, reflect this prioritization of the military.[84] However, over the period 1999–2007 the military burden in Algeria has fallen from 3.8 per cent to 3.0 per cent. This is the result of strong economic growth driven mostly by high oil and gas production. Algeria produces 13 per cent of Europe's gas supplies and 1.46 million barrels of oil per day, and their prices have reached record peaks in recent years.[85]

Two specific factors explain Algeria's prioritization of the military.[86] First, the increasing threat posed by attacks from al-Qaeda in the Islamic Maghreb (AQIM) has put pressure on the Algerian security forces.[87]

[81] International Monetary Fund (IMF), *Regional Economic Outlook: Sub-Saharan Africa*, World Economic and Financial Surveys (IMF: Washington DC, Oct. 2008), p. 25.

[82] McDonald and Drummond (note 80).

[83] 'Country focus: Algeria', *Finance and Development*, vol. 45, no. 2 (June 2008).

[84] Ritchie, M., 'Revised forecast indicates signifcant [*sic*] growth in Algerian defence spending', Forecast International, 26 Mar. 2008, <http://emarketalerts.forecast1.com/mic/eabstract.cfm?recno=145893>. On the arms deals with Russia see chapter 6, section II, and chapter 7, section II, in this volume.

[85] England, A., 'Algeria fears tightening grip of al-Qaeda', *Financial Times*, 22 Aug. 2008; 'Gas prices: worse than '81 oil shock', CNN Money, 27 May. 2007, <http://money.cnn.com/2007/05/21/news/economy/record_gas_monday/>; and 'Oil hits $100 barrel', BBC News, 2 Jan. 2008, <http://news.bbc.co.uk/2/7083015.stm>.

[86] Ritchie (note 84).

[87] AIQM, which was formerly known as the Salafist Group for Preaching and Combat (Groupe Salafiste pour la Prédication et le Combat, GSPC), participated in Algeria's civil war fighting the secular Algerian Government. In 2006 it declared its allegiance to al-Qaeda and made Algeria the epicentre of Islamic terrorism in North Africa. 'Intelligence brief: al-Qaeda's new strategy in North

Between 2006 and 2008 several hundred people were killed by terrorists attacks in Algeria, including bombings of UN installations, the prime minister's office and police stations, and kidnappings of Western citizens.[88] The government's response to this low-intensity insurgency has been mainly military, by raising the operational military budget. The emergence of a group like AQIM—which has declared its intention to attack Western targets and send fighters to Iraq[89]—has given the conflict in Algeria an international dimension and provided the military with further arguments to justify its importance.[90]

Second, there is strong military influence in Algerian politics. The Algerian military is a direct successor of the Armée de Libération Nationale (ALN, National Liberation Army), the armed wing of the Front de Libération National (FLN, National Liberation Front) during the Algerian war of independence. Since independence, the revolutionary elite composed of members of the FLN and the ALN has dominated politics and the position of president has consequently been weak.[91] While President Abdelaziz Bouteflika's main agenda has been to bolster the president's position by trying to demilitarize the Algerian Government, he has sought to keep the military's support—which he needs as he is seeking to alter the constitution to run for a third presidential term—with high defence budgets and large military equipment deals.[92]

VII. South America

Reported military spending in South America rose to $48.1 billion in 2008, an increase of 6 per cent in real terms, the same rate as in 2007. At 50 per cent, the rate of increase for the 10-year period 1999–2008 is almost double that for the decade 1990–99. Brazil, with 48 per cent of the South American total, is by far the largest military spender in the region and thus has a big influence on the regional trend. Colombia, the second largest spender, also

Africa', Power and Interest News Report, 16 Apr. 2007, <http://www.pinr.com/report.php?ac=view_report&report_id=641>.

88 England (note 85); and Porter, G. D., 'Islamist terrorism and energy sector security in Algeria', *Terrorism Monitor*, vol. 5, no. 12 (21 June 2007).

89 Hunt, E., *Islamist Terrorism in Northwestern Africa: A 'Thorn in the Neck' of the United States?,* Policy Focus no. 65 (Washington Institute for Near East Policy: Washington, DC, Feb. 2007), p. vii; and Hansen, A. and Vriens, L., 'Al-Qaeda in the Islamic Maghreb (AQIM) or L'Organisation Al-Qaïda au Maghreb Islamique (Formerly Salafist Group for Preaching and Combat or Groupe Salafiste pour la Prédication et le Combat)', Backgrounder, Council on Foreign Relations, 31 July 2008, <http://www.cfr.org/publication/12717/>.

90 Boubekeur, A., *Salafism and Radical Politics in Postconflict Algeria*, Carnegie Papers Carnegie Middle East Center no. 11 (Carnegie Endowment for International Peace: Washington, DC, Sep. 2008), p. 19.

91 Roberts, H., *Demilitarizing Algeria*, Carnegie Papers Middle East Program no. 86 (Carnegie Endowment for International Peace: Washington, DC, May 2007), pp. 7–8.

92 Roberts (note 91), pp. 2, 13–14; and Jameh, S., 'Algerian coalition opposes third term for President Bouteflika', *Magharebia*, 11 Feb. 2008.

contributes heavily to the regional rise, since it has increased military expenditure by approximately 142 per cent in real terms over the past 10 years.

A major determinant of increasing military spending in South America has been the rise in prices of commodities—especially copper, soya and oil—which has benefited countries such as Brazil, Chile, Ecuador and Venezuela, particularly over the past five years.[93] Commodity exports were about 10 per cent of the region's GDP in 2008 and accounted for over 40 per cent of export revenues.[94] This has been reflected in steady economic growth in the region: since 2003 it has averaged 5 per cent each year. This has been the strongest period of growth since the 1970s.[95] The high rate of growth slowed in 2008 due to the global financial crisis, and in 2009 it is predicted to fall sharply, to about 3 per cent.[96]

Increasing military expenditure in South America is unlikely to result in an interstate war, but it does allow countries to act in a more assertive manner. In March 2008 the region came closest to a military confrontation since the 1990s when Colombia raided a guerrilla camp in Ecuador, causing a brief regional crisis. Ecuador, Venezuela and Nicaragua broke diplomatic relations with Colombia, although these were later restored. Venezuelan President Hugo Chávez ordered extra troops to be sent to the border with Colombia, while Nicaragua revived maritime border disputes with Colombia.[97] Large arms procurement plans and increases in military spending have in themselves also affected relations among some South American countries.[98]

Brazil

Military expenditure in Brazil in 2008 is estimated to have been $23.3 billion, a 5 per cent increase in real terms. Military spending rose gradually

[93] 'Chavez threats, commodities boom converge to fuel arms race', Bloomberg, 6 Apr. 2008, <http://www.atlantisrisen.com/?p=52>.

[94] Singh, A., Director, Western Hemisphere Department, International Monetary Fund, 'The financial market crisis and risks for Latin America', Presentation at the conference 'The Euro: Global Implications and Relevance for Latin America', Sao Paulo, 17 Mar. 2008, <http://www.imf.org/external/np/speeches/2008/031708a.htm>.

[95] 'Latin America enjoys longest sustained growth in 30 years', *IMF Survey*, vol. 36, no. 7 (23 Apr 2007).

[96] International Monetary Fund (IMF), *Regional Economic Outlook: Western Hemisphere, Grappling with the Global Financial Crisis*, World Economic and Financial Surveys (IMF: Washington DC, Oct. 2008), pp. 7–29.

[97] 'On the warpath', *The Economist*, 8 Mar. 2008. On the intrastate conflict in Colombia see chapter 2, section VI, in this volume.

[98] E.g. in 2008 the Peruvian Foreign Minister, José García Belaúnde, recommended to the Chilean Government that it reduce arms procurement plans and abandon the Copper Law (which guarantees revenue from copper sales for the military). 'Chile rechaza las declaraciones del canciller peruano sobre ley del cobre' [Chile rejects Peruvia minister's statements on Copper Law], *El Comercio* (Lima), 8 Dec. 2008.

from 2003, following a large cut that year linked to President Luiz Inacio Lula da Silva's shift in policy to prioritize social spending.[99] The rate of increase accelerated sharply in 2007, restoring military spending to its 2002 high- point.

Brazil's change in policy to prioritize the military was articulated in its first National Defence Strategy, published in 2008.[100] This seeks to review Brazil's defence policy and to revive its domestic arms industry in order to upgrade the capabilities of the armed forces.[101] The document points to vulnerabilities that require attention in defence planning and operations, such as: a failure to follow through on commitments to fund big plans; the outdated technology of most of the armed forces' equipment; and dependence on foreign arms due to the limited development of the national arms industry. It also sets out key issues for the armed forces to address, such as increasing its presence in the South Atlantic and the Brazilian Amazon and becoming more flexible and mobile to allow for swift deployment. The strategy also points to revivals of the FX combat aircraft acquisition programme and plans to build a nuclear-powered submarine.[102]

Prior to the publication of the National Defence Strategy, in 2007 the Brazilian Government drew up a large military re-equipment programme as part of its 2008 budget proposal. This promised increases to all three services, but the Air Force will be the main beneficiary. The modernization programme will cost 16 billion reais ($8.7 billion) up to 2012. The plan also envisaged an increased budget for the previously postponed FX aircraft programme, from $700 million to approximately $1.1 billion.[103]

While various military officers and former President (now Senator) José Sarney have drawn attention to Venezuela's rearmament, and while political tensions with Venezuela have formed part of the discourse used to argue for increased military spending in Brazil, President da Silva has been cautious about linking the new defence strategy and the big procurement plans to Venezuela. Four major factors, some of them mentioned in the

[99] On Brazil's prioritization of social spending and cuts in military expenditure in 2003 see Sköns, E. et al., 'Military expenditure', *SIPRI Yearbook 2004: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2004), pp. 335–37.

[100] Brazilian Ministry of Defence (MOD), *Estratégia Nacional de Defesa*: *Paz e segurança para o Brasil* [National Defence Strategy: peace and security in Brazil] (MOD: Brasília, 17 Dec. 2008).

[101] 'Lula launches preparations for superpower status', *Latin American Security and Strategic Review*, Sep. 2007.

[102] Stephani-Bastos, E., 'Defesa no Brasil—2008: política nacional de defesa e estratégia nacional de defesa' [Defence in Brazil—2008: national defence policy and national defence strategy], Universidade Federal de Juiz de Fora, 2008, <http://www.ecsbdefesa.com.br/defesa/index.php?option=com_content&task=view&id=1550>, p. 3; and 'Brazil and France signs arms deal', BBC News, 23 Dec 2008, <http://news.bbc.co.uk/2/7798286.stm>.

[103] Rittner, D., 'Brazilian government plans to invest $7.8 billion in military re-equipment program', Forecast International, 5 Apr. 2007, <http://emarketalerts.forecast1.com/mic/eabstract.cfm?recno=134206>.

National Defence Strategy, have been used to support the argument for increasing military expenditure in Brazil.

First is the crisis in Brazil's military-administered air-traffic control system. Between late 2006 and mid-2007 an estimated 400 people died due to air-traffic control failures. This encouraged the military to voice their discontent over budget cuts and cancellations in modernization programmes, while air-traffic control workers also demanded higher salaries. The resulting public protest helped create a political environment favourable to higher military spending.[104]

Second, in 2008 the discovery of large offshore oil deposits was announced.[105] To protect these oil fields—which are very close to the limit of Brazil's exclusive economic zone—Brazil intends to acquire new ships financed partly from oil revenues.[106] The Defence Minister, Nelson Jobim, has even argued for the use of the planned nuclear-powered submarine for this purpose.[107]

Third, there is the perception that the Amazon is a region under threat in three ways: (*a*) from the spillover of the Colombian conflict; (*b*) from potential conflict due to contested land ownership by indigenous groups; and (*c*) from potential foreign opposition to Brazil's development and conservation policies.[108] The military presence in the Amazon region has increased, with more troops stationed at indigenous reservations. In addition, Indians in the border state of Roraima have been disarmed and tougher controls on the presence of foreigners established.[109]

Fourth, as part of the plan to raise Brazil to major power status, the government had sought greater autonomy in defence policy by giving further support to the arms industry combined with the acquisition of more advanced weapons.[110] New investment in military equipment will be dependent on obtaining technology transfers, as in the case of the deal for helicopters and the nuclear-powered submarine signed with France in December 2008.[111]

[104] Martens, C. K., 'Brazilian aviation crisis: mechanical error or governmental failure? Or a metaphor for Brazil under Lula's rule?', Council on Hemispheric Affairs, 21 Aug. 2007, <http://www.coha.org/2007/08/>.

[105] 'A funny kind of reward', *The Economist*, 28 Aug. 2008.

[106] Agence France-Presse, 'Brazil to protect oil fields with nuclear sub', *Defense News*, 5 June 2008; and 'Navy commander discusses fleet modernization; mentions nuclear submarine', World News Connection, 12 Apr. 2007.

[107] Agence France-Presse (note 106).

[108] Brazilian Ministry of Defence (note 100), p. 7.

[109] 'Brazil acts against perceived risk of conflict in Amazonia', *Latin American Security and Strategic Review*, May 2008.

[110] 'Lula launches preparations for superpower status' (note 101), p. 3.

[111] 'Brazil and France in arms deal' (note 102).

VIII. The Middle East

Military expenditure in the Middle East decreased by 1.1 per cent in real terms in 2008, after an increase of 57 per cent during the previous nine years. However, there is no indication that the reduction in Middle East military spending in 2008 marks the beginning of a trend. On the contrary, several Middle Eastern countries, including Israel, Saudi Arabia and the United Arab Emirates (UAE) have made significant military orders, presumably to be paid for in the future.[112]

The decline in military spending in 2008 applied to all countries in the region for which consistent data sets are available except Iraq and Jordan. Lebanon and Kuwait reduced their budgets the most, with real-terms cuts of 7.5 per cent each, followed by Iran, Egypt and Oman, which reduced their budgets by 5.5–6.1 per cent. However, the military burden remains very high in many countries, including Israel, Oman and Saudi Arabia, with military spending exceeding 8 per cent of GDP in 2007.

The data on military expenditure in most Middle Eastern countries is uncertain. Iran in particular does not include spending on the Islamic Revolutionary Guards Corps (IRGC) in its official defence budget, although with ground, air and naval forces as well as a missile unit it accounts for a major share of Iran's military capacity.[113] In 2008 there were vocal demands in the Iranian Parliament (the Majlis) for increased military spending, arguing that other countries in the region were spending a much higher share of their budgets on defence.[114]

Iraq

Much of the Middle East's long-term increase in military spending—made possible by the wealth of natural resources in the region—has been linked to armed conflicts and the regional military balance. Not only is the ongoing rebuilding of the Iraqi military a result of these trends, it will itself influence other countries' decisions in the future. However, it is difficult to discuss Iraqi military expenditure entirely separately from spending on internal security. The country's external and internal security are closely interrelated, and many neighbouring countries are involved in various ways in the internal conflict.

112 See chapter 7, section II, in this volume; and the SIPRI Arms Transfers Database, <http://armstrade.sipri.org/>.

113 On the Revolutionary Guards see also Stålenheim, P., Perdomo, C. and Sköns, E., 'Military expenditure', *SIPRI Yearbook 2008: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2008), p. 203.

114 Mehr News Agency, 'MP urges government to increase defense budget', *Tehran Times*, 2 Sep. 2008; and 'Armed forces budget set to increase, says defence minister', *Tehran Javan*, 15 Sep. 2008, Translation from Farsi, World News Connection.

Table 5.6. Iraqi Government budgets for the ministries of Defence and Interior, 2008

Ministry[a]	Original budget (b. dinars)	Revised budget (b. dinars)	Supplementary budget (b. dinars)	Final budget (b. dinars)	Final budget ($ m.)[b]
Ministry of Defence	6 088	6 093	258	6 351	5 332
Operating expenditure[c]	5 798	5 803	100	5 903	4 956
Investment expenditure	290	290	158	448	376
Ministry of Interior	4 713	4 826	2 018	6 845	5 747
Operating expenditure[c]	4 568	4 681	1 510	6 192	5 199
Investment expenditure	145	145	508	653	548
Total	**10 801**	**10 919**	**2 276**	**13 196**	**11 080**
Operating expenditure[c]	10 366	10 484	1 610	12 095	10 155
Investment expenditure	435	435	666	1 101	924
Total government expenditure	**59 862**	..	**26 822**	**86 684**	**72 783**

[a] The Ministry of Defence is responsible for the Iraqi military forces. The Ministry of Interior is responsible for internal police and security forces.

[b] Dollar figures are calculated using an exchange rate of 1191 dinars per dollar.

[c] Operating expenditures include salaries, goods, services and maintenance.

Sources: *Official Gazette of the Republic of Iraq*, no. 4067, 13 Mar. 2008, p. 15; and *Official Gazette of the Republic of Iraq*, no. 4086, 15 Sep. 2008, p. 9, <http://www.iraqog.org> (in Arabic).

The Iraqi Government is assuming an increasing share of the costs of the Iraqi Security Forces (ISF), which consists of the armed forces under the Ministry of Defence (MOD) and the internal security forces under the Ministry of Interior (MOI). External financing of the ISF has been exceeded by domestic financing since 2006, made possible by increased oil revenues. During the period 2005–2007, crude oil export sales accounted for 94 per cent of total estimated Iraqi Government revenues of $96 billion.[115]

While Iraq has received substantial financial support for the ISF from the USA since the invasion in March 2003, this support has been cut in recent years. Between 2003 and September 2008, the US Government provided a total of $50.77 billion for overall reconstruction in Iraq, but the rate of US funding decreased significantly in FY 2008.[116] Most of this US money has been for the support of the Iraqi infrastructure and economy, but a signifycant part has been for security, including: $4.96 billion in the Iraq Relief

[115] US Government Accountability Office (GAO), *Stabilizing and Rebuilding Iraq: Iraqi Revenues, Expenditures, and Surplus*, Report to Congressional Committees, GAO-08-1031 (GAO: Washington DC, Aug. 2008), pp. 7–8.

[116] US Special Inspector General for Iraq Reconstruction (SIGIR), *Quarterly Report to the United States Congress* (SIGIR: Arlington, VA, 30 Oct. 2008), pp. 16, 22. New funding decreased from appropriations of $9.1 billion in FY 2007 to $6.8 billion in FY 2008, including FY 2009 bridge funding.

and Reconstruction Fund (IRRF) for security and law enforcement, of which slightly over half is for national security; and $17.94 billion for the Iraq Security Forces Fund (ISFF), of which over half ($9.88 billion) is for the Iraqi MOD, to assist the Iraqi Government to develop, organize, train, equip and sustain the ISF.[117] While many US-supported projects continue, the authority to raise new funds for the ISFF expired in September 2008. In addition, the US Congress decided in 2008 to reduce the amount of additional funding and placed limitations on the permissible uses of US funding. It also created the bipartisan Commission on Wartime Contracting in Iraq and Afghanistan to examine reconstruction, security and logistical support contracts and to report on waste, fraud, abuse and mismanagement.[118]

Iraq's military expenditure financed from domestic revenues increased from $1126 million in 2005 to $1934 million in 2007, the main part of which was for salaries and other operating expenditure: investment expenditure accounted for only 7.5 per cent of total MOD expenditure during the period 2005–2007. Domestically funded expenditure on the MOI internal security forces increased from $983 million in 2005 to $2683 million in 2007.[119] These figures on actual expenditure are much lower than the budgeted amounts: while actual security expenditure by the MOD and MOI totalled $4.6 billion in 2007, budgeted expenditure was $7.3 billion.[120] The implementation rate was particularly low for the capital budgets. In 2007 the MOD spent only 11.8 per cent of its capital budget and the MOI spent 11.1 per cent.[121] Reasons identified for the difficulties in spending the budgeted amounts include shortage of trained staff, weak procurement and budgeting systems, violence and sectarian strife, and corruption.[122]

The Iraqi defence budget for 2008 was 133 per cent higher in real terms than actual expenditure for 2007. The original defence budget for 2008, passed in February 2008, amounted to 6088 billion dinars and the MOI budget was 4713 million dinars (see table 5.6). However, after revisions and

[117] US Special Inspector General for Iraq Reconstruction (note 116), pp. 22–27.

[118] These decisions are included in the National Defense Authorization Act for Fiscal Year 2009, US Public Law 110-417, signed into law on 14 Oct. 2008. See US Special Inspector General for Iraq Reconstruction (note 116), pp. 13, 22.

[119] US Government Accountability Office (note 115), pp. 10, 34–35. These figures are slightly different from the SIPRI figures reported in appendix 5A and in the SIPRI Military Expenditure Database, which are based on data from the International Monetary Fund.

[120] US Department of Defense (DOD), *Measuring Stability and Security in Iraq*, Report to Congress (DOD: Washington, DC, Sep. 2008), p. 10.

[121] Cordesman, A. H. and Mauser, A., *Iraqi Force Development 2008* (Center for Strategic and International Studies: Washington DC, 2008), p. 22.

[122] US Government Accountability Office (note 115), p. 4; and Cordesman and Mauser (note 121), p. 22. The Iraqi Government produces detailed analyses of the implementation of investment projects and the reasons for problems and obstacles. E.g. Iraqi Ministry of Planning and Development Cooperation (MOPDC), Government Investment Office, Department for Monitoring Project Implementation [Consolidated annual report to monitor the implementation of projects in the investment budget for 2007] (MOPDC: Baghdad, July 2008), <http://www.parliament.iq/> (in Arabic).

Table 5.7. Notifications to the US Congress of Foreign Military Sales to Iraq, 2008

Date	Main items	Estimated value ($ m.)
12 Mar.	Vehicles, small arms and ammunition	1 389
7 May	Technical assistance for construction	450
25 July	C-130J-30 aircraft	1 500
24 July	Armoured security vehicles	206
30 July	Light armoured vehicles	3 000
30 July	Technical assistance for construction	1 600
30 July	Helicopters and related munitions	2 400
31 July	M1A1 and upgrade to M1A1M Abram tanks	2 160
9 Dec.	Texan II aircraft, spare parts and other support	520
9 Dec.	Light armoured vehicles	1 110
9 Dec.	T-6A Texan aircraft	210
9 Dec.	Coastal patrol boats, offshore patrol vessels	1 010
9 Dec.	M1A1 and upgrade to M1A1M Abram tanks	2 160
9 Dec.	Helicopters and related munitions	366
9 Dec.	M16A4 rifles, M4 carbines and M203 grenade launchers	148
9 Dec.	Deployable rapid assembly shelters, communications equipment	485
Total		**18 784**

Notes: The notification to the Congress of possible Foreign Military Sales (FMS) does not mean that the sale has been concluded. The estimated value is the total value if all options are exercised.

Source: US Department of Defense (DOD), Defense Security Cooperation Agency, '36(b) arms sales notifications', <http://www.dsca.osd.mil/PressReleases/36-b/36b_index.htm>.

amendments, the MOD budget increased to 6351 billion dinars ($5.3 billion) in a total government budget of 86 684 billion dinars ($72.8 billion). The increase was due in part to the rapid rise in oil revenues, which in August 2008 were projected to be more than double in 2008 the average annual level for 2005–2007.[123] However, the sharp drop in world oil prices during the second half of 2008 may have an impact on the implementation of the budget. It also led the Iraqi Government to reduce its planned expenditure for 2009 from $80 billion to $67 billion.[124]

Iraqi military expenditure can be expected to increase significantly with the continued rebuilding of the Iraqi armed forces and the withdrawal of US troops. In November 2008 the target withdrawal date was set at December 2011, as formalized in a status of forces agreement (SOFA) and an associated strategic friendship agreement, but the new Obama Administration aims to withdraw combat troops by May 2010.[125]

[123] US Government Accountability Office (note 115), p. 3.

[124] Associated Press, 'Iraq's oil revenues fall 25%', *International Herald Tribune*, 23 Dec. 2008.

[125] According to the SOFA US armed forces will withdraw from Iraqi cities by the end of June 2009 and all US forces will be completely withdrawn from Iraq by the end of 2011, although this is

For arms procurement, Iraq depends on imports, primarily from the USA.[126] After reports of widespread corruption in the Iraqi arms procurement process in 2005, most US exports of arms to Iraq go through the US Foreign Military Sales (FMS) programme.[127] As of March 2008 the Iraqi Government had ordered or received roughly $3 billion worth of equipment through the FMS programme.[128] During 2008 the US DOD notified the US Congress of a large number of proposed arms sales to Iraq, with a combined total value of up to $19 billion (see table 5.7). These include deals worth over $10 billion in July alone and another round of notifications in December with a total value of up to $6 billion. While notifications only represent potential deals rather than firm orders, and while some of these may be duplications, they nevertheless indicate plans for substantial increases in Iraqi military expenditure over the next few years.

IX. Conclusions

The period 1999–2008 was one of strongly and consistently rising global military expenditure, following the post-cold war decline that ended in the late 1990s. Over this period, military expenditure rose by 45 per cent in real terms and never increased by less than 2 per cent in any year. The fastest annual growth rates, of 5.5–6.7 per cent, were in the years 2002–2004 as the conflicts in Afghanistan and Iraq began to absorb ever more financial resources. While the pace of growth has slowed a little, the upward trend has not abated. In 2008 real military expenditure increased by 3.7 per cent, slightly more than in 2007 and little different from the average annual rate over 1999–2008. With the exception of a probably temporary downturn in spending in the Middle East, the main broad trends in military spending over 1999–2007 continued in 2008, with significant rises in all other

subject to possible further negotiations which could delay withdrawal. Agreement between the United States of America and the Republic of Iraq on the Withdrawal of United States Forces from Iraq and the Organization of their Activities during Their Temporary Presence in Iraq and the Strategic Framework Agreement for a Relationship of Friendship and Cooperation between the United States of America and the Republic of Iraq, signed on 17 Nov. 2008, entered into force on 1 Jan. 2009, available at <http://www.mnf-iraq.com/>. See also Isaacs, J. and Sharp, T., 'How comfortable is the U.S.–Iraq SOFA?', Center for Arms Control and Non-Proliferation, 24 Nov. 2008, <http://www.armscontrolcenter.org/policy/iraq/articles/>; and Morgan, D., 'U.S. includes Obama withdrawal option in Iraq plans', *International Herald Tribune*, 15 Jan. 2009.

126 For a detailed account of Iraqi arms imports and the issues involved see Hagelin, B., Bromley, M. and Wezeman, S. T., 'International arms transfers', *SIPRI Yearbook 2006* (note 50), pp. 465–68. See also the SIPRI Arms Transfers Database, <http://armstrade.sipri.org/>.

127 According to a 2005 report by the Iraqi Board of Supreme Audit, the Iraqi MOD used foreign intermediaries, including US representatives, to conclude fictitious deals worth hundreds of millions of dollars and defence contracts had been drafted by the suppliers themselves without any government supervision. Cockburn, P., 'What has happened to Iraq's missing $1bn?', *The Independent*, 19 Sep. 2005.

128 Cordesman and Mauser (note 121), p. 21. See also US Department of Defense (DOD), *Measuring Stability and Security in Iraq*, Report to Congress (DOD: Washington, DC, Mar. 2008), p. 37.

regions and subregions except for Western and Central Europe and Central America.

While the United States accounts for the majority of the global increase—its increase represented 58 per cent of the global increase over the period—it is far from the only country to pursue such a determined course of militarization. China and Russia have both nearly tripled their military expenditure, while other regional powers—such as Algeria, Brazil, India, Iran, Israel, South Korea, Saudi Arabia and the United Kingdom—have also made substantial contributions to the total increase, as well as large relative increases. Of the five permanent members of the UN Security Council, only France has held its spending relatively steady, with a rise of just 3.5 per cent over the period. France's increase is in line with generally flat spending in Western Europe, which is the only region to enjoy a continued post-cold war 'peace dividend'.

The quest for global or regional power status lies behind many of these increases. In addition, actual or potential armed conflict has naturally remained a major driver of rapid military spending growth for both large and small states as has the rapid economic growth in some parts of the world. There are also specific regional factors, such as the demands of NATO membership and interoperability for a number of countries in Central Europe. More broadly, despite the rarity of interstate armed conflict, military modernization efforts have been supported by a global political climate in which the threat of terrorism has tended to be viewed through a highly militarized lens.[129]

During 8 of the 10 years considered in this chapter, the USA was governed by the administration of President George W. Bush, which rapidly increased US military expenditure. Much—but not all—of the increase can be attributed to funding for the policy called the 'global war on terrorism', in particular the conflicts in Afghanistan and Iraq. This has consumed $864 billion in direct expenditure since 2001, including $814 billion for the military. Rather than being funded through the regular budget, 90 per cent of the funds for the 'global war on terrorism' has been raised through emergency supplemental appropriations. This practice has raised concerns that the scope of such 'emergency' requests has been broadened to include items with little direct link to war requirements, and which should arguably have formed part of the base budget. This method of funding can be considered to have adverse consequences for budgetary transparency.

In the Middle East, an exception to the regional decrease in military spending is Iraq, where the government is taking over responsibility for

[129] On the number of major armed conflicts over the decade 1999–2008 see appendix 2A in this volume.

spending on the military and other security forces from the USA. The rebuilding of the Iraqi armed forces has required increasing financial resources, and this is likely to increase further as US forces begin to withdraw from the country. The large volume of proposed arms transfers to Iraq also suggest high future levels of spending.

The effects of the global financial crisis—in particular, growing government budget deficits and the economic stimulus packages that are aimed at countering the crisis—may set a limit to military spending in some regions in coming years, including in a number of European and Asian countries. However, it is too early to judge how widespread or substantial these effects will be. The crisis may also halt the growth in US military spending, although the commitments inherited by the Obama Administration will make substantial cuts difficult to achieve in the near future.

In November 2008 the president of the UN Security Council—President Óscar Arias of Costa Rica—issued a non-binding statement on behalf of the council which expresses concern at rising military spending, stresses 'the importance of appropriate levels of military expenditure, in order to achieve undiminished security for all at the lowest appropriate level of armaments', and calls for more spending on development.[130] The evidence of current trends, however, is that most states are likely to regard the statement as a largely symbolic gesture.

[130] United Nations, Security Council, Statement by the President of the Security Council, S/PRST/2008/43, 19 Nov. 2008. See also United Nations, Security Council, 'Security Council stresses concern at increasing global military expenditures, urges states to devote "as many resources as possible" to development', 6017th meeting, SC/9501, 19 Nov. 2008.