4. Military expenditure

SAM PERLO-FREEMAN, JULIAN COOPER, OLAWALE ISMAIL,
ELISABETH SKÖNS AND CARINA SOLMIRANO

I. Introduction

World military expenditure in 2010 reached $1630 billion, representing 2.6 per cent of global gross domestic product (GDP) or $236 for each person. Spending was 1.3 per cent higher in real terms than in 2009 and 50 per cent higher than in 2001.[1] The growth in 2010 was almost entirely due to the United States; military spending in the rest of the world increased by just 0.1 per cent. Over the period 2001–10, US military spending increased by 81 per cent, compared to 32 per cent in the rest of the world.

However, regional patterns varied considerably. Significant increases continued in 2010 in South America (5.8 per cent) and Africa (5.2 per cent). In contrast, the increases in North America (2.8 per cent) and Asia and Oceania (1.4 per cent) were lower than in recent years, while in Europe spending fell for the first time since 1998 (by 2.8 per cent). This reflects a delayed response to the global economic crisis, as European governments started to cut budget deficits, while in Asia growth in military spending slowed, in line with lower rates of economic growth in 2009.

This chapter focuses on the military spending trends in six key regional powers: China, Russia, India, Brazil, Turkey and South Africa. Strong economic growth in each of these countries has given them increasing prominence in regional and global affairs. Along with their enhanced economic strength, each has in different ways sought to develop its role as a political and diplomatic actor—and as a military power. Most have increased military spending rapidly in recent years, and all are engaging in major military modernization programmes, not all of which are clearly linked to a perceived military threat or clear military mission. Sections III–VII of this chapter discuss the military spending trends in each of these countries, in the light of their overall defence and security policies.

Before this, section II gives a brief overview of past and planned US military spending, while the chapter concludes in section VIII. Appendix 4A presents SIPRI's complete tables of world, regional and national military

[1] Except where otherwise stated, all US dollar figures for 2010 are in current (2010) prices and exchange rates, while all percentage changes are in real terms, calculated using constant 2009 prices and exchange rates. For full details see appendix 4A.

Table 4.1. US outlays for the Department of Defense and total national defence, financial years 2001 and 2008–12

Figures are in current US$ b. Years are financial years (starting 1 Oct. of the previous year).

	2001	2008	2009	2010	2011[a]	2012[a]	Change, 2001–10 (%)
DOD, military	290.2	594.6	636.7	666.7	739.7	707.5	*130*
Military personnel	74.0	138.9	147.3	155.7	157.0	159.3	*110*
O&M	112.0	244.8	259.3	276.0	311.9	301.7	*146*
Procurement	55.0	117.4	129.2	133.6	151.9	134.4	*143*
RDT&E	40.5	75.1	79.0	77.0	80.7	78.2	*90.1*
Other DOD military[b]	8.8	18.3	21.8	24.4	38.2	33.9	*177*
DOE, military	12.9	17.1	17.6	19.3	21.2	21.8	*49.6*
Other, military	1.6	4.3	6.8	7.6	7.3	8.2	*375*
Total national defence	**304.8**	**616.1**	**661.0**	**693.6**	**768.2**	**737.5**	***128***

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

[a] Figures for 2011 and 2012 are estimates.

[b] Other spending includes the Office of Management and Budget categories of military construction, family housing and other.

Source: US Office of Management and Budget (OMB), *Budget of the US Government, Fiscal Year 2012: Historical Tables* (Government Printing Office: Washington, DC, 2010), pp. 71, 74.

expenditure from 2001 to 2010, as well as information on regional trends in military spending in 2010, data on the top 15 military spenders, and the sources and methods for SIPRI data. Appendix 4B presents data on national reporting of military expenditure to SIPRI and to the United Nations, which reveals a decrease in the rates of reporting.

II. The United States

The USA's military expenditure increased by 2.8 per cent in real terms in 2010 to reach $698 billion. This increase, which was smaller than in recent years and substantially smaller than had been projected by the US Administration, was almost entirely due to an increase in spending on overseas contingency operations (OCO), in Afghanistan and Iraq.[2] However, the Administration's projections of future spending show a much larger increase in outlays in financial year (FY) 2011, particularly on operations

[2] US Office of Management and Budget (OMB), *Budget of the US Government, Fiscal Year 2010: Historical Tables* (Government Printing Office: Washington, DC, 2009). SIPRI uses data from the North Atlantic Treaty Organization (NATO) for US military spending up to 2007 and from 2008 the sum of the OMB figures for National Defence Outlays (see table 4.1) and State Department spending on foreign military finance (FMF) and international military equipment and training (IMET). The OMB figures do not include FMF or IMET.

and maintenance and procurement spending.[3] This suggests that some of the spending planned for 2010 has been delayed until 2011.

The budget for FY 2012 represents a fall in both budget authority requested and projected outlays, which indicates that US military spending is finally peaking after a decade-long surge (see table 4.1). The drop in 2012 is due to a $41 billion decrease in requested spending on OCO, mostly resulting from the planned withdrawal of US troops from Iraq at the end of 2011.[4] However, the base military budget request for 2012 (which excludes OCO but includes military spending outside the Department of Defense) is projected to be 0.8 per cent higher than in 2011, despite a $78 billion cut to previously planned procurement programmes over 5 years.[5]

III. China

The official Chinese defence budget for 2010 was 532 billion yuan ($78 billion), but SIPRI estimates that China's total military expenditure was 809 billion yuan ($119 billion).[6] Military spending increased by 189 per cent in real terms between 2001 and 2010, an average annual increase of 12.5 per cent. The increase of 3.8 per cent in 2010 thus represents a significant slowing in the rate of growth, reflecting the lower economic growth in 2009 caused by the global recession.[7] The rate of increase accelerated sharply in the 2000s compared to the 1980s and 1990s, when military modernization had the lowest priority among the 'four modernizations', behind agriculture, industry, and science and technology. However, as a share of GDP, China's military expenditure was consistently in the range 2.0–2.2 per cent in the period 2001–10.

China's military modernization and rapidly growing military spending reflect the country's equally rapid economic growth in recent years, which has propelled the country to the position of the world's second largest economy and has defined its position as a global power.[8] According to official policy, the country's military modernization depends on and is subordinate to national economic development.[9]

[3] These projections were released with the US Administration's budget request for FY 2012. US Office of Management and Budget, *Budget of the US Government, Fiscal Year 2012: Historical Tables* (Government Printing Office: Washington, DC, 2010), p. 74. SIPRI figures relate to *outlays* (actual expenditure), in contrast to *budgetary authority*, which authorizes government spending. This authorization may lead to outlays in both the current and subsequent financial years.

[4] US Office of Management and Budget, *Budget of the US Government, Fiscal Year 2012* (Government Printing Office: Washington, DC, 2010), pp. 137–40.

[5] US Office of Management and Budget (note 4), p. 59.

[6] SIPRI has revised its estimates of China's military expenditure. See appendix 4A, section III.

[7] See e.g. Kou L. and Hui L., [Behind the scenes of the introduction of China's 2010 national defence budget], *Guoji Xianqu Daobao*, 12 Mar. 2010, Translation from Chinese, Open Source Center.

[8] World Bank, *World Development Indicators 2010* (World Bank: Washington, DC, 2010), p. 89.

[9] Chinese State Council, Information Office, *China's National Defense in 2008* (Foreign Languages Press: Beijing, Jan. 2009).

SIPRI's estimate of China's military spending includes the official budget of the People's Liberation Army (PLA) and official figures or estimates for a number of additional elements of military spending. The Chinese Government has provided a breakdown of the PLA budget, from 1998 onwards, into three categories: personnel, training and maintenance, and equipment (which includes procurement, maintenance, and research and development, R&D).[10] These have consistently shown roughly equal shares for the three categories.[11] No breakdown of spending by service is available.[12] The main uncertainty in SIPRI's estimate of total military expenditure is in estimating extra-budgetary spending on research, development, testing and evaluation.[13]

According to official statements, two of the major purposes of the large spending increases are improving the pay and living conditions of troops and the modernization and 'informationization' of the armed forces.[14] The first is a natural development, given China's rapid economic growth. The second reflects a determination to narrow the gap in military technology and capabilities with the West, especially the USA. Both Chinese and Western analyses indicate that the PLA has made considerable strides in informationizing its systems and equipment, but that extending this throughout the 2.2 million-strong armed forces will take a long time. In particular, the ability of the different armed services to carry out joint operations is still questionable.[15] In addition, the 2008 Defence White Paper for the first time emphasizes 'military operations other than war' (MOOTW), including disaster relief, peacekeeping and anti-piracy operations, as key tasks of the PLA. While the PLA has certainly become more involved in such activities in recent years, they are unlikely to account for a significant portion of military spending increases.[16]

[10] Chinese defence white papers, 1998–2008, <http://eng.mod.gov.cn/Database/WhitePapers/>; and Chinese submissions to United Nations Reporting Instrument for Military Expenditures, 1998–2010, <http://www.un.org/disarmament/convarms/Milex/html/Milex_SGReports.shtml>.

[11] Definitions of categories such as 'personnel' and 'equipment' vary considerably between countries in their reporting of budgets, so international comparisons of these shares are difficult.

[12] In 2011 Xu Guangyu of the China Arms Control and Disarmament Association (CACDA) gave a rough breakdown of 60:20:20 between the army, navy and air force. Lin, J. Y., 'China focuses on "far sea defense"', *Asia Times Online*, 8 July 2010, <http://www.atimes.com/atimes/China/LG09Ad02.html>.

[13] For more on the way in which SIPRI estimates China's military spending see appendix 4A, section III.

[14] Chinese State Council (note 9), chapter XII. 'Informationization' refers to the incorporation of modern information and communications technology into military systems and operations, the equivalent of 'network-centric warfare' in the West.

[15] Polpetter, K., 'Towards an integrative C4ISR system: informationization and joint operations in the People's Liberation Army', eds R. Kamphausen, D. Lai and A. Scobell, *The PLA at Home and Abroad: Assessing the Operational Capabilities of China's Military* (US Army War College, Strategic Studies Institute: Carlisle, PA, June 2010).

[16] See also Gill, B. and Huang, C., *China's Expanding Role in Peacekeeping: Prospects and Policy Implications*, SIPRI Policy Paper no. 25 (SIPRI: Stockholm, Nov. 2009).

Until recently, much of China's military modernization depended on imports from Russia, but these have declined substantially and China increasingly procures equipment domestically.[17] The Chinese arms industry has made major advances in its ability to develop modern weapons, in particular in areas where it has been able to adapt Chinese strengths in civilian technology to military uses.[18] However, developments in other areas, such as military aircraft, have depended more on copying imported Russian systems. China remains dependant on imports from Russia for some subsystems, especially military aircraft engines, and on some high-technology imports from Western Europe.[19]

Several areas of capability—including space technology, missile systems and cyberwarfare—have received particular priority as part of the drive towards the goal of 'winning local wars in conditions of informationization'.[20] Some of the missile systems directly target Taiwan, while others form part of an asymmetric 'anti-access' and 'area-denial' strategy to keep the US Navy out of any potential conflict in the Taiwan Strait.[21] China is also rapidly developing naval capabilities, both surface and submarine. This is key to projecting Chinese power in the South China Sea and, potentially, the Indian Ocean, while modern submarines can also form part of an 'anti-access' strategy.[22] In addition, informationization has required major development in the training and education of troops.[23]

China describes its economic, political and security strategy as 'peaceful development', with major interstate conflict seen as only a remote possibility for the foreseeable future.[24] In particular, China regards deepening international economic interdependency as providing an 'invisible shield' against major conflict.[25] China insists that it will never seek 'hegemony' and that its military development is purely for self-defence. As justification for military modernization, official statements frequently cite the 'three evils'

[17] See chapter 6, section II, in this volume; and Wezeman, S. T., Bromley, M. and Wezeman, P. D., 'International arms transfers', *SIPRI Yearbook 2009*, pp. 308–13.

[18] Medeiros, E. S. et al., *A New Direction for China's Defense Industry* (RAND Corporation: Santa Monica, CA, 2005); and Mulvenon, J. and Tyroler-Cooper, R. S., 'China's defense industry on the path of reform', US–China Economic and Security Review Commission, Oct. 2009, <http://www.uscc.gov/researchpapers/research_archive.php>.

[19] Wezeman et al. (note 17).

[20] Chinese State Council (note 9), chapter II. On space technology see Fisher, R. D., 'China's scary space ambitions', *Wall Street Journal*, 20 Jan. 2010.

[21] US Department of Defense (DOD), *Military and Security Developments Involving the People's Republic of China 2010*, Annual report to Congress (DOD: Washington, DC, 2010), pp. 29–33.

[22] Tran, P., 'China extends military's reach', *Defense News*, 24 May 2010; Polpetter (note 15); and Lin (note 11).

[23] '2nd Ld: China's military forces to be trained for informationized warfare', Xinhua, 5 Mar. 2009.

[24] Chinese State Council (note 9).

[25] Shitting, X. and Junlan, Z., [Seize opportunity of domestic demand stimulation to advance national defense building to new level], *Junshi Jingji Yanjiu*, Dec. 2009, Translation from Chinese, Open Source Center, 9 Feb. 2010.

of separatism, terrorism and extremism and other new security challenges, as well as peacekeeping and anti-piracy missions.[26]

The stated goal of modernization of 'winning local wars in conditions of informationization' most likely relates to potential conflict with the USA over Taiwan, which China regards as an integral part of its territory. The USA has pledged to defend and supplies arms to Taiwan, and in 2010 it announced an arms sale worth $6.4 billion.[27] While relations between China and Taiwan have improved in recent years and China currently regards prospects for continued peace as good, its military modernization is in part a preparation for a worst-case scenario.

Aside from the Taiwan issue, as China's military power grows it appears to be becoming more assertive on claims to sovereignty in the South China Sea, disputed with Malaysia, the Philippines, Taiwan and Viet Nam, as well as its dispute with Japan over the Senkaku/Diaoyu Islands.[28] Beyond this, as a growing economic power, China's perceptions of its own interests and of what constitutes its security have expanded. In particular, as economic growth brings rapidly increasing energy demands, China is seeking access to and investments in energy resources from Africa to Latin America. The development of naval power is thus also aimed at guaranteeing China's vital sea lines of communication.

China's assurances of its peaceful intent have not stopped both the USA and neighbouring states including India and Japan from expressing concern at, and responding to, China's growing military power.[29] However, China's increases in military spending partly reflect its own fear of overwhelming US military power. Leading Chinese generals have made it clear that for China to continue to lag so far behind the West in military technology would leave it vulnerable.[30]

While China's rapid economic growth has pulled hundreds of millions of people out of poverty, this has been accompanied by environmental problems, economic inequality and continuing poverty in much of the country's interior. For the moment, however, the tension between military and social spending is mitigated by economic growth that permits increases in both.[31]

[26] Chinese State Council (note 9).

[27] American Institute in Taiwan, 'U.S. arms sales to Taiwan', Press release, 11 Feb. 2010, <http://www.ait.org.tw/en/pressrelease-pr1012.html>.

[28] E.g. Sutter, R. and Huang, C., 'China–Southeast Asia relations: senior officials visits; South China Sea tensions', *Comparative Connections*, vol. 12, no. 2 (July 2010), pp. 71–72.

[29] See e.g. Gienger, V., 'Gates seeks more stable China relations as Pentagon hedges bets', *Bloomberg Businessweek*, 9 Jan. 2011; and Japanese Ministry of Defence, 'National defense program guidelines for FY 2011 and beyond', 17 Dec. 2010, <http://www.mod.go.jp/e/d_act/d_policy/national.html>.

[30] E.g. Ma Xiaotian (Gen.), Deputy Chief of PLA General Staff, reported in Ai Y., Li X. and Wang C., 'China needs to "forge ahead" in defense', *China Daily*, 22 Oct. 2010.

[31] E.g. 'China budget increases social spending', Associated Press, 5 Mar. 2011, <http://www.cbc.ca/news/world/story/2011/03/05/china-budget.html>.

IV. Russia

Russia's military expenditure in 2010 was 1782 billion roubles ($58.7 billion), 1.4 per cent lower in real terms than in 2009, but 82 per cent higher than in 2001.

Russia as a regional power can only be understood in the context of its role as the largest successor state of the Soviet Union, a Communist country with a centrally planned economy and a military capability comparable to that of the USA. In the 1980s Soviet military spending is thought to have reached at least 18 per cent of national income.[32] The vast Soviet arms industry employed about 10 million people, and by 1990 the armed forces of the Ministry of Defence (MOD) alone had 3 393 000 uniformed personnel.[33] Reductions in Soviet military expenditure began in 1989, but in 1992 newly independent Russia retained a hypertrophied military capability.

Russia is still marked in a number of respects by its Communist past. It has a functioning market economy, but one in which the state plays a significant role. The economy is orientated strongly to resource extraction and export, with a relatively weak and uncompetitive manufacturing sector in which armaments occupy a predominant position. Democracy in Russia remains weak, and corruption is a serious problem.

During the 1990s the Russian economy contracted sharply as a turbulent market transformation was undertaken. As a result, military expenditure fell rapidly, to 32 per cent of its 1992 level by 1998 and from 5.5 per cent to 3.3 per cent of GDP. The arms industry also contracted rapidly. But after the 1998 economic crisis, the Russian economy began to recover, and it has since enjoyed a period of steady growth, in part fostered by rising prices for oil, natural gas and metals, the country's principal export goods. This permitted an expansion of military spending, which grew approximately in line with GDP (see table 4.2).

During President Vladimir Putin's first term of office (2000–2004) 'national defence' spending, which includes outlays on the MOD forces, nuclear weapons and some other categories of direct military support, grew much in line with the growth of GDP, by about 60 per cent in real terms.[34] However, in his second term (2004–2008) it lagged behind the growth of GDP, falling to a share of 2.5 per cent. The August 2008 conflict

[32] Vikulov, S. F., [Theory and practice: in a bundle], *Voenno-ekonomicheskii zhurnal Tyl'*, no. 3, 1993, pp. 4–5.

[33] Minaev, A. V. (ed.), [Soviet military might from Stalin to Gorbachev] (Voennyi parad: Moscow, 1999), p. 121.

[34] The real-terms calculation is based on the annual GDP deflator. In Russian conditions, with rapidly rising costs for procurement of arms and other materiel, this method better reflects price trends in relation to goods purchased by government agencies than the consumer price index (CPI), which is used to calculate SIPRI's constant US dollar figures in appendix 4A. Using the CPI, Russian military spending grew by 86% in real terms between 1999 and 2004.

Table 4.2. Russian military expenditure 2001, 2005, 2008–11

All figures are in current prices.

Year[a]	'National defence' spending (b. roubles)	'National defence' spending as a share of GDP (%)[b]	SIPRI estimate of military spending (b. roubles)[c]	SIPRI estimate of military spending as a share of GDP (%)[b]
2011	1 517	*3.0*	. .	. .
2010	1 277	*2.8*	1 782	*4.0*
2009	1 188	*3.0*	1 693	*4.3*
2008	1 041	*2.5*	1 448	*3.5*
2005	581	*2.7*	806	*3.7*
2001	248	*2.8*	365	*4.1*

GDP = gross domestic product.

[a] Figures for 2001–10 are for actual spending; figures for 2011 are budgeted figures.

[b] The figures for 2001–2009 are based on GDP statistics from the IMF's International Finance Statistics; the figures for 2010–11 are based on the IMF's World Economic Outlook projections.

[c] SIPRI's data for Russia's total military spending includes spending on military pensions and various paramilitary forces, an estimate of additional military research and development spending, and some military-related subsidies, in addition to 'national defence' spending.

Sources: Appendix 4A; *'National defence' spending, 2000–2009*: annual laws on budget implementation, <http://www.kremlin.ru/acts>; *2010 (provisional)*: Russian Federal Treasury, [Performance report of the federal budget], 1 Jan. 2011, <http://www.roskazna.ru/reports/oi.html>; *2011*: Federal budget, draft as transmitted to State Duma, draft law 433091-5, Oct. 2010, <http://asozd2.duma.gov.ru/>; *GDP, 2000–2009*: Russian Federal State Statistics Service (Rosstat), <http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite/main/account/>.

in Georgia prompted a policy change. Military reform and modernization became a national priority, and notwithstanding the severe impact on Russia of the global financial crisis, 'national defence' spending increased in real terms, to over 3 per cent of GDP in 2009.[35] In the plans for 2011–13, the 'national defence' budget is to increase more rapidly than the rate of growth of GDP, although in 2010 this budget fell by 5 per cent in real terms compared with 2009.[36]

Even though the Russian military is a predominantly conscripted force, its large size means that personnel and operations and maintenance costs have dominated military spending. However, the scale of the MOD forces has gradually been reduced, and since the appointment in 2007 of Anatoly Serdyukov as defence minister, the Russian armed forces have been undergoing a fundamental restructuring and modernization. The number of personnel has been reduced from 1.2 million to 1 million, mainly by retiring

[35] E.g. Cowan, G. and Petrov, V., 'Russian defence modernisation "will stay on track" despite crisis', *Jane's Defence Weekly*, 25 Mar. 2009, p. 13.

[36] Cooper, J., 'Military expenditure in the Russian federal budget, 2010–2013', Research note, [n.d.], <http://www.sipri.org/research/armaments/milex/publications/unpubl_milex/>.

officers. At the same time, many support services are now undertaken by civilian employees or have been contracted out to external suppliers.[37] According to data submitted to the UN, 36 per cent of MOD spending in 2008 was for personnel, 23 per cent for operations and maintenance, 23 per cent for arms procurement, and 9 per cent each for R&D and construction.[38] Over time, the share of procurement has been gradually rising, and this trend is likely to be maintained over the next few years.

The most recent state armaments programme, approved in October 2006, envisaged expenditure over the 10 years to 2015 of 5000 billion roubles ($165 billion).[39] Since the conflict in Georgia, a new programme has been drafted, for the period to 2020. By the end of 2010, the programme had not yet been approved, but it appeared that total MOD expenditure would be 20 000 billion roubles ($659 billion), reflecting a new commitment to thoroughly re-equipping the Russian armed forces over the next decade.[40] This will inevitably involve an increased share of GDP being spent on the military from 2012 (the probable first year of implementation), perhaps up to 3.5 per cent.

By service, the ground forces have consistently accounted for the largest share of spending. In 2005–2008 they received an average of 33 per cent of the total, the navy 18 per cent, the air and air defence forces 13 per cent, other forces (mainly the Strategic Rocket Forces, responsible for the land-based intercontinental ballistic missile capability) 17 per cent, and central support and administration 19 per cent.[41]

In conjunction with a major reorganization of the overall arms acquisition system, a potentially significant development is a new willingness to import weapons if the domestic arms industry is unable to supply the modern equipment required.[42] The most prominent example is the decision to buy from France two Mistral class helicopter-carrying assault vessels, with an option to build two more at a shipyard in St Petersburg.[43] Other imports include unmanned aerial vehicles (UAVs) from Israel and armoured vehicles from Italy. However, the intention is not to rely on

[37] Galeotti, M., 'Russian reform act', *Jane's Defence Weekly*, 29 Sep. 2010, pp. 26–31.

[38] United Nations, Office for Disarmament Affairs, Instrument for Reporting Military Expenditures Database, <http://disarmament.un.org/Milex.nsf>.

[39] Sergeev, M., [Sergei Ivanov has been given a new organization], *Gazeta*, 31 July 2006, p. 9. The annual state order for new arms procurement, repairs, modernization and military R&D is drawn up within the framework of a 10-year state armaments programme, updated every 5 years. Since 1996, 3 programmes have been operational.

[40] [State armaments programme], *Krasnaya zvezda*, 30 Dec. 2010.

[41] United Nations (note 38). For comparison with the late Soviet period and the first half of the 1990s see Cooper, J., 'The military expenditure of the USSR and the Russian Federation, 1987–97', *SIPRI Yearbook 1998*.

[42] See Cooper, J., 'Military procurement in Russia', eds B. Nygren, C. Vendil Pallin and R. McDermott, *Russian Military Development* (Routledge: Abingdon, forthcoming 2011).

[43] See chapter 6, section IV, in this volume.

imports but rather to develop the manufacture of equipment produced by foreign companies in Russia on a joint venture or licence basis.

Russia's military doctrine, which provides the context for the development of Russia's armed forces, was updated in February 2010.[44] It identifies the North Atlantic Treaty Organization (NATO) as a 'danger'—that is, a potential threat—but not as a current threat. Nuclear weapons remain a key component of Russia's military capability but are to be used only in response to an attack by weapons of mass destruction or 'when the very existence of the state is under threat'. The 2010 Russian–US Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) reflects the fact that Russia's strategic nuclear capability will inevitably contract over the coming years as Soviet-era missiles are withdrawn faster than they can be replaced by new systems.[45] The 2008 conflict in Georgia revealed to the political and military leadership that the armed forces required substantial upgrading. The new doctrine recognizes that conventional forces are most likely to be deployed in local conflicts, border and internal security, and anti-terrorist actions. In terms of the acquisition of new armaments, priorities are now systems for intelligence, communications, command and control, air and space defence systems; combat aeroplanes and helicopters; and equipment that will increase force mobility. These priorities are likely to be reflected in the new armaments programme and spending priorities up to 2020.

V. India

India's military expenditure in 2010 was an estimated 1888 billion rupees ($41.3 billion), 2.8 per cent lower in real terms than in 2009 but 54 per cent higher than in 2001.[46] The decline in 2010, the first fall in Indian military spending since 2002, appears to reflect a 'rebalancing' in relation to economic growth rates. In the mid-2000s, annual GDP growth rates of 8–9 per cent meant that the military burden fell from 3.0 per cent of GDP in 2001 to 2.3 per cent in 2007, but slower economic growth in 2008–2009 had raised the burden to 2.8 per cent in 2009 and an estimated 2.7 in 2010.

Like China, strong economic performance has propelled India to the status of a rising regional power with increasing global aspirations. While

[44] [Military Doctrine of the Russian Federation], Approved by presidential decree, 5 Feb. 2010, <http://news.kremlin.ru/ref_notes/461> (in Russian). For an insightful analysis see Giles, K., 'The Military Doctrine of the Russian Federation 2010', Research Review, NATO Defense College, Rome, Feb. 2010, <http://www.ndc.nato.int/research/series.php?icode=9>.

[45] On Russia's nuclear forces see chapter 7, section III, in this volume. On New START see chapter 8, section II, and annex A in this volume.

[46] These are estimates for the calendar year 2010. Budgeted military spending for FY 2010/11 was 1911 billion rupees ($41.7 billion). SIPRI estimates spending for calendar years by assuming an even rate of spending across the year.

India has traditionally had a close relationship with Russia, in recent years it has developed a strong strategic partnership with the USA, including wide-ranging agreements on civil nuclear and military cooperation. In part, this relationship is an attempt by both India and the USA to balance China's power, but India also sees partnership with the global superpower as an affirmation of its own growing importance in world affairs.[47]

Most discussions of India's military spending only refer to the 'defence services' budget, which includes the current and capital expenditure of the army, navy and air force, as well as R&D spending. This budget totalled 1473 billion rupees ($32.2 billion) in FY 2010/11. SIPRI's figures for total Indian military spending include two additional elements: the 'defence civil estimates' and expenditure on paramilitary forces. The 'defence civil estimates' include central MOD expenditure and military pensions, which totalled 284 billion rupees ($6.2 billion) in FY 2010/11. Expenditure on paramilitary forces has increased especially rapidly since 2001—to reach 153 billion rupees ($3.3 billion) in FY 2010/11—perhaps partly due to the role of these forces in combating the Maoist Naxalite rebels.

Three trends are notable in the budget for the regular armed forces (the defence services and defence civil estimates). First, capital expenditure (on equipment and infrastructure) jumped from 23 per cent of total spending on the regular armed forces in 2003/2004 to 37 per cent in FY 2004/2005 and has remained around 34 per cent since then. This spending has been used to modernize the Indian armed forces, whose equipment was previously dominated by Soviet-era technology. Moreover, the capital budget is planned to increase by 10 per cent each year up to FY 2015/16.[48] Second, in conjunction with this the share of the total devoted to R&D has quadrupled, from 1.3 per cent in FY 2001/2002 to 5.6 per cent in FY 2010/11. This reflects a long-standing desire to improve the performance of the sclerotic Indian arms industry, with R&D efforts accompanied by attempts to reform the industry by allowing more private involvement and to obtain foreign technology through offset arrangements.[49] Third, there has been a substantial increase in the Indian Air Force's share of the capital budget. While this has primarily been at the expense of the army, it has also affected the navy, despite the strong policy focus on naval development.

[47] See e.g. Indian Embassy in Washington, DC, 'India–US defense relations', [n.d.], <http://www.indianembassy.org/india-us-defense-relations.php>; and 'India very important strategic partner: US', *The Hindu*, 13 Feb. 2009.

[48] Mathew, T., 'No cap on FDI in defence', *New Indian Express*, 8 Apr. 2010; and 'India offers huge defence market', *Indian Aviation Civil & Military*, May/June 2010, pp. 13–22.

[49] See e.g. Indian Ministry of Defence (MOD), *Annual Report 2009–2010* (MOD: New Delhi, [2010]); Indian MOD, Department of Defence Production, *Defence Production Policy 2011* (MOD: New Delhi, Jan. 2011); and Indian MOD, *Defence Procurement Procedure 2011* (MOD: New Delhi, Dec. 2010). See also Matthew (note 48).

However, the absolute level of spending on naval equipment has increased rapidly.

India was the world's largest recipient of major conventional weapons over the period 2006–10, reflecting both the rapid pace of India's military modernization and the inability of the domestic industry to supply it.[50] India's Defence Minister, A. K. Antony, stated in 2009 that 70 per cent of India's military equipment was imported.[51] Since 2003, aircraft have accounted for a majority of India's imports by volume, reflecting in part the increasing share of capital expenditure allocated to the air force.[52] The aim of the modernization of the air force, with both new major combat aircraft and sensors, radars, satellites and UAVs, is to achieve superiority over China and Pakistan in air power and information.[53] In the naval sphere, India has been seeking for some years to expand its blue-water naval capabilities to allow it to project power in the Indian Ocean. Some equipment has been acquired specifically to prevent or respond to terrorist acts such as the Mumbai attacks of November 2008, including sensors for the coastguard and transport aircraft to speed up response.[54]

India has not published any comprehensive defence or security strategy document and does not issue defence white papers, although a summary of its defence policy is given in the MOD's annual reports and each of the three armed services has a doctrine.[55] In practice, several pressing security issues largely determine the direction of India's security policy and thus its military spending. First, the insurgency in Kashmir and the related conflict with Pakistan remain unresolved. India also suspects elements of the Pakistani intelligence services of involvement in the 2008 Mumbai terrorist attacks. While India's military expenditure now vastly exceeds Pakistan's, both the insurgency itself and the potential for wider conflict mean that Pakistan and Kashmir remain a major focus for India's armed forces. The experience of the brief, inconclusive 1999 'Kargil war' is one factor driving the modernization of India's military aircraft and its pursuit of network-

[50] See chapter 6, section III, in this volume.

[51] Grevatt, J. 'Indian defence minister urges DRDO to maintain high-tech focus in self-reliance quest', *Jane's Defence Industry*, 23 June 2009.

[52] SIPRI Arms Transfers Database, <http://www.sipri.org/databases/armstransfers/>. SIPRI measures the volume of arms imports, which cannot be directly linked to military expenditure since it does not usually reflect the price paid and since delivery of an import does not necessarily coincide with payment.

[53] See chapter 6 in this volume; 'Indian air force turns 77', *Indian Aviation Civil & Military*, Sep./Oct. 2009, pp. 18, 20–21; and Sawhney, P. and Wahab, G., 'Building capabilities', *Force* (New Delhi), Oct. 2010.

[54] Bedi, R., 'Mumbai attack prompts Indian security spending', *Jane's Defence Weekly*, 28 Jan. 2009, p. 14; and 'India boosts terror defense', *Defense Technology International*, Jan. 2009, p. 10. Note that spending on the coastguard is not included in SIPRI military spending figures for India.

[55] See e.g. Datta, R., 'An urgent need for national defence policy', *Political and Defence Weekly* (New Delhi), 9–15 Nov. 2010, pp. 17–18.

centric systems.[56] With both countries possessing nuclear weapons, India sees the option of an all-out military attack on Pakistan in response to Pakistani actions as unviable. Instead, India has decided to develop capabilities for delivering limited, swift, 'smart' attacks, as expressed in its 2004 'cold start' armed forces plan for mobilizing for limited warfare within 72 hours.[57]

Second, the burgeoning Naxalite rebellion by Maoist groups—which reflect the economic and environmental grievances of a variety of marginalized groups—have been described by the Indian Prime Minister, Manmohan Singh, as India's greatest internal security threat. In 2009 this intrastate conflict for the first time overtook that in Kashmir as India's most lethal.[58]

Third, despite the long-running conflict with Pakistan, India in many ways sees China as its major rival; the 'China threat' is a perennial theme in Indian defence and foreign policy circles and in the media.[59] The two countries have several territorial disputes, most notably China's claim to most of the Indian state of Arunachal Pradesh, over which tensions sharpened in 2010, and both sides have built up their forces near the border.[60] China's military modernization has been so rapid that the Indian military now admits that it is far behind in most categories of weaponry.[61] India also sees China as a potential rival for influence in the Indian Ocean. India's suspicions are particular aroused by China's investment in major port facilities in Bangladesh, Myanmar, Pakistan and Sri Lanka—the so-called string of pearls. Although these are purely civilian port facilities, India fears that China could use them to project naval power in the future.[62] Despite these issues, the Indian Government is keen to downplay tensions, and trade relations between the two countries are growing.[63]

India's relatively high and rising level of military spending is controversial in a country where extreme poverty is still prevalent. In 2005 India had more people living on less than $1.25 a day than sub-Saharan

[56] 'India offers huge defense market' (note 48). On the 1999 India–Pakistan conflict, the 'Kargil war', over Kashmir see Seybolt, T. B., 'Major armed conflicts', *SIPRI Yearbook 2000*, pp. 20–21.

[57] See e.g. Ladwig, W. C., 'A cold start for hot wars? The Indian Army's new limited war doctrine', *International Security*, vol. 32, no. 3 (winter 2007/2008), pp. 158–90.

[58] Uppsala Conflict Data Program (UCDP) Database, <http://www.ucdp.uu.se/>. The Naxalite conflict (denoted 'India (government)' by the UCDP) is classified as a minor armed conflict since it has never crossed the threshold of 1000 battle-related deaths in a year. See appendix 2A in this volume.

[59] For an overview of China–India relations see Malone, D. and Mukherjee, R., 'India and China: conflict and cooperation', *Survival*, vol. 52, no. 1 (Feb./Mar. 2010).

[60] Bhaumik, S., 'India to deploy 36,000 troops on Chinese border', BBC News, 23 Nov. 2010, <http://www.bbc.co.uk/news/world-south-asia-11818840>; and Shukla, A., 'Now, another air force base on the China border', *Business Standard* (New Delhi), 2 Oct. 2010.

[61] Gupta, S., 'Spendings stuck, India trails China in firepower', *Indian Express*, 30 Sep. 2010.

[62] Lamont, J. and Kazmin, A., 'Fear of influence', *Financial Times*, 13 July 2009, p. 5.

[63] See e.g. 'India and China set $100bn trade target by 2015', BBC News, 16 Dec. 2010, <http://www.bbc.co.uk/news/world-south-asia-12006092>.

Africa.[64] Indian non-governmental organizations (NGOs), UN officials in India and others have spoken in favour of redirecting money spent on the military towards development.[65] At the same time, surveys of Indian public opinion in 2010 showed that respondents perceived Pakistan and Islamic terrorist groups to be threats, feared China's military power and had a positive view of the Indian military as an institution.[66] Thus, high levels of military expenditure do not necessarily run contrary to Indian public opinion.

VI. Brazil

In 2010 Brazil's military spending was 59 billion reais ($33.5 billion), 9.3 per cent higher in real terms than in 2009. Between 2001 and 2010, military expenditure rose by 30 per cent, an annual average of only 2.9 per cent. The slow increase over the decade is explained by the cut of 20 per cent made to the military budget in 2003 by President Luiz Inácio Lula da Silva as part of his 'zero hunger' programme.[67] While this cut reversed a steadily rising trend since the mid-1990s, from 2004 military expenditure rose again, at an annual average of 6.9 per cent in 2004–2010. Between 2003 and 2010 Brazilian military expenditure was consistently 1.5–1.6 per cent of GDP, indicating that military spending increases have been broadly in line with economic growth. However, a financial adjustment programme proposed by President Dilma Rousseff in early 2011 aimed at slowing the rate of GDP growth includes a cut of 27 per cent in the planned military budget for 2011.[68]

A combination of factors has given Brazil a leadership role in South America. Brazil's economic performance in the past decade, with GDP growth of 41 per cent between 2001 and 2010, has made the country the world's 8th largest economy.[69] It is the largest country in South America and the fifth largest in the world.[70] It is one of the most stable democracies

[64] World Bank (note 8), p. 92.

[65] E.g. Menon, S., 'India's problem is implementation', *Business Standard* (New Delhi), 19 Oct. 2009; and Control Arms Foundation of India, 'Indian civil society challenges international arms manufacturers at DEFEXPO 2010', Press communiqué, 12 Feb. 2010, <http://www.cafi-online.org/press-detail.php?pr_id=27>.

[66] Pew Research Center, Global Attitudes Project, 'Indians see threat from Pakistan, extremist groups', 20 Oct. 2010, <http://pewglobal.org/2010/10/20/>; and Pew Research Center, Global Attitudes Project, 'Obama more popular abroad than at home, global image of U.S. continues to benefit', 17 June 2010, <http://pewglobal.org/2010/06/17/>, pp. 51–55.

[67] On this programme and cuts to Brazil's military expenditure see Sköns, E. et al., 'Military expenditure', *SIPRI Yearbook 2004*, pp. 335–37.

[68] Lima, M. S., 'Governo oficializa corte de R$ 50 bi no orçamento de 2011' [Government formalizes cut of R$50 billion in the 2011 budget], *Folha*, 9 Feb. 2011.

[69] International Monetary Fund, World Economic Outlook database, Oct. 2010, <http://www.imf.org/external/ns/cs.aspx?id=28>.

[70] United Nations Population Fund (UNFPA), *State of World Population 2010: From Conflict and Crisis to Renewal—Generation of Change* (UNFPA: New York, 2010).

in the region. It has pursued a proactive foreign policy in its own neighbourhood and beyond, based on two broad goals: regional integration and multilateralism.[71] Brazil's aspirations to a broader regional and international role are reflected in its long-standing desire for a permanent seat on the UN Security Council. The fact that Brazil is a founder of the Group of 20 (G20) leading developed and developing economies also gives it a special place among the emerging powers.[72]

SIPRI's figures for Brazil's military expenditure are based on the budget act (lei orçamentária) approved by the National Congress each year. In 2010, 73 per cent of the budget was spent on personnel (salaries and pensions), with the remaining 27 per cent allocated to 'current and other type of expenses', including arms acquisitions.[73] In addition to the regular military budget for 2010, the MOD was allocated 1.5 billion reais ($853 million) from the investment budget to improve the airspace control system and develop airport infrastructure.[74]

Along with many other countries in the region, Brazil has in recent years embarked on a programme to modernize and upgrade its armed forces. The 2008 National Defence Strategy announced plans to boost Brazil's military capabilities and reinvigorate the domestic arms industry through a series of acquisitions, which include significant volumes of technology transfer.[75] Most important is the agreement signed with France in September 2009 for the production of four Scorpène class diesel-powered submarines and Brazil's first nuclear-powered submarine, as well as 50 Super Cougar EC725 helicopters, which are to be built in Brazil.[76] The first submarine is to be delivered to Brazil in 2017.[77] The submarine deal was reported to cost €6.7 billion ($9.5 billion) and is to be financed by a consortium of banks.[78]

[71] Roett, R., 'Brazil: an emerging power', Paper presented at the conference 'Worldviews of Major and Aspiring Powers: Exploring National Identities', George Washington University, Sigur Center for Asian Studies, 14 Sep. 2007, <http://www.gwu.edu/~sigur/research/worldviews.cfm>, p. 2.

[72] See Hurrell, A., 'Lula's Brazil: a rising power, but going where?', *Current History*, vol. 107, no. 706 (Feb. 2008), p. 51.

[73] The predominance of personnel expenses over other expenses is a typical pattern across Latin America. On the distribution of military expenditure in other countries see *A Comparative Atlas of Defence in Latin America and Caribbean*, 2010 edn (RESDAL: Buenos Aires, 2010).

[74] Lei Orçamentária [Budget act], Brazilian Act no. 12.214, 26 Jan. 2010, *Diário Oficial da União* (Brasília), 27 Jan. 2010, pp. 1598–653.

[75] Brazilian Ministry of Defence (MOD), *Éstrategia Nacional de Defesa: Paz e segurança para o Brasil* [National Defence Strategy: peace and security in Brazil] (MOD: Brasília, 17 Dec. 2008). See also Perlo-Freeman, S. et al., 'Military expenditure', *SIPRI Yearbook 2009*, pp. 202–204; and Holtom, P. et al., 'International arms transfers', *SIPRI Yearbook 2008*, p. 309.

[76] Anderson, G. and Jennings, G., 'Brazil signs deal worth EUR6 billion with France', *Jane's Defence Weekly*, 14 Jan. 2009, p. 8.

[77] Fish, T., 'Steel cutting begins for first Brazilian Scorpene', *Jane's Defence Weekly*, 2 June 2010, p. 6.

[78] Barreria, V., 'Brazil puts price tag on its new submarine fleet', *Jane's Defence Weekly*, 26 Aug. 2009, p. 12.

The Brazilian Air Force is similarly pursuing a programme of modernizing its fleet of combat aircraft, known as the FX-2 programme. Although initiated in 2002, the programme was relaunched in 2007 and an open tender competition announced in 2008.[79] The winning contender for a $2 billion deal, which would include the joint production of some of the aircraft in Brazil (via technology transfer), was expected to be announced in 2011. However, the proposed cut in the MOD's budget for 2011 may lead to further delays in the deal. The cut may cause the cancellation or delay of other procurement plans, such as a $6 billion deal to acquire frigates and patrol boats and a proposed integrated border surveillance system that would include the acquisition of radars, armoured vehicles and UAVs.[80]

Brazilian defence policy can be understood in terms of Brazil's broader foreign policy goals as an emerging regional power with a significant role in global affairs. The 2008 National Defence Strategy examines the security challenges faced by Brazil in the 21st century in key strategic areas such as space, cybernetics, nuclear energy, and the defence of the Amazon region and of recently discovered offshore oil fields.[81] Despite Brazil's location in a peaceful region, the strategy argues that the country has to be prepared to defend itself from potential conflicts and to take its place in the world.[82] The procurement plans discussed above appear to be a way to enhance Brazil's power-projection capabilities. Brazil has also sought to expand its global presence by participating in UN peace operations. For example, Brazil leads the military component of the UN Stabilization Mission in Haiti (MINUSTAH), with a contingent of 2187 troops deployed as of December 2010.[83]

The implementation of the National Defence Strategy is likely to involve further military spending increases as Brazil seeks to modernize its defence structure through the reorganization of the armed forces, the restructuring of its arms industry and a proposal for mandatory military service.[84] Another proposed reform is a move to mandatory multi-year military investment budgeting, which would allow the MOD and the three services

[79] Duarte Villa, R., *Corrida armamentista ou modernizacao de armamentos na America do Sul: estudo comparativo dos gastos militares* [Arms race or arms modernization in South America: comparative study of military expenditures], Estudos e Cenarios (Observatório Político Sul-Americano: Rio de Janeiro, Dec. 2008), p. 18.

[80] Lima (note 68); 'Brasil revaluará plan compra barcos de guerra por US$6.000 millones' [Brazil to reassess $6 billion warship purchase], Infolatam, 24 Jan. 2011, <http://www.infolatam.com/2011/01/24/brasil-revaluara-plan-compra-barcos-de-guerra-por-us6-000-millones/>; and 'Exército terá investimento bilionário nas fronteiras' [Army will have to invest heavily in the borders], *Folha*, 9 Jan. 2011.

[81] See Perlo-Freeman et al. (note 75); and Brazilian Ministry of Defence (note 75).

[82] Brazilian Ministry of Defence (note 75), p. 8.

[83] United Nations Peacekeeping, 'UN mission's contributions by country', 31 Dec. 2010, <http://www.un.org/en/peacekeeping/resources/statistics/>. See also chapter 3 and appendix 3A in this volume.

[84] Brazilian Ministry of Defence (note 75), pp. 5.

to better plan and assess the resources needed to carry out the National Defence Strategy.[85]

In 2010, as part of the implementation of the National Defence Strategy, the National Congress approved the restructuring of the armed forces in a project that included the creation of a joint general staff under the MOD and a proposal to draft Brazil's first defence white paper.[86] Every four years from 2012 the government will have to submit to the National Congress information on its defence policies and strategies, the modernization of the armed forces, and the military sector's economic resources.[87] In addition, it is expected that a secretariat of defence products will be established to handle military procurement.

Brazil is moving forward with its intention to become a regional power in both the economic and military realms. In the absence of real military threats to Brazil, its military expenditure choices may be mostly motivated by the search for prestige or status, rather than by national defence needs. At the same time, the 2003 and 2011 budgets, which cut planned military spending while protecting areas such as health and education, show that the government recognizes more pressing social needs, in a country still plagued by extreme inequality.

VII. Turkey

Turkey's military expenditure totalled an estimated 26.3 billion liras ($17.5 billion) in 2010, 3.0 per cent lower in real terms than in 2009 and 11.2 per cent lower than in 2001. Military expenditure as a share of GDP has also fallen, from 3.7 per cent in 2001 to an estimated 2.4 per cent in 2010. Despite this decrease, in 2010 Turkey became the world's 15th largest military spender.[88]

In recent years Turkey has re-emerged as a significant player in international politics. It has the eighth largest economy in Europe and the 17th largest in the world.[89] After the break-up of the Ottoman Empire at the end of World War I, Turkey was built by President Mustafa Kemal Atatürk

[85] Brazilian Ministry of Defence, 'Palestra do Ministro Nelson Jobim na SAE: "Politica de Defesa do Governo Lula"' [Address by Minister Nelsom Jobim to the Secretariat of Strategic Affairs: 'the defence policy of the Lula government'], 15 Dec. 2010, <https://www.defesa.gov.br/index.php/noticias-do-md.html>.

[86] Richard, I., 'Lula sanciona lei que cria Estado-Maior da Defesa e dá mais poderes a ministro da pasta' [Lula approves law that creates defence general staff and gives more power to the ministry], Agencia Brasil, 25 Aug. 2010, <http://agenciabrasil.ebc.com.br/noticia/2010-08-25/lula-sanciona-lei-que-cria-estado-maior-da-defesa-e-da-mais-poderes-ministro-da-pasta>.

[87] Brazilian Complementary Act no. 136 of 25 Aug. 2010, *Diário Oficial da União* (Brasília), 26 Aug. 2010. On the drafting process for the first defence white paper, which was launched in Feb. 2011, see Brazilian Ministry of Defence, 'Livro branco de defesa nacional' [National defence white paper], <http://livrobranco.defesa.gov.br/>.

[88] See appendix 4A, section II.

[89] International Monetary Fund (note 69).

as a secular and modern state. The military was given the role of guardian of the state and has intervened several times when it deemed that Turkey's secular democracy was threatened.[90] Although it remains a key actor in Turkey's political life, the military is now less influential. Since 2001 governance of the military has been reformed, partly in response to recommendations made in negotiations on Turkey's accession to the European Union (EU): the military is now accountable to the Grand National Assembly (the Turkish Parliament), which has been given full control of military budgeting, including extra-budgetary funding; and the National Security Council has been transformed from a coordinating organ with executive powers into an advisory body that now includes civilians.[91] These reforms, along with changes to the constitution in 2010 and ongoing investigations into alleged military coup plots, continue to generate tensions between the military and the ruling Justice and Development Party (Adalet ve Kalkınma Partisi, AKP), which is seeking to reduce the military's role in politics.[92]

Traditionally orientated towards Europe and the USA, Turkish foreign policy has been slowly but consistently reoriented to its neighbourhood in the Middle East and the Caucasus, especially since the AKP came to power in 2002.[93] One of the main pillars of this new architecture is the 'zero problems with neighbours' policy, by which Turkey seeks to strengthen cooperation on political, economic and security issues within its vicinity.[94]

SIPRI's estimate of Turkey's military expenditure includes spending on both the Turkish Armed Forces (Türk Silahlı Kuvvetleri, TSK) and paramilitary forces—the gendarmerie and coastguard. The TSK, with approximately 511 000 active members and 378 700 in the reserve, is NATO's second largest military (after that of the USA).[95] In 2010 its budget, allocated via the Ministry of National Defence, was 15.9 billion liras ($10.6 billion). Although the paramilitary gendarmerie and coastguard depend administratively on the Ministry of the Interior, they fulfil military functions. In 2010 their respective budgets were 3.77 billion liras ($2.5 bil-

[90] Taspinar, Ö., *Turkey's Middle East Policies: Between Neo-Ottomanism and Kemalism*, Carnegie Papers no. 10 (Carnegie Endowment for International Peace: Washington, DC, Sep. 2008).

[91] Narli, A. N., 'Aligning civil–military relations in Turkey: transperency [*sic*] building in defense sector and the EU reforms', eds E. M. Felberbauer, P. Jureković and P. Pantev, *Transforming National Armed Forces in South East Europe: From the Social to the Military Challenge* (National Defence Academy and Bureau for Security Policy: Vienna, Oct. 2004), pp. 164, 166. See also Özcan, G., 'National Security Council', ed. Ü. Cizre, Geneva Centre for the Democratic Control of Armed Forces, *Democratic Oversight and Reform of the Security Sector in Turkey* (LIT: Zurich, 2007), pp. 41–58.

[92] E.g. Butler, D., 'Turkish army plot trial to revive tensions', Reuters, 15 Dec. 2010, <http://www.reuters.com/article/2010/12/15/us-turkey-sledgehammer-preview-idUSTRE6BE3AU20101215>.

[93] Yilmaz, M. 'Conceptual framework of Turkish foreign policy in AK Party era', *Turkish Review*, spring 2010, p. 106.

[94] Davutoğlu, A., 'Turkey's zero-problems foreign policy', *Foreign Policy*, May 2010.

[95] International Institute for Strategic Studies, *The Military Balance 2010* (Routledge: London, 2010), p. 164.

lion) and 192 million liras ($128 million).[96] Funding for military procurement comes from the TSK budget and from the Defence Industry Support Fund (DISF). The DISF is a special fund created in 1986 that collects levies on petrol, tobacco, alcohol and legal gambling. Between 1986 and 2008 it is reported to have collected $22 billion, including $1.5 billion in 2008.[97] For 2010, expenditure by the DISF was budgeted at 2.3 billion liras ($1.5 billion).[98]

In addition to the DISF, the Turkish military budget includes resources from the TSK Foundation (TSK Güçlendirme Vakfı, TSKGV), credits reimbursed by the Treasury, funds allocated to the gendarmerie and coastguard commands, slush funds from the Office of the Prime Minister, and funding for 'village guards'—local paramilitary units originally raised to fight the Kurdistan Workers' Party (Partiya Karkerên Kurdistan, PKK).[99] These extra-budgetary resources are generally not subject to public scrutiny. Turkish NGOs have criticized the lack of transparency in Turkish military spending and have called for improved availability of data, including on extra-budgetary funding.[100]

The ongoing plans for modernization of the TSK, which include strengthening domestic arms production capability and planned increases in future R&D and procurement budgets, suggest that the downward trend in Turkey's military expenditure since 2001 may not continue.[101] Indeed, in December 2010 the Grand National Assembly approved an increase in the budget of the Ministry of National Defence for 2011, including higher spending on procurement.[102] This trend will continue in subsequent years as Turkey starts to pay for ongoing and future weapons acquisitions, including long-range and transport aircraft, major warships (including an aircraft carrier), UAVs and mine-resistant ambush-protected (MRAP) vehicles for internal security.[103]

Turkey's defence and security policy has been guided by two main policy documents: the 2000 Defence White Paper and the National Security

[96] Public Expenditures Monitoring Platform, Letter to Grand National Assembly of Turkey from coalition of Turkish non-governmental organizations, Mar. 2010, <http://www.kamuharcamalarini izlemeplatformu.org/index_en.html>, p. 17.

[97] Enginsoy, U. and Bekdil, B. E., 'Turkey needs to boost procurement funds', *Defense News*, 6 Sep. 2010, p. 13; and Akça, İ., *Military-Economic Structure in Turkey: Present Situation, Problems, and Solutions* (TESEV: Istanbul, 2010), p. 17.

[98] Public Expenditures Monitoring Platform (note 96), p. 17.

[99] Sarıibrahimoğlu, L., 'Turkish armed forces', ed. Cizre (note 91), p. 82; and Public Expenditures Monitoring Platform (note 96), pp. 10–12.

[100] Public Expenditure Monitoring Platform (note 96).

[101] Sarıibrahimoğlu, L., 'Undeterred by financial crisis, Turkish defense companies plan to increase domestic arms production', *Eurasia Daily Monitor*, 27 Feb. 2009. On the modernization plans see Hen-Tov, E., 'The political economy of Turkish military modernization', *Middle East Review of International Affairs*, vol. 8, no. 4 (Dec. 2004). On the Turkish arms industry see chapter 5, section VI, in this volume.

[102] Enginsoy, Ü., 'Turkey to increase arms spending in 2011', *Hürriyet Daily News*, 10 Jan. 2011.

[103] SIPRI Arms Transfers Database (note 52); and Enginsoy (note 102).

Policy Document (NSPD). The white paper sets Turkey's official defence policy, based on Atatürk's principle of 'peace at home, peace in the world'.[104] The NSPD—sometimes referred to as the 'secret constitution'—'identifies the domestic and foreign threats faced by Turkey and delineates the policies which have been established in order to avoid these threats'.[105] It is revised every five years, and in 2010 it was reviewed for the first time by a team of civilians. Although the document is not available to the public, this review reportedly removed Greece, Iran, Iraq and Russia from the list of critical threats to Turkish national security, in line with the AKP's zero problems policy.[106] At the domestic level, the main threat to national security continues to be the intrastate conflict with the PKK, although the intensity of this conflict has generally diminished since 1999, especially after Turkey increased cooperation with the Iraqi Government.[107]

The recent downward trend in Turkish military expenditure may be explained by reforms introduced to democratize the military, the changes in the perception of Turkey's security threats since the implementation of the zero problems policies and the lower intensity of the conflict with the PKK. Indeed, the Turkish and Greek prime ministers explicitly discussed mutual reductions in military spending during the former's visit to Greece in May 2010.[108] In the light of this, the rationale for Turkey's major military modernization plans is not immediately apparent. With the exception of military equipment for internal security tasks, it is questionable whether the acquisition of advanced power-projection capabilities is in line with Turkey's defence and foreign policy. It is possible that Turkish military spending is motivated more by considerations of regional status than by its real defence needs.

VIII. South Africa

Although South Africa's military expenditure is far lower than the other cases studied here, it is the highest in sub-Saharan Africa. In 2010 it totalled 32.9 billion rand ($4.5 billion), representing an estimated 1.2 per cent of GDP. While spending in 2010 was 2.0 per cent lower than in 2009, it was 22 per cent higher than in 2001.

[104] Turkish Ministry of National Defence (MND), *Defense White Paper 2000* (MND: Ankara, 2000).

[105] Sariibrahimglu (note 99), p. 74.

[106] 'Russia, Iran, Iraq, Greece no longer "national threat"' to Turkey', *Hürriyet Daily News*, 23 Aug. 2010.

[107] See appendix 2A in this volume; and Migdalovitz, C., *Turkey: Politics of Identity and Power*, Congressional Research Service (CRS) Report for Congress R41368 (US Congress, CRS: Washington, DC, 13 Aug. 2010), pp. 14–18.

[108] Kambas, M. and Kyriakidou, D., 'Greek, Turkish PMs meet, discuss defense cuts', Reuters, 14 May 2010, <http://www.reuters.com/article/2010/05/14/us-turkey-greece-idUSTRE64D5BN20100514>.

Since the end of apartheid in 1994 South Africa has emerged as a major economic, political, security and diplomatic actor in Africa. This is linked to three factors. First is its economic profile as the hub of trade, manufacturing and investment in southern Africa. The country's gross national income (GNI) in 2008 accounted for 29.8 per cent of the entire GNI of sub-Saharan Africa.[109] Second is its military strength, both in terms of military expenditure and having the most developed arms industry in Africa.[110] Third is South Africa's increasingly assertive role in multilateral institutions, specifically the Southern African Development Community (SADC) and the African Union (AU). South Africa was instrumental in the development and adoption of the AU's Constitutive Act in 2000 and its New Partnership for Africa's Development (NEPAD) in 2001.[111] In addition, South Africa claims leadership in Africa in promoting human rights, good governance and the 'African renaissance', underscored by its hosting of the 2010 FIFA World Cup.[112]

Since 2002 a large share of South Africa's military spending has been allocated to the Special Defence Account (SDA), which is dedicated to arms procurement. From 40 per cent of the total in 2002, the SDA share gradually declined to 27 per cent in 2009, and just 18 per cent was budgeted for 2010.[113] The high level of procurement spending over the past decade has been driven by the 47.2 billion rand ($6.4 billion) Strategic Defence Procurement (SDP) programme, a multi-year arms acquisition programme that was initiated in 1999 to transform apartheid-era military capabilities.[114] The SDP initially included the purchase of 4 corvettes, 3 submarines, 24 trainer aircraft, 26 combat aircraft and 30 helicopters.[115] The 2006 Defence Update emphasizes more flexible, mobile and deployable land forces, with concomitant air- and sealift capabilities.[116] The most significant consequent change to the SDP was a 2007 order—also known as the

[109] World Bank (note 8), p. 34.

[110] On the South African arms industry see e.g. Dunne, J. P., 'The making of arms in South Africa', *Economics of Peace and Security Journal*, vol. 1, no. 1 (Jan. 2006); and Wezeman, P. D., 'South African arms supplies to sub-Saharan Africa', SIPRI Background Paper, Jan. 2011, <http://books.sipri.org/product_info?c_product_id=419>.

[111] Constitutive Act of the African Union, adopted 11 July 2000, entered into force 26 May 2001, <http://www.au.int/en/about/constitutive_act>. On NEPAD see the NEPAD Planning and Coordination Agency website, <http://www.nepad.org/>.

[112] See e.g. Mbeki, T., South African Deputy President, 'The African renaissance, South Africa and the world', Speech, United Nations University, Tokyo, 9 Apr. 1998, <http://www.info.gov.za/speeches/1998/98b17_5559811376.htm>.

[113] South African National Treasury, Estimates of national expenditure, 2002–10, <http://www.treasury.gov.za/documents/national budget/>.

[114] 'SDP to cost R47.225bn', DefenceWeb, 25 Jan. 2011, <http://www.defenceweb.co.za/index.php?option=com_content&id=13207>. For an alternative estimate of the total cost of the SDP see chapter 1, section III, in this volume.

[115] For full details see chapter 1, section III, in this volume.

[116] South African Department of Defence (DOD), *Annual Report FY 2007–2008* (DOD: Pretoria, 2008), pp. 2–3.

Hoefyster project—for 264 infantry combat vehicles worth $1.5 billion.[117] The Defence Update also calls for significantly higher military spending from FY 2011/12.[118]

Important domestic changes and policy processes have shaped South Africa's military expenditure and its emergent geopolitical status. First, a new constitution in 1996—based on equality, respect for human rights and social welfare—reshaped the composition, mandate and defence doctrine of the armed forces, specifically changing from an adversarial relationship with South Africa's neighbours to one of cooperation.[119]

Second has been a series of military-related policy initiatives launched since the mid-1990s, including the 1996 White Paper on National Defence, the 1998 Defence Review, the 2002 Defence Act, the 2006 Defence Update and the 2009 Future SA Army 2020 Strategy (Strategy 2020).[120] The white paper and defence review undertook comprehensive planning of force doctrine and design, armaments, equipment, and funding. The review concluded that, despite the absence of a major external military threat to South Africa in the medium term, there was a need to acquire conventional military deterrence capabilities. This became the basis for the SDP, although the connection between the conclusions of the review and what was actually bought has been questioned.[121] The 2006 Defence Update redefined and aligned South Africa's defence capabilities with the government's foreign policy objective of active participation in AU and UN peace operations, while Strategy 2020, which is closely linked to the 2006 Defence Update, includes plans for three infantry battalions and three engineer squadrons for external deployment and three infantry companies and one composite engineer squadron for internal deployment.[122]

The third factor shaping South Africa's military expenditure has been a policy launched in 2007 to align military capabilities to the country's foreign policy objectives of regional military cooperation, participation in peace operations and deployment of defence attachés.[123] By 2007 South

[117] SIPRI Arms Transfers Database (note 52); and Gibson, E., 'A lucky "horseshoe" for Denel?', *Defense News*, 21 May 2007.

[118] South African Department of Defence (note 116), p. 4.

[119] South African Department of Defence (DOD), *White Paper on National Defence for the Republic of South Africa: Defence in a Democracy* (DOD: Pretoria, May 1996), chapter 1, para. 4.

[120] South African Department of Defence (note 119); South African Department of Defence (DOD), *South African Defence Review* (DOD: Pretoria, 1998); Defence Act, South African Act no. 42 of 2002, assented to 12 Feb. 2003, *Government Gazette* (Pretoria), 20 Feb. 2003; and South African DOD, *The Future SA Army Strategy*, Version 1 (DOD: Pretoria, Jan. 2009).

[121] South African Department of Defence, *South African Defence Review* (note 120), chapter 8, para. 73; Feinstein, A., *After the Party: Corruption, the ANC and South Africa's Uncertain Future* (Verso: London, 2009); and chapter 1 in this volume.

[122] Kruys, G. P. H., *South African Army Priorities and Roles in the Early 21st Century*, University of Pretoria, Institute for Strategic Studies (ISSUP) Bulletin no. 3/2009 (ISSUP: Pretoria, Apr. 2009), p. 4; and South African Department of Defence (note 116), pp. xi–xiii.

[123] South African Department of Defence (note 116), pp. 1–2.

Africa had defence representation in 31 countries.[124] It has participated in three of the four AU-led peace operations and in December 2010 had 2005 troops deployed on UN operations.[125] This policy of defence diplomacy underscores South Africa's aspiration to become a permanent member of the UN Security Council.[126]

The size and focus of South Africa's military spending has proved controversial given the many competing domestic priorities, especially the needs to tackle poverty, unemployment and extreme inequality, HIV/Aids, and poor housing.[127] Most controversial are the SDP acquisitions, which largely relate to external deterrence and power projection and which have placed a heavy strain on the military budget, hampering efforts to meet the immediate operational needs of the South African National Defence Force (SANDF). These are primarily for peacekeeping and internal security, since extreme levels of violent crime have led to the involvement of the SANDF in internal security operations alongside the police force.[128] Meanwhile, the corruption that accompanied the SDP has implicated several top-ranking military officers, ministers and leaders of the ruling African National Congress. This shows that South Africa is not insulated from the poor military budgeting, procurement and oversight practices and mismanagement of resources associated with many African countries.[129]

IX. Conclusions

World military expenditure continued to increase in 2010, albeit much more slowly than in recent years. The continuing effects of the global economic recession slowed or halted growth in Asia and Europe, but large increases continued in Africa and South America and the United States again accounted for most of the real-terms increase in the world total.

While the USA led the global rise in military spending over the past decade, this trend has been followed by many emerging (or re-emerging) regional powers such as Brazil, China, India, Russia, South Africa and Turkey. Of these six countries, all but Turkey increased their military spending significantly over the decade 2001–10.

[124] Lekota, M., Minister of Defence, Defence budget speech, South African National Assembly, 27 Mar. 2007, <http://www.info.gov.za/speeches/2007/07032717151001.htm>.

[125] SIPRI Multilateral Peace Operations Database, <http://www.sipri.org/databases/pko/>. On South Africa's involvement in peacekeeping see chapter 3 and appendix 3A in this volume.

[126] Neethling, T., 'Military spending, socio-economic challenges and foreign policy demands: Appraising South Africa's predicament', *African Security Review*, vol. 15, no. 4 (2006), p. 69.

[127] World Bank (note 8), pp. 80–142.

[128] Elowson, C., *Clouds at the Horizon? Security Challenges in South Africa's Post-transition Period*, User Report (Swedish Defence Research Agency, FOI: Stockholm, Mar. 2009). On crime and conflict see Stepanova, E., 'Armed conflict, crime and criminal violence', *SIPRI Yearbook 2010*.

[129] 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), p. 6.

The reasons for military spending increases in these countries vary. The economy has been a key constraining factor, with increases in military spending remaining in line with or slower than economic growth rates. Thus, China's economic growth has allowed it to increase its military spending at by far the fastest rate, and many have engaged in military modernization to accompany their growing economic and political roles. Rising military expenditure carries an opportunity cost in terms of the potential alternative uses—for example, in relation to social and developmental needs—to which the spending could be applied. This issue is particularly pressing and controversial in Brazil, India and South Africa, all of which are democracies with high levels of poverty and inequality.

Another key variable influencing military expenditure levels has been the intensity of ongoing conflicts, immediate security threats and relations with neighbouring countries, such as India's conflict in Kashmir and Turkey's relations with Greece.

Most of these powers seek global or regional status—in economic, political and diplomatic terms—for which a strong and modern military able to project influence is seen as a key element. Brazil, China, India, South Africa and Turkey are all pursuing naval and airborne power-projection capabilities, while Russia is seeking to re-establish itself as the dominant military force in the former Soviet area. In connection with this, the development of domestic arms industries able to reduce dependence on imports for modernization is a priority for all six countries.[130]

For some, this desire for military power reflects a fear of the consequences for security and status of falling behind in military technology. China and Russia are both concerned by overwhelming US military dominance and technological superiority, while China's rapid modernization is a major concern for India. However, in the cases of Brazil, South Africa and Turkey, which lack any clear actual or perceived threats or obvious potential uses for advanced weapons systems, military power appears to be desired as a mark of prestige.

Rapid military modernization in Asia in particular, while not yet showing signs of becoming a hostile arms race, in some ways reflects a classic security dilemma.[131] China's military development comes in part from a sense of its vulnerability to US power but generates similar feelings of vulnerability in its neighbours, in particular India. In each case, protestations of peaceful intent have offered little reassurance, and the danger is that predictions of an arms race and of inevitable rivalry could become self-fulfilling.

[130] See chapter 5, section III, in this volume.

[131] On modernization in Asia see e.g. *Asian Perspective*, vol. 33, no. 4, Special issue on the arms race in North East Asia (2009). In addition to China and India, Asian countries that are significantly modernizing their militaries include Japan, South Korea, the Philippines, Thailand and Viet Nam.

Appendix 4A. Military expenditure data, 2001–10

SAM PERLO-FREEMAN, OLAWALE ISMAIL, NOEL KELLY, ELISABETH SKÖNS AND CARINA SOLMIRANO*

I. Introduction

This appendix presents the latest SIPRI military expenditure data for the years 2001–10. The principal regional trends and trends among major spenders are described in section II. Section III discusses how China's military spending can best be estimated. Section IV explains the sources and methods used in compiling the data and contains tables with the complete data series for 2001–10.

II. Regional trends and major spenders

Boxes 4A.1–4A.6 highlight the significant trends in military spending, globally and in the Americas, Africa, Asia and Oceania, Europe, and the Middle East. The figures suggest that the global financial and economic crisis that broke in 2008 is beginning to have an impact on world military spending, although there are considerable regional variations in this pattern. The regions and subregions in which military spending grew most rapidly in 2010 were South America (5.8 per cent), Africa (5.2 per cent) and Oceania (4.1 per cent). Across Asia and Oceania as a whole, however, the increase was only 1.4 per cent, one of the lowest rates in recent years, while military spending fell in Europe, by 2.8 per cent. The changes in Europe and Asia reflect the delayed effects of the economic crisis: in Europe, governments focused on tackling deficits, while in Asia the slower rate of growth appears to reflect an adjustment to the lower economic growth experienced in the crisis years.

The 15 countries with the highest military expenditure together accounted for 82 per cent of world military spending in 2010, with the top 5 accounting for 61 per cent (table 4A.1). The United States spent by far the largest share,

* Contribution of military expenditure data, estimates and advice are gratefully acknowledged from Julian Cooper (Centre for Russian and East European Studies, University of Birmingham), David Darchiashvili (Center for Civil–Military Relations and Security Studies, Tbilisi), Dimitar Dimitrov (University of National and World Economy, Sofia), J. Paul Dunne (University of the West of England, Bristol), Iñigo Guevara y Moyano (Colectivo de Análisis de la Seguridad con Democracia, Querétaro), Iduvina Hernández (Asociación para el estudio y la promoción de la seguridad en democracia, Guatemala City), Nazir Kamal (United Nations, New York), Pavan Nair (Jagruti Seva Sanstha, Pune), Elina Noor (Institute of Strategic and International Studies Malaysia, Kuala Lumpur), Pere Ortega (Centre d'Estudis per la Pau J. M. Delàs, Barcelona), Tamara Pataraia (Caucasus Institute for Peace, Democracy and Development, Tbilisi), Thomas Scheetz (Lincoln University College, Buenos Aires), Ron Smith (Birkbeck College, London) and Ozren Žunec (University of Zagreb).

Box 4A.1. World trends in military expenditure, 2010

- Estimated total world military expenditure in 2010 was $1630 billion (at current prices).
- Spending in 2010 was 1.3 per cent higher in real terms than in 2009 and 50 per cent higher than in 2001.
- The USA's real-terms increase of 2.8 per cent accounted for $18.5 billion of the global total increase of $19.6 billion (in constant 2009 prices).
- Military spending in the rest of the world (i.e. excluding the USA) increased by 0.1 per cent in real terms in 2010.
- The region or subregion with the fastest real-terms increase in 2010 was South America, at 5.8 per cent.
- Military spending fell in only one region in 2010: in Europe it fell by 2.8 per cent in real terms. There were also a fall in the subregion of Central and South Asia.
- The effects of the global financial crisis and economic recession on world military expenditure began to be felt in 2010 with slower growth or falls in several regions.

43 per cent, far more than China in second place, which in turn spent twice as much as the United Kingdom, in third place. For the first time since 2007, a new country entered the top 15: Turkey replaced Spain in 15th place, in part due to an appreciation of the Turkish lira in relation to the US dollar and despite a slight real-terms fall in its spending in 2010. Otherwise, there were only slight changes in the rankings, with European countries tending to continue to slip down the rankings in comparison with rising developing-world countries.

In contrast to 2009, when all but two of the top 15 increased their military spending, eight of the top 15 in 2010 decreased their spending. India, South Korea, Russia and the UK reversed—at least temporarily—the long-term increasing trend in their military spending in 2010, while France, Germany, Italy and Turkey continued the generally downward trend in their spending. The increases by the USA and China—while still significant—were also lower than in recent years. This partly reflected delayed effects of the global economic recession which, while not leading to major cuts in world military spending, at least caused a pause in its rapid growth as countries addressed budget deficits or adjusted spending to slower rates of economic growth. However, Australia, Brazil, Canada and Saudi Arabia all made substantial increases, in line with recent trends, and Japan slightly increased its spending, reversing recent trends.

The share of their gross domestic products (GDPs) that the major spenders devoted to military spending (the military burden) varies considerably, from just 1.0 per cent in the case of Japan to 10.4 per cent for Saudi Arabia. However, only four of the top 15 spenders—South Korea, Russia, Saudi Arabia and the USA—have military burdens above the global average of 2.6 per cent.

The rankings discussed above refer to figures for military expenditure converted into US dollars at market exchange rates (MERs). These rates are determined by the supply of and demand for currencies used in international transactions and do not always accurately reflect differences in price levels between

Table 4A.1. The 15 countries with the highest military expenditure in 2010

Spending figures are in US$, at current prices and exchange rates. Countries are ranked according to military spending calculated using market exchange rates (MER). Figures for military spending calculated using purchasing power parity (PPP) exchange rates are also given.

Rank	Country	Spending ($ b., MER)	Change, 2001–10 (%)	Share of GDP (%, estimate)[a]	World share (%)	Spending ($ b., PPP)[b]
1	United States	698	*81.3*	*4.8*	*43*	698
2	China	[119]	*189*	[*2.1*]	[*7.3*]	[210]
3	United Kingdom	59.6	*21.9*	*2.7*	*3.7*	57.6
4	France	59.3	*3.3*	*2.3*	*3.6*	49.8
5	Russia	[58.7]	*82.4*	[*4.0*]	[*3.6*]	[88.2]
Sub-total top 5		**995**			***61***	
6	Japan	54.5	*–1.7*	*1.0*	*3.3*	43.6
7	Saudi Arabia[c]	45.2	*63.0*	*10.4*	*2.8*	64.6
8	Germany	[45.2]	*–2.7*	[*1.3*]	[*2.8*]	[40.0]
9	India	41.3	*54.3*	*2.7*	*2.5*	116
10	Italy	[37.0]	*–5.8*	[*1.8*]	[*2.3*]	[32.2]
Sub-total top 10		**1 218**			***75***	
11	Brazil	33.5	*29.6*	*1.6*	*2.1*	36.2
12	South Korea	27.6	*45.2*	*2.8*	*1.7*	40.8
13	Australia	24.0	*48.9*	*2.0*	*1.5*	17.3
14	Canada	[22.8]	*51.8*	[*1.5*]	[*1.4*]	[19.4]
15	Turkey	[17.5]	*–12.2*	[*2.4*]	[*1.1*]	[23.9]
Sub-total top 15		**1 344**			***82***	
World		**1 630**	***50.3***	***2.6***	***100***	

[ ] = estimated figure; GDP = gross domestic product.

[a] The figures for national military expenditure as a share of GDP are based on estimates for 2010 GDP from the IMF *World Economic Outlook*, October 2010.

[b] The figures for military expenditure at PPP exchange rates are estimates based on the ratio of PPP to MER-based GDP projections for 2010 implicit in the International Monetary Fund's *World Economic Outlook*. Thus, military expenditure figures at MER rates have been multiplied by the same ratio to obtain the PPP estimates.

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

Sources: SIPRI Military Expenditure Database, <http://www.sipri.org/databases/milex/>; and International Monetary Fund, *World Economic Outlook* database, Oct. 2010, <http://www.imf.org/external/pubs/ft/weo/2010/02/weodata/index.aspx>.

countries. An alternative is to use exchange rates based on GDP-based purchasing power parity (PPP), which seek to control for differences in price levels in order to provide a measure of the real purchasing power of the GDP of each country. The right-hand column of table 4A.1 presents military spending figures converted using estimated PPP rates.

Box 4A.2. Trends in military spending in Africa, 2010

- Estimated total military expenditure in Africa in 2010 was $30.1 billion ($10.6 billion in North Africa and $19.5 billion in sub-Saharan Africa).
- Spending in 2010 was 5.2 per cent higher in real terms than in 2009 (5.6 per cent in North Africa and 4.9 per cent in sub-Saharan Africa) and 64 per cent higher than in 2001 (69 per cent in North Africa and 61 per cent in sub-Saharan Africa).
- Four of the continent's five top spenders—Algeria, Angola, Morocco and Nigeria—accounted for the bulk of the increase, while spending in the fifth—South Africa—fell slightly in real terms.
- Angola's real-terms increase of 19 per cent ($609 million in 2009 prices) was the major determinant of the trend in Africa. This was partly offset by another large fall in Chad from the oil-fuelled heights of 2008.
- The increases in Algeria, Angola and Nigeria and the decrease in Chad were influenced by corresponding trends in oil and gas revenues.

Note: Estimates for Africa and its subregions in 2010 are uncertain due to missing data for some countries.

Box 4A.3. Trends in military spending in the Americas, 2010

- Estimated total military expenditure in the Americas in 2010 was $791 billion ($6.5 billion in Central America and the Caribbean, $721 billion in North America, and $63.3 billion in South America).
- Spending in 2010 was 3.0 per cent higher in real terms than in 2009 (1.9 per cent in Central America and the Caribbean, 2.8 per cent in North America and 5.8 per cent in South America) and 76 per cent higher than in 2000 (28 per cent in Central America and the Caribbean, 80 per cent in North America and 42 per cent in South America).
- The bulk of the real-terms increase of $3.0 billion in South America was due to the 9.3 per cent ($2.4 billion in 2009 prices) increase in Brazil's spending.
- However, military spending increased significantly in 7 of the 10 South American countries for which data is available. The largest relative increases were in Paraguay (16 per cent) and Peru (16 per cent).
- As in 2009, the largest percentage decrease was in Venezuela, where spending fell by 27 per cent. Bolivia and Uruguay also cut spending.

Although the same 15 countries were the top spenders in both MER and PPP terms in 2010, the PPP rates give a different picture of the top 15.[1] The USA and China are clearly the top 2 spenders in both cases, but the ratio between US and Chinese military spending in PPP terms was 3.3 : 1, compared to 5.9 : 1 in MER terms. The next three biggest spenders in PPP terms were India, Russia and Saudi Arabia. In general, the effect of using PPP rates is to increase the relative size of expenditure figures of developing and transition economies.

PPP rates have some advantages over MERs in general price calculations, and they can successfully measure what alternative volume of goods and services could be bought within the country in question if military expenditure were used for other purposes. However, they are not a better measure of the

[1] Iran should almost certainly be in the top 15 measured by PPP, in place of Australia, but data for Iran's military spending in 2010 was unavailable.

Box 4A.4. Trends in military spending in Asia and Oceania, 2010

- Estimated total military expenditure in Asia and Oceania in 2010 was $317 billion ($52.1 billion in Central and South Asia, $211 billion in East Asia, $25.7 billion in Oceania, and $28.7 billion in South East Asia).
- Spending in 2010 was 1.4 per cent higher in real terms than in 2009 (a fall of 2.2 per cent in Central and South Asia, and increases of 2.1 per cent in East Asia, 4.2 per cent in Oceania and 0.7 per cent in South East Asia) and 64 per cent higher than in 2001 (50 per cent in Central and South Asia, 70 per cent in East Asia, 46 per cent in Oceania, and 60 per cent in South East Asia).
- The growth rate in the region as a whole and in the Asian subregions in 2010 was much slower than in previous years, and the fall in Central and South Asia was the first in a decade. The largest absolute increases in 2010 were by China ($4.2 billion in 2009 prices) and Indonesia ($1.3 billion). The largest absolute fall was by India ($1.0 billion).
- The largest relative increases were in Indonesia (28 per cent), Mongolia (26 per cent), the Philippines (12 per cent) and Bangladesh (11 per cent). The largest falls were in Timor-Leste (51 per cent), Sri Lanka (14 per cent) and Thailand (12 per cent).

relative costs of military goods and services such as advanced weapon technology. For example, using PPP rates, India's military spending is double that of the UK or France, but few analysts would suggest that India is acquiring double the value of military resources of the traditional European powers. In fact, military spending figures, whatever exchange rate is used, do not directly measure military capability, as this depends also on factors such as prices, industrial efficiency, military organization and doctrine, and capacity for technological absorption. In addition, PPP rates, as estimates, are less reliable than MERs. For these reasons, SIPRI uses MERs to convert military expenditure data into US dollars, despite their limitations, as the simplest and most objective measure for comparing international spending levels.[2]

III. Estimating China's military spending

In its estimates of Chinese military expenditure, SIPRI seeks to take into account a number of sources of military expenditure outside the official defence budget. These include funding from other central government ministries (some of which is publicly available, some of which is not), local government and internal People's Liberation Army (PLA) sources.

SIPRI's estimate of China's military spending is based on a methodology used in a study by Shaoguang Wang published in *SIPRI Yearbook 1999*.[3] SIPRI has now updated its estimates for China for the years 1997–2010 using data from various editions of the China Public Finance Yearbook, the China Statistical Yearbook and other official publications, while maintaining the key elements of Wang's approach to estimation. This has allowed previous estimates

[2] On the issues involved in international comparison and currency conversion and the use of PPP rates see Ward, M., 'International comparisons of military expenditures: issues and challenges of using purchasing power parities', *SIPRI Yearbook 2006*.

[3] Wang, S., 'The military expenditure of China, 1989–98', *SIPRI Yearbook 1999*.

Box 4A.5. Trends in military spending in Europe, 2010

- Estimated total military expenditure in Europe in 2010 was $382 billion ($65.5 billion in Eastern Europe, and $316 billion in Western and Central Europe).
- Spending in 2010 was 2.8 per cent lower in real terms than in 2009 (1.3 per cent in Eastern Europe and 3.0 per cent in Western and Central Europe) but 11.9 per cent higher than in 2001 (88 per cent in Eastern Europe and 4.1 per cent in Western and Central Europe).
- The falls show that the global financial and economic crisis is beginning to have an effect on military spending in Europe.
- While most major spenders (i.e. those in the top 15 worldwide) made relatively small cuts, there were large falls in many smaller Central and East European countries such as Bulgaria (28 per cent), Latvia (26 per cent), Georgia (25 per cent), Moldova (24 per cent) and Estonia (23 per cent). Spending in Albania, Greece, Hungary, Lithuania and Slovakia also fell by more than 10 per cent.
- Further cuts are expected in most of Western and Central Europe in 2011 and subsequent years, although these are likely to remain relatively modest in the major spending countries.

of some elements of the total figure for Chinese military spending to be replaced with actual expenditure data and some other estimates to be improved. However, the previous methodology, in terms of the items included in the total and the approach to estimating those items for which actual expenditure data is not available, remains largely unchanged.

This exercise has led to a small but significant increase in SIPRI's estimates for Chinese military spending, largely due to the systematic inclusion of local government spending on the PLA and increased estimates for extra-budgetary spending on research, development, technology and evaluation (RDT&E).

The seven items outside the official defence budget that are included in the estimate are as follows.[4]

1. *Central and local government spending on the paramilitary People's Armed Police (PAP)*. Official expenditure figures for these are used up to 2008, while for 2009–10 this item is assumed to have increased in line with the official defence budget.

2. *Soldiers' demobilization and retirement payments from the Ministry of Civil Affairs*. These figures are estimated as for item 1 above.

3. *Subsidies to the arms industry*. While Wang used official figures for 'subsidies to productive loss-making industries', these are no longer disaggregated. This item is therefore estimated based on an assumption of a constant share of overall subsidies to loss-making industries. For 2009–10 the average rate of decline over the previous three years is used as an estimate.

[4] Also previously included were estimates for PLA revenues from arms exports, which were a very small element of the total. These have been deleted on the grounds that there is a risk of double counting, as these revenues may be used, for example, to fund arms imports. This is the one substantive departure from Wang's methodology.

Box 4A.6. Trends in military spending in the Middle East, 2010

- Estimated total military expenditure in the Middle East in 2010 was $111 billion.
- Spending in 2010 was 2.5 per cent higher in real terms than in 2009 and 35 per cent higher than in 2001.
- Most of this increase since 2001 occurred during the period 2002–2007, since when spending has changed little.
- The largest absolute increase in the Middle East in 2010 was in Saudi Arabia ($1.6 billion in 2009 prices), while the largest relative increases were in Iraq (12 per cent) and Lebanon (9.7 per cent). The largest fall was in Oman (9.8 per cent).
- Military expenditure estimates in the Middle East for 2009 and 2010 are subject to considerable uncertainty due to missing data for some countries.
- The most important country for which data was missing in 2009 and 2010 was Iran. According to a media report, the budget for the Iranian armed forces increased by 20 per cent to 90 trillion rials ($9 billion), while that for the Revolutionary Guard Corps was 58 billion rials ($5.8 billion). However, SIPRI has been unable to verify these figures or compare them with previous data from other sources.

4. *Additional military RDT&E funding by civilian government ministries*. These estimates are based on the growth in the relevant general research and development (R&D) and science and technology budget lines as used by Wang, or the rate of growth of the nearest equivalent when reporting systems have changed. Estimates for 2009–10 are based on the rate of growth of the defence budget.

5. *Additional military construction expenses*. These are estimated, following Wang, at 4 per cent of the capital construction budget up to 2006 and are assumed to have increased in line with the PLA budget since then, as the capital construction expenditure series is no longer published.

6. *Chinese arms imports*. These estimates have not been changed and are assumed to have followed the rate of change of China's arms imports and exports as measured by the SIPRI trend indicator value (TIV).[5]

7. *Revenue from residual military-owned enterprises*. These are unchanged and are assumed to have declined steadily since 1999, as a policy of divestment from such activities has been followed.

The resulting SIPRI estimates for total Chinese military spending are a little over 50 per cent higher than the official defence budget for most recent years. SIPRI's current estimate for R&D spending is quite high, suggesting a share of R&D in overall military spending close to that of the USA, and considerably higher than that of major European arms producers. This is due to the rapid increase in recent years of the general budget for R&D, which has been even faster than that of the economy as a whole or the official defence budget.

While details of some elements of Chinese military spending outside the official defence budget are publicly available (such as the PAP budget), others—most importantly R&D spending—are not, and can at present only be the

[5] For the definition of the TIV see appendix 6A in this volume.

subject of educated guesswork. Further research based on publicly available Chinese-language sources could provide improved estimates, but without greater transparency on the part of the Chinese Government, a completely accurate figure is not possible.

IV. Tables of military expenditure

Table 4A.2 presents military expenditure by region, by certain international organizations and by income group for the period 2001–10. It also presents time series for spending per capita and spending as a proportion of global GDP. Military expenditure by individual countries is presented in table 4A.3 in local currency at current prices for the period 2001–10 and in table 4A.4 in US dollars at constant (2009) prices and exchange rates for the period 2001–10 and for 2010 in current US dollars. Table 4A.5 presents military expenditure for the period 2001–2009 as a percentage of countries' GDPs. Notes and explanations of the conventions used appear below table 4A.5.

Conversion to constant US dollars has been made using market exchange rates for all countries. As the base year for conversion to constant US dollars has been changed to 2009, the figures in table 4A.4 are substantially different from those in *SIPRI Yearbook 2010*, where the base year 2008 was used. The effects of the change of base year are twofold. First, as is usually the case, adopting a later base year tends to increase most figures due to the effects of inflation between 2008 and 2009. Second, there were significant exchange rate changes between 2008 and 2009, with the dollar generally rising. This has reduced the relative size of the constant dollar figures of those countries whose currency has fallen against the dollar. Conversely, the fall of the dollar against most currencies in 2010 means that the current dollar figures for 2010 shown in the right-hand columns of tables 4A.2 and 4A.4 are generally significantly higher than the constant (2009) dollar figures for the same year. This includes the figure for the world total in table 4A.2.

The data in local currency at current prices is presented on a financial year basis, while all other data is presented on a calendar year basis. Those countries with financial years that do not coincide with calendar years are indicated in table 4A.3. In all but one such case, the current price local currency figure shown for a given year is for the financial year beginning in that calendar year. For example, the local currency figure for a financial year running from 1 July 2008 to 30 June 2009 is shown in the table as being for 2008. The exception is the USA, where each figure is for the financial year beginning on 1 October of the year previous to that indicated. A few countries have changed their financial year during the period 2001–10. These cases are indicated in footnotes.

Military expenditure data from different editions of the SIPRI Yearbook should not be combined because the data series are continuously revised and updated. This is true in particular for the most recent years as figures for budget allocations are replaced by figures for actual expenditure. In some cases entire series are revised as new and better data becomes available. Revisions in constant dollar series can also be caused by significant revisions in the eco-

nomic data used for these calculations. The SIPRI Military Expenditure Database, accessible at <http://www.sipri.org/databases/milex/>, includes consistent series dating back to 1988 for most countries. Data for the years 1950–87—published in previous editions of the SIPRI Yearbook—cannot always be combined with the post-1987 data since SIPRI conducted a major review of the data for many countries for the period beginning in 1988.

The purpose of the data

The main purpose of the data on military expenditure is to provide an easily identifiable measure of the scale of resources absorbed by the military. Military expenditure is an 'input' measure, which is not directly related to the 'output' of military activities, such as military capability or military security. Long- and short-term changes in military spending may be signs of a change in military output, but interpretations of this type should be made with caution.

The purpose of the specific tables are as follows. The country data on military expenditure in local currency at current prices (table 4A.3) is the original data for all the other tables. This is provided to contribute to transparency and to enable comparison with data reported in government sources and elsewhere. Data in constant dollars is provided to allow for comparison over time for individual countries (table 4A.4) and for regions, organizations and income groups, as well as for the world total (table 4A.2). Data in current dollars for the most recent year (here 2010) is provided for the purpose of international comparison across countries (table 4A.4) and across regions (table 4A.2). The current dollar figures also facilitate comparison with other economic indicators, which are often expressed in current dollar terms. Data on military expenditure as a share of GDP is provided (in table 4A.5) as an indicator of the proportion of a country's resources used for military activities, that is, as an indicator of the economic burden of military expenditure, also called the 'defence burden' or the 'military burden'.

The coverage of the data

The military expenditure data in tables 4A.2–4A.5 covers 165 countries for the 10-year period 2001–10. Total military expenditure figures are calculated for three types of country groupings—geographical region, international organization and country income group (categorized by gross national income per capita). The coverage of each of these groupings is provided in the notes to table 4A.2.

The definition of military expenditure

The guideline definition of military expenditure used by SIPRI includes expenditure on the following actors and activities: (*a*) the armed forces, including peacekeeping forces; (*b*) defence ministries and other government agencies engaged in defence projects; (*c*) paramilitary forces, when judged to be trained and equipped for military operations; and (*d*) military space activ-

ities. It includes all current and capital expenditure on: (*a*) military and civil personnel, including retirement pensions of military personnel and social services for personnel; (*b*) operations and maintenance; (*c*) procurement; (*d*) military research and development; and (*e*) military aid (in the military expenditure of the donor country). It does not include civil defence and current expenditure for past military activities, such as for veterans' benefits, demobilization, conversion and weapon destruction. While this definition serves as a guideline, in practice it is often difficult to adhere to due to data limitations.

The limitations of the data

There are three main types of limitations of the data: reliability, validity and comparability.

The main problems of reliability are due to the less than comprehensive coverage of official military expenditure data, the lack of detailed information on military expenditure and the lack of data on actual, rather than budgeted, military expenditure. In many countries the official data covers only a part of total military expenditure. Important items can be hidden under non-military budget headings or can even be financed entirely outside the government budget. Many such extra-budgetary and off-budget mechanisms are employed in practice.[6]

The validity of expenditure data depends on the purpose for which it is used. Since expenditure data is a measure of monetary input, its most valid use is as an indicator of the economic resources consumed for military purposes. For the same reason, its utility as an indicator of military strength or capability is limited. While military expenditure does have an impact on military capability, so do many other factors such as the balance between personnel and equipment, the technological level of military equipment, and the state of maintenance and repair, as well as the overall security environment in which the armed forces are to be employed.

The comparability of the data is limited by two different types of factor: the varying coverage (or definition) of the data and the method of currency conversion. The coverage of official data on military expenditure varies significantly between countries and over time for the same country. For the conversion into a common currency, the choice of exchange rate makes a great difference in cross-country comparisons (as discussed in section II). This is a general problem in international comparisons of economic data and is not specific to military expenditure. However, since international comparison of military expenditure is often a sensitive issue, it is important to bear in mind that the interpretation of cross-country comparisons of military expenditure is greatly influenced by the choice of exchange rate.[7]

[6] For an overview of such mechanisms see Hendrickson, D. and Ball, N., *Off-budget Military Expenditure and Revenue: Issues and Policy Perspectives for Donors*, Conflict, Security and Development Group (CSDG) Occasional Papers no. 1 (King's College: London, Jan. 2002).

[7] For comprehensive overviews of the conceptual problems and sources of uncertainty involved in military expenditure data sets see e.g. Brzoska, M., 'World military expenditures', eds K. Hartley and T. Sandler, *Handbook of Defense Economics*, vol. 1 (North-Holland: Amsterdam, 1995); and Ball,

Methods

SIPRI data is based on open sources and reflects the official data reported by governments. However, the official data does not always conform to the SIPRI definition of military expenditure. Nor is it always possible to recalculate data according to the definition, since this would require detailed information about what is included in the official defence budgets and about extra-budgetary and off-budget military expenditure items. In many cases SIPRI is confined to using the data provided by governments, regardless of definition. If several data series are available, which is often the case, SIPRI chooses the data series that corresponds most closely to the SIPRI definition of military expenditure. Nevertheless, priority is given to choosing a uniform time series for each country, in order to achieve consistency over time, rather than to adjusting the figures for individual years according to a common definition. In addition, estimates have to be made in specific cases.

Estimation

Estimates of military expenditure are predominantly made when the coverage of official data diverges significantly from the SIPRI definition or when no complete consistent time series is available. In the first case, estimates are made on the basis of an analysis of primarily official government budget and expenditure accounts. The most comprehensive estimates of this type are for China and Russia, which have been presented in detail in previous editions of the SIPRI Yearbook.[8] In the second case, when only incomplete times series are available, the figures from the data series which corresponds most closely to the SIPRI definition are used for the years covered by that series. Figures for the missing years are then estimated by applying the percentage change between years in an alternative series to the data in the first series, in order to achieve consistency over time.

All estimates are based on official government data or other empirical evidence from open sources. Thus, no estimates are made for countries that do not release any official data, and no figures are displayed for these countries.

SIPRI estimates are presented in square brackets in the tables. Round brackets are used when data is uncertain for reasons beyond SIPRI's control, for example, when the data is based on a source of uncertain reliability and in cases when data expressed in constant dollars or as shares of GDP is uncertain due to uncertain economic data.

The data for the most recent years includes two types of estimate, which apply to all countries. First, figures for the most recent years are for adopted budget, budget estimates or revised estimates, the majority of which will be revised in subsequent years. Second, in table 4A.4 the deflator used for the final

N., 'Measuring third world security expenditure: a research note', *World Development*, vol. 12, no. 2 (Feb. 1984). On African countries see Omitoogun, W., *Military Expenditure Data in Africa: A Survey of Cameroon, Ethiopia, Ghana, Kenya, Nigeria and Uganda*, SIPRI Research Report no. 17 (Oxford University Press: Oxford, 2003).

[8] Cooper, J., 'The military expenditure of the USSR and the Russian Federation, 1987–97', *SIPRI Yearbook 1998*; and Wang (note 3). On China see also section III above.

year in the series is an estimate based on part of a year or as provided by the International Monetary Fund (IMF). Unless exceptional uncertainty is involved, these estimates are not bracketed.

The totals for the world, regions, organizations and income groups in table 4A.2 are estimates because data is not available for all countries in all years. In cases where data for a country is missing at the beginning or end of the series, these estimates are made on the assumption that the rate of change for that country is the same as the average for the region to which it belongs. In cases where data is missing in the middle of the series, the estimates are made on the assumption of an even trend between the end values. When no estimate can be made, countries are excluded from all totals.

Calculations

The original country data is provided in local currency at current prices (table 4A.3). This is shown on a financial year basis, in contrast to previous editions of the SIPRI Yearbook, when these figures were shown on a calendar year basis. This change has been made to allow a direct comparison between SIPRI data and primary source documents, such as national budgets.

Figures in constant US dollars and as a share of GDP (tables 4A.4 and 4A.5) are displayed on a calendar year basis, which makes it necessary to convert financial year figures to calendar year figures for those countries where their financial and calendar years differ. These calculations are made on the assumption of an even rate of expenditure throughout the financial year. Local currency data is then converted to US dollars at constant prices and exchange rates (table 4A.3) using the national consumer prices index (CPI) for the respective country and the annual average market exchange rate. The use of CPIs as deflators means that the trend in the SIPRI military expenditure for each country (in constant dollars) reflects the real change in its purchasing power for country-typical baskets of civilian consumer goods.[9]

Sources

The sources for military expenditure data are, in order of priority: (*a*) primary sources, that is, official data provided by national governments, either in their official publications or in response to questionnaires; (*b*) secondary sources which quote primary data; and (*c*) other secondary sources.

The first category consists of national budget documents, defence white papers and public finance statistics as well as responses to a SIPRI questionnaire that is sent out annually to the finance and defence ministries, central banks, and national statistical offices of the countries in the SIPRI Military Expenditure Database (see appendix 4B). It also includes government responses to questionnaires about military expenditure sent out by the United

[9] A military-specific deflator is a more appropriate choice for the purpose of measuring purchasing power in terms of the amount of military personnel, goods and services that could be bought for the military expenditure. However, military-specific deflators are not available for most countries.

Nations and, if made available by the countries themselves, the Organization for Security and Co-operation in Europe (OSCE).

The second category includes international statistics, such as those of the North Atlantic Treaty Organization (NATO) and the IMF. The data for the 16 pre-1999 NATO member states has traditionally been taken from military expenditure statistics published in a number of NATO sources. The introduction by NATO of a new definition of military expenditure in 2005 has made it necessary to rely on other sources for some NATO countries for the most recent years. The data for many developing countries is taken from the IMF's Government Finance Statistics Yearbook, which provides a defence heading for most IMF member countries, and from country reports by IMF staff. This category also includes publications of other organizations that provide references to the primary sources used, such as the Country Reports of the Economist Intelligence Unit.

The third category of sources consists of specialist journals and newspapers.

The main sources for economic data are the publications of the IMF: *International Financial Statistics*, *World Economic Outlook* and country reports by IMF staff.

Table 4A.2. Military expenditure by region, by international organization and by income group, 2001–10

Figures are in US $b. at constant (2009) prices and exchange rates for 2001–10 and, in the right-most column, marked *, in current US$ b. for 2010. Figures do not always add up to totals because of the conventions of rounding.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
World total	**1 044**	**1 107**	**1 177**	**1 243**	**1 294**	**1 334**	**1 381**	**1 457**	**1 549**	**1 569**	**1 630**
United States	379	425	484	528	553	562	576	619	669	687	698
Rest of the world	665	682	693	715	741	772	805	838	880	881	932
Geographical regions											
Africa	17.4	18.4	18.3	20.5	21.4	22.3	(23.2)	(25.6)	(27.1)	(28.5)	(30.1)
North Africa	6.2	6.3	6.5	7.1	7.3	7.4	8.0	9.4	(10.0)	(10.6)	(10.6)
Sub-Saharan Africa	11.2	12.1	11.8	13.5	14.0	14.9	(15.2)	(16.2)	(17.1)	(17.9)	(19.5)
Americas	436	482	537	583	613	626	644	692	746	768	791
Central America and the Caribbean	4.6	4.5	4.3	4.0	4.3	4.6	5.1	5.3	5.8	5.9	6.5
North America	392	439	498	542	568	577	593	637	688	707	721
South America	38.7	38.3	35.1	37.4	41.1	44.3	46.2	49.4	51.8	54.8	63.3
Asia and Oceania	177	186	195	205	216	229	246	260	286	290	317
Central and South Asia	29.8	29.9	30.7	34.9	36.7	37.3	38.6	41.8	45.8	44.8	52.1
East Asia	117	123	128	134	142	153	165	175	195	199	211
Oceania	14.5	15.0	15.3	15.9	16.4	17.3	18.4	19.0	20.4	21.2	25.7
South East Asia	16.1	18.1	20.2	19.9	20.6	21.1	24.3	24.5	25.5	25.7	28.7
Europe	336	347	351	353	354	361	367	378	387	376	382
Eastern Europe	31.4	34.8	37.2	39.0	43.1	48.1	53.1	58.5	59.8	59.1	65.5
Western and Central Europe	305	312	314	314	311	313	314	320	327	317	316
Middle East	78.2	73.7	76.2	80.9	89.5	95.9	101	101	(103)	(106)	(111)
Organizations											
African Union	19.1	20.5	20.5	22.5	23.2	24.2	(25.1)	(26.9)	(28.0)	(29.2)	(31.4)
Arab League	61.8	58.7	60.5	66.2	72.0	76.5	84.5	90.0	93.1	95.5	100.0
ASEAN	16.1	18.1	20.2	19.9	20.6	21.1	24.3	24.5	25.5	25.7	28.7

CIS	32.2	35.7	38.3	40.1	44.5	49.6	55.1	60.5	61.8	60.6	67.2
CSTO	. .	33.1	35.3	36.8	40.4	44.5	48.7	53.7	56.0	55.4	61.6
East African Community	0.9	0.9	0.9	0.9	1.0	1.0	1.2	1.2	1.2	(1.3)	(1.3)
ECOWAS	1.9	2.4	1.9	1.9	1.8	1.9	2.1	2.6	2.7	3.0	3.2
European Union	257	262	266	282	280	282	288	292	298	288	285
Gulf Cooperation Council	46.0	42.2	43.4	47.4	52.7	57.6	64.5	65.9	69.2	70.5	73.5
NATO	669	724	784	835	858	870	886	936	996	1 005	1 018
NATO Europe	277	285	286	293	290	293	293	299	308	298	297
OECD	776	831	893	937	962	975	993	1 044	1 107	1 119	1 166
OPEC	62.7	57.4	60.2	67.3	75.8	82.7	89.1	94.8	97.2	95.1	99.2
OSCE	729	787	850	896	923	940	962	1 017	1 077	1 086	1 106
SADC	5.6	5.8	6.4	6.5	7.5	8.0	7.6	7.7	8.6	9.2	10.1
SCO	69.0	78.6	84.6	91.5	102	116	132	145	165	169	180
UNASUR	. .	. .	. .	. .	. .	. .	. .	49.4	51.8	54.8	63.3
Income group											
Low	7.1	7.4	7.5	7.6	7.9	8.4	9.6	9.8	10.0	10.1	10.4
Lower middle	102	108	116	128	141	155	169	182	203	209	226
Upper middle	112	116	114	117	125	134	140	150	156	158	177
High	824	876	940	990	1 020	1 036	1 063	1 115	1 180	1 192	1 219
World military spending per capita (US$)											
	121	127	145	161	172	182	200	222	227	236	
World military burden (world military spending as a % of world gross domestic product, in current prices)											
	2.3	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.4*	*2.7*	*2.6*	

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

Notes: The world total and the totals for regions, organizations and income groups in table 4A.2 are estimates, based on data in table 4A.4. When military expenditure data for a country is missing for a few years, estimates are made, most often on the assumption that the rate of change in that country's military expenditure is the same as that for the region to which it belongs. When no estimates can be made, countries are excluded from the totals. The countries excluded from all totals in table 4A.2 are Cuba, Equatorial Guinea, Guyana, Haiti, North Korea, Myanmar, Somalia, Trinidad and Tobago, and Zimbabwe.

Totals for regions and income groups cover the same groups of countries for all years. Totals for organizations cover only the member countries in the year given. The coverage of the geographical regions and subregions in table 4A.1 is based on the classification of countries in tables 4A.3–4A.5.

Organizations

African Union (AU): All countries in the Africa region (see tables 4A.3–4A.5) except Morocco, plus Egypt. Members not in the SIPRI Military Expenditure Database: Comoros, Sao Tome and Principe, Saharawi Arab Democratic Republic (Western Sahara).

Arab League (League of Arab States): Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, Yemen. Members not in the SIPRI Military Expenditure Database: Comoros, Palestine.

Association of Southeast Asian Nations (ASEAN): All countries in the South East Asia subregion except Timor-Leste.

Commonwealth of Independent States (CIS): Armenia, Azerbaijan, Belarus, Georgia (–2008), Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

Collective Security Treaty Organization (CSTO): Armenia (2002–), Belarus (2002–), Kazakhstan (2002–), Kyrgyzstan (2002–), Russia (2002–), Tajikistan (2002–), Uzbekistan (2006–).

East African Community (EAC): Burundi (2007–), Kenya, Rwanda (2007–), Tanzania, Uganda.

Economic Community of West African States (ECOWAS): Benin, Cameroon, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Niger, Nigeria, Senegal, Sierra Leone, Togo.

European Union (EU): Austria, Belgium, Bulgaria (2007–), Cyprus (2004–), Czech Republic (2004–), Denmark, Estonia (2004–), Finland, France, Germany, Greece, Hungary (2004–), Ireland, Italy, Latvia (2004–), Lithuania (2004–), Luxembourg, Malta (2004–), Netherlands, Poland (2004–), Portugal, Romania (2007–), Slovakia (2004–), Slovenia (2004–), Spain, Sweden, UK.

Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates.

North Atlantic Treaty Organization (NATO): Albania (2009–), Belgium, Bulgaria (2004–), Canada, Croatia (2009–), Czech Republic, Denmark, Estonia (2004–), France, Germany, Greece, Hungary, Iceland, Italy, Latvia (2004–), Lithuania (2004–), Luxembourg, Netherlands, Norway, Poland, Portugal, Romania (2004–), Slovakia (2004–), Slovenia (2004–), Spain, Turkey, UK, USA. *NATO Europe* excludes Canada and the USA.

Organisation for Economic Co-operation and Development (OECD): Australia, Austria, Belgium, Canada, Chile (2010–), Czech Republic, Denmark, Estonia (2010–), Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel (2010–), Italy, Japan, South Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia (2010–), Spain, Sweden, Switzerland, Turkey, UK, USA.

Organization of the Petroleum Exporting Countries (OPEC): Algeria, Angola (2007–), Ecuador (2007–), Indonesia (–2008), Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela.

Organization for Security and Co-operation in Europe (OSCE): Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Macedonia (Former Yugoslav Republic of, FYROM), Malta, Moldova, Montenegro (2006–), Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, UK, Ukraine, USA, Uzbekistan.

Shanghai Cooperation Organisation (SCO): China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan.

Southern African Development Community (SADC): Angola, Botswana, Congo (Democratic Republic of the, DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles (2001–2003, 2008–), South Africa, Swaziland, Tanzania, Zambia.

Union of South American Nations (UNASUR, 2008–): All countries in the South America subregion. Members not in the SIPRI Military Expenditure Database: Suriname.

Income group

The country coverage of income groups is based on figures of 2008 gross national income (GNI) per capita as calculated in World Bank, *World Development Report 2010: Development and Climate Change* (World Bank: Washington, DC, 2009).

Low-income countries (GNI per capita ≤$975 in 2008): Afghanistan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Congo (Democratic Republic of the, DRC), Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Haiti, Kenya, North Korea, Kyrgyzstan, Laos, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Senegal, Sierra Leone, Somalia, Tajikistan, Tanzania, Togo, Uganda, Uzbekistan, Viet Nam, Yemen, Zambia, Zimbabwe.

Lower-middle-income countries (GNI per capita $976–$3855 in 2008): Albania, Angola, Armenia, Azerbaijan, Belize, Bolivia, Cameroon, Cape Verde, China, Congo (Republic of the), Côte d'Ivoire, Djibouti, Ecuador, Egypt, El Salvador, Georgia, Guatemala, Guyana, Honduras, India, Indonesia, Iran, Iraq, Jordan, Lesotho, Moldova, Mongolia, Morocco, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Paraguay, Philippines, Sri Lanka, Sudan, Swaziland, Syria, Thailand, Timor-Leste, Tunisia, Turkmenistan, Ukraine.

Upper-middle-income countries (GNI per capita $3856–$11 905 in 2008): Algeria, Argentina, Belarus, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Fiji, Gabon, Jamaica, Kazakhstan, Latvia, Lebanon, Libya, Lithuania, Macedonia (Former Yugoslav Republic of, FYROM), Malaysia, Mauritius, Mexico, Montenegro, Namibia, Panama, Peru, Poland, Romania, Russia, Serbia, Seychelles, South Africa, Turkey, Uruguay, Venezuela.

High-income countries (GNI per capita ≥$11 906 in 2008): Australia, Austria, Bahrain, Belgium, Brunei Darussalam, Canada, Croatia, Cyprus, Czech Republic, Denmark, Equatorial Guinea, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, South Korea, Kuwait, Luxembourg, Malta, Netherlands, New Zealand, Norway, Oman, Portugal, Qatar, Saudi Arabia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, Trinidad and Tobago, United Arab Emirates, UK, USA.

Military spending per capita and military burden

The spending per capita figures are based on estimated world population figures from United Nations Population Fund (UNFPA), *State of World Population*, various edns (UNFPA: New York, 2001–10).

The military burden figures are based on world GDP figures from the International Monetary Fund's World Economic Outlook database, Oct. 2010, <http://www.imf.org/external/pubs/ft/weo/2010/02/weodata/index.aspx>. The figure for world GDP in 2010 is a projection.

Table 4A.3. Military expenditure by country, in local currency, 2001–10

Figures are in local currency at current prices and are for financial years (Jan.–Dec. unless otherwise indicated). Countries are grouped by region and subregion.

State	Currency	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Africa											
North Africa											
Algeria[1]	m. dinars	161 505	167 380	170 764	201 930	214 320	224 767	273 415	334 044	383 621	421 866
Libya[‡ ¶ 2]	m. dinars	496	575	700	894	904	807	807	1 346	. .	. .
Morocco	m. dirhams	16 619	16 254	17 418	17 182	18 006	18 775	19 730	22 824	24 615	26 605
Tunisia	m. dinars	483	491	525	554	608	662	629	716	718	772
Sub-Saharan Africa											
Angola[‖ 3]	b. kwanzas	8.9	19.1	50.0	68.3	119	158	156	182	251	343
Benin	m. CFA francs	9 612	18 122	20 077	22 072	[24 677]	[25 601]	. .	[30 330]	. .	. .
Botswana[a]	m. pula	1 305	1 451	1 503	1 464	1 556	1 686	[2 031]	[2 380]	[2 673]	[2 700]
Burkina Faso[†]	m. CFA francs	22 259	24 666	25 571	30 289	33 649	37 081	45 616	55 089	51 740	65 631
Burundi	b. francs	44.2	41.8	47.0	49.4	53.6	46.0	50.1	52.0	. .	. .
Cameroon[§]	b. CFA francs	99.0	52.0	110	117	118	134	142	155	162	175
Cape Verde	m. escudos	572	530	565	573	614	614	640	646	682	713
Central African Rep.[‡ 4]	m. CFA francs	. .	7 445	8 729	7 979	8 121	. .	9 160	14 111	16 995	25 549
Chad[5]	b. CFA francs	22.5	23.9	23.8	26.7	29.3	. .	186	274	206	112
Congo, Republic of[§]	m. CFA francs	28 374	35 035	38 728	40 050	41 954	44 070	50 849	63 420	. .	66 168
Congo, DRC[6]	m. francs	. .	. .	31 908	54 983	78 292	96 045	106 046	89 486	99 100	166 400
Côte d'Ivoire[7]	b. CFA francs	. .	. .	124	132	132	140	155	165	. .	. .
Djibouti	m. francs	4 629	5 909	7 422	6 639	7 970	[8 800]	6 135	6 447	. .	. .
Equatorial Guinea	m. CFA francs	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	m. nakfa	1 884	2 104	2 520	. .	. .	. .	. .	. .	. .	. .
Ethiopia[b]	m. birr	2 610	2 341	2 452	2 920	3 009	3 005	3 453	4 000	4 000	4 581
Gabon[8]	b. CFA francs	66.0	66.0	63.0	65.0	60.0	58.0	(9.0)	. .	. .	62.0

Gambia[‡]	m. dalasis	38.5	45.0	57.0	58.0	85.3	78.2	113	. .	. .	. .
Ghana[‖] [9]	m. cedis	23.2	29.3	46.2	50.7	58.2	69.4	118	120	159	179
Guinea[10]	b. francs	171	194	167	182	. .	. .	. .	. .	. .	. .
Guinea-Bissau[‖] [11]	m. CFA francs	4 533	4 435	4 362	. .	6 391	. .	. .	. .	. .	. .
Kenya[b]	m. shillings	16 258	17 430	19 921	21 219	26 652	27 540	39 062	41 209	48 520	46 968
Lesotho[a]	m. maloti	199	209	207	202	218	245	292	190	452	. .
Liberia[b]	m. dollars	. .	. .	104	401	321	126	220	518	336	. .
Madagascar[‖] [12]	b. ariary	85.7	78.9	89.8	102	108	116	154	176	139	119
Malawi[a]	m. kwacha	988	1 186	1 309	2 752	4 452	[5 525]	[5 923]	. .	. .	. .
Mali[13]	b. CFA francs	43.8	45.8	51.6	54.5	63.2	68.9	75.6	77.3	[82.3]	[87.2]
Mauritania[14]	b. ouguiyas	13.3	9.9	16.4	18.6	17.7	22.0	. .	29.4	30.1	. .
Mauritius[b]	m. rupees	270	299	308	293	349	337	392	481	. .	. .
Mozambique[‖]	m. meticais	1 048	1 267	1 422	1 753	1 436	1 459	1 773	2 034	2 320	. .
Namibia[a] [15]	m. dollars	905	935	994	1 107	1 260	1 382	1 683	2 372	2 593	3 015
Niger	b. CFA francs	18.2	14.4	14.3	16.7	17.3	. .	. .	24.0	. .	23.4
Nigeria	b. naira	63.5	108	75.9	85.0	88.5	99.9	122	192	224	292
Rwanda[16]	b. francs	25.2	24.3	24.3	23.8	25.1	30.1	30.4	37.0 /	64.2	47.1
Senegal[§ ¶]	m. CFA francs	50 500	51 829	56 293	56 819	65 619	77 678	92 407	97 116	98 111	98 838
Seychelles	m. rupees	64.8	64.1	66.1	87.6	81.0	79.3	102	80.9	103	87.2
Sierra Leone	m. leones	59 408	56 955	66 841	62 026	68 056	[83 686]	[87 998]	[133 080]	. .	. .
Somalia	shillings	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
South Africa[a]	m. rand	[16 548]	[19 571]	[21 254]	21 326	24 880	25 102	26 746	29 556	33 235	32 922
Sudan[‡] [17]	m. pounds	1 004	1 276	1 039	3 200	2 838	3 338	. .	. .	. .	. .
Swaziland[‡ a] [18]	m. emalangeni	168	202	255	283	410	392	451	[584]	[942]	[895]
Tanzania[b]	b. shillings	147	125	135	143	172	197	217	247	326	. .
Togo	m. CFA francs	. .	. .	16 757	16 757	17 532	. .	. .	25 529	. .	. .
Uganda[b]	b. shillings	244	267	331	379	393	407	549	[696]	[583]	[583]
Zambia	b. kwacha	. .	. .	. .	[490]	626	747	596	1 120	1 068	1 326
Zimbabwe[19]	m. dollars/m. US$	15.8	37.3	136	1 300	2 942	(26 604)	. .	. .	. .	98.3

State	Currency	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Americas											
Central America and the Caribbean											
Belize[a]	m. dollars	15.3	15.8	17.6	19.4	22.1	25.4	28.2	40.5	31.6	30.4
Costa Rica[20]	m. colones	–	–	–	–	–	–	–	–	–	–
Cuba[21]	m. pesos	. .	. .	1 259	1 303	1 640	1 695	1 876	2 004	2 083	. .
Dominican Republic	m. pesos	[5 882]	[6 980]	[5 625]	6 435	8 305	8 477	9 153	11 629	11 587	12 326
El Salvador[22]	m. US dollars	109	109	106	106	109	116	122	117	138	135
Guatemala	m. quetzales	1 546	1 239	1 245	813	768	993	1 043	1 259	1 192	1 368
Haiti[a]	th. gourdes	–	–	–	–	–	–	–	–	–	–
Honduras[23]	m. lempiras	[907]	[1 261]	[1 291]	[1 304]	[1 410]	1 485	2 210	3 886	4 102	4 657
Jamaica[a]	m. dollars	2 212	2 936	3 244	3 368	3 804	5 100	6 005	10 677	9 896	8 992
Mexico	m. pesos	[33 074]	[33 578]	[35 014]	35 314	39 467	44 496	52 235	54 977	64 348	68 411
Nicaragua[24]	m. córdobas	377	502	548	530	574	662	727	809	851	948
Panama	m. balboas	–	–	–	–	–	–	–	–	–	–
North America											
Canada[a]	m. dollars	13 191	13 379	14 143	14 951	16 001	17 066	19 255	21 100	22 712	[23 733]
United States[25]	m. dollars	312 743	356 720	415 223	464 676	503 353	527 660	556 961	621 138	668 604	698 281
South America											
Argentina	m. pesos	3 182	3 413	3 988	4 285	4 935	5 643	7 109	8 769	11 063	[13 030]
Bolivia[26]	m. bolivianos	1 218	1 219	1 394	1 414	1 438	1 517	1 832	2 455	2 433	2 262
Brazil	m. reais	25 557	28 224	25 829	28 608	33 080	35 686	39 887	44 841	51 382	59 006
Chile[§ 27]	b. pesos	1 615	1 765	1 842	2 158	2 397	2 742	2 939	3 109	3 185	3 525
Colombia[28]	b. pesos	7 448	8 191	10 203	10 656	11 548	12 722	14 439	17 307	18 567	20 341
Ecuador	m. US dollars	384	505	739	710	954	950	1 310	1 548	1 915	2 191
Guyana	m. dollars	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Paraguay[† 29]	b. guaraníes	270	288	294	364	347	431	476	577	626	761
Peru[30]	m. nuevos soles	3 187	2 982	3 092	3 397	3 820	4 011	3 918	4 057	5 157	6 091

Uruguay	m. pesos	4 384	4 333	4 967	5 261	5 696	6 168	6 812	8 397	11 344	11 806
Venezuela[‖ 31]	m. bolívares	1 383	1 244	1 588	2 740	4 292	6 436	6 377	9 286	9 173	8 604
Asia and Oceania											
Central and South Asia											
Afghanistan[32]	m. afghanis	. .	. .	[5 622]	[5 404]	5 544	6 358	11 506	11 471	12 783	. .
Bangladesh[b]	m. takas	34 020	34 190	38 110	41 150	44 860	53 980	59 510	62 600	78 750	91 750
India[a 33]	b. rupees	703	722	774	964	1 025	1 091	1 182	1 475	1 820	1 911
Kazakhstan	b. tenge	32.5	37.7	47.5	58.0	78.6	100	167	185	188	[194]
Kyrgyzstan[34]	m. som	1 734	2 055	2 408	2 688	3 105	3 606	4 807	6 423	7 147	. .
Nepal[b ¶]	m. rupees	5 882	7 420	8 255	10 996	11 745	11 136	11 389	14 712	17 811	18 291
Pakistan[‡ 35]	b. rupees	182	195	220	244	281	292	327	376	448	514
Sri Lanka[36]	b. rupees	[60.3]	[54.7]	[52.3]	62.7	64.7	82.2	117	164	170	156
Tajikistan	m. somoni	29.6	70.7	107	134	. .	. .	. .	. .	. .	. .
Turkmenistan	b. manat	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Uzbekistan[37]	b. sum	41.1	44.5	53.0	. .	. .	. .	. .	. .	. .	. .
East Asia											
China[38]	b. yuan	[227]	[262]	[288]	[331]	[379]	[452]	[546]	[638]	[752]	[808]
Japan[a † 39]	b. yen	4 955	4 956	4 953	4 893	4 870	4 812	4 746	4 769	4 774	4 790
Korea, North[40]	b. won	(3.2)	(3.3)	(50.8)	(54.4)	(64.5)	(67.1)	(68.5)	(71.3)	(76.3)	(82.6)
Korea, South[41]	b. won	[16 708]	[17 642]	[18 884]	[20 421]	22 694	24 039	25 765	28 733	31 121	31 876
Mongolia	m. tugriks	25 384	28 071	27 899	32 891	35 914	46 232	66 200	66 614	54 088	74 443
Taiwan	b. dollars	248	225	238	253	248	235	256	282	298	286
Oceania											
Australia[b]	m. dollars	14 514	14 739	15 873	16 748	17 921	19 899	21 179	23 249	25 372	26 896
Fiji[† 42]	m. dollars	74.7	67.6	70.7	81.1	72.9	93.6	122	85.4	98.2	. .
New Zealand[b]	m. dollars	1 403	1 419	1 518	1 528	1 645	1 807	1 875	2 083	2 201	2 254
Papua New Guinea[43]	m. kina	85.5	66.3	68.8	78.7	94.2	93.7	112	100	109	116

State	Currency	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
South East Asia											
Brunei Darussalam[44]	m. dollars	390	405 /	530 /	308	449	472	492	[482]	[482]	[485]
Cambodia	b. riel	280	265	270	272	289	328	[388]	[513]	[790]	. .
Indonesia	b. rupiah	10 673	19 418	26 974	29 466	[31 814]	[36 540]	[46 756]	[47 883]	[48 853]	[65 525]
Laos	b. kip	(112)	(115)	(115)	(121)	(125)	(135)	(140)	(150)	(157)	. .
Malaysia	m. ringgit	7 351	8 504	10 950	10 728	11 817	11 981	13 649	14 717	13 679	11 682
Myanmar[a] [45]	b. kyats	64.0	76.1	. .	. .	. .	. .	. .	. .	. .	. .
Philippines	m. pesos	35 977	38 907	44 440	43 847	47 634	51 527	62 188	61 965	62 967	73 354
Singapore[a]	m. dollars	7 820	8 204	8 238	8 620	9 252	9 268	10 009	10 726	11 447	11 455
Thailand	b. baht	76.4	77.2	79.9	74.1	78.1	85.1	115	142	168	154
Timor-Leste[46]	m. US dollars	. .	. .	. .	6.6	9.8	24.4 /	[11.5] /	23.7	38.0	19.9
Viet Nam	b. dong	. .	. .	13 058	14 409	16 278	20 577	28 735	34 848	40 981	44 400
Europe											
Eastern Europe											
Armenia[†] [47]	b. drams	36.8	36.8	44.3	52.3	64.4	78.3	95.8	121	131	[158]
Azerbaijan[‖]	m. manats	[123]	[136]	[173]	[224]	288	641	812	1 321	1 184	1 206
Belarus	b. roubles	247	366	475	679	975	1 355	1 603	1 886	1 886	2 174
Georgia[†] [48]	m. lari	[49.4]	74.6	91.5	135	388	720	1 556	1 625	1 008	810
Moldova[†] [¶] [49]	m. lei	76.7	94.7	115	116	151	216	276	383	277	227
Russia[50]	b. roubles	[365]	[470]	[568]	[656]	[806]	[967]	[1 144]	[1 448]	[1 693]	[1 782]
Ukraine[§]	m. hryvnias	5 848	6 266	7 615	8 963	12 328	15 082	20 685	25 341	[26 077]	[29 445]
Western and Central Europe											
Albania[§] [¶] [51]	m. leks	7 638	8 220	9 279	10 373	11 000	13 831	17 619	21 450	23 633	19 749
Austria	m. euros	[1 999]	1 999	2 111	2 158	2 160	2 105	2 557	2 558	2 401	2 524
Belgium	m. euros	3 393	3 344	3 434	3 433	3 400	3 434	3 773	4 293	4 048	3 959
Bosnia–Herzegovina[†] [¶] [52]	m. marka	. .	501	351	315	273	278	279	311	341	335
Bulgaria[†] [53]	m. leva	[887]	[947]	[986]	1 025	1 101	1 171	1 475	1 388	1 355	1 006
Croatia[54]	m. kunas	[5 251]	[5 775]	[4 757]	4 250	4 323	4 959	5 251	6 396	5 966	5 663

Cyprus[†] [‖]	m. euros	[360]	[253]	[255]	271	302	304	295	310	339	376
Czech Republic[55]	m. koruny	44 978	48 924	53 194	52 481	58 445	55 358	54 949	49 827	51 824	48 867
Denmark	m. kroner	21 017	21 269	21 075	21 441	20 800	23 173	22 731	24 410	23 252	25 160
Estonia[56]	m. krooni	1 640	2 028	2 376	2 581	3 346	3 928	5 079	5 409	4 917	3 894
Finland	m. euros	1 653	1 712	2 006	2 131	2 206	2 281	2 203	2 468	2 591	2 709
France[57]	m. euros	37 187	38 681	40 684	42 690	42 545	43 457	44 273	45 063	48 146	44 788
Germany	m. euros	30 648	31 168	31 060	30 610	30 600	30 365	31 090	32 824	34 166	[34 090]
Greece	m. euros	[4 948]	5 030	4 462	5 048	5 652	6 064	6 235	7 219	7 612	[7 062]
Hungary	b. forint	272	280	314	311	319	297	326	321	299	[281]
Iceland[†]	m. krónur	–	–	–	–	–	–	–	688	1 227	. .
Ireland	m. euros	858	862	855	887	921	949	1 003	1 081	1 019	965
Italy[58]	m. euros	24 592	25 887	26 795	27 476	26 959	26 631	[26 275]	[28 156]	[27 578]	[27 914]
Latvia	m. lats	54.6	91.0	108	124	154	206	247	280	184	134
Lithuania	m. litai	860	908	1 077	[1 139]	[1 150]	[1 292]	[1 495]	[1 741]	1 380	1 196
Luxembourg	m. euros	179	163	176	189	196	197	209	. .	. .	. .
Macedonia, FYR[59]	m. denars	15 397	6 841	6 292	6 683	6 259	6 149	7 272	7 229	7 000	6 511
Malta[†] [‖]	m. euros	28.4	28.7	30.0	32.5	42.3	35.3	35.8	38.3	42.6	43.0
Montenegro	m. euros	. .	. .	. .	. .	. .	42.3	39.9	48.6	39.5	40.4
Netherlands	m. euros	6 929	7 149	7 404	7 552	7 693	8 145	8 388	8 448	8 733	8 461
Norway	m. kroner	26 669	32 461	31 985	32 945	31 471	32 142	34 439	35 932	38 960	[40 675]
Poland[60]	m. złotys	14 864	15 407	16 141	17 479	19 078	20 541	23 774	[22 190]	[24 701]	[26 847]
Portugal	m. euros	2 598	2 765	2 755	2 996	3 248	3 242	3 190	3 285	3 463	[3 805]
Romania[‖]	m. lei	2 864	3 491	4 151	4 994	5 757	6 324	6 358	7 558	6 785	7 001
Serbia[61]	m. dinars	33 060	43 695	42 070	43 154	41 996	47 342	56 792	63 295	63 626	65 917
Slovakia[†] [‖]	m. euros	632	662	762	762	848	898	929	994	877	734
Slovenia[‖]	m. euros	275	328	360	396	413	485	506	566	571	578
Spain	m. euros	7 972	8 414	8 587	9 132	9 508	11 506	12 219	12 756	12 196	11 596
Sweden	m. kronor	42 639	42 401	42 903	40 527	41 240	41 150	43 163	39 710	38 751	[40 664]
Switzerland[†] [¶] [62]	m. francs	4 664	4 493	4 404	4 357	4 339	4 174	4 231	4 439	4 414	4 813
Turkey[‖]	m. liras	8 844	13 641	15 426	15 568	16 232	19 260	18 333	22 297	[25 268]	[26 313]
United Kingdom[a] [63]	m. pounds	24 874	26 991	29 338	29 524	30 603	31 454	33 486	36 431	37 425	38 954

State	Currency	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Middle East											
Bahrain[64]	m. dinars	126	150	175	180	183	203	222	248	287	279
Egypt[b]	m. pounds	[12 148]	13 333	14 563	14 804	15 933	17 922	19 350	21 718	22 831	25 396
Iran[a ¶ 65]	b. rials	26 831	19 648	33 998	45 893	65 208	78 611	70 460	(58 135)	. .	. .
Iraq[§ 66]	b. dinars	. .	. .	. .	(892)	(1 649)	(2 117)	(2 437)	(6 352)	(4 863)	(5 734)
Israel [¶]	m. shekels	41 788	48 957	46 351	44 060	45 739	49 546	48 965	49 754	48 649	[52 485]
Jordan	m. dinars	375	370	434	416	428	497	732	952	997	[1 016]
Kuwait[a]	m. dinars	784	882	950	1 039	1 020	1 059	1 219	1 195	[1 266]	[1 341]
Lebanon	b. pounds	1 445	1 368	1 392	1 439	[1 451]	[1 521]	[1 737]	1 763	2 150	[2 461]
Oman[‡ 67]	m. rials	933	958	1 010	1 144	1 404	1 550	1 663	1 775	1 726	1 615
Qatar[68]	m. riyals	. .	3 324	3 428	3 374	3 901	4 610	6 391	9 234	. .	. .
Saudi Arabia[§ 69]	m. riyals	78 850	69 382	70 303	78 414	95 146	110 779	132 922	143 336	154 772	169 667
Syria[70]	m. pounds	53 381	55 332	67 117	70 209	75 720	74 924	82 742	86 827	101 464	108 907
United Arab Emirates[71]	m. dirhams	[24 062]	[22 775]	[24 645]	[27 951]	[27 626]	[30 551]	[36 443]	[49 294]	[57 929]	[58 987]
Yemen	b. riyals	91.1	130	148	136	156	162	209	239	. .	. .

Notes: See below table 4A.5.

Table 4A.4. Military expenditure by country, in constant US dollars for 2001–10 and current US dollars for 2010

Figures are in US$ m. at constant 2009 prices and exchange rates for 2001–10 and, in the right-most column, marked *, in current US$ m. for 2010. Figures are for calendar years except for the USA, where the figures are for financial years. Countries are grouped by region and subregion.

State	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
Africa											
North Africa											
Algeria[1]	2 914	2 978	2 914	3 314	3 470	3 557	4 173	4 862	5 281	5 586	5 668
Libya[‡ ¶ 2]	427	549	683	892	879	773	728	1 100	. .	. .	. .
Morocco	2 426	2 309	2 446	2 377	2 467	2 490	2 565	2 861	3 055	3 256	3 162
Tunisia	469	464	483	491	529	551	507	550	532	548	539
Sub-Saharan Africa											
Angola[‖ 3]	1 272	1 304	1 722	1 639	2 322	2 728	2 393	2 479	3 165	3 774	3 729
Benin	26.1	48.0	52.4	57.1	[60.6]	[60.6]	. .	[65.6]	. .	. .	. .
Botswana	342	365	352	325	312	301	[331]	[346]	[363]	[352]	[396]
Burkina Faso[†]	60.4	65.5	66.5	79.1	82.6	89.0	110	120	110	140	132
Burundi	73.7	70.7	73.7	69.9	66.8	55.8	56.1	46.9	. .	. .	. .
Cameroon[§]	235	255	273	291	287	312	327	339	343	368	354
Cape Verde	8.7	7.9	8.3	8.6	9.2	8.7	8.7	8.2	8.6	8.8	8.6
Central African Republic[‡ 4]	. .	20.2	22.7	21.2	21.0	. .	21.9	30.9	36.0	52.9	51.6
Chad[5]	60.0	60.6	61.4	72.7	73.9	. .	479	638	436	242	226
Congo, Republic of[§]	81.2	96.0	107	108	110	108	121	141	. .	133	134
Congo, DRC[6]	. .	. .	113	187	219	238	225	162	122	163	184
Côte d'Ivoire[7]	. .	. .	310	327	313	324	353	353	. .	. .	. .
Djibouti	35.1	44.6	54.9	47.6	55.5	[59.2]	39.3	36.9	. .	. .	. .
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	502	480	469	. .	. .	. .	. .	. .	. .	. .	
Ethiopia	715	588	484	525	519	469	429	343	340	338	297
Gabon[8]	165	165	154	159	141	138	(134)	. .	. .	134	125

State	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
Gambia[‡]	2.6	2.8	3.0	2.7	3.8	3.4	4.6	. .	. .	. .	. .
Ghana[‖ 9]	52.9	58.3	72.5	70.7	70.5	75.8	116	102	113	115	126
Guinea[10]	126	139	108	99.9	. .	. .	. .	. .	. .	. .	. .
Guinea-Bissau[‖ 11]	11.6	10.9	11.2	. .	15.7	. .	. .	. .	. .	. .	. .
Kenya	474	510	515	508	536	530	594	567	580	594	603
Lesotho	50.1	38.3	36.1	33.6	34.3	36.1	39.3	27.3	45.6	. .	. .
Liberia	. .	. .	1.1	4.2	10.3	4.8	3.9	3.9	7.2	. .	. .
Madagascar[‖ 12]	98.4	78.1	90.0	89.7	80.4	77.5	93.4	98.3	71.0	55.7	56.9
Malawi	15.2	16.4	16.9	28.4	41.4	[47.4]	[48.6]	. .	. .	. .	. .
Mali[13]	114	113	129	141	154	165	179	167	[174]	[183]	[176]
Mauritania[14]	85.4	61.1	96.9	99.6	84.4	98.7	. .	114	115	. .	. .
Mauritius	13.3	13.6	13.9	13.2	13.4	13.1	12.8	14.0	. .	. .	. .
Mozambique[‖]	87.0	90.1	89.1	97.6	74.6	66.9	75.2	78.2	86.3	. .	. .
Namibia[15]	168	168	166	175	194	204	228	282	300	329	397
Niger	48.9	37.7	38.0	44.3	42.6	. .	. .	53.1	. .	49.2	47.2
Nigeria	1 056	1 594	981	956	844	879	1 021	1 435	1 504	1 724	1 952
Rwanda[16]	90.0	84.8	79.2	69.1	66.8	73.6	68.2	71.9	75.3	77.2	77.1
Senegal[§ ¶]	126	127	138	138	157	182	205	204	208	207	200
Seychelles	9.8	9.7	9.6	12.3	11.3	11.1	13.5	7.8	7.5	6.6	7.2
Sierra Leone	25.4	24.4	28.5	26.0	28.4	[34.6]	[32.6]	[42.9]	. .	. .	. .
Somalia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
South Africa	[3 068]	[3 300]	[3 451]	3 482	3 791	3 782	3 713	3 647	3 813	3 735	4 507
Sudan[‡ 17]	882	1 021	781	2 220	1 815	1 991	. .	. .	. .	. .	. .
Swaziland[‡ 18]	36.5	37.2	43.3	47.8	62.6	62.3	62.6	[69.7]	[101]	[102]	[124]
Tanzania	173	169	154	157	169	185	194	197	217	. .	. .
Togo	. .	. .	43.5	43.3	42.5	. .	. .	55.1	. .	. .	. .
Uganda	206	221	238	272	272	263	296	[346]	[315]	[276]	[268]
Zambia	. .	. .	. .	[177]	191	209	151	252	212	243	276
Zimbabwe[19]	120	118	92.4	196	132	(107)	. .	. .	. . ‖‖	93.8	98.3

Americas											
Central America and the Caribbean											
Belize	9.4	9.6	10.3	11.0	12.0	13.2	14.5	18.5	16.9	14.9	15.3
Costa Rica[20]	–	–	–	–	–	–	–	–	–	–	–
Cuba[21]	. .	. .	1 360	1 407	1 771	1 830	2 026	2 164	2 249	. .	. .
Dominican Republic	[443]	[499]	[316]	239	295	280	285	327	322	322	334
El Salvador[22]	145	143	136	130	128	131	131	119	138	133	135
Guatemala	327	242	231	140	122	149	147	157	146	161	170
Haiti	–	–	–	–	–	–	–	–	–	–	–
Honduras[23]	[86.9]	[112]	[107]	[99.6]	[99.0]	98.8	137	217	217	235	246
Jamaica	60.9	73.5	76.6	71.0	68.2	81.2	89.8	121	115	95.2	106
Mexico	[3 490]	[3 373]	[3 364]	3 241	3 483	3 789	4 279	4 284	4 762	4 859	5 414
Nicaragua[24]	36.3	46.6	48.3	43.0	42.5	44.9	44.4	41.2	41.8	44.1	44.4
Panama	–	–	–	–	–	–	–	–	–	–	–
North America											
Canada	13 280	13 350	13 595	14 110	14 730	15 415	16 806	18 111	19 518	[20 164]	[22 788]
United States[25]	378 925	425 471	484 255	527 799	552 966	561 555	576 294	618 940	668 604	687 105	698 281
South America											
Argentina	1 953	1 664	1 714	1 764	1 853	1 910	2 211	2 512	2 982	[3 179]	[3 344]
Bolivia[26]	266	264	292	284	274	277	307	361	347	314	322
Brazil	21 679	22 079	17 614	18 301	19 802	20 504	22 114	23 528	25 704	28 096	33 538
Chile[§ 27]	3 763	4 013	4 074	4 723	5 090	5 633	5 781	5 626	5 679	6 198	6 909
Colombia[28]	5 347	5 530	6 429	6 340	6 541	6 909	7 430	8 323	8 569	9 191	10 717
Ecuador	589	689	934	873	1 146	1 108	1 493	1 628	1 915	2 116	2 191
Guyana	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Paraguay[† 29]	102	98.9	88.4	105	93.6	106	108	119	126	146	160
Peru[30]	1 291	1 206	1 222	1 296	1 434	1 476	1 416	1 387	1 712	1 992	2 156
Uruguay	401	348	334	324	335	341	349	398	503	491	589
Venezuela[‖ 31]	3 329	2 445	2 380	3 374	4 558	6 014	5 020	5 562	4 273	3 106	3 328

State	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
Asia and Oceania											
Central and South Asia											
Afghanistan[32]	. .	. .	[153]	[156]	142	154	226	198	250	. .	. .
Bangladesh	841	816	818	822	833	897	944	932	1 024	1 137	1 224
India[33]	22 557	22 487	22 989	26 679	28 196	28 365	28 765	32 106	35 819	34 816	41 284
Kazakhstan	432	473	560	640	806	944	1 420	1 349	1 272	[1 227]	[1 317]
Kyrgyzstan[34]	71.5	82.9	94.4	101	112	123	149	160	167	. .	. .
Nepal[¶]	106	141	157	187	207	194	180	188	210	207	247
Pakistan[‡ 35]	4 108	4 414	4 714	4 911	5 101	5 160	5 182	4 888	5 039	5 160	5 646
Sri Lanka[36]	[1 186]	[981]	[883]	983	910	1 051	1 287	1 474	1 480	1 280	1 379
Tajikistan	17.1	36.4	47.2	55.4	. .	. .	. .	. .	. .	. .	. .
Turkmenistan	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Uzbekistan[37]	77.2	65.7	70.1	. .	. .	. .	. .	. .	. .	. .	. .
East Asia											
China[38]	[39 500]	[45 900]	[49 800]	[55 200]	[62 100]	[72 900]	[84 100]	[92 700]	[110 100]	[114 300]	[119 400]
Japan[† 39]	52 314	52 844	52 954	52 470	52 270	51 616	50 905	50 221	51 008	51 420	54 527
Korea, North[40]	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Korea, South[41]	[16 711]	[17 171]	[17 755]	[18 535]	20 047	20 778	21 717	23 138	24 372	24 270	27 591
Mongolia	34.8	38.1	36.1	39.3	38.0	46.6	61.2	49.2	37.6	47.4	54.9
Taiwan	8 146	7 424	7 864	8 230	7 870	7 419	7 946	8 470	9 008	8 535	9 078
Oceania											
Australia	13 301	13 870	14 123	14 705	15 222	16 038	17 023	17 643	18 963	19 799	23 972
Fiji[† 42]	50.6	45.4	45.6	50.9	44.7	56.0	69.4	45.2	50.2	. .	. .
New Zealand	1 104	1 062	1 086	1 102	1 114	1 172	1 227	1 263	1 339	1 358	1 605
Papua New Guinea[43]	50.6	35.1	31.8	35.6	41.8	40.6	48.2	38.9	39.4	39.1	42.5
South East Asia											
Brunei Darussalam[44]	280	297	310	245	297	334	345	[336]	[331]	[327]	[355]
Cambodia	111	101	102	99.1	99.1	106	[116]	[123]	[191]	. .	. .

Indonesia	2 025	3 293	4 291	4 412	[4 313]	[4 380]	[5 271]	[4 903]	[4 702]	[6 009]	[7 208]
Laos	(23.9)	(22.2)	(19.2)	(18.2)	(17.6)	(17.8)	(17.7)	(17.6)	(18.4)	. .	. .
Malaysia	2 513	2 855	3 640	3 513	3 758	3 678	4 107	4 199	3 881	3 259	3 626
Myanmar[45]	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Philippines	1 130	1 187	1 310	1 220	1 231	1 254	1 472	1 342	1 321	1 486	1 626
Singapore	5 995	6 320	6 382	6 503	6 908	6 966	7 236	7 293	7 743	7 651	8 399
Thailand	2 747	2 755	2 802	2 528	2 547	2 654	3 498	4 115	4 907	4 336	4 846
Timor-Leste[46]	. .	. .	. .	4.2	10.4	20.7	[26.1]	23.8	38.0	18.6	19.9
Viet Nam	. .	. .	1 369	1 402	1 462	1 721	2 219	2 186	2 401	2 410	2 385
Europe											
Eastern Europe											
Armenia[† 47]	140	138	159	175	215	254	297	345	359	[404]	[422]
Azerbaijan[‖]	[291]	[313]	[391]	[474]	554	1 138	1 237	1 666	1 473	1 421	1 502
Belarus	318	330	334	404	526	683	745	764	676	726	730
Georgia[† 48]	[50.0]	71.5	83.7	117	310	527	1 043	990	604	452	454
Moldova[† ¶ 49]	14.6	17.1	18.6	16.6	19.4	24.6	28.0	34.4	24.9	19.0	18.3
Russia[50]	[28 833]	[32 035]	[34 080]	[35 454]	[38 669]	[42 317]	[45 908]	[50 937]	[53 330]	[52 586]	[58 668]
Ukraine[§]	1 760	1 871	2 162	2 334	2 826	3 170	3 853	3 770	[3 347]	[3 442]	[3 711]
Western and Central Europe											
Albania[§ ¶ 51]	102	101	114	124	129	158	196	231	249	201	190
Austria	[3 216]	3 160	3 291	3 297	3 226	3 098	3 683	3 570	3 334	3 446	3 343
Belgium	5 527	5 359	5 417	5 304	5 111	5 071	5 472	5 959	5 622	5 382	5 244
Bosnia–Herzegovina[† ¶ 52]	. .	428	298	267	223	215	212	220	242	232	227
Bulgaria[†53]	[1 022]	[1 031]	[1 051]	1 027	1 050	1 042	1 210	1 014	963	698	681
Croatia[54]	[1 250]	[1 352]	[1 094]	958	943	1 048	1 079	1 239	1 129	1 060	1 030
Cyprus[† ‖]	[619]	[423]	[410]	426	462	454	430	432	471	510	497
Czech Republic[55]	2 855	3 051	3 314	3 180	3 477	3 212	3 098	2 641	2 719	2 529	2 558
Denmark	4 586	4 530	4 396	4 421	4 213	4 606	4 442	4 614	4 337	4 588	4 472
Estonia[56]	201	240	278	293	365	410	498	480	437	336	330
Finland	2 576	2 627	3 050	3 234	3 320	3 380	3 184	3 428	3 599	3 718	3 588

State	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010*
France[57]	59 308	60 525	62 364	64 076	62 724	63 059	63 272	62 642	66 869	61 285	59 322
Germany	48 170	48 306	47 646	46 183	45 460	44 411	44 454	45 730	47 453	[46 848]	[45 152]
Greece	[8 794]	8 626	7 390	8 125	8 786	9 135	9 128	10 148	10 572	[9 369]	[9 354]
Hungary	2 032	1 981	2 129	1 971	1 951	1 749	1 782	1 656	1 476	[1 323]	[1 350]
Iceland†	–	–	–	–	–	–	–	6.2	9.9	. .	. .
Ireland	1 464	1 405	1 347	1 368	1 386	1 374	1 384	1 434	1 415	1 354	1 279
Italy[58]	40 553	41 661	41 999	42 137	40 539	39 226	[38 006]	[39 408]	[38 303]	[38 198]	[36 972]
Latvia	180	294	339	366	426	536	584	572	364	268	253
Lithuania	453	465	514	[492]	[532]	[579]	[632]	[661]	504	427	412
Luxembourg	296	264	279	293	297	291	301	. .	. .	. .	. .
Macedonia, FYR[59]	418	181	165	173	162	154	176	163	159	145	140
Malta† ‖	47.9	47.3	48.8	51.6	65.0	52.8	52.9	54.2	59.1	58.8	57.0
Montenegro	. .	. .	. .	. .	. .	68.7	62.2	69.8	54.9	55.8	53.5
Netherlands	11 137	11 125	11 283	11 370	11 388	11 922	12 082	11 873	12 129	11 604	11 207
Norway	4 908	5 897	5 670	5 813	5 469	5 459	5 807	5 838	6 196	[6 322]	[6 729]
Poland[60]	5 804	5 904	6 137	6 416	6 859	7 303	8 256	[7 385]	[7 917]	[8 380]	[8 902]
Portugal	4 341	4 463	4 306	4 574	4 848	4 710	4 508	4 525	4 810	[5 213]	[5 040]
Romania‖	2 059	2 048	2 112	2 271	2 403	2 476	2 375	2 617	2 225	2 164	2 202
Serbia[61]	1 197	1 324	1 161	1 072	899	907	1 022	1 009	941	920	848
Slovakia† ‖	1 242	1 258	1 335	1 240	1 344	1 363	1 371	1 403	1 218	1 010	972
Slovenia‖	520	577	601	637	650	744	749	793	792	788	766
Spain	13 814	14 145	14 010	14 461	14 565	17 027	17 591	17 646	16 939	15 803	15 359
Sweden	6 250	6 084	6 040	5 684	5 758	5 668	5 817	5 174	5 063	[5 248]	[5 641]
Switzerland† ¶[62]	4 595	4 398	4 283	4 204	4 138	3 939	3 964	4 060	4 057	4 392	4 615
Turkey‖	17 803	18 942	17 096	15 602	14 770	15 859	13 880	15 285	[16 302]	[15 634]	[17 509]
United Kingdom[63]	47 112	49 977	52 765	52 541	52 579	52 475	53 122	55 291	57 907	57 424	59 598
Middle East											
Bahrain[64]	398	475	546	550	544	592	627	677	762	731	742
Egypt	[4 169]	4 360	4 567	4 321	4 313	4 413	4 444	4 139	4 017	3 914	4 290

Iran[¶ 65]	8 552	6 162	7 503	9 228	11 444	12 743	10 473	(7 044)	. .	. .	. .
Iraq[§ 66]	. .	. .	. .	(2 089)	(2 820)	(2 362)	(2 078)	(5 277)	(4 156)	(4 663)	(4 901)
Israel [¶]	12 656	14 037	13 194	12 594	12 903	13 687	13 458	13 074	12 373	[13 001]	[14 036]
Jordan	747	724	835	775	770	843	1 177	1 331	1 404	[1 363]	[1 430]
Kuwait	3 839	3 962	4 269	4 595	4 447	4 419	4 707	4 336	[4 334]	[4 411]	[4 612]
Lebanon	1 228	1 142	1 148	1 167	[1 185]	[1 177]	[1 292]	1 184	1 426	[1 564]	[1 633]
Oman[‡ 67]	3 169	3 263	3 433	3 860	4 652	4 975	5 040	4 799	4 489	4 047	4 200
Qatar[68]	. .	1 511	1 524	1 404	1 492	1 577	1 922	2 413	. .	. .	. .
Saudi Arabia[§ 69]	26 322	23 109	23 279	25 879	31 183	35 522	40 919	40 159	41 273	42 917	45 245
Syria[70]	1 850	1 920	2 201	2 205	2 218	1 994	2 120	1 922	2 182	2 236	2 346
United Arab Emirates[71]	[10 703]	[9 844]	[10 329]	[11 153]	[10 380]	[10 504]	[11 275]	[13 585]	[15 774]	[15 749]	[16 062]
Yemen	1 037	1 313	1 355	1 105	1 136	1 063	1 271	1 222	. .	. .	. .

Notes: See below table 4A.5.

Table 4A.5. Military expenditure by country as percentage of gross domestic product, 2001–2009

Countries are grouped by region and subregion.

State	2001	2002	2003	2004	2005	2006	2007	2008	2009
Africa									
North Africa									
Algeria[1]	3.8	3.7	3.3	3.3	2.8	2.6	2.9	3.0	3.8
Libya[‡ ¶ 2]	2.7	2.2	1.9	1.9	1.4	1.0	0.9	1.2	. .
Morocco	3.9	3.6	3.7	3.4	3.4	3.3	3.2	3.3	3.4
Tunisia	1.7	1.6	1.6	1.6	1.6	1.6	1.4	1.4	1.3
Sub-Saharan Africa									
Angola[‖ 3]	4.5	3.8	4.8	4.1	4.5	4.4	3.4	2.9	4.2
Benin	0.5	0.9	0.9	1.0	[1.0]	[1.0]	. .	[1.0]	. .
Botswana	3.8	3.8	3.8	3.4	3.1	2.8	[2.7]	[2.7]	[3.0]
Burkina Faso[†]	1.1	1.1	1.0	1.1	1.1	1.2	1.3	1.4	1.2
Burundi	8.0	7.2	7.3	6.6	6.2	4.9	4.7	3.8	. .
Cameroon[§]	1.3	1.3	1.4	1.4	1.3	1.4	1.5	1.5	1.6
Cape Verde	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5
Central African Rep.[‡ 4]	. .	1.1	1.3	1.2	1.1	. .	1.1	1.6	1.8
Chad[5]	1.8	1.7	1.5	1.1	0.9	. .	5.5	7.1	6.2
Congo, Republic of[§]	1.4	1.7	1.9	1.7	1.3	1.1	1.4	1.1	. .
Congo, DRC[6]	. .	. .	1.4	2.1	2.3	2.4	2.0	1.4	1.0
Côte d'Ivoire[7]	. .	. .	1.5	1.5	1.4	1.5	1.5	1.5	. .
Djibouti	4.5	5.6	6.7	5.6	6.3	[6.4]	4.1	3.7	. .
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	22.1	20.7	20.9	. .	. .	. .	. .	. .	. .
Ethiopia	4.4	3.4	2.8	2.5	2.3	1.7	1.3	1.1	1.0
Gabon[8]	1.9	2.0	1.8	1.7	1.3	1.1	(1.0)	. .	. .
Gambia[‡]	0.9	1.0	1.1	0.4	0.5	0.4	0.6	. .	. .

Ghana[‖ 9]	0.6	0.6	0.7	0.6	0.6	0.6	0.8	0.7	0.7
Guinea[10]	2.9	3.1	2.4	2.2	. .	. .	. .	. .	. .
Guinea-Bissau[‖ 11]	3.1	3.2	1.6	. .	2.1	. .	. .	. .	. .
Kenya	1.5	1.6	1.6	1.6	1.7	1.6	1.8	1.9	2.0
Lesotho	3.4	3.0	2.9	2.6	2.5	2.5	2.5	1.6	2.8
Liberia	. .	. .	0.2	0.7	1.5	0.6	0.5	0.5	0.8
Madagascar[‖ 12]	1.4	1.3	1.3	1.2	1.1	1.0	1.1	1.1	0.8
Malawi	0.7	0.6	0.5	0.8	1.2	[1.2]	[1.2]	. .	. .
Mali[13]	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.0	[1.9]
Mauritania[14]	4.6	3.2	4.9	4.9	3.7	3.0	. .	3.4	3.8
Mauritius	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	. .
Mozambique[‖]	1.2	1.3	1.3	1.4	0.9	0.8	0.8	0.8	0.9
Namibia[15]	2.2	2.8	2.9	2.9	3.1	2.9	3.0	3.4	3.7
Niger	1.3	1.0	0.9	1.1	1.0	. .	. .	1.0	. .
Nigeria	1.3	1.5	0.9	0.7	0.6	0.5	0.6	0.8	0.9
Rwanda[16]	3.4	3.0	2.4	2.0	1.7	1.8	1.5	1.4	1.4
Senegal[§ ¶]	1.4	1.4	1.4	1.3	1.4	1.6	1.7	1.6	1.6
Seychelles	1.8	1.7	1.7	2.3	2.1	1.9	1.9	1.2	1.2
Sierra Leone	3.7	2.9	2.9	2.1	2.0	[2.1]	[1.9]	[2.4]	. .
Somalia	. .	. .	. .	. .	. .	. .	. .	. .	. .
South Africa	[1.6]	[1.6]	[1.7]	1.5	1.5	1.4	1.3	1.3	1.3
Sudan[‡ 17]	2.5	2.7	1.9	4.7	3.3	3.4	. .	. .	. .
Swaziland[‡ 18]	1.4	1.5	1.7	1.7	2.1	2.0	1.9	[2.2]	[3.1]
Tanzania	1.6	1.4	1.2	1.1	1.1	1.2	1.1	1.1	1.1
Togo	. .	. .	1.6	1.5	1.5	. .	. .	1.7	. .
Uganda	2.4	2.4	2.3	2.3	2.2	2.0	2.0	[2.2]	[1.8]
Zambia	. .	. .	. .	[1.9]	2.0	1.9	1.3	2.0	1.7
Zimbabwe[19]	2.2	2.2	2.5	5.5	2.3	(2.1)	. .	. .	. .

State	2001	2002	2003	2004	2005	2006	2007	2008	2009
Americas									
Central America and the Caribbean									
Belize	0.9	0.8	0.9	0.9	1.0	1.0	1.1	1.4	1.2
Costa Rica[20]	–	–	–	–	–	–	–	–	–
Cuba[21]	. .	. .	. .	. .	. .	. .	. .	. .	. .
Dominican Republic	[1.4]	[1.5]	[0.9]	0.7	0.8	0.7	0.7	0.7	0.7
El Salvador[22]	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.7
Guatemala	0.9	0.8	0.7	0.4	0.4	0.4	0.4	0.4	0.4
Haiti	–	–	–	–	–	–	–	–	–
Honduras[23]	[0.8]	[1.0]	[0.9]	[0.8]	[0.8]	0.7	0.9	1.5	1.5
Jamaica	0.5	0.6	0.6	0.5	0.5	0.6	0.7	0.9	0.9
Mexico	[0.6]	[0.5]	[0.5]	0.4	0.4	0.4	0.5	0.5	0.5
Nicaragua[24]	0.7	0.8	0.9	0.7	0.7	0.7	0.7	0.7	0.7
Panama	–	–	–	–	–	–	–	–	–
North America									
Canada	1.2	1.2	1.1	1.1	1.1	1.2	1.2	1.3	1.5
United States[25]	3.1	3.4	3.8	4.0	4.0	3.9	4.0	4.3	4.7
South America									
Argentina	1.2	1.1	1.1	1.0	0.9	0.9	0.9	0.8	1.0
Bolivia[26]	2.3	2.2	2.3	2.0	1.9	1.7	1.8	2.0	2.0
Brazil	2.0	1.9	1.5	1.5	1.5	1.5	1.5	1.5	1.6
Chile[§ 27]	3.7	3.8	3.6	3.7	3.6	3.5	3.4	3.5	3.5
Colombia[28]	3.5	3.5	3.9	3.6	3.4	3.3	3.3	3.6	3.7
Ecuador	1.8	2.0	2.6	2.2	2.6	2.3	2.9	2.8	3.4
Guyana	. .	. .	. .	. .	. .	. .	. .	. .	. .
Paraguay[† 29]	1.0	1.0	0.8	0.9	0.8	0.8	0.8	0.8	0.9
Peru[30]	1.7	1.5	1.5	1.4	1.5	1.3	1.2	1.1	1.4

Uruguay	1.8	1.7	1.6	1.4	1.3	1.3	1.2	1.3	1.6
Venezuela[‖ 31]	1.6	1.2	1.2	1.3	1.4	1.6	1.3	1.4	1.3
Asia and Oceania									
Central and South Asia									
Afghanistan[32]	. .	. .	[2.2]	[2.1]	1.7	1.6	2.2	1.9	1.8
Bangladesh	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0
India[33]	3.0	2.9	2.8	2.8	2.7	2.5	2.3	2.5	2.8
Kazakhstan	1.0	1.1	1.1	1.0	1.0	1.0	1.3	1.1	1.2
Kyrgyzstan[34]	2.3	2.7	2.9	2.8	3.1	3.2	3.4	3.4	3.6
Nepal[¶]	1.1	1.4	1.6	1.9	2.2	2.2	1.9	1.8	2.0
Pakistan[‡ 35]	3.8	3.9	3.7	3.6	3.4	3.3	3.0	2.8	2.8
Sri Lanka[36]	[4.3]	[3.3]	[2.9]	3.0	2.6	2.8	3.3	3.7	3.5
Tajikistan	1.2	2.1	2.2	2.2	. .	. .	. .	. .	. .
Turkmenistan	. .	. .	. .	. .	. .	. .	. .	. .	. .
Uzbekistan[37]	0.8	0.6	0.5	. .	. .	. .	. .	. .	. .
East Asia									
China[38]	[2.1]	[2.2]	[2.1]	[2.1]	[2.0]	[2.0]	[2.1]	[2.0]	[2.2]
Japan[† 39]	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0
Korea, North[40]	. .	. .	. .	. .	. .	. .	. .	. .	. .
Korea, South[41]	[2.6]	[2.4]	[2.5]	[2.5]	2.6	2.6	2.6	2.8	2.9
Mongolia	1.9	1.9	1.6	1.5	1.3	1.2	1.4	1.2	1.0
Taiwan	2.5	2.2	2.2	2.2	2.1	1.9	2.0	2.2	2.4
Oceania									
Australia	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9
Fiji[† 42]	2.0	1.7	1.6	1.7	1.4	1.7	2.2	1.5	1.7
New Zealand	1.2	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.2
Papua New Guinea[43]	0.8	0.6	0.5	0.6	0.6	0.5	0.6	0.4	0.5

State	2001	2002	2003	2004	2005	2006	2007	2008	2009
South East Asia									
Brunei Darussalam[44]	5.2	5.3	3.7	2.5	2.6	2.6	2.6	[2.4]	[3.1]
Cambodia	1.8	1.6	1.5	1.3	1.1	1.1	[1.1]	[1.1]	[1.8]
Indonesia	0.6	1.1	1.3	1.3	[1.1]	[1.1]	[1.2]	[1.0]	[0.9]
Laos	(0.7)	(0.6)	(0.6)	(0.5)	(0.4)	(0.4)	(0.4)	(0.3)	(0.3)
Malaysia	2.1	2.2	2.6	2.3	2.3	2.1	2.1	2.0	2.0
Myanmar[45]	1.8	1.3	. .	. .	. .	. .	. .	. .	. .
Philippines	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8
Singapore	5.0	5.1	5.1	4.6	4.4	4.0	3.7	3.9	4.3
Thailand	1.5	1.4	1.3	1.1	1.1	1.1	1.3	1.6	1.9
Timor-Leste[46]	. .	. .	. .	1.1	2.5	5.2	[6.6]	5.3	6.8
Viet Nam	. .	. .	2.1	2.0	1.9	2.1	2.5	2.3	2.5
Europe									
Eastern Europe									
Armenia[† 47]	3.1	2.7	2.7	2.7	2.9	2.9	3.0	3.4	4.2
Azerbaijan[‖]	[2.3]	[2.2]	[2.4]	[2.6]	2.3	3.4	2.9	3.3	3.4
Belarus	1.4	1.4	1.3	1.4	1.5	1.7	1.6	1.5	1.4
Georgia[† 48]	[0.7]	1.0	1.1	1.4	3.3	5.2	9.2	8.5	5.6
Moldova[† ¶ 49]	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5
Russia[50]	[4.1]	[4.4]	[4.3]	[3.8]	[3.7]	[3.6]	[3.5]	[3.5]	[4.3]
Ukraine[§]	2.9	2.8	2.8	2.6	2.8	2.8	2.9	2.7	[2.9]
Western and Central Europe									
Albania[§ ¶ 51]	1.3	1.3	1.3	1.4	1.4	1.6	1.8	2.0	2.1
Austria	[0.9]	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9
Belgium	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.2
Bosnia–Herzegovina[† ¶ 52]	. .	3.9	2.4	1.9	1.5	1.3	1.1	1.1	1.3
Bulgaria[†53]	[3.0]	[2.9]	[2.8]	2.6	2.6	2.4	2.6	2.1	2.0
Croatia[54]	[2.8]	[2.8]	[2.1]	1.7	1.6	1.7	1.7	1.9	1.8

Cyprus[†] [‖]	[3.4]	[2.3]	[2.2]	2.1	2.2	2.1	1.9	1.8	2.0
Czech Republic[55]	1.9	2.0	2.1	1.9	2.0	1.7	1.6	1.4	1.4
Denmark	1.6	1.5	1.5	1.5	1.3	1.4	1.3	1.4	1.4
Estonia[56]	1.5	1.7	1.7	1.7	1.9	1.9	2.1	2.2	2.3
Finland	1.2	1.2	1.4	1.4	1.4	1.4	1.2	1.3	1.5
France[57]	2.5	2.5	2.5	2.6	2.5	2.4	2.3	2.3	2.5
Germany	1.4	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.4
Greece	[3.4]	3.2	2.6	2.7	2.9	2.9	2.8	3.0	3.2
Hungary	1.8	1.6	1.7	1.5	1.4	1.2	1.3	1.2	1.1
Iceland[†]	–	–	–	–	–	–	–	0.0	0.1
Ireland	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.6
Italy[58]	2.0	2.0	2.0	2.0	1.9	1.8	[1.7]	[1.8]	[1.8]
Latvia	1.0	1.6	1.7	1.7	1.7	1.8	1.7	1.7	1.4
Lithuania	1.8	1.7	1.7	[1.5]	[1.4]	[1.4]	[1.4]	[1.4]	1.4
Luxembourg	0.8	0.7	0.7	0.7	0.6	0.6	0.6	. .	. .
Macedonia, FYR[59]	6.6	2.8	2.5	2.5	2.2	2.0	2.1	1.8	1.7
Malta[†] [‖]	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.7
Montenegro	. .	. .	. .	. .	. .	2.0	1.5	1.6	1.3
Netherlands	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.4	1.5
Norway	1.7	2.1	2.0	1.9	1.6	1.5	1.5	1.4	1.6
Poland[60]	1.9	1.9	1.9	1.9	1.9	1.9	2.0	[1.7]	[1.8]
Portugal	1.9	2.0	1.9	2.0	2.1	2.0	1.9	1.9	2.1
Romania[‖]	2.4	2.3	2.1	2.0	2.0	1.8	1.5	1.5	1.4
Serbia[61]	4.3	4.5	3.7	3.1	2.5	2.4	2.5	2.3	2.3
Slovakia[†] [‖]	1.9	1.8	1.9	1.7	1.7	1.6	1.5	1.5	1.4
Slovenia[‖]	1.3	1.4	1.4	1.5	1.4	1.6	1.5	1.5	1.6
Spain	1.2	1.2	1.1	1.1	1.0	1.2	1.2	1.2	1.1
Sweden	1.8	1.7	1.7	1.5	1.5	1.4	1.4	1.2	1.2
Switzerland[† ¶ 62]	1.1	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8
Turkey[‖]	3.7	3.9	3.4	2.8	2.5	2.5	2.2	2.3	[2.7]
United Kingdom[63]	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.5	2.7

State	2001	2002	2003	2004	2005	2006	2007	2008	2009
Middle East									
Bahrain[64]	4.2	4.7	4.8	4.3	3.6	3.4	3.2	3.0	3.7
Egypt	[3.3]	3.4	3.3	3.0	2.9	2.7	2.5	2.3	2.1
Iran[¶ 65]	3.9	2.3	2.7	2.9	3.3	3.4	2.5	(1.8)	. .
Iraq[§ 66]	. .	. .	. .	(1.9)	(2.6)	(2.7)	(2.9)	(5.3)	(5.4)
Israel[¶]	8.1	9.1	8.6	7.7	7.6	7.6	7.1	6.9	6.3
Jordan	5.9	5.4	6.0	5.1	4.8	4.8	6.1	6.3	6.1
Kuwait	7.7	7.4	6.5	5.8	4.3	3.6	3.6	3.0	[4.4]
Lebanon	5.4	4.7	4.6	4.4	[4.4]	[4.5]	[4.6]	3.9	4.1
Oman[‡ 67]	12.5	12.4	12.2	12.1	11.8	11.0	10.3	7.7	9.7
Qatar[68]	. .	4.7	4.0	2.9	2.5	2.1	2.2	2.3	. .
Saudi Arabia[§ 69]	11.5	9.8	8.7	8.4	8.0	8.3	9.2	8.0	11.2
Syria[70]	5.5	5.4	6.3	5.6	5.1	4.4	4.1	3.8	4.0
United Arab Emirates[71]	[9.8]	[8.6]	[7.9]	[7.4]	[5.6]	[5.1]	[5.0]	[5.5]	[7.3]
Yemen	4.8	6.0	6.0	4.7	4.3	3.6	4.1	3.9	. .

. . = not available or not applicable; – = nil or a negligible value; ( ) = uncertain figure; [ ] = SIPRI estimate; | = change of multiple of currency; / = change of financial year (FY); ||| = series break.

[a] The FY runs from Apr. of the year indicated to Mar. of the following year.
[b] The FY runs from July of the year indicated to June of the following year.
[†] All figures exclude military pensions.
[‡] All figures are for current spending only (i.e. exclude capital spending).
[§] All figures are for the adopted budget, rather than actual expenditure.
[¶] All figures exclude spending on paramilitary forces.
[||] This country changed or redenominated its currency during the period; all figures have been converted to the latest currency.

[1] The figures for Algeria for 2004–10 are budget figures. In July 2006 the Algerian Government issued supplementary budgets increasing the total expenditure by 35%. It is not clear if any of these extra funds were allocated to the military.
[2] The figures for Libya do not include development expenditure, which in 2008 amounted to 1000 million dinars.

[3] The rate of implementation of Angola's budget can vary considerably. Military expenditure for Angola should be seen in the context of highly uncertain economic statistics due to the impact of war on the Angolan economy.

[4] Investment expenditure for the Central African Republic for 2005 totalled 775 000 CFA francs.

[5] Chad's military expenditure increased sharply after 2005 due to conflict in the east of the country, with exceptional military expenditure financed by oil revenues. Figures for 2006 are not available, but available information suggests a large increase over 2005 and a smaller increase from 2006 to 2007.

[6] The figures for the Democratic Republic of the Congo do not include profits from extensive military-run mining operations.

[7] The figures for Côte d'Ivoire for 2003 are for budgeted spending rather than actual expenditure.

[8] The figures for Gabon exclude off-budget spending financed by the Provisions pour Investissements Hydrocarbures (PIH), an investment fund based on tax revenues from foreign oil companies active in Gabon.

[9] The figures for Ghana in 2001 and 2006–10 are for the adopted budget rather than actual spending.

[10] The figures for Guinea might be an underestimate as the IMF reports large extra-budgetary spending on the military.

[11] An armed conflict broke out in Guinea-Bissau in 1998, which led to a substantial increase in defence expenditure, especially in 2000 and 2001. According to the IMF, the increase was financed by a credit from the banking system and by promissory notes.

[12] The figures for Madagascar include expenditure for the gendarmerie and the National Police.

[13] The figures for Mali are for defence and security.

[14] The figures for Mauritania are for operating expenditure only.

[15] The figures Namibia for 2002 include a supplementary allocation of 78.5 million Namibian dollars.

[16] Rwanda changed its FY in 2009 from Jan.–Dec. to July–June. The local currency figure for Rwanda for 2009 is the sum of a special 6-month budget for Jan.–June 2009 (20.6 billion Rwandan francs) and the first full July–June FY of 2009–10 (43.6 billion Rwandan francs). The figures for 2005 and 2006 include allocations for African Union (AU) peacekeeping missions.

[17] The figures for Sudan are for defence and security.

[18] The figures for Swaziland for 2008–10 are estimates based on an estimated share of the Defence, Public Order and Safety budget, and are subject to considerable uncertainty.

[19] Zimbabwe abandoned the Zimbabwean dollar in Apr. 2009 and now mainly uses the US dollar. Local currency figures for Zimbabwe are given in Zimbabwean dollars up to 2006 and in US$ from 2010. Hyperinflation means that no meaningful price data are available for 2008, and so it is not possible to provide a single constant price series for Zimbabwe. The constant dollar figures in table 4A.4 are therefore given in constant 2005 US dollars up to 2006 and in constant 2009 US dollars for 2010. These 2 series may not be joined. The figures for Zimbabwe in general should be used with caution due to an extreme level of inflation in the country.

[20] Costa Rica has no armed forces. Expenditure for paramilitary forces, border guards, and maritime and air surveillance is less than 0.05% of GDP.

[21] Figures for Cuba are for Defence and Internal Order. The figures shown in table 4A.4 are for current US dollars, converted at the official exchange rate for each year, instead of constant (2009) US dollars, due to the lack of reliable inflation data for Cuba. Data for military expenditure as a share of GDP is not given due to the lack of reliable GDP data for Cuba.

[22] The figures for El Salvador do not include local government spending on the Armed Forces Pensions Fund or the Pharmaceutical Centre for the Armed Forces. If included, total military spending for 2007 would have been $205.7 million.

[23] The figures for Honduras do not include spending on arms imports.

[24] The figures for Nicaragua include military aid from the USA and Taiwan for the years 2002–2009 of 12.5, 16.9, 13.6, 11.1, 7.3, 28.8, 12.2 and 11.6 million cordobas, respectively.

[25] All figures for the USA are for FY (1 Oct. of the previous year to 30 Sep. of the stated year), rather than calendar year.

[26] The figures for Bolivia include some expenditure for civil defence.

[27] The figures for Chile are for the adopted budget. They include direct transfers from the state-owned copper company Corporacion Nacional del Cobre (CODELCO) for military purchases. These transfers increased rapidly between 2005 and 2008 owing to rising copper prices, then fell in 2009, also along with copper prices.

[28] The figures for Colombia for 2002–2007 include special allocations totalling 2.5 billion pesos from a war tax decree of 12 Aug. 2002. Most of these allocations were spent between 2002 and 2004.

[29] The figures for Paraguay in 2003 are for the modified budget, rather than actual expenditure. Spending on military pensions is not included and for the years 2007, 2008, 2009 and 2010 amounted to 208, 239.3, 271.7 and 293.9 billion guaranies, respectively.

[30] The figures for Peru from 2005 do not include spending from revenues from natural gas that are used to fund military and police procurement.

[31] The figures for Venezuela do not include substantial extra-budgetary expenditure on arms imports.

[32] The figures for Afghanistan are for core budget expenditure on the Afghan National Army. Military aid from foreign donors—which in 2009 included $4 billion from the USA, 16 times Afghanistan's domestic military expenditure—is not included.

[33] The figures for India include expenditure on the paramilitary forces of the Border Security Force, the Central Reserve Police Force, the Assam Rifles, the Indo-Tibetan Border Police and, from 2007, the Sashastra Seema Bal, but do not include spending on military nuclear activities.

[34] The figures for Kyrgyzstan include spending on internal security, which accounts for a substantial part of total military spending.

[35] The figures for Pakistan are for current expenditure. They do not include spending on paramilitary forces—the Frontier Corps (Civil Armed Forces) and Pakistan Rangers. For 2008, 2009 and 2010, these totalled 16.7, 20.8 and 31.4 billion rupees, respectively. Defence spending in the Public Sector Development Plan amounted to 2.3, 5 and 3.9 billion rupees in 2008, 2009 and 2010, respectively.

[36] The figures for Sri Lanka for 2009 include a 33 billion rupees supplementary allocation following the end of the civil war.

[37] The figures for Uzbekistan expressed in constant US dollars should be seen in the light of considerable difference between the official and the unofficial exchange rates.

[38] The figures for China, which have been substantially revised in this edition of the Yearbook, are for estimated total military expenditure, including estimates for items not included in the official defence budget. See section III above for more details.

[39] The figures for Japan are for adopted budget for 2001–2004 and 2009–10. The figures include the budgeted amount for the Special Action Committee on Okinawa (SACO) and exclude military pensions.

[40] The figures for North Korea are as reported by North Korean authorities. They do not include investment in the arms industry and R&D in dual-use technology, or various social welfare services provided through the military sector. Due to lack of a credible exchange rate between the North Korean won and the US dollar, no dollar estimates can be provided.

[41] The figures for South Korea do not include spending on 3 'special funds' for relocation of military installations, relocation of US bases and welfare for troops. These amounted to 449.3 billion and 1048.8 billion won in 2009 and 2010, respectively.

[42] Fiji's spending on military pensions for the years 1998–2002 amounted to roughly 3.5% of annual military spending.

[43] Figures for Papua New Guinea are for the recurrent part of the budget. For the years 2008–10, development expenditure amounted to 6 million, 25.1 million and 0 kina, respectively.

[44] The local currency figure for Brunei Darussalam for 2003 is for a special 15-month FY from Jan. 2003 to Mar. 2004. FYs up to 2002 are Jan.–Dec.; those from 2004 onwards are Apr.–Mar.

[45] The figures for Myanmar are not presented in US dollar terms owing to the extreme variation in stated exchange rate between the kyat and the dollar.

[46] The local currency figure for Timor-Leste for 2007 is for a special 6-month FY, July–Dec. 2007. Previous FYs, up to 2006/2007, are July–June; subsequent FYs, from 2008, are Jan.–Dec. The figures for military expenditure as a share of GDP for Timor-Leste are based on GDP data that excludes oil and gas revenues, which in recent years have been several times higher than Timor-Leste's GDP itself.

[47] If the figures for Armenia were to include military pensions they would be 15–20% higher.

[48] The budget figures for Georgia for 2003 are believed to be an underestimation of actual spending because of the political turmoil during the year.

[49] Adding all military items in Moldova's budget, including expenditure on military pensions and paramilitary forces, would give total military expenditure for 2005, 2006 and 2007 of 343, 457 and 530 million lei, respectively.

[50] For the sources and methods of the military expenditure figures for Russia see Cooper, J., 'The military expenditure of the USSR and the Russian Federation, 1987–97', *SIPRI Yearbook 1998*.

[51] The figures for Albania prior to 2006 do not fully include pensions.

[52] The figures for Bosnia and Herzegovina from 2005 onwards are for the armed forces of Bosnia and Herzegovina, which was formed in 2005 from the Croat–Bosniak Army of the Federation of Bosnia and Herzegovina and the Bosnian Serb Army of Republika Srpska. The figures prior to 2005 include expenditure for the Army of the Federation of Bosnia and Herzegovina and the Army of Republika Srpska. The figures for Bosnia and Herzegovina do not include spending on arms imports.

[53] According to NATO figures, Bulgaria's total spending, including pensions, was 1393, 1712 and 1749 million leva in 2006, 2007 and 2008, respectively.

[54] The figures for Croatia for 2006–10 include sums allocated from central government expenditure for repayments on a loan for a military radar system. The sums allocated were 147.8, 91.4, 53.2, 54.6 and 55.2 million koruny in 2006, 2007, 2008, 2009 and 2010, respectively.

[55] The figures for the Czech Republic do not include military aid to Afghanistan or Iraq. Aid to Afghanistan was 18.7 million koruny in 2004 and 612.6 million koruny in 2007. Aid to Iraq was 1.1 million koruny in 2005.

[56] Estonia merged its Border Guard Service with the National Police in 2010, and it is no longer classed as a paramilitary force by SIPRI. This accounts for much of the decrease in Estonian military spending in 2010.

[57] The figures for France from 2006 are calculated with a new methodology due to a change in the French budgetary system and financial law.

[58] The figures for Italy include spending on civil defence, which typically amounts to about 4.5% of the total.

[59] The definition of military expenditure for FYROM changed from 2006. Border troops were transferred from the Ministry of Defence to the Ministry of Interior Affairs, and part of the military pensions, previously entirely excluded, are now included.

[60] The figures for Poland exclude some defence spending in other ministries and additional domestic defence spending such as the Armed Forces Modernization Fund and some additional defence R&D. Between 2004 and 2010 these additional sums varied between *c.* 240 million and 640 million złotys.

[61] Montenegro seceded from the State Union of Serbia and Montenegro on 3 June 2006. The figures for Serbia up to 2005 are for the State Union of Serbia and Montenegro (known as the Federal Republic of Yugoslavia until Feb. 2003) and for 2006 onwards for Serbia alone.

[62] Figures for Switzerland do not include expenditure on military pensions or paramilitary forces, or spending by cantons and local government. For 1990–2006, military spending by cantons and local government typically amounted to 5–8% of the central government spending figures.

[63] From 2001 the UK moved from a cash-based accounting system to a resource-based system. The figures for the UK from 2001 are based on the 'Net Cash Requirement' figures given in the annual UK Defence Statistics, which are closest to the old cash definition. The Net Cash Requirement definition differs slightly from the cash definition used up to 2000. The effect on the figures for British military expenditure is unknown.

[64] The figures for Bahrain do not include extra-budgetary spending on defence procurement.

[65] The figures for Iran do not include spending on paramilitary forces such as the Islamic Revolutionary Guards Corps (IRGC). No official data for Iran was available for 2009 and 2010, but a media report claimed that the budget for the Ministry of Defence and army was 64 000 billion rials in 2009 and 90 000 billion rials in 2010, while the budget for the IRGC was 48 500 billion rials in 2009 and 58 250 billion rials in 2010. SIPRI has been unable to verify this report.

[66] The figures for Iraq are uncertain because they are budget figures that may be subject to revision due to variations in the price of oil and because of the high rate of inflation up to 2007.

[67] The figures for Oman are for expenditure on defence and national security.

[68] The figures for Qatar are for expenditure on defence and security.

[69] The figures for Saudi Arabia are for expenditure on defence and security.

[70] The figures for Syria in US dollars have been converted from local currency using the market exchange rate for the base year of 2009 of 1 dollar = 46.5 Syrian pounds. Previously, Syria operated an official exchange rate of 1 dollar = 11.225 Syrian pounds, which was used in editions of the SIPRI Yearbook up to 2009. Syria abolished the official rate in 2007, moving to the parallel market rate that had previously operated unofficially.

[71] The military expenditure of the United Arab Emirates is uncertain and lacking in transparency. The only available sources of data are IMF Staff Country Reports and the IMF's *Government Finance Statistics*. The Country Reports include 2 lines relating to military expenditure: the Goods and Services expenditure of the Defence and Interior ministries (which does not include military wages, salaries and pensions), and Abu Dhabi Federal Services, which the reports say are mainly defence and security expenditure. *Government Finance Statistics* give only the Goods and Services figures. The SIPRI figures are estimated as 80% of the Abu Dhabi Federal Services item, plus 100% of the Goods and Services figures. The latter item is estimated for 2006–10 assuming a constant real value.

Appendix 4B. The reporting of military expenditure data, 2001–10

NOEL KELLY

I. Introduction

The public availability of information on military expenditure has increased in recent years. In many countries this increase in transparency has been partly associated with an increase in democratic governance and civilian control of the military. Another factor has been the growth of the Internet; a growing number of governments make budgetary information, including military budgets, available online. However, national systems of reporting vary considerably in the level of coverage, the definitions of military spending and the level of disaggregation.

This appendix focuses on the two international systems for reporting military expenditure data that seek to create a common reporting standard: the United Nations Standardized Instrument for Reporting Military Expenditures and the annual requests that SIPRI makes to governments to report military expenditure data. The systems of reporting are described in section II, and the trends in reporting for the period 2001–10 are presented in section III.

In addition to these global systems, a number of systems exist at a regional level: the Organization for Security and Co-operation in Europe (OSCE) requires its participating states to annually report their military budgets and expenditure in the previous year. This information is not made publicly available. The North Atlantic Treaty Organization (NATO) annually reports the military expenditure of its member states according to a common definition.[1]

II. The reporting systems

The United Nations reporting system

Each year the UN Secretary-General invites all member states (currently 192) through a *note verbale* to report their military expenditure for the most recent financial year. The basis for this request is a UN General Assembly resolution adopted in 1980.[2] Successive biennial General Assembly resolutions have called for the continued reporting of military expenditure by member states.[3]

The justification for this request has evolved over the years. The initial purpose was to use the reporting system as a step towards gradual reductions in

[1] North Atlantic Treaty Organization (NATO), 'Financial and economic data relating to NATO defence', Press Release (2011)027, 10 Mar. 2011, <http://www.nato.int/cps/en/natolive/topics_49198.htm>.

[2] UN General Assembly Resolution 35/142 B, 12 Dec. 1980.

[3] The most recent such resolution is UN General Assembly Resolution 64/22, 2 Dec. 2009.

military budgets.[4] The justification stated in the latest resolution is that the General Assembly is convinced 'that transparency in military matters is an essential element for building a climate of trust and confidence between States and that a better flow of objective information on military matters can help to relieve international tension and is therefore an important contribution to conflict prevention.'[5]

UN member states are requested to report by 30 April annually their military expenditure for the most recent financial year for which data is available. Preferably and to the extent possible, they are asked to use the reporting instrument developed for this purpose—the UN Standardized Instrument for Reporting Military Expenditures—but they can use any other format for reporting military expenditure developed by other international or regional organizations.[6] If appropriate, a state can submit a nil report—a report with no data; these are usually submitted by countries that do not maintain regular armed forces.

The Standardized Instrument is in the form of a matrix with fields for the reporting of disaggregated data by function (e.g. personnel, operations and maintenance, procurement, construction, and research and development, each broken down into subcategories) and by military service (e.g. air force, army and navy) and to give aggregated totals.[7] In the belief that some countries found this matrix too complicated and in order to encourage reporting by more countries, in 2002 the UN introduced an alternative, simplified reporting form that requests only aggregate data by service on personnel, operations and procurement.

The UN Office for Disarmament Affairs (UNODA) manages the system. The reported data is included in an annual report to the General Assembly.[8] In addition, the UNODA periodically publishes documents analysing the reporting trends to the UN.[9] A Group of Governmental Experts (GGE) began a review of the operation of the Standardized Instrument and its further development in 2010 (see below).

[4] See Omitoogun, W. and Sköns, E., 'Military expenditure data: a 40-year overview', *SIPRI Yearbook 2006*, pp. 276–77, 286, 291.

[5] UN General Assembly Resolution 64/22 (note 3).

[6] UN General Assembly Resolution 64/22 (note 3), para. 1.

[7] The Standardized Instrument is reproduced in United Nations, Department for Disarmament Affairs, *Transparency in Armaments: United Nations Standardized Instrument for Reporting Military Expenditures—Guidelines* (United Nations: New York, [n.d.]), pp. 7–8.

[8] The most recent report is United Nations, General Assembly, 'Objective information on military matters, including transparency of military expenditures', Report of the Secretary-General, A/65/118, 12 July 2010; and addenda A/65/118/Add.1, 15 Sep. 2010; A/65/118/Corr.1, 30 Sep. 2010; and A/65/118/Add.2, 8 Dec. 2010.

[9] The most recent example is United Nations, Office for Disarmament Affairs, *United Nations Standardized Instrument for Reporting Military Expenditures: Pattern of Global and Regional Participation by States 1996–2007* (United Nations: New York, [n.d.]).

The SIPRI reporting system

SIPRI has sent requests for data on military expenditure to governments via various national government offices and embassies on an annual basis since 1993. Such requests are sent to most of the 173 countries that are included in the SIPRI Military Expenditure Database.[10] The SIPRI questionnaire is a simplified version of the UN instrument, with fields for data on spending on military and civilian personnel, operations and maintenance, procurement, military construction, military research and development, paramilitary forces, and military aid provided and received. Data is requested for the five most recent years in order to ensure consistency over time. The reported data is one source of information used in preparing SIPRI's tables of military expenditure.[11]

III. Trends in reporting, 2001–10

There has been a decrease in reporting in recent years (see table 4B.1). The number of countries reporting to either the UN or SIPRI dropped from 85 in 2006 to 67 in 2010, reflecting a drop in the response rate to both SIPRI and the UN.

Since the introduction of the UN's standardized instrument, over 124 member states have submitted a report at least once.[12] The number of reports to the UN peaked in 2002 at 70; the total of 51 reports in 2009 was the lowest (excluding the 6 countries that submitted nil reports) in the period 2001–10. Over the period 2001–10 the rate of response to the UN (including nil reports) was 38 per cent, but this had fallen to 30–31 per cent in 2009 and 2010. The response rate to SIPRI over the period 2001–10 was 36 per cent, but this had fallen to 30 per cent by 2010.

The region with the highest overall reporting rate in 2010 was Europe, while the Middle East and Africa had the lowest rates (see table 4B.2).

Given that participation is voluntary and the low levels of reporting are now declining, it seems that annual reporting to these mechanisms is not a high priority for governments. While the political sensitivity of military expenditure is a primary reason in some cases, this cannot be the case for the majority of those that do not report as many of them have made their military budgets available to international financial institutions or online to the general public. Reasons for not reporting may include uncertainty about the utility of reporting, the irrelevance of some or most of the categories in the Standardized

[10] SIPRI Military Expenditure Database, <http://www.sipri.org/databases/milex/>. In 2010 SIPRI did not send requests to Bahamas, Barbados, Costa Rica, Haiti, Panama, Somalia or Tonga. In addition, the SIPRI Military Expenditure Database contains historical data on 4 states that no longer exist: Czechoslovakia, the German Democratic Republic (East Germany), the Yemen Arab Republic (North Yemen) and the People's Democratic Republic of Yemen (South Yemen).

[11] See appendix 4A.

[12] United Nations, Office for Disarmament Affairs (UNODA), and SIPRI, *Promoting Further Openness and Transparency in Military Matters: An Assessment of the United Nations Standardized Instrument for Reporting Military Expenditures*, UNODA Occasional Papers no. 20 (United Nations: New York, Nov. 2010), p. 2.

Table 4B.1. Number of countries reporting their military expenditure to the United Nations and SIPRI, 2001–10

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
UN reporting system[a]										
Number of UN member states	189	191	191	191	191	192	192	192	192	192
Number of reports to the UN[b]	56	70	64	68	62	69	66	68	51	53
Standardized reports	56	70	54	54	55	54	48	53	42	41
Simplified reports[c]	. .	. .	10	14	7	15	18	15	9	12
Nil reports[d]	5	11	11	10	12	11	12	8	6	7
UN response rate (%)[e]	*32*	*42*	*39*	*41*	*39*	*42*	*41*	*40*	*30*	*31*
SIPRI reporting system										
States in the SIPRI Military Expenditure Database[f]	164	167	167	167	167	168	168	168	169	166
Number of SIPRI requests	158	158	158	159	167	165	165	165	167	162
Number of reports to SIPRI	63	61	64	62	67	60	55	53	58	50
SIPRI response rate (%)	*40*	*39*	*41*	*39*	*40*	*36*	*33*	*32*	*35*	*31*
Total number of reports to the UN or SIPRI[g]	**. .**	**. .**	**. .**	**. .**	**. .**	**85**	**78**	**78**	**68**	**67**

[a] The UN data for 2010 includes late submissions up to 8 Dec. 2010, but some countries may report after this date.

[b] These figures exclude nil reports.

[c] Countries reporting to the UN with both standardized and simplified reports are listed as standardized reports to avoid double counting.

[d] A nil report is a questionnaire returned to the UN with no data entered, usually submitted by a country that does not maintain regular armed forces. The total includes those from states not in the SIPRI database.

[e] These figures include nil reports.

[f] The SIPRI Military Expenditure Database excludes many small states with populations under 1 million. In addition, the totals exclude former states on which the database contains historical data.

[g] Totals may be smaller than the sums of reports to the UN and SIPRI because the same country may report to both organizations. Totals before 2006 are not available because of changes in the way responses to the UN and SIPRI are counted.

Sources: United Nations, 'Objective information on military matters, including transparency of military expenditures', Reports of the Secretary-General, various dates, 2001–10, <http://www.un.org/disarmament/convarms/Milex/html/Milex_SGReports.shtml>; and submitted filled-in SIPRI questionnaires.

Instrument, and low governmental capacity to respond.[13] In general, most countries that have never reported to the Standardized Instrument tend to make only basic information on military spending available elsewhere (such as a single total figure).[14] Equally, the fact that many countries have responded at least once suggests that they have the capacity and the willingness to report but lack political commitment to respond consistently.

The GGE that has been appointed to review the operation of the Standardized Instrument started its work in November 2010 by commissioning a joint report by SIPRI and the UNODA.[15] The GGE forms part of the first review of the Standardized Instrument since its inception and initial assessment in the early 1980s. It is expected that by June 2011 the GGE will produce recommendations on how to develop the Standardized Instrument to encourage wider and more consistent participation in this confidence-building measure.

[13] United Nations and SIPRI (note 12), p. 1.
[14] United Nations and SIPRI (note 12), p. 22.
[15] United Nations and SIPRI (note 12).

Table 4B.2. Reporting of military expenditure data to the United Nations and SIPRI, by region, 2010

Figures are numbers of countries. Nil reports to the UN and reports by countries not included in the SIPRI Military Expenditure Database are not included. No state that is not included in the SIPRI Military Expenditure Database sent a substantive report to the UN.

Region/ subregion[a]	Reporting to the UN			Reporting to SIPRI			Total, SIPRI and UN[b]	Response rate (%)
	Requests	Countries reporting data	Total	Requests	Countries reporting data	Total		
Africa	50		2	49		5	6	*12*
North Africa	4	–	0	4	Tunisia	1	1	*25*
Sub-Saharan Africa	46	Burkina Faso, Mauritius[c]	2	45[d]	Burkina Faso, Namibia, Seychelles, South Africa	4	5	*11*
Americas	26		7	23		5	9	*35*
Central America and the Caribbean	13	El Salvador[c], Mexico[e]	2	10[f]	Guatemala, Mexico	2	3	*23*
North America	2	Canada, USA	2	2	USA	1	2	*100*
South America	11	Argentina, Brazil, Colombia[e]	3	11	Argentina, Bolivia	2	4	*36*
Asia and Oceania	31		12	32		5	14	*44*
Central and South Asia	11	Bangladesh[c], Kazakhstan, Kyrgyzstan, Nepal[e]	4	11	–	0	4	*36*
East Asia[i]	5	China[c], Japan, South Korea[c]	3	6	Japan, South Korea, Taiwan[g]	3	4	*67*
Oceania	4	Australia, New Zealand	2	4	Australia	1	2	*50*
South East Asia	11	Cambodia[c], Indonesia[e], Thailand[c]	3	11	Philippines	1	4	*37*
Europe	44		30	44		34	36	*82*
Central and Western Europe	37	Austria, Bulgaria, Croatia[e], Czech Republic, Estonia, Finland, France, Germany, Hungary[c], Ireland, Latvia, Macedonia (FYR)[e], Malta, Netherlands, Norway, Poland,	25	37	Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia,	29	31	*84*

		Portugal, Romania, Serbia[e], Slovakia[e], Slovenia[e], Spain[e], Sweden, Switzerland, UK			Macedonia (FYR), Malta, Montenegro, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK			
Eastern Europe	7	Armenia[c], Belarus, Moldova[c], Russia, Ukraine	5	7	Armenia, Belarus, Moldova, Russia, Ukraine	5	5	*71*
Middle East	14	Israel[c], Lebanon[c]	2	14	Lebanon	1	2	*14*
Total	**165[h]**		**53[i]**	**162**		**50**	**67**	***40***

[a] Countries are grouped in the geographical regions and subregions used in the SIPRI Military Expenditure Database. See appendix 4A.

[b] Totals may be smaller than the sums of reports to the UN and SIPRI because the same country may report to both organizations.

[c] These 12 countries reported their data using a simplified UN form.

[d] There are 46 sub-Saharan African countries in the SIPRI Military Expenditure Database, but SIPRI is unable to send requests to Somalia because of a lack of contact details.

[e] These 10 countries used both the simplified and standardized forms when reporting to the UN. These countries are counted as standardized form responses in this table.

[f] SIPRI does not send a request to Costa Rica, Panama and Haiti, as these countries have no regular armed forces.

[g] SIPRI sent a request to Taiwan, which is not a member of the UN.

[h] In addition, the UN sent requests to 27 states not in the SIPRI Military Expenditure Database.

[i] In addition, 7 UN member states—Andorra, Iceland, Liechtenstein, Monaco, Nauru, Samoa and Tunisia—submitted nil reports to the UN.

Sources: United Nations, General Assembly, 'Objective information on military matters, including transparency of military expenditures', Report of the Secretary-General, A/65/118, 12 July 2010; and addenda A/65/118/Add.1, 15 Sep. 2010; A/65/118/Corr.1, 30 Sep. 2010; and A/65/118/Add.2, 8 Dec. 2010; and submitted SIPRI questionnaires.