

I. Global developments in military expenditure, 2023

NAN TIAN

Estimated global military spending increased for the ninth consecutive year in 2023, reaching a total of \$2443 billion.¹ This 6.8 per cent increase, adjusted for inflation, marks the steepest annual rise in global military expenditure since 2009. Over the decade 2014–23 the total grew in real terms by 27 per cent (see table 5.1). The increase in 2023 can be primarily attributed to the Russia–Ukraine war and to escalating geopolitical tensions in Asia and Oceania and the Middle East.

While estimated world military spending and global gross domestic product (GDP) both increased, the rate of growth of military spending was more than double that of GDP.² As a result, the global military burden—defined as military spending as a percentage of global GDP—increased to 2.3 per cent in 2023. Prior to 2023 the trend in global military burden had been downwards, from 2.5 per cent in 2020 to 2.2 per cent in 2022. World military spending also rose faster than world population in 2023, leading to another increase in per capita military spending: up from \$281 in 2022 to \$306 in 2023. Notably, per capita spending in 2023 was the highest level in real terms since 1990. Average military expenditure as a share of government expenditure—an indicator of government priorities—reached 6.9 per cent in 2023, up 0.4 percentage points from 6.5 per cent in 2022. The biggest change in government priorities occurred in Europe, where military expenditure as an average share of government expenditure rose from 4.2 per cent in 2014 to 7.0 per cent in 2023, while it fell slightly in all other regions.

Military spending increased across all five geographical regions (see figure 5.1)—a phenomenon not observed since 2009. Among the five, the most significant rise occurred in Africa, where spending surged by 22 per cent to \$51.6 billion. Europe followed with a substantial increase of 16 per cent, reaching \$588 billion. In the Middle East, estimated military spending grew by 9.0 per cent to \$200 billion. Growth in Asia and Oceania was more moderate, at 4.4 per cent, taking military expenditure to \$595 billion. The smallest increase was in the Americas: a 2.2 per cent rise to \$1009 billion.

This section continues with a summary of the major driving factors that influenced global military spending in 2023 and then goes on to describe

¹ All figures for spending in 2023 are quoted in current (2023) US dollars. Except where otherwise stated, figures for increases or decreases in military spending are expressed in constant 2022 US dollars, often described as changes in ‘real terms’ or adjusted for inflation. On sources and methods, including the definition of military expenditure, see SIPRI Military Expenditure Database, ‘Sources and methods’, [n.d.].

Of the 168 countries for which SIPRI attempted to estimate military expenditure in 2023, relevant data was found for 153. On estimates in world and regional totals see also the notes in table 5.1.

² International Monetary Fund (IMF), World Economic Outlook, Oct. 2023.

Table 5.1. Military expenditure, the military burden and government spending priorities, by region, 2014–23

Regional and world totals for 2014–23 are in US\$ b. at constant (2022) prices and exchange rates. Figures for 2023 in the right-most column, marked *, are in current US\$ b. Figures do not always add up to totals because of the conventions of rounding.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023*
World total	1 883	1 908	1 915	1 935	1 990	2 073	2 149	2 164	2 242	2 394	2 443
<i>Geographical regions</i>											
Africa	47.7	(44.3)	41.7	40.9	38.5	39.2	40.6	41.5	39.5	48.4	51.6
North Africa	18.0	(18.3)	18.2	17.7	17.2	18.2	19.3	19.0	18.4	25.4	28.5
Sub-Saharan Africa	29.7	(26.0)	23.5	23.2	21.4	21.0	21.3	22.5	21.1	23.0	23.1
Americas	878	861	858	856	881	926	968	957	946	967	1 009
Central America and the Caribbean	8.2	8.0	8.8	8.3	9.1	10.0	12.2	11.9	12.7	12.7	14.7
North America	819	804	802	798	821	866	906	897	886	907	943
South America	50.2	49.7	47.4	50.1	51.1	50.1	49.6	48.5	46.8	46.6	50.7
Asia and Oceania	417	443	465	486	506	531	550	564	583	609	595
Central Asia	1.9	2.0	1.7	1.7	1.8	2.3	2.0	2.1	1.7	1.6	1.8
East Asia	279	297	310	324	341	359	373	384	401	425	411
Oceania	25.8	28.3	31.0	31.1	30.6	31.9	33.4	35.2	35.4	35.1	35.5
South Asia	71.4	73.1	79.5	84.9	88.8	94.3	94.6	94.6	96.5	98.6	98.2
South East Asia	38.8	42.5	43.0	44.6	43.2	43.9	46.5	47.6	48.8	48.0	47.8
Europe	351	361	374	364	370	389	410	420	489	569	588
Central and Western Europe	262	265	273	280	287	302	320	328	340	374	407
Eastern Europe	89.3	96.2	102	84.0	82.5	86.9	89.9	91.2	149	195	181
Middle East	189	(200)	(176)	(188)	(194)	(188)	(181)	(181)	(184)	(201)	(200)
<i>World military spending per capita</i> (current US\$)	255	252	250	251	256	265	274	275	281	306	

Military burden (%)^a

World	2.4	2.5	2.4	2.3	2.4	2.5	2.3	2.2	2.3
Africa	2.1	1.8	1.7	1.6	1.6	1.7	1.7	1.7	1.9
Americas	1.4	1.4	1.4	1.4	1.3	1.4	1.3	1.2	1.2
Asia and Oceania	1.8	1.8	1.7	1.7	1.6	1.7	1.8	1.7	1.7
Europe	1.5	1.5	1.5	1.5	1.7	1.8	1.7	2.3	2.8
Middle East	4.6	5.3	4.8	4.5	4.4	4.5	4.3	3.7	4.2
<i>Military spending as a share of total government spending (%)^b</i>									
World	6.4	6.6	6.5	6.3	6.4	6.2	6.4	6.5	6.9
Africa	7.3	7.5	7.3	6.9	6.9	6.9	7.1	6.6	7.2
Americas	4.1	4.2	4.1	4.0	4.2	4.0	3.8	3.7	3.8
Asia and Oceania	7.7	7.7	7.3	6.9	6.9	6.5	7.0	6.9	7.1
Europe	4.2	4.4	4.6	4.8	5.1	4.8	4.8	6.0	7.0
Middle East	14	14	14	13	13	12	13	13	12

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

Notes: The world and regional totals are estimates, based on data from the SIPRI Military Expenditure Database. When 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 here are Cuba, Djibouti, Eritrea, North Korea, Laos, Somalia, Syria, Turkmenistan, Uzbekistan and Yemen. Totals for regions cover the same groups of countries for all years. The SIPRI military expenditure figures are presented on a calendar-year basis, calculated on the assumption of an even rate of expenditure throughout the financial year. Rough estimates for the Middle East are included in the world totals for 2015–23. Further detail on sources and methods can be found in SIPRI Military Expenditure Database, 'Sources and methods', [n.d.].

^a The military burden of a region is the average military burden for countries in the region for which data is available. World military burden is calculated as world military spending as a share of world gross domestic product, both measured in current US\$.

^b Military spending as a share of total government spending for a region (and for the world) is calculated as the average of military spending as a share of total government spending for the countries in the region (or the world) for which data is available.

Sources: SIPRI Military Expenditure Database, Apr. 2024; International Monetary Fund, World Economic Outlook Database, Oct. 2023; International Monetary Fund, International Financial Statistics Database, Oct. 2023; and United Nations, Department of Economic and Social Affairs, Population Division, 'World population prospects 2022', 2022.

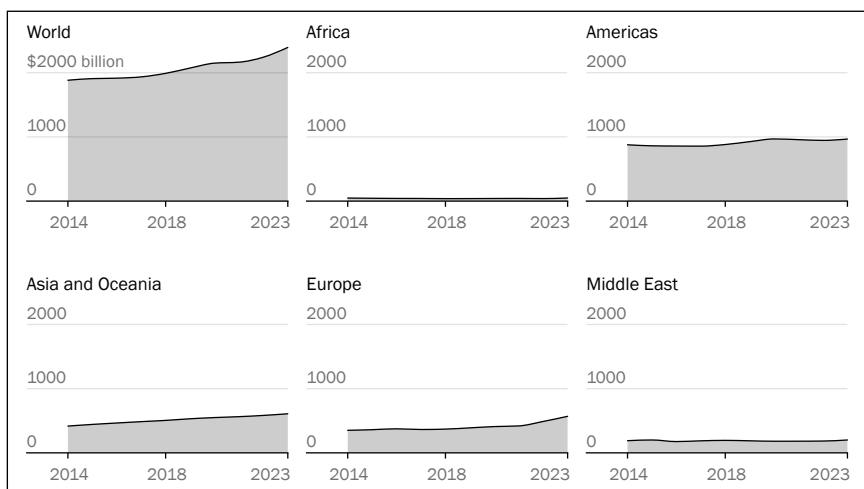


Figure 5.1. Military expenditure by region, 2014–23

Note: Figures are in constant (2022) US\$ billion.

Source: SIPRI Military Expenditure Database, Apr. 2024.

the global trends in military expenditure over the decade 2014–23. It closes by identifying the 15 countries with the highest military spending in 2023. Regional and subregional trends and the spending of individual countries are discussed in section II of this chapter. It should be kept in mind that military expenditure is an input measure, which is not directly related to the ‘output’ of military activities, such as military capability or military security. However, it provides an easily identifiable measure of the scale of resources absorbed by the military.³

The state and drivers of world military spending in 2023

Historical spending patterns (especially among the world’s largest military spenders, see below), the worsening geopolitical environment, and the intensity and numbers of armed conflicts were among the main probable drivers of the rise in 2023.⁴ This increase in spending—across all five global regions—is indicative of a broader trend that started in 2018, and global military expenditure can be expected to grow further in the coming years.

Several intense interstate conflicts and the responses of neighbouring states to the conflict were a major factor behind the hike in global military spending. The Russian Federation’s full-scale invasion of Ukraine in February 2022 was a monumental escalation in the conflict there. The ongoing war

³ For more on sources and methods see SIPRI Military Expenditure Database (note 1).

⁴ On the geopolitical environment see chapter 1 in this volume. On the numbers of armed conflicts see chapter 2, section III, in this volume.

in 2023, marked by a Ukrainian counteroffensive that turned into a war of attrition, prompted significant increases in military spending by Russia and Ukraine.⁵ It also continued to drive the trend of increased military spending in Europe initiated by the urgent response to Russia's invasion in 2022, with many European countries announcing further increases in military spending in 2023.⁶ Of the 43 countries in Europe, 39 increased their military spending in 2023, greatly influencing global expenditure levels. Spending by the United States was also affected, partly due to supplemental expenditure linked to the war. As the world largest spender, increases in the USA's spending have a consequential impact on regional and global trends.

There were also at least 50 other states involved in, mainly intrastate, armed conflicts in 2023.⁷ With the exception of the Israel–Hamas war, many of these armed conflicts appear to have had a marginal impact on global military spending. Even with major or high-intensity armed conflicts, the military expenditure of some of the affected countries (e.g. the Democratic Republic of the Congo, India, Myanmar, Nigeria, Pakistan and Sudan) is small relative to the world total. However, the substantial national increases do have an impact on regional spending and reflect a global worsening of peace and security.

Another factor that had a serious impact on military spending in 2023 was the worsening geopolitical tensions, which contributed to an action–reaction response in military expenditure decisions. For example, with an increasingly assertive China seeking to challenge US global leadership, military spending by China continued to rise in 2023, as did that of some of its neighbours, such as India, Japan, the Republic of Korea (South Korea) and Taiwan.⁸ This pushed up spending levels in Asia and Oceania and globally.

Finally, high oil prices in 2022–23 helped facilitate military expenditure increases in some countries reliant on hydrocarbon revenue.⁹ For example, higher oil and gas revenue partly enabled Algeria and Saudi Arabia to allocate more money to their militaries. These increases had a considerable upward impact on regional and world trends.

⁵ On the Russia–Ukraine war see chapter 1, chapter 2, section I, and chapter 10, sections II and III, in this volume.

⁶ European Defence Agency (EDA), *Defence Data 2022: Key Findings and Analysis* (EDA: Brussels, 2023); and Strupczewski, J., 'Exclusive: New rules would give Europe more scope for military spending post-Ukraine invasion', Reuters, 7 Sep. 2023.

⁷ For a list of these conflicts see chapter 2, section III, in this volume.

⁸ Freeman, C. et al., 'Biden and Xi at APEC: Averting further crisis in US–China relations', US Institute of Peace, 16 Nov. 2023.

⁹ On the relationship between oil price and military expenditure see Tian, N., 'Oil price shocks and military expenditure', *SIPRI Yearbook 2017*.

Table 5.2. The 15 countries with the highest military expenditure in 2023

Expenditure figures and GDP are in US\$, at current prices and exchange rates. Changes are in real terms, based on constant (2022) US dollars.

Rank		Country	Military expenditure, 2023 (\$ b.)	Change (%)		Military expenditure as a share of GDP (%) ^b		Share of world military expenditure, 2023 (%)
2023	2022 ^a			2022–23	2014–23	2023	2014	
1	1	United States	916	2.3	9.9	3.4	3.7	37
2	2	China	[296]	6.0	60	[1.7]	[1.7]	[12]
3	3	Russia	[109]	24	57	[5.9]	[4.1]	[4.5]
4	4	India	83.6	4.2	44	2.4	2.5	3.4
5	5	Saudi Arabia	[75.8]	4.3	–18	[7.1]	[11]	[3.1]
<i>Subtotal top 5</i>			1 481	..	..	..	..	61
6	6	UK	74.9	7.9	14	2.3	2.2	3.1
7	7	Germany	66.8	9.0	48	1.5	1.1	2.7
8	11	Ukraine	64.8	51	1272	37	3.0	2.7
9	8	France	61.3	6.5	21	2.1	1.9	2.5
10	9	Japan	50.2	11	31	1.2	1.0	2.1
<i>Subtotal top 10</i>			1 799	..	..	..	..	74
11	10	South Korea	47.9	1.1	34	2.8	2.5	2.0
12	12	Italy	35.5	–5.9	31	1.6	1.3	1.5
13	13	Australia	32.3	–1.5	34	1.9	1.8	1.3
14	19	Poland	31.6	75	181	3.8	1.9	1.3
15	15	Israel	27.5	24	44	5.3	5.6	1.1
<i>Subtotal top 15</i>			1 974	..	..	..	..	81
World			2 443	6.8	27	2.3	2.4	100

.. = not applicable; [] = estimated figure; GDP = gross domestic product.

^a Rankings for 2022 are based on updated military expenditure figures for 2022 in the current edition of the SIPRI Military Expenditure Database. They may therefore differ from the rankings for 2022 given in *SIPRI Yearbook 2023* and in other SIPRI publications in 2023.

^b These figures are based on GDP estimates from International Monetary Fund, World Economic Outlook Database, Oct. 2023; and International Monetary Fund, International Financial Statistics Database, Oct. 2023.

Source: SIPRI Military Expenditure Database, Apr. 2024.

Trends in military expenditure, 2014–23

At \$2443 billion, world military expenditure in 2023 was 27 per cent higher than in 2014. Following a spending decrease in 2014, the subsequent nine straight years of increases can be divided into two distinct growth periods. First, in 2015–17 military spending was roughly stable, with an average annual increase of just 0.9 per cent. This was then followed by a clear increase in the rate of growth, with a yearly average of 4.2 per cent in 2018–23, excluding the anomalous year of 2021 when spending was unchanged due to the Covid-19 pandemic.

Between 2014 and 2023 there was a marked rise in the concentration of global military expenditure. In 2023 the spending of the United States and

China accounted for half of the estimated world total, a significant jump from their joint 44 per cent share in 2014. Over the same period, the combined expenditure of the top 10 countries rose to 74 per cent of the global total, up from 69 per cent (see table 5.2). This reflects a trend whereby most of the absolute spending increases in the world are made by the major military powers. Any changes in the military spending of the largest spenders affect global estimates. Notably, 5 of the top 10 had a military burden larger than the global average of 2.3 per cent in 2023.

Over the decade, the speeding up and slowing down in the growth of world military expenditure can also be directly linked to the spending changes of the largest military spenders. For example, between 2015 and 2017 the effect on global military spending of the significant rises by China, India and Russia (in 2015 and 2016) and Saudi Arabia (in 2015 and 2017) was dampened by the declines in US and British military spending during that period. In addition, the rise in world military expenditure between 2018 and 2020 coincided with the return of increased US spending and increases among all the other major spenders except Saudi Arabia.

Military expenditure in all regions increased between 2014 and 2023. The rate of increase was lowest in Africa (at only 1.5 per cent), was moderate in the Middle East (5.9 per cent) and the Americas (10 per cent), and surged in Asia and Oceania (46 per cent) and Europe (62 per cent). At the subregional level, military expenditure fell in only sub-Saharan Africa (-22 per cent), Central Asia (-16 per cent) and South America (-7.2 per cent). The five largest subregional increases were observed in Eastern Europe (118 per cent), Central America and the Caribbean (54 per cent), East Asia (52 per cent), Central and Western Europe (43 per cent) and North Africa (41 per cent). The war-time military expenditure by Russia and Ukraine was the sole reason for the more than doubling of spending in Eastern Europe. In Central America and the Caribbean, the sharp rise resulted from increases in Mexico's spending. The growth in East Asia can be attributed to higher expenditure across the subregion.

The North Atlantic Treaty Organization

The combined military expenditure by the 31 member states of the North Atlantic Treaty Organization (NATO) reached \$1341 billion in 2023, 5.2 per cent more than in 2022 and 19 per cent higher compared to 2014. Total NATO military expenditure accounted for 55 per cent of world military spending. The increases are due to new member states joining NATO (Montenegro in 2017, North Macedonia in 2020 and Finland in 2023) but also to a general upward trend in military spending by all NATO states. Over a decade, the countries that were part of NATO in 2014 (excluding Iceland, which has no military expenditure) increased their military spending by an average of 92 per cent. In 2023 only three NATO countries decreased their mili-

tary expenditure: Greece (–17 per cent), Italy (–5.9 per cent) and Romania (–4.7 per cent).

At their 2014 summit in Newport, Wales, the NATO members had agreed to each spend 2 per cent of their GDP on their military by 2024.¹⁰ This target was revised at NATO's 2023 summit in Vilnius to an 'enduring commitment' to annual military spending of 'at least' 2 per cent of GDP.¹¹ The summit communiqué added that, 'We affirm that in many cases, expenditure beyond 2% of GDP will be needed in order to remedy existing shortfalls and meet the requirements across all domains arising from a more contested security order.' The average military burden of NATO members was 1.9 per cent in 2023, although only 11 of the 31 members met the 2 per cent commitment. This was, nonetheless, the highest number since the agreement in 2014 and was four more than in 2022 and eight more than in 2014. Between 2014 and 2023, only three member states did not increase their military burden: Türkiye (–0.4 percentage points), the USA (–0.3 percentage points) and Croatia (unchanged).

In 2014 the NATO members also agreed to allocate 20 per cent or more of their total military spending to major equipment.¹² Every member state subsequently raised the proportion of its expenditure dedicated to equipment and the average share more than doubled, reaching 28 per cent in 2023.¹³

The military burden and government spending priorities

Despite the substantial absolute increases in world military spending, world GDP has been growing on average at a faster rate. Thus, global military burden—world military spending as a share of world GDP—fell marginally from 2.4 per cent in 2014 to 2.3 per cent in 2023.

Middle Eastern countries had the highest average military burden in 2023, at 4.2 per cent of GDP, down from 4.6 per cent in 2014. Europe had the second-highest average, at 2.8 per cent, an increase of 0.5 percentage points from 2022 and of 1.3 percentage points from 2014. This rise was largely due to dramatic growth in the military burdens of Russia and Ukraine, as well as the many countries that continued to increase their spending in response to the ongoing war. The average military burdens of countries in Africa (1.9 per cent), Asia and Oceania (1.7 per cent), and the Americas (1.2 per cent) were considerably lower after slight falls over the decade.

Average military expenditure as a share of government expenditure rose by 0.4 percentage points to 6.9 per cent in 2023. Among the geographic

¹⁰ North Atlantic Treaty Organization, Wales Summit Declaration, 5 Sep. 2014, para. 14.

¹¹ North Atlantic Treaty Organization, Vilnius Summit Communiqué, 11 July 2013, para. 27.

¹² North Atlantic Treaty Organization (note 10), para. 14.

¹³ North Atlantic Treaty Organization, 'Defence expenditure of NATO countries (2014–2023)', 7 July 2023. See also Tian, N., Lopes da Silva, D. and Wezeman, P. D., 'Spending on military equipment by European members of the North Atlantic Treaty Organization', *SIPRI Yearbook 2020*.

regions, the Middle East had the highest average military spending as a share of government expenditure (12 per cent). It was followed by Africa (averaging 7.2 per cent), Asia and Oceania (7.1 per cent), Europe (7.0 per cent) and the Americas (3.8 per cent). Between 2014 and 2023, average military spending as a share of government spending rose substantially in Europe (by 2.8 percentage points) but fell slightly in all other regions.

The largest military spenders in 2023

The top 15 largest military spenders in the world together spent \$1974 billion, equivalent to 81 per cent of the world total. The USA, China and Russia remained the three largest spenders. Further down the list, Ukraine's military spending increased by 51 per cent to rank it eighth, up three places since 2022. Another major increase was made by Poland, where spending rose by 75 per cent to make it the 14th largest spender in 2023, entering the top 15 for the first time.

Of the 15 largest spenders, all but two—Italy (−5.9 per cent) and Australia (−1.5 per cent)—increased their military expenditure in 2023. The largest relative increases were made by Poland and Ukraine, followed by Israel (24 per cent) and Russia (24 per cent). Notably, three of these states were party to two of the year's deadliest conflicts, the Russia–Ukraine and Israel– Hamas wars.

Nearly all top 15 spenders raised their military expenditure over the decade 2014–23. The sole exception was Saudi Arabia, which decreased its spending by 18 per cent. By far the biggest increase was by Ukraine (1272 per cent), with other significant increases by Poland (181 per cent), China (60 per cent), Russia (57 per cent), Germany (48 per cent), India and Israel (both 44 per cent).

The military burdens of 13 of the top 15 increased in 2023. The largest increase was by Ukraine, where military spending as a share of GDP rose by 11 percentage points to 37 per cent in 2023. This was followed by Poland, with an increase of 1.6 percentage points to 3.8 per cent, and Russia, with an increase of 1.2 percentage points to 5.9 per cent. The two exceptions, with falling military burdens in 2023, were Italy and the USA.

Five countries had a lower military burden in 2023 than in 2014: China, India, Israel, Saudi Arabia and the USA.¹⁴ Saudi Arabia's military spending as a share of GDP fell the most over the decade, down from 11 per cent to 7.1 per cent. The standout increase was in Ukraine, where the military burden rose from 3.0 per cent in 2014 to 37 per cent in 2023. In comparison, Russia's military burden increased by 1.8 percentage points over the same period.

¹⁴ China's military burden fell from 1.74% in 2014 to 1.67% in 2023, but conventions of rounding mean that no change is shown in table 5.3.