



Quantifying Peace and its Benefits

The Institute for Economics & Peace (IEP) is an independent, non-partisan, non-profit think tank dedicated to shifting the world's focus to peace as a positive, achievable, and tangible measure of human well-being and progress.

IEP achieves its goals by developing new conceptual frameworks to define peacefulness; providing metrics for measuring peace; and uncovering the relationships between business, peace and prosperity as well as promoting a better understanding of the cultural, economic and political factors that create peace.

IEP is headquartered in Sydney, with offices in New York, Brussels, The Hague, Mexico City and Harare. It works with a wide range of partners internationally and collaborates with intergovernmental organizations on measuring and communicating the economic value of peace.

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Executive Summary

This is the 17th edition of the Global Peace Index (GPI), which ranks 163 independent states and territories according to their level of peacefulness. Produced by the Institute for Economics and Peace (IEP), the GPI is the world's leading measure of global peacefulness. This report presents the most comprehensive datadriven analysis to-date on trends in peace, its economic value, and how to develop peaceful societies.

The GPI covers 163 countries comprising 99.7 per cent of the world's population, using 23 qualitative and quantitative indicators from highly respected sources, and measures the state of peace across three domains: the level of Societal Safety and Security; the extent of Ongoing Domestic and International Conflict; and the degree of Militarisation.

In addition to discussing the findings from the 2023 GPI, the report includes analysis of current conflicts and potential future conflicts, including an analysis of the likely economic impact of a Chinese blockade of Taiwan on the global economy.

This year's results found that the average level of global peacefulness deteriorated by 0.42 per cent. This is the thirteenth deterioration in peacefulness in the last fifteen years, with 84 countries improving and 79 deteriorating in peacefulness in 2022.

Iceland remains the most peaceful country in the world, a position it has held since 2008. It is joined at the top of the index by Denmark, Ireland, New Zealand, and Austria. Afghanistan is the least peaceful country in the world for the eighth consecutive year, followed by Yemen, Syria, South Sudan, and the Democratic Republic of the Congo. All these countries in both groups, other than Ireland, have always been ranked amongst the ten most peaceful or least peaceful countries, highlighting the stickiness of peacefulness at both ends of the Index.

The war in Ukraine had a significant impact on global peacefulness, with Ukraine and Russia having the largest and fifth largest deteriorations in peacefulness respectively. Haiti, Mali, and Israel were the other countries with the largest deteriorations.

The largest improvement in peacefulness occurred in Libya for the second successive year, followed by Burundi, Oman, Côte d'Ivoire, and Afghanistan. Europe is the most peaceful region in the world and is home to seven of the ten most peaceful countries. The other three most peaceful countries are in the Asia-Pacific region. The Middle East and North Africa (MENA) region remained the world's least peaceful region. It is home to four of the ten least peaceful countries, however it was also the region with the largest improvement in peace.

The largest improvements occurred in MENA and North America. North America's improvement was driven by improvements in Canada. In the MENA region Ongoing Conflict domain was the primary driver of the improvement, with terrorism impact, internal conflicts fought, and deaths from internal conflict all improving.

The largest regional deterioration occurred in the Russia and Eurasia region. Although this was primarily driven by a deterioration in peacefulness in Ukraine and Russia, many other countries in the region also experienced significant falls in peacefulness.

Of the 23 indicators in the GPI, ten recorded improvements, eleven deteriorated, and two recorded no change. The Safety and Security and Ongoing Conflict domains both deteriorated, while the Militarisation domain recorded a slight improvement, continuing a long-term trend of improvement.

The largest year-on-year deteriorations occurred on the external conflicts fought, deaths from internal conflict and political instability indicators. The number of battle deaths had been rising even before the Ukraine conflict began, with the total number of conflict-related deaths rising by 45 per cent between 2020 and 2021.

On a more positive note, there were substantial improvements for several Safety and Security indicators, including terrorism impact and the homicide rate. Several countries in the Central America and Caribbean recorded reductions in the number of homicides, although the region still has the highest homicide rate on average of any area in the GPI.

Over the last 15 years the world has become less peaceful, with the average country score deteriorating by five per cent. Of the 163 countries in the GPI, 95 recorded deteriorations, while 66 recorded improvements and two recorded no change in score. Sixteen of the 23 GPI indicators deteriorated between 2008 and 2023 while eight improved.

Two of the three GPI domains have deteriorated since 2008, with Ongoing Conflict deteriorating by 14 per cent and Safety and Security deteriorating by 5.4 per cent. *Militarization* was the only domain to improve. Some of the largest indicator deteriorations were for external conflicts fought, internal conflicts fought, number of refugees and IDPs and violent demonstrations. There were 120 countries where the number of violent demonstrations increased over the past fifteen years, compared to just 20 where it fell. *External conflicts fought* recorded the largest deterioration of all indicators since 2008, worsening by over 50 per cent. There were 77 countries that recorded a deterioration on this indicator since 2008. Of the 163 countries in the GPI, 122 were involved in at least one external conflict since 2008, although the majority did so as part of broad coalitions and not committing substantial resources.

The improvement in the *Militarisation* domain was widespread, with every region recording a fall in score since 2008. The *armed service* rate fell in 113 countries, while the average level of *military expenditure* as a percentage of GDP also fell, from 2.04 to 1.95 per cent. However, the absolute level of military expenditure increased, with the largest increases occurring in China, the US, and India, where total expenditure increased by \$USD 180 billion, 70 billion and 40 billion respectively since 2008.

Several conflicts, other than the war in Ukraine, have also been devastating. 2022 was the deadliest year for armed conflict since the 1994 Rwandan genocide, the

deadliest year in the history of the GPI. This was driven by more than 100,000 deaths in the war in Tigray in northern Ethiopia. The battles between the Ethiopian Defence Force, ally Eritrea and rebel group TPLF is the single deadliest event since 1994. Ukraine also saw at least 82,000 conflict deaths in 2022. Conflict-related deaths in Mali increased 154 per cent in 2022, with violence against civilians rising by 570 per cent, while in Myanmar, conflict-related deaths increased by 87 per cent. In contrast, the level of violence in other conflictaffected areas fell sharply over the past year. Conflict-related deaths fell by 91 per cent in Afghanistan, and by 63 per cent in Yemen.

The use of unmanned aerial vehicles (UAVs), commonly known as drones, are being more commonly deployed, with both state and non-state actors increasingly using drones in attacks against both military and infrastructure targets. The number of non-state groups using drones doubled between 2018 and 2022, and the total number of drone strikes nearly tripled over the same period.

Both violence and peacefulness can be contagious. Actions in one region or country can spill over into bordering regions and countries, leading to virtuous or vicious cycles where peace and conflict move in tandem. Eastern Europe is an example of where changes in one country have led to large decreases in peacefulness in neighbouring countries. Russia's annexation of Crimea in 2014 led to a surge in militarisation in Ukraine, Belarus, Lithuania, Latvia, and Estonia, with *military expenditure* and *neighbouring countries relations* deteriorating in all these countries.

Coastal West Africa is an example of a virtuous cycle

of peacefulness, where countries improved their GPI scores over the past 15 years, despite widespread violence in the neighbouring Sahel region, and a strong history of violent conflict. Other than Guinea, every single coastal West African country recorded an improvement in peacefulness from 2008 to 2023. Improvements in governance and political stability, as well as increased resources for policing and security services have played a key role in the increase in peacefulness.

The economic impact of violence on the global economy in 2022 was \$17.5 trillion in purchasing power parity (PPP) terms. This figure is equivalent to 12.9 per cent of the world's GDP or \$2,200 per person, increasing by 6.6 per cent from the previous year. This was mainly driven by an increase in the total economic impact of global military expenditure, which rose by 16.8 per cent, although more countries reduced their military expenditure as a percentage of GDP than increased it. Much of the increase resulted from Russia's invasion of Ukraine and associated military spending from countries directly and indirectly involved in the conflict.

The largest year-onyear deteriorations occurred on the external conflicts fought, deaths from internal conflict, and political instability indicators.

. . . .

For the ten countries most affected by violence, the average economic impact was equivalent to 34 per cent of GDP, compared to 2.9 per cent in the ten countries least affected by violence. Ukraine, Afghanistan, and the Central African Republic incurred the largest proportional economic cost of violence in 2021, equivalent to 63, 47, and 40 per cent of GDP, respectively.

The 2023 GPI report also looks at the economic impact of a hypothetical Chinese blockade of Taiwan. IEP estimates that a blockade would have an impact twice as large as the global financial crisis, with global GDP falling by 2.8 per cent within a year. The Chinese economy would shrink by an estimated seven per cent, while Taiwan's economy would shrink by almost 40 per cent. There would be significant spill over effects in any industry that relies on complex electronics, as Taiwan produces over 90 per cent of the world's advanced logic semiconductors. China's five major trading partners are all developed democracies with strong defence links with the US.

The need for a systemic response to building peace is urgent. Conflict is intensifying in several regions, with conflict-related deaths rising rapidly. The gap between the most and least peaceful countries continues to grow, and although many measures of militarisation have improved over the past fifteen years, the proliferation of cheaper advanced military technologies, increasing geopolitical competition, and an underlying current of political instability in many countries means that a continuing deterioration of global peacefulness seems likely.

Key Findings

SECTION 1: RESULTS

- The average level of country peacefulness deteriorated by 0.42 per cent in the 2023 Global Peace Index. This is the ninth consecutive year that global peacefulness has deteriorated. The average level of peacefulness has only improved twice year-on-year since 2008.
- In the past year, 84 countries recorded an improvement, while 79 countries recorded a deterioration in peacefulness.
- Russia's invasion of Ukraine and its consequences were the main drivers of the deterioration in peacefulness globally. Both Russia and Ukraine are now ranked amongst the ten least peaceful countries, and Ukraine had the largest deterioration of any country in the 2023 GPI.
- The intensity of conflict was increasing around the world even prior to the start of the conflict in Ukraine.
- The total number of conflict-related deaths increased by 96 per cent. Both the *deaths from internal conflict* and *external conflicts fought* indicators would have deteriorated even if Ukraine and Russia were excluded from the analysis.
- The two indicators with the largest deteriorations in 2022 were conflict-related, *external conflicts fought* and *deaths from internal conflict*, followed by *political instability*. The indicators with the biggest improvement were *UN peacekeeping funding* and *military expenditure*.
- Although 92 countries improved on *military expenditure (%GDP)* in 2022 total military expenditure increased, mainly driven by countries involved in the Ukraine war.
- The Middle East and North Africa (MENA) region recorded the second largest improvement in peacefulness after North America, however it remained the world's least peaceful region. It is home to four of the ten least peaceful countries in the world.
- Europe remains the most peaceful region in the world and is home to seven of the ten most peaceful countries. However, it deteriorated on all three GPI domains over the past year, as tensions between European countries and Russia continued to grow. Europe is less peaceful now than it was 15 years ago.
- Peacefulness improved on average for the *Militarisation* domain but deteriorated on both the *Ongoing Conflict* and *Safety and Security* domains.
- Of the 23 GPI indicators, ten recorded an improvement, 11 had a deterioration, and two recorded no change over the past year. The largest deterioration occurred on the *external conflicts fought* indicator, while UN peacekeeping funding had the largest improvement.
- Several countries that had experienced serious conflict in the past two decades recorded the largest improvements in peacefulness. Libya, Côte d'Ivoire, and Afghanistan were all ranked amongst the five biggest improvers in peace.
- There were 59 countries where *political instability* deteriorated over the past year, compared to just 22 where the indicator improved.

SECTION 2: TRENDS

- The level of global peacefulness has deteriorated by five per cent since 2008, with 95 countries deteriorating and 66 improving in the GPI. The average level of global peacefulness has deteriorated for 13 of the last 15 years, with no year-on-year improvements recorded since 2014.
- The gap between the least and the most peaceful countries continues to grow. Since 2008, the 25 least peaceful countries deteriorated on average by 9.8 per cent, while the 25 most peaceful countries improved by 0.1 per cent.
- Of the three GPI domains, two recorded deteriorations and one improved since 2008. Ongoing Conflict and Safety and Security deteriorated by 14 and 5.4 per cent respectively. Militarisation improved by 6.2 per cent.
- All six of the Ongoing Conflict indicators deteriorated. In total, 99 countries recorded a deterioration on this domain, with 52 recording an improvement, and 10 registering no change since 2008.
- Conflict and terrorism in the Middle East were key drivers of the global deterioration in peacefulness until 2015, but in the past eight years conflicts in other regions have underpinned the global decline in peacefulness.
- Sixteen of the 23 indicators in the GPI deteriorated, while only seven improved. Only one indicator improved by more than ten per cent, while eight deteriorated by more than ten per cent.
- The two indicators with the largest deterioration in peacefulness since 2008 were *violent demonstrations* and *external conflicts fought*, each deteriorating by an average of 53 per cent. The increase in *external conflicts fought* reflects more external actors becoming involved in internal conflicts in other countries.
- The *terrorism impact* indicator deteriorated sharply until 2015, but in recent years has begun to improve. The epicenter of terrorism has shifted from the Middle East and North Africa into sub-Saharan Africa, especially the Sahel.
- The average homicide rate across all GPI countries fell from 7.6 to 6.3 per 100,000 from 2008 to 2023, representing a 17.1 per cent improvement. 104 countries improved their score on the homicide rate indicator, while 42 deteriorated.
- Five of the six indicators in the Militarisation domain have improved since 2008, with the average armed personnel rate declining from 476 to 403 soldiers per 100,000 population, and 123 countries improving on UN peacekeeping funding.
- In contrast with the global trend, Eastern European countries bordering Russia deteriorated on the *Militarisation* domain by an average of 6.9 per cent between 2008 and 2023. The *relations with neighbouring countries* indicator also deteriorated significantly in this region.
- Coastal West Africa recorded an improvement in overall peacefulness, despite a history of conflict, political instability, and a surge in violent conflict and terrorism in the neighbouring Sahel region. There were no deaths from terrorism recorded in this region in 2022.
- There are now 15 countries where at least five per cent of the population are either refugees or internally displaced. Syria has 61 per cent of its population displaced, South Sudan over 42 per cent, Ukraine over 30 per cent, while Somalia and the Central African Republic have more than 20 per cent displaced.

SECTION 3: ECONOMIC IMPACT OF VIOLENCE

- The global economic impact of violence was \$17.5 trillion in 2022, equivalent to 12.9 per cent of global GDP, or \$2,200 per person.
- The war in Ukraine had a devastating economic effect, with the economic impact of violence in Ukraine increased by 479 per cent or \$449 billion. This was the largest increase of any country.
- Ukraine, Afghanistan and Sudan incurred the highest relative economic cost of violence in 2022, equivalent to 63.1, 46.5 and 39.7 per cent of GDP, respectively.
- In the ten countries most affected by violence, the economic cost of violence averaged 34 per cent of GDP in 2022, compared to just 2.9 per cent for the ten least affected countries.
- IEP estimates that a Chinese blockade of Taiwan would lead to a drop in global economic output of USD 2.7 trillion in the first year. This estimate is considered conservative.
- The blockade would lead to a 2.8 per cent decline in global economic output in the first year. This is almost double the loss that occurred as the result of the 2008 Global Financial Crisis.
- Almost 60 per cent of this loss of economic activity would occur in China and Taiwan, with the two countries having combined lost output of 1.6 trillion USD.
- The Chinese economy would shrink by an estimated seven per cent, while Taiwan's economy would shrink by almost 40 per cent.
- The loss of economic output would be strongly felt in other parts of the world, most noticeably South-East Asia and Oceania. Losses in these regions would range from three per cent in Australia and Laos, to up to six per cent in Vietnam.
- The impact of a blockade would be especially strong on trade in computers and electronics. China and Taiwan put together dominate global trade in computer and electronics, at 31 per cent and electrical equipment at 23 per cent.
- China and several East Asian Countries including South Korea and Japan are highly dependent on imports of computer and electronic components from Taiwan. The share of trade with Taiwan in total trade in this sector ranges from 10 per cent for the Philippines to 21 per cent for China.
- Taiwan is the global leader in semiconductor production, with a 20 per cent share of the total global capacity, 37 per cent of the world's logic semiconductors production capacity, and 92 per cent of the world's advanced logic semiconductors production capacity.

SECTION 4: CONFLICT TRENDS AND HOTSPOTS

- 2022 saw a shift in the global distribution of violence. Major conflicts in the MENA region and South Asia declined, while conflicts in sub-Saharan Africa, Europe, and Asia-Pacific intensified.
- Russia's invasion of Ukraine is the largest war in Europe since the Balkan wars in the 1990s. Conservative estimates suggest there were at least 82,200 conflict-related deaths in Ukraine in 2022, although the true number is likely to be much higher.
- Even when the violence in Ukraine is excluded, there has been an increase in the level of conflict since 2019. Conflict-related deaths rose by 45 per cent in the year prior to Russia's invasion of Ukraine, with over 100,000 total deaths being recorded in 2021.
- Violence increased significantly in Mali, Myanmar, and Ukraine in 2022. 2022 was the deadliest year for armed conflict in the history of the GPI. In Ethiopia over 104,000 people died in the war in Tigray, the single largest conflict death event since the 1994 Rwandan genocide. By contrast, conflict decreased significantly in Afghanistan and Yemen.
- Increased geopolitical competition has fueled conflict in many countries. Both great and middle powers are competing for influence in states or regions by supporting competing interests

through the supply of military assistance.

- Drones have also played a major role in many conflicts, with military and commercial drones utilised in large numbers in Ukraine, Ethiopia and Myanmar. The total number of drone attacks increased by 40.8 per cent from in 2022, with the number of different groups using drones increasing by 24 per cent.
- Violence in Mali escalated after France withdrew its forces from the country. Mali saw a 154 per cent increase in conflict-related deaths, including a nearly four-fold increase in deaths from violence targeted at civilians. There were nearly 5,000 battlefield deaths in 2022.
- Myanmar saw a shift from protest-related violence towards civil war, as various militias gained support after the coup. Protest-related deaths fell 99.2 per cent, while conflict-related deaths increased by 86.7 per cent.
- The war in Ethiopia's Tigray region saw the most severe battles of the war with over 104,000 people killed between August and November prior to a truce between the Ethiopian government and TPLF. Violence also surged in Oromia, a separate conflict.
- Afghanistan recorded the largest reduction in deaths from armed conflict in 2022 with conflict-related deaths falling 90.6 per cent, from almost 43,000 to just over 4,000.
- Conflict declined in Yemen as a truce held. Improvements in relations between Saudi-Arabia and Iran may further reduce tensions.

SECTION 5: POSITIVE PEACE

- Positive Peace is defined as the attitudes, institutions and structures that create and sustain peaceful societies.
- These same factors also lead to many other positive outcomes that society feels are important, such as economic strength, resilience and wellbeing.
- The most peaceful countries in the world perform strongly on all eight Pillars of Positive Peace.
- High Positive Peace countries are more likely to maintain stability, adapt and recover from shocks.
- Of the countries with a substantial Positive Peace Deficit in 2009, almost 80 per cent deteriorated in the GPI in the subsequent decade. A Positive Peace deficit is where the actual peacefulness of a country is substantially higher than what its levels of Positive Peace would suggest.
- · Positive Peace improved two per cent globally from 2009 to 2022.
- The global PPI improved every year without interruption from 2009 until 2019. The slight decline since 2019 was associated with COVID-19 and the global recession created by the policy responses to the pandemic.
- Improvements in the PPI are due to the *Structures* domain of Positive Peace, which showed substantial development since 2009, while the *Institutions* domain recorded only a small improvement in the period.
- In contrast, the Attitudes domain deteriorated by two per cent globally from 2009 to 2022. This domain deteriorated in 99 of the total 163 countries assessed, reflecting increased polarisation of views on political and economic administration matters, as well as a deterioration in the quality of information disseminated to the public.

Results



Key Findings

- The average level of country peacefulness deteriorated by 0.42 per cent in the 2023 Global Peace Index. This is the ninth consecutive year that global peacefulness has deteriorated. The average level of peacefulness has only improved twice year-on-year since 2008.
- In the past year, 84 countries recorded an improvement, while 79 countries recorded a deterioration in peacefulness.
- Russia's invasion of Ukraine and its consequences were the main drivers of the deterioration in peacefulness globally. Both Russia and Ukraine are now ranked amongst the ten least peaceful countries, and Ukraine had the largest deterioration of any country in the 2023 GPI.
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- Although 92 countries improved on the *military expenditure* indicator in 2022 total military expenditure increased, mainly driven by countries involved in the Ukraine war.

- The Middle East and North Africa (MENA) region recorded the second largest improvement in peacefulness after North America, however it remained the world's least peaceful region. It is home to four of the ten least peaceful countries in the world.
- Europe remains the most peaceful region in the world and is home to seven of the ten most peaceful countries. However, it deteriorated on all three GPI domains over the past year, as tensions between European countries and Russia continued to grow. Europe is less peaceful now than it was 15 years ago.
- Peacefulness improved on average for the Militarisation domain but deteriorated on both the Ongoing Conflict and Safety and Security domains.
- Of the 23 GPI indicators, ten recorded an improvement, 11 had a deterioration, and two recorded no change over the past year.
- Several countries that had experienced serious conflict in the past two decades recorded the largest improvements in peacefulness. Libya, Côte d'Ivoire, and Afghanistan were all ranked amongst the five biggest improvers in peace.
- There were 59 countries where political instability deteriorated over the past year, compared to just 22 where the indicator improved.

2023 BAI A SNAPSHOT OF THE GLOBAL STATE OF PEACE

THE STATE OF PEACE

VERY HIGH	HIGH	MEDIUM	LOW	VERY LOW	NOT INCLUDED

RANK	COUNTRY	SCORE	CHANGE
1	Iceland	1.124	↔
2	🔵 Denmark	1.31	† 1
3	Ireland	1.312	↓ 1
4	🔵 New Zealand	1.313	† 2
5	🔵 Austria	1.316	↓ 1
6	 Singapore 	1.332	† 4
7	Portugal	1.333	† 1
8	 Slovenia 	1.334	↓ 4
9	🔵 Japan	1.336	↔
10	 Switzerland 	1.339	<u>†</u> 1
11	🔵 Canada	1.35	† 2
12	Czechia	1.379	↓ 5
13	Finland	1.399	† 3
14	🔵 Croatia	1.45	† 1
15	Germany	1.456	† 2
16	Netherlands	1.49	† 5
17	🔵 Bhutan	1.496	↓ 5
18	Hungary	1.508	↓ 4
19	🔵 Malaysia	1.513	↔
20	🔵 Belgium	1.523	† 4
21	🔵 Qatar	1.524	† 1
22	🔵 Australia	1.525	† 4
23	 Mauritius 	1.546	† 5
24	Norway	1.55	↓ 6
25	Estonia	1.563	† 1
26	 Slovakia 	1.578	↓ 6
27	🔵 Latvia	1.582	† 3
28	Sweden	1.625	† 1

RANK	COUNTRY	SCORE	CHANGE
29	Poland	1.634	↓ 6
30	🔵 Bulgaria	1.643	↓ 5
31	🔵 Romania	1.649	† 4
32	🔵 Spain	1.649	↔
33	🔵 Taiwan	1.649	† 2
34	🔵 Italy	1.662	↓ 2
35	🔵 Kuwait	1.669	† 3
36	🔵 Lithuania	1.671	↓ 2
37	United Kingdom	1.693	↓ 1
38	North Macedonia	1.713	↓ 1
39	Costa Rica	1.731	† 2
40	🔵 Albania	1.745	↔
41	🔵 Vietnam	1.745	† 4
42	Botswana	1.762	† 6
43	South Korea	1.763	† 2
44	Mongolia	1.765	↓ 5
45	Montenegro	1.772	† 5
46	Laos	1.779	† 3
47	Sierra Leone	1.792	↔
48	🔵 Oman	1.794	† 18
49	Timor-Leste	1.796	† 3
50	 Uruguay 	1.798	↓ 5
51	🔵 Ghana	1.799	↓ 8
52	Senegal	1.827	† 4
53	Indonesia	1.829	↓ 12
54	Argentina	1.837	† 10
55	Madagascar	1.846	↔
56	Namibia	1.859	† 6

RANK	COUNTRY	SCORE	CHANGE
57	Moldova	1.873	† 4
58	Chile	1.874	↓ 5
59	The Gambia	1.888	↓ 8
60	Greece	1.89	↓ 6
61	Bosnia and Herzegovina	1.892	↓ 4
62	Jordan	1.895	† 6
63 🌔	Zambia	1.898	↓ 4
64 🌔	Cyprus	1.904	† 1
65 🤇	Serbia	1.921	↓ 7
66 🤇	Armenia	1.929	† 3
67 🤇	France	1.939	↔
=68	Panama	1.942	↓ 8
=68	Paraguay	1.942	† 12
=70	Trinidad and Tobago	1.946	† 1
=70	Kosovo	1.946	† 5
=70	Liberia	1.946	† 8
73 🤇	Cambodia	1.947	↓ 1
74 🤇	Malawi	1.97	↓ 4
75 🤇	United Arab Emirates	s 1.979	† 3
76	🛛 Kazakhstan	1.98	† 21
77 🤇	Jamaica	1.986	† 3
78 🤇	Bolivia	2.001	↓ 1
79 🤇	Nepal	2.006	↓ 5
80	China	2.009	† 6
81 🤇	Tunisia	2.01	† 1
82 🤇	Equatorial Guinea	2.013	↓ 19
83	Dominican Republic	2.019	† 5



countries recorded

improvements in peacefulness

0

countries recorded deteriorations in peacefulness



The average level of global peacefulness deteriorated by 0.42 per cent in the 2023 Global Peace Index

RANK	COUNTRY	SCORE	CHANGE
=84	– Angola	2.02	↓ 9
=84	Morocco	2.02	↓ 1
86	😑 Uzbekistan	2.033	↓ 2
87	😑 Guinea-Bissau	2.045	† 12
=88	😑 Bangladesh	2.051	† 8
=88	😑 Rwanda	2.051	† 3
90	Côte d'Ivoire	2.053	† 18
91	😑 Tanzania	2.058	† 2
92	🛑 Thailand	2.061	† 13
93	😑 Gabon	2.068	↓ 6
94	😑 Georgia	2.071	† 1
95	🗕 Azerbaijan	2.09	† 15
96	😑 Algeria	2.094	† 8
=97	😑 Ecuador	2.095	1 24
=97	😑 Papua New Guinea	2.095	↓ 8
99	😑 Cuba	2.103	† 1
100	😑 Turkmenistan	2.107	† 3
101	😑 Kyrgyz Republic	2.11	↓ 16
102	🛑 Tajikistan	2.114	↓ 8
=103	😑 Guatemala	2.13	† 2
=103	😑 Peru	2.13	↓ 1
=103	🗕 Togo	2.13	† 4
106	😑 Guyana	2.134	↓ 5
107	💛 Sri Lanka	2.136	↓ 18
108	😑 Bahrain	2.145	† 1
109	💛 Eswatini	2.168	↓ 17
110	😑 Benin	2.177	† 1
111	💛 Lesotho	2.191	↓ 13

RANK	COUNTRY	SCORE	CHANGE	RANK	COUNTRY	SCORE	CHANGE
112	– Djibouti	2.196	<u>†</u> 1	138	Niger	2.625	† 2
113	Republic of the	2.21	† 1	139	🛑 Cameroon	2.66	† 5
113	Congo	2.21	1 1	=140	🛑 Venezuela	2.693	† 5
114	🗕 Mauritania	2.228	† 4	=140	🛑 Colombia	2.693	† 2
115	Philippines	2.229	† 6	142	🛑 Chad	2.699	↓ 5
116	😑 Belarus	2.248	† 4	143	Israel	2.706	↓ 8
117	🛑 Kenya	2.254	† 2	144	🛑 Nigeria	2.713	J 3
118	🗕 Mozambique	2.259	↓ 2	145	🛑 Myanmar	2.741	↓ 7
119	😑 Saudi Arabia	2.26	† 5	146	🛑 Pakistan	2.745	† 2
120	 Honduras 	2.265	J 5	=147	🛑 Türkiye	2.8	† 5
121	egypt	2.267	† 5	=147	🛑 Iran	2.8	↓ 1
122	😑 El Salvador	2.279	↓ 6	149	🛑 North Korea	2.848	† 4
123	😑 Nicaragua	2.294	↔	150	🛑 Burkina Faso	2.868	J 3
=124	🦲 Zimbabwe	2.3	† 3	151	🛑 Ethiopia	2.872	↓ 2
=124	💛 Uganda	2.3	† 1	152	Central African	2.934	† 2
126	🛑 India	2.314	† 2	152	Republic	2.934	2
127	🛑 Guinea	2.359	† 2	153	🛑 Mali	2.963	↓ 4
128	🛑 Burundi	2.393	† 6	154	🛑 Iraq	3.006	† 3
129	🛑 Haiti	2.395	↓ 17	155	🛑 Sudan	3.023	↔
130	🛑 South Africa	2.405	↓ 8	156	🛑 Somalia	3.036	† 2
131	 United States of 	2.448	↔	157	🛑 Ukraine	3.043	↓ 14
131	America	2.440	-	158	🛑 Russia	3.142	J 3
132	🛑 Brazil	2.462	↔	159	Democratic Republic	lic 3.214	↔
133	🛑 Eritrea	2.505	↔	100	of the Congo	0.214	
134	Palestine	2.538	↓ 4	160	🛑 South Sudan	3.221	↔
135	🛑 Lebanon	2.581	† 1	161	🛑 Syria	3.294	↔
136	Mexico	2.599	† 3	162	🛑 Yemen	3.35	↔
137	🛑 Libya	2.605	† 14	163	🛑 Afghanistan	3.448	↔

Results

The 2023 GPI finds that the world became less peaceful for the 13th time in the last 15 years, with the average level of country peacefulness deteriorating by 0.42 per cent over the past year. Figure 1.1 shows the change in the average levels of peacefulness for each of the GPI domains, as well as the percentage of countries that improved or deteriorated. In total, peacefulness improved in 84 countries and deteriorated in 79, highlighting that falls in peacefulness are generally larger than improvements.

The deterioration in peacefulness was mainly due to a deterioration in the *Ongoing Conflict* domain. *Deaths from internal conflict, neighbouring countries relations,* and *external conflicts fought* all recorded significant deteriorations, with the total number of conflict-related deaths increasing by 96 per cent. Although the conflict in Ukraine was the primary driver of this increase, increases in conflict were also seen in many other countries, particularly in sub-Saharan Africa and the Asia-Pacific.

There was a slight deterioration in the *Safety and Security* domain, with the largest deterioration occurring in the *political instability* indicator. There were 59 countries that recorded a deterioration in *political instability* in 2022. However, the *terrorism impact* indicator improved for the fourth consecutive year, with 70 countries recording lower levels of terrorism in 2022, and only 28 recording a deterioration.

Militarisation was the only domain to record an improvement on the 2023 GPI. Of the 163 GPI countries, 109 recorded an improvement. The major driver of the change in *Militarisation* was an increased commitment to *UN peacekeeping funding* and lower *military expenditure* as a percentage of GDP. However, even though the average *military expenditure* score improved, total global *military expenditure* increased because of the large increase in military spending related to the conflict in Ukraine.

Figure 1.2 shows the average percentage change for each indicator from the 2022 to the 2023 GPI. Eleven of the 23 GPI indicators deteriorated on average, with ten improving and two remaining unchanged. The largest average deterioration was on the *external conflicts fought* indicator, while the *UN peacekeeping funding* indicator had the largest improvement.

FIGURE 1.1

Year-on-year change in GPI score by domain, 2023

Only the Militarisation domain recorded an improvement on the 2023 GPI.



FIGURE 1.2 Percentage change in score by indicator, 2022–2023

Increasing external involvement in conflict hotspots led to the external conflicts fought indicator deteriorating by over four per cent.



The deterioration on the *external conflicts fought* indicator reflects the increase in external actors becoming involved in internal conflicts. There were 65 countries with scores that deteriorated on this indicator, with seven of the ten largest deteriorations occurring in countries in sub-Saharan Africa. There are now 91 countries who are least partially involved in some form of external conflict, up from 58 in 2008. Of those 91, 13 were acting alone in an external conflict, 33 were involved in a small coalition, and 45 were involved in a large coalition of ten or more countries. In the majority of conflicts, countries were offering support to an existing government in its conflict with an internal armed rebel or terrorist group.

The rise in the level of conflict globally led to a deterioration on the *deaths from internal conflict* indicator. The total number of deaths rose sharply in the past year and would have risen even if the conflict in Ukraine was not included in the analysis. There were 47 countries that recorded at least one death from conflict on the 2023 GPI.

Political instability had the third largest average deterioration and has deteriorated every year for the past five years. There were 59 countries where *political instability* deteriorated over the past year, compared to just 22 where the indicator improved. The largest deteriorations occurred in Israel, El Salvador, Malawi, and Burkina Faso.

Although many indicators of conflict deteriorated globally, there was an increased commitment to *UN peacekeeping funding*,

with 118 countries improving the timeliness of their financial commitment to peacekeeping. The *UN peacekeeping funding* indicator has recorded the biggest improvement of any of the GPI indicators since the inception of the index.

The relative level of *military expenditure* improved for the second consecutive year, with 92 countries reducing their level of military spending as a percentage of GDP. There are now 43 countries where *military expenditure* accounts for less than one per cent of GDP. However, *military expenditure* still accounts for the greatest share of the total economic impact of violence.

The average score on the *violent demonstrations* indicator improved for the first time since 2016, although it remains considerably higher than fifteen years ago. There were 59 countries that recorded an improvement on the indicator, compared to 43 which recorded a deterioration. However, *violent demonstrations* are still common globally, with 140 countries recording at least one violent demonstration over the past year.

Five Most & Least Peaceful Countries by Domain

TABLE 1.1

Safety and Security domain

Rank	Country	2023 Score	Score change	Rank change	Rank	Country	2023 Score	Score change	Rank change
1	Finland	1.251	-0.096	† 6	163	Afghanistan	4.136	0.001	↔
2	Japan	1.272	-0.014	† 1	162	Yemen	3.900	-0.124	↔
3	Iceland	1.282	0.104	↓ 2	161	Syria	3.842	-0.050	↔
4	Singapore	1.300	-0.027	† 1	160	South Sudan	3.835	-0.001	↔
5	Norway	1.301	0.043	↓ 3	159	Democratic Republic of the Congo	3.749	-0.004	↔

TABLE 1.2

Ongoing Conflict domain

Rank	Country	2023 Score	Score change	Rank change	Rank	Country	2023 Score	Score change	Rank change
1	Iceland	1.000	0.000	+	163	Yemen	3.486	0.132	↓ 3
1	Mauritius	1.000	0.000	+	162	Ukraine	3.470	0.580	↓ 13
1	Singapore	1.000	0.000	+	161	Syria	3.460	-0.173	† 2
1	Uruguay	1.000	0.000	+	160	Russia	3.445	0.575	↓ 12
5	Malaysia	1.005	0.000	† 2	159	Afghanistan	3.434	-0.193	† 3

TABLE 1.3 Militarisation domain

Rank	Country	2023 Score	Score change	Rank change	Rank	Country	2023 Score	Score change	Rank change
1	Iceland	1.015	-0.004	÷	163	Israel	3.783	-0.018	÷
2	Malaysia	1.180	-0.023	† 3	162	Russia	3.187	-0.024	+
3	Hungary	1.191	0.014	† 1	161	United States of America	3.081	-0.033	↔
4	Portugal	1.211	-0.067	† 6	160	North Korea	3.000	-0.094	↔
5	Slovenia	1.230	0.085	↓ 3	159	France	2.769	-0.004	+

Regional Overview

Six of the nine regions in the world deteriorated in peacefulness in 2023. Asia-Pacific, North America and the Middle East and North Africa were the only three regions that improved.

Russia and Eurasia recorded the largest average deterioration of all the regions, primarily driven by the conflict in Ukraine while North America recorded the largest average percentage improvement, with improvements recorded across all three GPI

domains. Figure 1.3 shows the overall score for each region on the 2023 GPI, as well as the change in score from the 2022 to the 2023 GPI.

FIGURE 1.3

Regional GPI results, 2023

Six of the nine global regions experienced deteriorations in peacefulness.



Source: IEP

KEY FINDINGS



total *military expenditure* increased, mainly driven by countries involved in the Ukraine war.

fought indicators would have deteriorated even if Ukraine and Russia were excluded from the analysis.

peacefulness. Libya, Côte d'Ivoire, and Afghanistan were all ranked amongst the

five biggest improvers in peace.

ASIA-PACIFIC

The Asia-Pacific region recorded a slight improvement in peacefulness in the 2023 GPI, with an average improvement of 0.32 per cent. The rise in peacefulness was driven by the *Safety and Security* and *Militarisation* domains, which were led by improvements in the *violent demonstrations* and *UN peacekeeping funding* indicators.

The Ongoing Conflict domain deteriorated by 2.1 per cent, with four of its six indicators deteriorating. This was driven mainly by the worsening conflict in Myanmar, and an increase in violence in the West Papua region of Indonesia. Six countries in the region recorded deteriorations in their score, while 13 countries recorded improvements. All but five of the 19 countries in the region are ranked in the top half of the index.

New Zealand is the most peaceful country in the region and the fourth most peaceful country overall. New Zealand recorded a slight improvement in score in the 2023 GPI, because of improvements in the *violent demonstrations, incarceration rate* and *terrorism impact* indicators. However, the *Militarisation* domain deteriorated by six per cent, with *nuclear and heavy weapons* and *armed services personnel rate* being the only two indicators to improve. Both *weapons imports* and *weapons exports* recorded deteriorations on the back of the sale of surplus tanks to Chile and upgrades on armed personnel carriers.

North Korea has been the least peaceful country in the region since the inception of the GPI. In 2023 however, the country recorded the third largest improvement in the region and is at its most peaceful level since 2010. The only indicator to

TABLE 1.5

Asia-Pacific

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	New Zealand	1.313	-0.004	4
2	Singapore	1.332	-0.013	6
3	Japan	1.336	-0.004	9
4	Malaysia	1.513	0.036	19
5	Australia	1.525	-0.040	22
6	Taiwan	1.649	0.002	33
7	Vietnam	1.745	-0.044	41
8	South Korea	1.763	-0.028	43
9	Mongolia	1.765	0.006	44
10	Laos	1.779	-0.041	46
11	Timor-Leste	1.796	-0.042	49
12	Indonesia	1.829	0.054	53
13	Cambodia	1.947	-0.005	73
14	China	2.009	-0.009	80
15	Thailand	2.061	-0.070	92
16	Papua New Guinea	2.095	0.068	98
17	Philippines	2.229	-0.059	115
18	Myanmar	2.741	0.129	145
19	North Korea	2.848	-0.046	149
REGIONAL	AVERAGE	1.857	-0.006	

deteriorate was *perceptions of criminality* indicator which fell by 5.4 per cent. The change in overall score was driven by improvements in *violent demonstrations* and *refugees and IDPs*. However, improvements on these indicators were likely driven by the government-imposed national lockdown after the country experienced its first confirmed case of COVID-19 in May 2022, leading to border and mobility restrictions that were in place for months.

Myanmar experienced the largest deterioration in its overall score, owing to changes in *perceptions of criminality, violent crime* and *deaths from internal conflict*. All three GPI domains experienced deteriorations. The rising political tensions in Myanmar led to a worsening of *violent crime* in 2022. The continued focus of the security agencies on cracking down on the political opposition, as well as the need for financial resources on both sides, has resulted in an increase in serious and organised crimes, including drug trafficking.

Thailand experienced the largest improvement in the region with a 3.3 per cent improvement in its score. While all three domains improved, the change in peacefulness was largely driven by significant improvements in *violent demonstrations*, *political instability* and the *incarceration rate*. Thailand's improvement on the *political instability* indicator in 2022 resulted from the successful transfer of power following the victories of the opposition camp in recent by-elections and the mayoral election in the capital, Bangkok. The smooth transfer of power has reduced the likelihood of disruptive large protests as, to some degree, faith has been restored in the political systems ability to effect change through elections and democratic means.

CENTRAL AMERICA & THE CARRIBEAN

Peacefulness in Central America and the Caribbean deteriorated slightly in the 2023 GPI, with an average deterioration in score of 0.71 per cent. However, of the 12 countries in the region, only Panama, Honduras, El Salvador and Haiti experienced deteriorations, compared to seven countries that deteriorated in the year prior. *Ongoing Conflict* and *Safety and Security* deteriorated in 2023, while *Militarisation* recorded

TABLE 1.6

Central America & The Carribean

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Costa Rica	1.731	-0.044	39
2	Panama	1.942	0.062	68
3	Trinidad and Tobago	1.946	-0.032	70
4	Jamaica	1.986	-0.003	77
5	Dominican Republic	2.019	-0.003	83
6	Cuba	2.103	-0.008	99
7	Guatemala	2.130	0	105
8	Honduras	2.265	0.036	120
9	El Salvador	2.279	0.022	122
10	Nicaragua	2.294	-0.027	123
11	Haiti	2.395	0.193	129
12	Mexico	2.599	-0.017	136
REGIONAL	AVERAGE	2.141	0.015	

improvements across all indicators in the domain except the *armed services personnel rate*. The overall fall in peacefulness was largely driven by a large deterioration in *political instability* as well as *neighbouring countries relations*, which deteriorated by 5.3 and 4.2 per cent respectively.

Costa Rica remains the most peaceful country in the region and is ranked 39th overall in the 2023 GPI. Costa Rica also recorded the largest improvement in peacefulness of any country in the region over the past year, owing to improvements in the *violent demonstrations, incarceration rate* and *perceptions of criminality* indicators. Both the *Militarisation* and *Safety and Security* domains improved, while the *Ongoing Conflict* domain experienced no change. *Political stability* improved in Costa Rica towards the end of 2022. Costa Rica also has one of the lowest poverty rates in Central America and the Caribbean, which in part explains the low levels of social unrest in 2022.

Mexico is the largest and most populous country in Central America, and it remained the least peaceful country in the region in 2023. However, it recorded a 0.65 per cent improvement in the 2023 GPI, rising three places in the rankings to 136th overall. The improvement was mainly driven by improvements in the *militarisation* domain. More than half of its GPI indicators remained stable between 2022 and 2023, while only three indicators deteriorated during the period: the *incarceration rate, violent demonstrations* and *external conflicts fought*. Despite these improvements, Mexico still has very large number of *deaths from internal conflict*, with the *ongoing conflict* between the government and criminal organisations still posing a serious threat to internal peacefulness.

Haiti recorded the biggest deterioration in peacefulness in the region and the second largest deterioration in the 2023 GPI, with falls in peacefulness across all GPI domains. The deterioration in peacefulness was driven by increases in intensity of *internal conflict*, *violent crime* and *political instability*. The intensity of *internal conflict* deteriorated significantly in Haiti throughout 2022. The country has descended into extreme instability, with a variety of organised crime groups, which control much of the country, unleashing violence against both civilians and government security forces. The government has been unable to put together a proper security strategy. There have been continuous election delays, as well as collusion between organised crime groups and some government officials.

EUROPE

Europe remains the most peaceful region in the world and is home to seven of the ten most peaceful countries. However, Europe deteriorated in peacefulness over the past year, with an average increase in its overall score of just over one per cent. Of the 36 countries in the region, 13 had improvements in peacefulness and 23 had deteriorations. All three of Europe's domain scores deteriorated, with the largest occurring on the *Ongoing Conflict* domain. The *political instability, neighbouring countries relations* and *external conflicts fought* indicators all recorded deteriorations, as the impact of the war in Ukraine continued to be strongly felt across the region.

While Russia and Ukraine are part of the Russia and Eurasia region, the conflict had serious repercussions globally, most notably in Europe. Of the five countries in Europe with the largest deteriorations in peacefulness in 2023, three share a

TABLE 1.7 Europe

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Iceland	1.124	0.044	1
2	Denmark	1.310	0.012	2
3	Ireland	1.312	0.029	3
4	Austria	1.316	0.006	5
5	Portugal	1.333	0	7
6	Slovenia	1.334	0.025	8
7	Switzerland	1.339	-0.023	10
8	Czechia	1.379	0.063	12
9	Finland	1.399	-0.040	13
10	Croatia	1.450	0.012	14
11	Germany	1.456	0.003	15
11	Netherlands	1.490	-0.031	16
13	Hungary	1.508	0.075	18
14	Belgium	1.523	-0.022	20
15	Norway	1.550	0.074	24
16	Estonia	1.563	-0.003	25
17	Slovakia	1.578	0.070	26
18	Latvia	1.582	-0.042	27
19	Sweden	1.625	0.034	28
20	Poland	1.634	0.093	29
21	Bulgaria	1.643	0.086	30
22	Romania	1.649	-0.017	31
23	Spain	1.649	0.012	32
24	Italy	1.662	0.021	34
25	Lithuania	1.671	0.014	36
26	United Kingdom	1.693	-0.006	37
27	North Macedonia	1.713	0.006	38
28	Albania	1.745	-0.019	40
29	Montenegro	1.772	-0.054	45
30	Greece	1.890	0.047	60
31	Bosnia and Herzegovina	1.892	0.035	61
31	Cyprus	1.904	-0.005	64
33	Serbia	1.921	0.060	65
34	France	1.939	0.021	67
35	Kosovo	1.946	-0.002	71
36	Türkiye	2.800	0.046	147
REGIONAL	AVERAGE	1.619	0.017	

border with either Ukraine. These countries largely had deteriorations on the *political instability* and *neighbouring countries relations* indicators.

Iceland remains the most peaceful country in the region and the world in the 2023 GPI. It has been the most peaceful country in the world for every year since the index began. However, Iceland recorded a four per cent deterioration in its overall score as the result of an increase in the *homicide rate* and also the *terrorism impact* indicator. This is the first year that any terrorist activity has been recorded in the country. Four individuals were arrested and charged with plotting terrorist attacks against the Icelandic

parliament and several prominent Icelandic politicians.

Türkiye remains the least peaceful country in the region and is the only European country ranked outside the top half of the index. The country experienced a 1.7 per cent decrease in its overall score, which was led by deteriorations in the Ongoing Conflict and Safety and Security domains. This is the least peaceful Türkiye has been since the inception of the GPI in 2008. The deterioration in peacefulness was driven by the deaths from external conflict and the incarceration rate indicators, which rose 46.3 and 12.3 per cent respectively. Türkiye has also been one of the most active exporters of military technology in the past few years, particularly drones, which led to its weapons exports indicator deteriorating.

Montenegro recorded the largest improvement in peacefulness in the region and is now ranked 45th on the index overall. The improvement in peacefulness was driven by improvements on the *Political Terror Scale, violent demonstrations* and *UN peacekeeping funding* indicators. The only three indicators to deteriorate were *armed services personnel rate, military expenditure* as a percentage of GDP and *weapons imports*. Fourteen of the 23 indicators experienced no change.

Poland experienced the largest deterioration in peacefulness in Europe, falling six places to rank 29th in the overall index. Poland is now less peaceful than at any time since 2008. The country recorded deteriorations across all three domains, with *Ongoing Conflict* experiencing the most significant deterioration at 14.4 per cent. This change was driven by Poland's changing relationship with Russia, which saw its *neighbouring countries relations* score deteriorate significantly. Poland has been one of the leading proponents in Europe of taking a tough line against Russia. Poland is a member of NATO and shares a border with Kaliningrad, an exclave that is part of the Russian Federation. Poland was also one of the first countries in the region to have supplies of natural gas cut off by Russia. Like the rest of the EU, Poland is suffering from the economic fallout from the war and Russia's cut-off of gas supplies to the EU.

MIDDLE EAST & NORTH AFRICA

The Middle East and North Africa (MENA) remains the least peaceful region in the world for the eighth consecutive year, despite recording consecutive improvements in peacefulness since 2020. It is home to four of the ten least peaceful countries in the world. However, MENA improved by 0.63 per cent over the past year, with significant improvements recorded on the *Militarisation* and *Ongoing Conflict* domains. The MENA region has improved in peacefulness year-on-year for the past three years.

Several post-conflict countries in the region recorded improvements in peacefulness, including Libya, Syria, Iraq, and Yemen. Libya recorded the largest improvement in peacefulness in the region and the largest improvement globally, with a 7.2 per cent improvement in its overall score. This is the most peaceful Libya has been since the start of the second Libyan civil war in 2014. The improvement in Libya's overall score was driven by significant improvements on the Ongoing Conflict domain, with deaths from internal conflict, internal conflicts fought, and the intensity of internal conflict all improving. Although the internal security situation is still fragile, the ceasefire agreement signed in August 2022 between the Government of National Accord and the Libyan National Army has improved the chances of future increases in peacefulness.

TABLE 1.8 Middle East & North Africa

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Qatar	1.524	-0.011	21
2	Kuwait	1.669	-0.048	35
3	Oman	1.794	-0.121	48
4	Jordan	1.895	-0.024	62
5	United Arab Emirates	1.979	-0.001	75
6	Tunisia	2.010	0.012	81
7	Morocco	2.020	0.020	84
8	Algeria	2.094	-0.032	96
9	Bahrain	2.145	-0.020	108
10	Saudi Arabia	2.260	-0.061	119
11	Egypt	2.267	-0.068	121
12	Palestine	2.538	0.132	134
13	Lebanon	2.581	0.021	135
14	Libya	2.605	-0.202	137
15	Israel	2.706	0.154	143
16	Iran	2.800	-0.008	148
17	Iraq	3.006	-0.022	154
18	Sudan	3.023	0.029	155
19	Syria	3.294	-0.076	161
20	Yemen	3.350	-0.054	162
REGIONAL	AVERAGE	2.378	-0.019	

Israel experienced the largest deterioration in peacefulness the MENA region, falling eight places to 143rd in the GPI. Israel's overall level of peacefulness has not been this low since 2010. There were two main drivers of this deterioration in peacefulness: a worsening of *neighbouring countries relations*, especially with Palestine, and a sharp increase in *political instability*. Israel's relationship with its neighbours was damaged by an increase in the intensity of the conflict between Israelis and Palestinians, with the *terrorism impact* and *deaths from internal conflict* indicators both deteriorating. *Political instability* deteriorated after mass political protests against attempts by the government to curb the power of the judiciary to limit or overturn government legislation.

Qatar remains the most peaceful country in the region, a position it has held since 2008. It is the only country in the region to be ranked in the top 25 most peaceful countries globally. Qatar improved in overall peacefulness in 2023, driven by improvements in *political instability, external conflicts fought* and *UN peacekeeping funding*. The restoration of diplomatic relations in 2021 with Saudi Arabia, the UAE, Bahrain and Egypt helped improve the internal political situation in Qatar. Relations have remained stable throughout 2022, resulting in a full-year improvement to *political stability*.

Sudan is the third least peaceful country in the MENA region, even before accounting for the eruption of of conflict in mid-April 2023 between the Sudanese military and the Rapid Support Forces (RSF), a coalition of paramilitary groups that rivals the military. The source of the fighting is predominantly a power struggle between the two forces over control of Sudan's armed forces and their roles in the ruling military regime. The fighting has believed to have resulted in at least 1,000 deaths by the end of April. Up to 200,000 Sudanese have fled the country and 700,000 have been internally displaced by the violence, which includes with significant urban warfare. Yemen is the least peaceful country in the MENA region for the third consecutive year. Yemen is also the second least peaceful country globally. However, there are signs that peacefulness in Yemen is beginning to improve, with the country recording its first improvement in peacefulness since 2017. This change was driven by significant improvements in violent demonstrations and neighbouring countries relations. The ceasefire that was signed in April 2022 significantly reduced the number of Saudi airstrikes in Yemen. Despite the ceasefire's collapse in October 2022, airstrikes have not resumed to pre-2022 levels and Houthi cross-border attacks have also ceased. Fighting along the frontline reduced sharply, despite the persistence of some localised skirmishes between the Houthis and militias associated with the internationally recognised government (IRG), and some notable clashes between IRG-affiliated militias in southern Yemen. The collapse of the ceasefire has led to an uptick in Houthi attacks against IRG-controlled infrastructure and the intensification of clashes along the frontline, but these remain less frequent and less intense than in 2021.

NORTH AMERICA

North America recorded the largest improvement of any region in the 2023 GPI, with the average level of peacefulness in the region improving by 0.84 per cent. North America is third most peaceful GPI region. There are only two countries in the North American region, with Canada recording a 2.9 per cent increase in peacefulness, and the US experiencing a slight fall in peacefulness, with its overall score deteriorating by 0.38 per cent. There is a considerable disparity in peacefulness between the two countries in the region, with Canada being ranked as the 11th most peaceful country and the United States being ranked 131st.

All three domains improved across the region. Nine of the 23 indicators improved, while only three deteriorated and the rest experienced no change. The three indicators to deteriorate regionally were the *homicide rate, perceptions of criminality* and *weapons exports*. North America is more peaceful than the global average on the *Safety and Security* and *Ongoing Conflict* domains, but scores poorly on the *Militarisation* domain, particularly with regards to *military expenditure, nuclear and heavy weapons*, and *weapons exports*.

Overall peacefulness improved in Canada, owing to improvements on the Ongoing Conflict and Safety and Security domains. The Political Terror Scale, terrorism impact, incarceration rate and perceptions of criminality indicators all recorded improvements over the past year. Less than 20 per cent of Canadians report that they do not feel safe walking alone at night in their city or neighbourhood. The Militarisation domain recorded a slight deterioration, owing to an increase in weapons exports. However, Canada is ranked amongst the 25 countries with the highest levels of weapons exports per capita.

TABLE 1.9

North America

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Canada	1.350	-0.040	11
2	United States of America	2.448	0.009	131
REGIONAL	AVERAGE	1.899	-0.016	

The United States experienced a slight deterioration in peacefulness over the past year, the continuation of a trend that began in 2015. Civil unrest is no longer the primary driver of the deterioration, as the *violent demonstrations* indicator improved by ten per cent and *political instability* experienced no change. The deterioration was driven by a deterioration on the *Safety and Security* domain, particularly in the *perceptions of criminality* and *homicide rate* indicators. The United States recorded the fourth largest overall increase in its *homicide rate*, which is now above six per 100,000 people and more than six times higher than most Western European countries.

RUSSIA & EURASIA

The Russia and Eurasia region experienced the largest deterioration in peacefulness in the world in 2022. The fall in peacefulness was more than twice as large as any other region. Seven of the 12 countries in the region recorded deteriorations in peacefulness, with the largest occurring in Ukraine and Russia, which had the largest and the fifth largest deteriorations respectively.

Russia remains the least peaceful nation in the region and is one of the least peaceful countries in the world in the 2023 GPI, with an overall rank of 158th. Russia recorded a deterioration of just under five per cent in overall score, and now has its lowest levels of peacefulness since 2008. The major driver of the fall in peacefulness was a four per cent increase in *deaths from external conflict* which is a result of the Russian-Ukrainian war. Despite this, Russia improved in both the *Militarisation* and *Safety and Security* domains, driven by improvements in the *violent demonstrations* and *incarceration rate* indicators.

Ukraine experienced the largest deterioration in overall score both regionally and globally. Ukraine deteriorated across all domains, with the largest deteriorations occurring on the *deaths from internal conflict, refugees and IDPs* and *armed services personnel rate* indicators. The Russian invasion in February 2022 led to mass displacements, with close to 30 per cent of the population now estimated to be refugees or internally displaced. Whilst the true number killed in the conflict in 2022 is not yet

TABLE 1.10 Russia & Eurasia

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Moldova	1.873	-0.008	57
2	Armenia	1.929	-0.004	66
3	Kazakhstan	1.980	-0.087	76
4	Uzbekistan	2.033	0.023	86
5	Georgia	2.071	0.010	94
6	Azerbaijan	2.090	-0.082	95
7	Turkmenistan	2.107	-0.018	100
8	Kyrgyz Republic	2.110	0.098	101
9	Tajikistan	2.114	0.057	102
10	Belarus	2.248	-0.030	116
11	Ukraine	3.043	0.356	157
12	Russia	3.142	0.148	158
REGIONAL	AVERAGE	2.228	0.038	

known, some estimates suggest there have been as many as 300,000 casualties, with possible fatalities of over 80,000 people.

Kazakhstan experienced the largest improvement in overall peacefulness, improving by 4.2 per cent and rising 21 places to an overall rank of 76th, which is the third highest rank of all countries in the region. The country recorded an improvement in both the *Militarisation* and *Safety and Security* domains, with five indicators improving, the largest being in *violent demonstrations*, which improved by 50 per cent. Fifteen of the 23 GPI indicators remained unchanged in Kazakhstan in 2023, with only three indicators deteriorating: the *incarceration rate*, *political instability* and *military expenditure* as a percentage of GDP.

Moldova is the most peaceful nation in the Russia and Eurasia region for the 16th consecutive year. Moldova experienced a slight improvement in overall peacefulness, owing to improvements in violent demonstrations and perceptions of criminality. Despite the overall score improving, Moldova's political stability deteriorated by 4.2 per cent in 2022. Russia's invasion of Ukraine has escalated regional instability and increased the threat of a broader conflict between Russia and the NATO alliance partners. The Russia-Ukraine conflict, and the resultant sanctions imposed on Russia, also brought major economic disruptions, including strong increases in staple commodity prices. The worsening economic conditions domestically stirred public pressure on the government to mitigate the negative impacts on living conditions. The conflict has resulted in an unprecedented influx of refugees from Ukraine, further straining Moldova's limited resources. The fighting threatened to spread to Moldova's Russian-backed breakaway region Transnistria.

SOUTH AMERICA

South America experienced a slight deterioration in peacefulness in 2023, owing to deteriorations in *Ongoing Conflict* and *Safety and Security*. The average level of peacefulness in South America rose by 0.33 per cent over the past year, with three countries recording improvements and eight recording deteriorations. The deterioration in peacefulness in the region was driven by increases in internal conflicts, *violent demonstrations* and *incarceration rate*. The region is the fifth most peaceful overall.

Uruguay remains the most peaceful country in South America for the fourth consecutive year. It is the only country in South America to be ranked amongst the 50 most peaceful countries globally. Uruguay recorded a slight deterioration in peacefulness over the past year, with a 0.4 per cent deterioration in its overall score. This deterioration was driven by increases in *violent demonstrations* and the *incarceration rate*. Uruguay also suffered a deterioration in *political instability* in 2022.

Colombia has the lowest levels of peacefulness in the region, although it did record a small improvement in its overall score over the past year. All six of the *Militarisation* domain indicators improved in 2022, with the largest improvement occurring on the *UN peacekeeping funding* indicator. However, despite the overall increase in peacefulness, Colombia experienced a deterioration in *political stability* throughout 2022. In the run-up to the May 2022 presidential elections, social unrest increased as opposing sides became further

TABLE 1.11 South America

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Uruguay	1.798	0.007	50
2	Argentina	1.837	-0.068	54
3	Chile	1.874	0.033	58
4	Paraguay	1.942	-0.046	69
5	Bolivia	2.001	0.024	78
6	Ecuador	2.095	0.135	97
7	Peru	2.130	0.008	104
8	Guyana	2.134	0.014	106
9	Brazil	2.462	0.011	132
10	Venezuela	2.693	0.009	140
11	Colombia	2.693	-0.045	141
REGIONAL	AVERAGE	2.151	0.007	

polarised and divisive over key issues. Tensions related to deep divisions within Colombian society remained high even after the election of the current president Gustavo Petro.

Argentina recorded the largest improvement in peacefulness in the region and now ranks 54th in the overall GPI. The *Militarisation* and *Safety and Security* domains both recorded improvements, with no change recorded on the *Ongoing Conflict* domain. The largest improvement occurred on the *violent crime* indicator. Violent crime is less of a concern in Argentina than in most of Latin America. According to Argentina's Ministry of Security, the *homicide rate* in the country was 4.6 per 100,000 inhabitants in 2021, which was well below the regional and global averages. The previous government made progress in improving policing practices and markedly reduced rates of *violent crime* from 2015 to 2019. This improvement in *violent crime* has been maintained throughout 2022.

Ecuador experienced the largest deterioration in overall score, owing to increases in *violent crime* and *deaths from internal conflict*. Ecuador's overall score deteriorated by 6.9 per cent, leading to a fall in the rankings of 24 places, to 97th overall. Instances of *violent crime* became more frequent in Ecuador over the past year owing to the rise in power and prominence of organised crime groups, and a subsequent surge in homicide. In 2022 the regions of Guayaquil, Duran and Samborondon recorded three times the level of *violent crime* as the same period in 2021, with the *homicide rate* in some areas increasing past 25 per 100,000 inhabitants.

SOUTH ASIA

South Asia recorded a slight deterioration in peacefulness over the past year and remains the second least peaceful region overall. The average level of peacefulness in the region increased by 0.13 per cent, owing to deteriorations in the *Militarisation* and *Safety and Security* domains. Four of the seven countries in the region experienced improvements in peacefulness, while three deteriorated. There is a wide disparity between the least and most peaceful countries in the region, with Bhutan ranked

TABLE 1.12 South Asia

Regional Rank	Country		Score Change	
1	Bhutan		0.003	19
2	Nepal		-0.034	73
3	Sri Lanka	2.02		90
4	Bangladesh	2.067	-0.01	96
5	India	2107.0	-0.037	135
6	Pakistan		-0.038	147
7	Afghanistan	3.554	-0.046	163
REGIONAL	AVERAGE	2.348	-0.034	

 $17^{\rm th}$ overall and Afghanistan being the least peaceful country in the world in the 2023 GPI.

Afghanistan has been the least peaceful country in the world for the past six years. However, it recorded a 2.73 per cent improvement in peacefulness over the past year, which was the fifth largest improvement globally. Improvements in UN peacekeeping funding, intensity of internal conflict and armed services personnel rate drove the improvements of both the Militarisation and Ongoing Conflict domains. The terrorism impact indicator also improved for the fourth consecutive year, although terrorism remains a serious security concern. The withdrawal of US troops and the Taliban's recapture of Afghanistan in August 2021 led to a rapid fall in the number of deaths from internal conflict in late 2021 and throughout 2022. The intensity of internal conflict also improved due to fewer reported instances of hostilities between the Taliban and the National Resistance Front in 2022 and early 2023.

Bhutan is the most peaceful country in South Asia, despite recording the largest deterioration in the region over the past year. It is also the highest-ranking country on the GPI outside of Europe, Asia-Pacific and North America. Bhutan's deterioration in the level of peacefulness over the past year was driven by a deterioration on the *Political Terror Scale*, as well as a 50 per cent deterioration on the *violent demonstrations* indicator. Despite the *Militarisation* domain deteriorating by just under three per cent, Bhutan remains one of the least militarised countries in the world, with the 15th lowest overall score on the *Militarisation* domain.

India is the most populous country in the region and ranks as the 126th most peaceful nation in the 2023 GPI. The country experienced an improvement of 3.5 per cent in overall peacefulness over the past year, owing to improvements in *violent crime, neighbouring countries relations* and *political instability*. The improvement on the *neighbouring countries relations* indicator occurred because of fewer incidences of cross border violence and ceasefire violations with Pakistan and China in 2022. Furthermore, the reduction in geopolitical tensions with China owing to the reduction in border incidents, as well as less social unrest more generally, led to an improvement on the *political instability* indicator.

SUB-SAHARAN AFRICA

Sub-Saharan Africa recorded a slight fall in peacefulness in the 2023 GPI, with the average country score deteriorating by 0.57 per cent. Of the 44 countries in the region, 21 improved in score,

while 22 deteriorated and one remained unchanged. The region is less peaceful than the global average on the *Safety and Security* and *Ongoing Conflict* domains, but more peaceful than the global average on the *Militarisation* domain. The overall deterioration in score in sub-Saharan Africa was driven by increases in both the *internal conflicts fought* and the *external conflicts fought* indicators, as well as a rise in *violent demonstrations*.

The most peaceful country in the region is Mauritius, which is ranked 23rd in the 2023 GPI. The country recorded a slight improvement of 1.8 per cent in its GPI score, owing to

TABLE 1.13

Sub-Saharan Africa

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Mauritius	1.546	-0.029	23
2	Botswana	1.762	-0.052	42
3	Sierra Leone	1.792	-0.011	47
4	Ghana	1.799	0.014	51
5	Senegal	1.827	-0.024	52
6	Madagascar	1.846	0	55
7	Namibia	1.859	-0.032	56
	The Gambia	1.888	0.059	59
9	Zambia	1.898	0.027	63
10	Liberia	1.946	-0.023	72
11	Malawi	1.970	0.036	74
	Equatorial Guinea	2.013	0.113	82
13	Angola	2.020	0.051	85
. 14	Guinea-Bissau	2.045	-0.043	87
14	Rwanda	2.051	0.012	89
16	Côte d'Ivoire	2.053	-0.107	90
	Tanzania	2.058	0.007	91
18	Gabon	2.068	0.049	93
19	Тодо	2.130	-0.004	103
20	Eswatini	2.168	0.127	109
	Benin	2.177	0.001	110
22	Lesotho	2.191	0.109	111
23	Djibouti	2.196	-0.015	112
	Republic of the Congo	2.210	-0.014	113
25	Mauritania	2.228	-0.031	114
26	Kenya	2.254	-0.018	117
27	Mozambique	2.259	0.003	118
28	Zimbabwe	2.300	-0.026	124
29	Uganda	2.300	-0.046	125
	Guinea	2.359	-0.041	127
31	Burundi	2.393	-0.133	128
	South Africa	2.405	0.099	130
	Eritrea	2.505	-0.014	133
	Niger	2.625	-0.013	138
35	Cameroon	2.660	-0.059	139
36	Chad	2.699	0.111	142
	Nigeria	2.713	0.049	. 144
38	Burkina Faso	2.868	0.100	150
39	Ethiopia	2.872	0.067	151
40	Central African Republic	2.934	0.007	152
41	Mali	2.963	0.158	153
42	Somalia	3.036	-0.032	156
43	Democratic Republic of the Congo	3.214	0.105	159
44	South Sudan	3.221	0.030	160
REGIONAL	AVERAGE	2.28	0.013	

improvements in both the *Militarisation* and *Safety and Security* domains. The only two indicators to deteriorate were *political instability* and *military expenditure* as a percentage of GDP. *Political stability* deteriorated in Mauritius owing to the re-emergence of Covid-19 infections in mid-2022 and subsequent renewed restrictions that led to economic uncertainty and general public dissatisfaction with the government's handling of the pandemic.

South Sudan remains the least peaceful country in the region and one of the least peaceful countries in the world. South Sudan experienced a one per cent deterioration of its overall score, owing to deteriorations in the Ongoing Conflict and Militarisation domains. The country continues to have high levels of internal conflicts, with internal conflicts fought and deaths from internal conflict both deteriorating over the past year. The only indicators to improve were armed services personnel rate and incarceration rate, which improved by 0.7 and one per cent respectively. Sudan has the least peaceful possible score on the violent crime, Political Terror Scale, political instability, and refugees and IDPs indicators. Burundi experienced the largest improvement in peacefulness, with a 5.3 per cent improvement in its overall score. This was largely driven by improvements in Burundi's *intensity of internal conflict* as well as *deaths from external conflict*. During 2022, the EU's decision to lift financial sanctions and resume direct financial assistance to the Burundian administration also underscores the improving situation in the country.

The largest deterioration in peacefulness in the region occurred in Mali. This was also the fourth largest deterioration of any country on the 2023 GPI. The 5.6 per cent deterioration in its overall score was driven by an increase in the *intensity of internal conflict*. Conflict between the Malian government and jihadists groups has continued to grow over the past year, with clashes also recorded between different ethnic militias. There has been a large increase in attacks against civilians, and the latest available data shows that the number of conflict-related fatalities increased to around 9,000 in 2022, up from 6,000 in 2021. The deterioration in the levels of organised internal conflict is likely due to the government's failure to retain control of its territory, allowing jihadist groups to launch more attacks against government and UN forces.





Libya recorded the largest improvement in peacefulness in the 2023 GPI with its overall score improving by 7.1 per cent. Libya is now ranked 137th on the GPI, its highest ranking since 2014. This is the fourth year in a row that Libya has improved in peacefulness, and the second year in a row that it had the largest overall improvement in peacefulness. The increase in peacefulness follows the turmoil and violent conflict that occurred after the Arab Spring uprising in 2011, and the first and second Libyan civil wars that followed.

The largest improvement in Libya occurred on the Ongoing Conflict domain, which improved by 21.5 per cent. The primary driver of this improvement was a fall in the deaths from internal conflict indicator. Libya recorded no deaths from conflict in 2021 for the first time since 2010. The intensity of internal conflict indicator also improved for the first time since 2013. Although the country remains divided and heavily armed, with sporadic conflict occurring in the past year, the Government of National Accord and the Libyan National Army reached a ceasefire agreement in August 2022. These developments led to improvements on the terrorism impact, Political Terror Scale, and refugees and IDPs indicators.

However, despite the improvements over the past five years, Libya still faces many challenges to peace. The *Safety and Security* domain deteriorated on the 2023 GPI, with both the *violent demonstrations* and *incarceration rate* indicators deteriorating over the past year. Libya also still has the highest possible score on the *violent crime* and *access to small arms* indicators, and the level of *political instability* remains high despite the ceasefire agreement.



Burundi recorded the second largest improvement in peacefulness in the 2023 GPI, improving its score by 5.2 per cent and its ranking by six places to 128th. Burundi recorded improvements on both the *Safety and Security* and *Ongoing Conflict* domains, however it deteriorated on the *Militarisation* domain, contrary to the global trend.

The largest improvement in peacefulness in Burundi occurred on the *Ongoing Conflict* domain, which improved by just under 15 per cent over the past year. This improvement was largely driven by a fall in *deaths from internal conflict* and an easing of the *intensity of internal conflict*. There was widespread public dissatisfaction and violent unrest when former president Pierre Nkurunziza decided to run for a third term as president. However, this unrest has abated since his successor Evariste Ndayishimiye was elected in 2020.

Burundi also recorded an improvement on the *Safety and Security* domain, driven by improvements on the *Political Terror Scale*, a fall in *terrorism impact*, and a reduction in the number of *refugees and IDPs*. The improvement on the *Political Terror Scale* has been recognised by other countries. In February 2022, the EU cited improvement in Burundi's rule of law and human rights situation in its decision to lift financial sanctions and resume direct financial assistance to the Burundian administration. Ongoing voluntary repatriation operations for Burundian refugees in neighbouring countries such as Tanzania have also increased, reflecting the improved domestic security outlook.

Oman		Rank: 48
	CHANGE IN SCORE 2022–23:	CHANGE IN RANK 2022–23:
	-0.121	718

Oman recorded the third largest improvement in peacefulness in the 2023 GPI, rising eighteen places in the rankings to 48th overall. Oman's overall score improved by 6.2 per cent, with the biggest improvement occurring on the *Militarisation* domain. Oman is now the third most peaceful country in the MENA region, behind only Qatar and Kuwait.

Oman recorded improvements on every single indicator in the *Militarisation* domain, with the largest improvements occurring on the *weapons imports* and *military expenditure* indicators. However, despite these improvements Oman still has one of the highest relative levels of *military expenditure* in the world, accounting for just under six per cent of its GDP. Oman is also still amongst the 20 countries with the highest levels of *weapons imports* per capita, despite having the single largest improvement of any country on this indicator.

Oman also improved considerably on the *Safety and Security* domain, driven by improvements on the *political instability* and *violent crime* indicators. Furthermore, high global oil prices have delayed the introduction of planned austerity measures, easing economic conditions and lowering the risk of social unrest and civil retaliation. This was reflected in the country's improvement on the *violent demonstrations* indicator.



Côte d'Ivoire recorded the fourth largest improvement in peacefulness in the 2023 GPI, rising eighteen places in the rankings to 90th. This is the first time since the inception of the index that Côte d'Ivoire has been ranked amongst the 100 most peaceful countries. It improved across two of the GPI domains, with the largest improvement occurring on the *Safety and Security* domain. There was a slight deterioration on the

Ongoing Conflict domain, as Côte d'Ivoire became more involved in external conflicts in the West Africa and Sahel region.

The largest single improvement in score occurred on the *Political Terror Scale*, where Côte d'Ivoire moved from a score of four to a score of two. Côte d'Ivoire also experienced an improvement in *political instability* in 2022. The country saw reconciliation efforts between current President Alassane Outtara and former President's Lauren Gbagbo and Henri Konan Bedie, who sought to repair ethnic and political divisions ahead of elections in 2025. There was also an improvement in the *terrorism impact* indicator, with no deaths from terrorism reported in 2022.

The *violent crime* indicator recorded a significant improvement in 2022. The impact of *violent crime* is most prominent in the border region with Burkina Faso, owing to the risk posed by jihadist groups. In other parts of the country *violent crime*, car-hijacking and armed break-ins were on the decline throughout 2022.



Afghanistan recorded the fifth largest improvement in peacefulness in the 2023 GPI, however it remains the least peaceful country in the world. Although violence is still widespread throughout the country, the level of conflict has dropped considerably since the withdrawal of US troops in August 2021, and the subsequent Taliban takeover of the government.

Afghanistan recorded improvements on the *Ongoing Conflict* and *Militarisation* domains, and a very slight deterioration on the *Safety and Security* domain, owing to an increase in *violent demonstrations*. The *perceptions of criminality* of Afghan civilians improved slightly, with the number of people who say they felt unsafe walking alone falling from 84 per cent to 77 per cent. The *intensity of internal conflict* improved, owing to fewer reported instances of hostilities between the Taliban and the National Resistance Front over the past year.

Afghanistan has had the worst impact of terrorism over the past five years, but that has changed since the Taliban took power as the Taliban is no longer classified as a terrorist organisation. Terrorist incidents in Afghanistan fell by 75 per cent in 2022, with deaths from terrorism falling 58 per cent, leading to improvements on the terrorism impact and internal conflicts fought indicators. However, the security situation in Afghanistan remains uncertain, with an escalation in conflict between ISK and the Taliban remaining a strong possibility. Since its emergence in 2015, ISK has viewed the Taliban as both its strategic and ideological rival. ISK has repeatedly denounced the Taliban's efforts to form an emirate based on national boundaries, which directly opposes ISK's vision of a global caliphate. Additionally, a number of local militias have aligned against the Taliban under organisations such as Afghan National Liberation Front, the Afghan National Resistance Front.





Ukraine recorded the largest deterioration in the 2023 GPI, with its overall score deteriorating by 13.27 per cent. The country is now ranked 157th globally on the index after falling fourteen places in the rankings. Russia's invasion of Ukraine in February 2022 was the primary factor in the deterioration in peacefulness, leading to deteriorations across all three GPI domains.

The Russian invasion has had a devastating impact on the Ukrainian population, which is reflected in the deterioration in score on both the *Safety and Security* and *Ongoing Conflict* domains. The single largest change occurred on the *refugees and IDPs* indicator. It is estimated that over 30 per cent of the total Ukrainian population are now either refugees or internally displaced. Prior to the invasion, this figure stood at just 1.7 per cent of the population. The second largest deterioration occurred on the *deaths from internal conflict* indicator. Although there are a range of estimates on the exact number of Ukrainians killed in the conflict, best estimates suggest that over 30,000 Ukrainians have been killed, with hundreds of thousands wounded.

Ukraine was one of the few countries where the *Militarisation* domain deteriorated over the past year, owing to a large increase in *weapons exports*, and the single largest increase in the *armed services personnel rate*. There has also been a considerable deterioration in the *intensity of internal conflict* and *political instability* indicators. President Volodymyr Zelensky imposed martial law in response to the Russian invasion, and most government processes were disrupted by the defence effort. While domestic support for the government is extremely strong and widespread, the instability remained elevated by the realities of open conflict raging in the eastern and southern regions. Even the less affected areas in west Ukraine suffered from rocket and drone attacks.



Haiti recorded the second largest deterioration of peacefulness in the GPI, dropping seventeen places to 129th. This is the lowest ranking that Haiti has had on the index since its inception in 2008. Haiti recorded significant deteriorations on all three GPI domains, with the largest occurring on the *Safety and Security* domain. The internal security situation in Haiti significantly worsened over the past year, with deteriorations on the *violent crime*, *political instability*, and *Political Terror Scale* indicators. Since the assassination of the previous president, Jovenel Moise, Haiti has entered a crisis of insecurity with criminal gangs controlling over half the country, forcing thousands from their homes. A recent UN report noted that gang violence and *violent crime* in Haiti have increased significantly, with 934 killings and 680 kidnappings recorded in the first half of 2022 in the capital Port-au-Prince alone.

The scale of the internal security problem in Haiti has increased to the point where it has now been classified as outright violent conflict, with the *intensity of internal conflict* indicator rising to a score of five, the highest possible score. The country has descended into extreme instability, with a variety of organised crime groups, which control much of the country, unleashing violence against civilians and openly battling security forces. Multiple election delays have meant that the terms of most elected officials have expired, which has affected the ability of the government to properly formulate a security strategy. There is a high level of corruption and collusion between political elements and organised crime groups, which have also infiltrated government security forces.



Mali had the third largest deterioration in peacefulness in the 2023 GPI, falling four places to 153rd. Mali has been at the centre of the increase in conflict and violence in the Sahel region in the past decade, with the level of violence continuing to increase over the past year. Mali's score on both the *Safety and Security* and *Ongoing Conflict* domains deteriorated significantly, however it did record a small improvement on the *Militarisation* domain, owing to an improvement on the *UN peacekeeping funding* indicator.

Increased activity by jihadist groups led to Mali's *intensity of internal conflict* indicator deteriorating over the past year, and it now has the maximum possible score of five. It is now estimated that the government only retains control of 20 per cent of the country, with jihadist groups launching attacks against both government and UN forces throughout the year. There have also been increased clashes between regionally or ethnically based defence forces.

The rise in the level of conflict in Mali led to a deterioration on the *violent crime* indicator. Both jihadist and inter-ethnic violence has increased because of the conflict, causing more civilian deaths. The latest available conflict data shows that there were around 5,000 conflict-related casualties in 2022, up from 2,000 in 2021. Mali also recorded deteriorations on the *terrorism impact, political terror* scale, and *refugees and IDPs* indicators.



Israel recorded the fourth largest deterioration in peacefulness of any country, dropping eight places to 143rd on the 2023 GPI. Israel's score deteriorated on both the *Ongoing Conflict* and *Safety and Security* domains, with both internal domestic turmoil and deteriorating relationships with other countries in the region playing a key role in its overall deterioration in peacefulness.

The primary driver of Israel's change in score was a deterioration in *political instability*. Israel now has the highest levels of *political instability* since 2008. The returning Netanyahu government, sought to implement changes that would curb the ability of the judicial system to overrule government decisions. The proposed legislation led to enormous demonstrations in January 2023, with over 100,000 people attending some of the protests. Israel also recorded deteriorations on the *terrorism impact, perceptions of criminality*, and *Political Terror Scale* indicators.

Israel's score on the *Ongoing Conflict* domain also deteriorated, driven by worsening *neighbouring countries relations*. Some UN senior officials told the UN Security Council that 2022 was one of the deadliest years in the Israeli-Palestinian conflict, with both the frequency and intensity of violent clashes increasing. There have also been increasing tensions with Syria and Iran, as Israel has attacked Syrian forces and militias that were backed by the Iranian government.



Russia had the fifth largest deterioration in peacefulness in the 2023 GPI, falling three places to 158th. Russia's fall was driven by their invasion of Ukraine in February 2022. Deaths from external conflict rose by 400 per cent, and Russia scores a five on both the external conflicts fought and relations with neighbouring countries indicators. Some estimates suggest that the number of Russian fatalities because of the war in Ukraine may be as high as 43,000, with total casualties of just under a quarter of a million.¹

The war in Ukraine has placed considerable strain on Russia's military resources. Russian President Vladimir Putin announced the partial mobilization of up to 300,000 military reservists in September 2022, a day after Russia announced the annexation of five regions in the East and South of Ukraine. Russian offensives in Eastern Ukraine are also increasingly dependent on soldiers from state sponsored private military contractor, the Wagner Group.

Although Russia had one of the five largest deteriorations in peacefulness of any country, it improved in peacefulness on several indicators on the Safety and Security domain. The incarceration rate, violent demonstrations, terrorism impact and homicide rate indicators all recorded improvements over the past year. Russia's homicide rate is now lower than at any point since the inception of the GPI in 2008.

2 Trends



Key Findings

- The level of global peacefulness has deteriorated by five per cent since 2008, with 95 countries deteriorating and 66 improving in the GPI. The average level of global peacefulness has deteriorated for 13 of the last 15 years, with no year-on-year improvements recorded since 2014.
- The gap between the least and the most peaceful countries continues to grow. Since 2008, the 25 least peaceful countries deteriorated on average by 9.8 per cent, while the 25 most peaceful countries improved by 0.1 per cent.
- Of the three GPI domains, two recorded deteriorations and one improved since 2008. *Ongoing Conflict* and *Safety and Security* deteriorated by 14 and 5.4 per cent respectively. Militarisation improved by 6.2 per cent.
- All six of the Ongoing Conflict indicators deteriorated. In total, 99 countries recorded a deterioration on this domain, with 52 recording an improvement, and 10 registering no change since 2008.
- Conflict and terrorism in the Middle East were key drivers of the global deterioration in peacefulness until 2015, but in the past eight years conflicts in other regions have underpinned the global decline in peacefulness.
- Sixteen of the 23 indicators in the GPI deteriorated, while only seven improved. Only one indicator improved by more than ten per cent, while eight deteriorated by more than ten per cent.
- The two indicators with the largest deterioration in peacefulness since 2008 were violent demonstrations and external conflicts fought, each deteriorating by an average of 53 per cent. The increase in external conflicts fought reflects more external actors becoming involved in internal conflicts in other countries.

- The terrorism impact indicator deteriorated sharply until 2015, but in recent years has begun to improve. The epicentre of terrorism has shifted from the Middle East and North Africa into sub-Saharan Africa, especially the Sahel.
- Five of the six indicators in the Militarisation domain have improved since 2008, with the average *armed personnel rate* declining from 476 to 403 soldiers per 100,000 population, and 123 countries improving on *UN peacekeeping funding*.
- In contrast with the global trend, Eastern European countries bordering Russia deteriorated on the Militarisation domain by an average of 6.9 per cent between 2008 and 2023. The *relations with* neighbouring countries indicator also deteriorated significantly in this region.
- Coastal West Africa recorded an improvement in overall peacefulness, despite a history of conflict, political instability, and a surge in violent conflict and terrorism in the neighbouring Sahel region.
- There are now 15 countries where at least five per cent of the population are either refugees or internally displaced. Syria has 61 per cent displaced, South Sudan over 42 per cent, Ukraine over 30 per cent, while Somalia and the Central African Republic have more than 20 per cent displaced.
- The average homicide rate across all GPI countries fell from 7.6 to 6.3 per 100,000 from 2008 to 2023, representing a 17.1 per cent improvement. 104 countries improved their score on the *homicide rate* indicator, while 42 deteriorated.

GPI Trends

The world is considerably less peaceful now than it was in 2008, with the average level of country peacefulness deteriorating by five per cent between 2008 and 2023. Over that same period, 95 countries have become less peaceful, compared to 66 that have improved.

Figure 2.1 highlights the overall trend in peacefulness from 2008 to 2023, as well as the year-on-year percentage change in score. Peacefulness has declined year-on-year for 13 of the last 15 years.

The deterioration in peacefulness since 2008 occurred in most of the GPI regions, with four accounting for most of the global increase in violence: MENA, sub-Saharan Africa, South America, and Central America and the Caribbean.

Europe remains the most peaceful region in the world. It has had a slight deterioration in peacefulness since 2008, with its average GPI score deteriorating by one per cent. The deterioration in Europe's overall peacefulness was largely driven by the Ongoing Conflict domain. Militarisation improved, and Safety and Security recorded virtually no change. Despite its high level of peacefulness, Europe recorded deteriorations in the indicators for violent demonstrations, neighbouring country relations, political instability, terrorism impact, and external conflicts fought.

MENA remains the least peaceful region in the world, with its *Ongoing Conflict* and *Safety and Security* domain scores recording large deteriorations since 2008. However, there has been very little change in overall peacefulness in the region since 2016. The *deaths from internal conflict* indicator has improved by an average of 19.5 per cent across the region since the peak of violence during the Syrian civil war in 2014.

The gap in peace between the most and least peaceful countries

in the world has widened since 2013, as shown in Figure 2.2. While the 25 most peaceful countries in 2023 recorded an average improvement of less than 0.1 per cent in their GPI scores since 2008, the 25 least peaceful nations saw their scores deteriorate by an average of 9.8 per cent in the period.

FIGURE 2.2

Trend in peace, 25 most and 25 least peaceful countries, 2008–2023

The 25 least peaceful countries deteriorated in peacefulness by an average of 9.8 per cent, while the most peaceful improved by 0.1 per cent.



FIGURE 2.1

GPI overall trend and year-on-year percentage change, 2008–2023

Peacefulness has declined year-on-year for thirteen of the last fifteen years.



Domain Trends

The GPI measures peacefulness across three domains: *Safety and Security, Ongoing Conflict*, and *Militarisation*. Figure 2.3 highlights the indexed trend across these three domains over the past 15 years.

While the world has become less peaceful since 2008, there have been some notable improvements in peace. The average country score on the *Militarisation* domain improved by 6.2 per cent since 2008. The largest improvements in this domain were in *UN peacekeeping funding*, the size of the armed forces, and the stock of heavy weapons in many countries, with only the *weapons imports* indicator deteriorating since 2008. The *Safety and Security* domain deteriorated by 5.4 per cent, and the *Ongoing Conflict* domain deteriorated by 14 per cent.

Figure 2.4 shows the percentage change in score for each indicator from the 2008 to the 2023 GPI. Of the 23 GPI indicators, 16 recorded deteriorations with the remaining seven recording improvements.

Eight indicators deteriorated by more than ten per cent. The largest deterioration was recorded for *violent demonstrations* and *external conflicts fought*, which both deteriorated by 53 per cent over the period on average, however *violent demonstrations* has improved for the last two years. This movement reflects the increase in frequency and severity of violent protests and riots around the world, as well as the increasing internationalisation of armed conflicts over time, which is discussed further in section four. The number and severity of *internal conflicts fought* also deteriorated by 17.2 per cent since 2008, while *deaths from internal conflict* deteriorated by 14.6 per cent.

Of the seven indicators that improved, only *UN peacekeeping funding* had an improvement of over 20 per cent. The *nuclear and heavy weapons, armed services personnel rate* and *homicide rate* indicators all improved by more than five per cent on average.

FIGURE 2.3

Indexed trend in peacefulness by domain, 2008 to 2023 (2008=1)

Militarisation was the only domain to record an improvement since 2008.



FIGURE 2.4

Percentage change by indicator, 2008–2023

Funding for UN peacekeeping operations had the biggest improvement, while the indicators for violent demonstrations and external conflicts fought saw the largest deteriorations from 2008 to 2023.

Violent Demonstrations External Conflicts Fought Internal Conflicts Fought Deaths from Internal Conflict Terrorism Impact Intensity of Internal Conflict Neighbouring Countries Relations Refugees and IDPs Political Instability Violent Crime Incarceration Rate Police Rate Deaths from External Conflict Weapons Imports Political Terror Scale Access to Small Arms Military Expenditure (% GDP) Perceptions of Criminality Weapons Exports Homicide Rate Armed Services Personnel Rate Nuclear and Heavy Weapons UN Peacekeeping Funding



FIGURE 2.5 Trends in key safety and security indicators

Over 80 million people globally have been forcibly displaced.



Source: Terrorism Tracker, GTD, UNHCR, UNODC, IEP Calculations

SAFETY & SECURITY

The *Safety and Security* domain deteriorated 5.4 per cent between 2008 and 2023. Of the 11 indicators in this domain, nine deteriorated and two improved. The largest deterioration occurred in the *violent demonstrations* indicator, with 120 countries seeing the impact of *violent demonstrations* increase between 2008 and 2023. Average scores on this indicator have deteriorated in every region around the world. Figure 2.5 highlights the trend from 2008 to 2023 for the key *Safety and Security* indicators.

The *terrorism impact* indicator had the second largest deterioration since 2008. Until 2015, most deaths from terrorism occurred in the MENA region. However, in the last eight years the epicentre of terrorism has shifted out of South Asia and MENA and into sub-Saharan Africa and especially the Sahel. The Sahel region accounted for more terrorism deaths in 2022 than both South Asia and MENA combined. Deaths from terrorism have been increasing in sub-Saharan Africa, yet they have been decreasing in every other region since 2019. In the last four years *terrorism impact* has improved in every region except sub-Saharan Africa.

The *homicide rate* indicator had the largest improvement in the *Safety and Security* domain, with 104 countries recording reductions in their *homicide rates* since 2008. The average *homicide rate* across all GPI nations fell from 7.6 to 6.3 per 100,000. There are now 34 countries globally that have a *homicide rate* of less than one per 100,000, and 61 with a rate of less than two per 100,000. Between 2008 and 2023, the *homicide rate* improved in all regions except for MENA and North America.

The number of forcibly displaced people has increased consistently since 2008. There are now over 85 million refugees and internally displaced people (IDPs) according to the UNHCR. This number includes *refugees and IDPs* as a result of the war in Ukraine, but excludes those people classified as 'others of concern' by the UNHCR. The number of forcibly displaced people more than tripled between 2008 and 2023. There are now 15 countries where at least five per cent of the population are either refugees or internally displaced. Somalia and the Central African Republic both have more than 20 per cent of their populations displaced, while South Sudan has over 42 per cent of its population displaced. The war in Ukraine had resulted in an estimated 5.4 million refugees and 6.3 million IDPs according to UNHCR, representing almost 30 per cent of the country's population. However, the extent of displacement is still greatest in Syria, where the impact and aftermath of the Syrian civil war has led to 61 per cent of the population being either internally displaced or refugees since the start of the conflict.

ONGOING CONFLICT

Ongoing Conflict had the largest deterioration of the three GPI domains, with an average fall of 14 per cent between 2008 and 2023. All six of the *Ongoing Conflict* indicators deteriorated. In total, 99 countries recorded a deterioration on this domain, with 52 recording an improvement, and ten registering no change since 2008.

Figure 2.6 shows the trend for three key conflict indicators: the total number of conflict-related deaths, the average score for the *external conflicts fought* indicator and the average score on the *intensity of internal conflict* indicator.

Total conflict-related deaths rose sharply in the 2010s to reach a peak of just over 149,000 in 2014. The dramatic increase was concentrated in a handful of countries, with most deaths occurring during the Syrian civil war. There were also significant increases in Afghanistan, Iraq, Nigeria and Central African Republic. The number of conflict-related deaths began falling in 2015 as the intensity of conflict in Syria subsided.

In the last few years there has been a reversal of the downward trend in conflict-related deaths, with total deaths rising 45 per cent between 2020 and 2021. The most recent surge has primarily occurred in sub-Saharan Africa, most notably in Ethiopia and the tri-border region of Mali, Niger and Burkina Faso. In the past year the number of deaths increased by 96 per cent, owing to conflicts in Ukraine and Ethiopia.

The rise in conflict-related deaths has been mirrored by a deterioration in the *external conflicts fought* indicator, meaning that more states are becoming involved in conflicts outside their own borders by offering troops and support to combatants within other territories. In 2021, there were 91 countries that had been at least partially involved in an external conflict in the past five years. Of these 91, 78 were only involved in an external conflict in a coalition of at least two countries, and of those 45

FIGURE 2.6 Trends in key ongoing conflict indicators

Battle deaths increased by 45 per cent from 2020 to 2021, reversing the downward trend since 2014.



Source: UCDP, EIU, IEP calculations

were only involved in a large coalition of ten or more countries.

The intensity of conflict has also been increasing. The average *intensity of internal conflict* indicator score increased from 2.29 to 2.56 between 2008 and 2023. In 2008, 104 countries had a score of two or less on this indicator, suggesting no conflict or only a latent potential for conflict. By 2023, this number had fallen to 85. The number of countries with a score of four or higher, which indicates the existence of openly violent internal conflict, rose from 29 in 2008 to 37 in 2023.

MILITARISATION

Militarisation was the only GPI domain to record an improvement from 2008 to 2023. The average score on this domain improved by 6.2 per cent over this period, with 118 countries recording an improvement and 43 deteriorating. Five of the six indicators on the *Militarisation* domain improved, with only the *weapons imports* indicator recording a deterioration. The largest proportional improvements occurred on the *UN peacekeeping funding* indicator, where 123 countries improved, and the *nuclear and heavy weapons* indicator, where 110 countries improved. A total of 113 nations recorded improvements in the *armed personnel rate*. Figure 2.7 shows the average trend for the *armed forces rate* and *military expenditure* as a proportion of GDP, as well as the *weapons imports* indicator score.

The improvement in both the *armed personnel rate* and *military expenditure* since 2008 was particularly notable in some of the largest militaries in the world. The average *armed*

personnel rate declined from 476 soldiers per 100,000 population in 2007 to 403 soldiers per 100,000 population by 2022. Of the five countries with the largest total *military expenditure* - the United States, China, India, Russia and the United Kingdom - all except Russia recorded falls in military spending as a percentage of GDP. Although *military expenditure* as a percentage of GDP did decrease, the overall spending on the military did increase. The countries with the biggest increases in absolute expenditure were China, the US, and India, increasing by USD 180 billion, 70 billion and 40 billion respectively since 2008.

There was a slight deterioration in the *weapons imports* indicator, the only *Militarisation* indicator to show a deterioration over the past decade. The number of countries that recorded no *weapons imports* fell from 27 in 2008, to 13 in 2023. Six of the ten countries with the largest per capita *weapons imports* are in the MENA region.

Weapons exports remain highly concentrated, with 103 countries registering no exports at all in 2023. Several highly peaceful countries performed poorly on this indicator, with Sweden, the Netherlands and Switzerland all being ranked amongst the ten highest weapons exporters per capita in 2023. Eight of the ten largest exporters on a per capita basis are western democracies. However, by total export value, just five countries account for over 75 per cent of total *weapons exports*: the US, Russia, Germany, France, and China, with the US alone accounting for over 40 per cent.

FIGURE 2.7

Trends in key militarisation indicators

The armed personnel rate has fallen by an average of 18.3 per cent since 2008.



Source: Military Balance, IEP calculations

Geospatial Trends

The Global Peace Index measures peacefulness at the national level, yet the dynamics of violence, peace, and conflict are frequently influenced by transnational events and factors. Conflicts can overflow from one country into another, causing regional clusters or 'hotspots'. Countries in these hotspots share certain economic or political traits, which often serve as the root causes of conflicts. Additionally, there is substantial evidence suggesting that internal conflicts can spill over from one country to another.

The level of peacefulness in one country can affect the level of peacefulness in neighbouring countries either directly or indirectly. Conflict can spread directly across borders through the movement of weapons or people, including combatants and displaced persons or refugees.¹ The spread of conflict is more likely if rebel groups in neighbouring countries share ethnic ties and separatist motivations.² The presence of conflict can also depress the economies of bordering nations, contributing to an environment where conflict is more likely.³

This means that a country's overall level of peacefulness may be affected by events that occur in bordering nations, both positively and negatively. This section highlights trends in peacefulness in two clusters: Eastern Europe and Coastal West Africa.

EASTERN EUROPE

Eastern Europe is one of the few regions of the world where the militarisation domain deteriorated over the past fifteen years. The key driver of this deterioration were the tensions between Russia and its western neighbours, which were rising long before the 2022 Russian invasion of Ukraine. Russia's support of separatist forces in Georgia in 2008 and its annexation of the

Crimean Peninsula in 2014 were the main events which led to an increase in tensions, and subsequent levels of militarisation in the region. Figure 2.8 maps the changes in the *Militarisation* domain in Europe between 2008 and 2023.

Militarisation in Estonia, Latvia, Lithuania, Belarus and Ukraine deteriorated by an average of just under seven per cent between 2008 and 2023, compared with a global average improvement of 6.2 per cent over the same period. All five of these countries deteriorated on the *weapons imports, military expenditure* and *armed personnel rate* indicators. The score for *weapons imports* deteriorated by an average of 57.2 per cent, compared with a global average improvement of 1.4 per cent. Russia's level of *Militarisation* did not increase as it was starting from a very high base, with the size of its *armed forces personnel rate* decreasing slightly between 2008 and 2022.

The level of *military expenditure* amongst Russia's neighbouring countries increased sharply following the annexation of Crimea and the start of the Donbas War in 2014, as shown in Figure 2.9. Ukraine, Latvia, and Lithuania all recorded large increases in *military expenditure*, with a smaller increase in Estonia.

FIGURE 2.8

Militarisation in Eastern Europe, 2008–2023

Eastern European countries bordering Russia have deteriorated on the Militarisation domain by an average of seven per cent since 2008.



Source: IEP

FIGURE 2.9 Trend in military expenditure (% GDP), Eastern Europe, 2008–2022

Military expenditure increased sharply in Ukraine, Latvia and Lithuania following the annexation of Crimea in 2014.



Source: Military Balance

Ukraine's *military expenditure* had already increased sharply between 2013 and 2014. Political rhetoric and threats from Russia toward Ukraine intensified during the Euromaidan demonstrations in late 2013 before Russian troops entered the Crimean Peninsula in February 2014. *Military expenditure* increased again in 2015 as Ukrainian forces fought pro-Russian separatists in the Donbas. Spending has remained high since. Data on Ukrainian *military expenditure* are only available to 2021, but it is likely that the level of spending increased to an all-time high in 2022. Some sources estimate *military expenditure*, including foreign aid, accounted for more than a third of Ukraine's GDP in 2022.⁴

Latvia and Lithuania were vocal supporters of tough EU sanctions against Russia for its actions in the Crimean Peninsula, and both countries committed to increasing their *military expenditure* to the NATO target level of two per cent of GDP.⁵ Lithuania achieved the target of two per cent in 2019, and Latvia followed in 2021, with both countries maintaining spending above the NATO target and well above both NATO and EU average *military expenditure* up to 2022.⁶

Estonia's *military expenditure* increased by 0.24 percentage points between 2008 and 2022, from an already high starting point of 1.89 per cent. Belarus, a country which supported the

2022 Russian invasion of Ukraine, did not substantially increase its *military expenditure* after the annexation of Crimea in 2014. However, *weapons imports* to Belarus more than doubled between 2015 and 2022.

Figure 2.10 shows the proportion of the population in five neighbouring countries that disapproved of Russia's leadership between 2006 and 2021, prior to the Russian invasion of Ukraine. From 2013 to 2015, the proportion of the population that disapproved of President Putin increased by 52.8 percentage points, to over 80 per cent of the population in Ukraine.

The *neighbouring country relations* scores for Ukraine, Estonia, Latvia and Lithuania all deteriorated in 2015 in reaction to Russia's activities in Crimea and as a result of Russia's embargo on food from the EU. Belarus' *neighbouring country relations* score deteriorated in 2021 because of declining relations with the EU. The EU imposed a range of sanctions against Belarus in 2021 and 2022 in reaction to political repression after the 2020 election, the forced landing of a flight in Minsk the following year, and the actions of Belarusian authorities to facilitate tens of thousands of third-country migrants across the Lithuanian, Latvian, and Polish borders.⁷

FIGURE 2.10



Proportion of the population disapproving of Russia's leadership, Eastern Europe, 2006–2021

Source: Gallup World Poll

COASTAL WEST AFRICA

West Africa has been described as one of the world's most unstable regions, having experienced numerous coups and civil wars over the past fifty years.⁸ However, as Figure 2.11 shows, there has been an improvement in overall peacefulness in several countries in the region since 2008. These improvements in Côte d'Ivoire, Liberia, Sierra Leone, Guinea-Bissau, Senegal and Mauritania contrast with the steep deterioration in peacefulness seen in the neighbouring Sahel region, where violent conflict and terrorism have increased considerably over the past 15 years.

The improvement in peacefulness in the region was driven by substantial improvements in the *Militarisation* domain and a decline in the number and intensity of internal conflicts. Figure 2.12 shows the average trend in *Militarisation* in Côte d'Ivoire, Liberia, Sierra Leone, Guinea-Bissau, Senegal and Mauritania between 2008 and 2023. *Militarisation* improved by an average of 13.4 per cent in these countries, which was over twice as high as the global average improvement of 6.2 per cent.

All six countries in West Africa have seen a sustained improvement in the *armed personnel rate*. In Sierra Leone, the *armed personnel rate* fell by 48.8 per cent, from 193 per 100,000 population in 2008 to 99 per 100,000 in 2023. In Senegal and Mauritania, it improved by over 30 per cent, compared with a global average improvement of 15.3 per cent. All six countries also improved their contribution to *UN peacekeeping funding* between 2008 and 2023. In Sierra Leone the score for *UN peacekeeping funding* improved by 75 per cent, and in Senegal it improved by more than 50 per cent.

The level of internal conflict in the region has fallen significantly over the past 15 years. None of the six countries has recorded a new conflict with over 25 battle deaths in the

FIGURE 2.12

Trend in Militarisation, West Africa, 2008–2023

Militarisation has improved by an average of 13.4 per cent in Côte d'Ivoire, Liberia, Sierra Leone, Guinea-Bissau, Senegal and Mauritania.



Source: IEP

past five years. Since 2008, the *intensity of internal conflict* indicator improved by over 25 per cent in Senegal, Mauritania, and Guinea-Bissau, while the *internal conflicts fought* indicator improved by over 30 per cent in Côte D'Ivoire and Sierra Leone.

The improvements in Liberia, Sierra Leone, and Côte d'Ivoire are a reversal of the conflict contagion that was seen in the 1990s and 2000s. Liberia's military leader between 1997 and 2003, Charles Taylor, was accused of directly supporting rebels in Sierra Leone, and armed groups in all three countries are

FIGURE 2.11

Overall peacefulness in coastal West Africa, 2008–2023

Countries in coastal West Africa have improved on the GPI by an average of 4.95 per cent since 2008.



Source: IEP

reported to have recruited for eign combatants, including children, from their neighbours. $^{\rm 9}$

Peacekeeping and peacebuilding have also played a vital role in increasing peacefulness in the region. The widely praised UN mission in Sierra Leone ended in 2006, and those in Côte d'Ivoire and Liberia ended in 2017 and 2018 respectively. Evidence from the region suggests that the successful peace processes have been underpinned by a focus on the social and economic concerns of local communities. However, their long-term success still depends on building sufficient economic opportunity to avoid the return of violence.¹⁰

One of the starkest differences between these countries and the neighbouring Sahel countries such as Burkina Faso, Mali and Niger is the impact of terrorism, as shown in Figure 2.13. Côte d'Ivoire, Liberia, Sierra Leone, Guinea-Bissau, Senegal and Mauritania all recorded zero deaths from terrorism in 2022, compared with 1,135 deaths in Burkina Faso and 994 deaths in Mali.¹¹

Jihadist terror groups have expanded in Sahelian countries with high group grievances and poor economic growth, funding their activities through criminal activities such as kidnapping and smuggling.¹² However, despite the existence of many of these risk factors in West African countries, terrorist activity has been relatively limited. *Political instability* and poverty in Mauritania, and the existence of separatist grievances, trafficking networks and gold resources in Senegal are potential risk factors for the spread of terrorism. Investments in the capacity of policing and security services have been important preventive measures in both countries, as have strategic interventions in border regions. Although economic development across Mauritania has been limited since the 2008 coup, the new government extended services such as water, electricity, schools, and mobile connectivity to remote areas where terrorists were known to be recruiting.¹³ Senegal began building a military camp near the Malian border to protect its gold assets.¹⁴

Improvements in peacefulness have coincided with an improvement in governance and other key political institutions, which have led to more open and transparent elections and peaceful transitions of power. Liberia has had three election cycles since the end of the civil war, including a peaceful transfer of power in 2017. Although there was some violence after the 2020 elections in Côte d'Ivoire it did not escalate into armed conflict as it had a decade before. Governments in Senegal have increasingly collaborated with their neighbours by sharing intelligence in the fight against violent extremism, and Côte d'Ivoire has taken on a more significant role in regional peacekeeping missions. These improvements in governing institutions are important given that countries with more effective governments are better able to protect against potential spill over effects from nearby conflicts.¹⁵

FIGURE 2.13

Terrorism deaths in West Africa, 2022



There was not a single death recorded from terrorism in 2022 in any coastal West African country from Morocco to Ghana.

Source: IEP

3 Economic Impact of Violence

Key Findings

- The global economic impact of violence was \$17.5 trillion in 2022, equivalent to 12.9 per cent of global GDP, or \$2,200 per person.
- The 2022 result represented an increase of 6.6 per cent – or \$1 trillion – from the previous year, largely driven by a 16.8 per cent increase in the economic impact of military expenditure.
- The war in Ukraine had a devastating economic effect, with the economic impact of violence in Ukraine increasing by 479 per cent or \$449 billion. This was the largest increase of any country.
- Other than Ukraine, Togo and Qatar recorded the largest increases in the economic impact of violence, with all recording increases of over 60 per cent. However, Qatar's was from a very low base.
- Ukraine, Afghanistan and Sudan incurred the highest relative economic cost of violence in 2022, equivalent to 63.1, 46.5 and 39.7 per cent of GDP, respectively.

- In the ten countries most affected by violence, the economic cost of violence averaged 34 per cent of GDP in 2022, compared to just 2.9 per cent for the ten least affected countries.
- Kuwait, Mauritius, Haiti, Trinidad and Tobago, and Cambodia had the largest improvements in the economic impact of violence. All these nations recorded reductions of more than 25 per cent from 2021 to 2022.
- Expenditure on peacebuilding and peacekeeping was \$34.1 billion in 2022, which equals only 0.4 per cent of military spending.
- The biggest increases in the economic costing model are for Armed Conflict which increased 102 per cent since 2008.
The Economic Value of Peace

In 2022, the impact of violence on the global economy amounted to \$17.5 trillion, in US dollars in purchasing power parity (PPP) terms. This is equivalent to 12.9 per cent of global GDP, or \$2,200 per person. The total economic impact of violence increased by 6.6 per cent over the past year.

The global economic impact of violence is defined as the *expenditure and economic effect related to containing, preventing and dealing with the consequences of violence.* The economic impact of violence provides an empirical basis to better understand the economic benefits resulting from improvements in peace.

Violence and the fear of violence create significant economic disruptions. Violent incidents generate costs in the form of property damage, physical injury or psychological trauma. Fear of violence also alters economic behaviour, primarily by reducing the propensity to invest and consume. Expenditure on preventing, containing and dealing with the consequences of violence diverts public and private resources away from more productive activities and towards protective measures. Violence generates economic losses in the form of productivity shortfalls, foregone earnings and distorted expenditure.

The total economic impact of violence has three components that represent different ways in which violence impacts economic activity: direct costs, indirect costs and a multiplier effect. The direct costs of violence include the immediate consequences to the victims, perpetrators and public systems including health, judicial and public safety. The indirect cost refers to longer-term costs, such as lost productivity resulting from the physical and psychological effects and the impact of violence on the perception of safety and security in society. The multiplier effect represents the economic benefits that would be generated by the diversion of expenditure away from sunk costs, such as incarceration spending, and into more productive alternatives.

The economic impact of violence includes many indicators contained in the GPI, such as military expenditure, conflict deaths and homicides. However, the model also includes costs that are not incorporated into the GPI, such as the United Nations High Commissioner for Refugees' (UNHCR) expenditure on refugees and internally displaced persons (IDP), losses from conflict, suicide, and internal security expenditure.



The economic impact of violence was \$17.5 trillion in 2022. This represented a 6.6 per cent increase from the previous year, owing largely to an increase in military and private security expenditure. Figure 3.1 displays the breakdown of the total economic impact of violence by category for 2022.

The single largest component was global military expenditure, which totalled \$7.6 trillion, or 43.6 per cent of the total economic impact. Note that this is an economic measure of military expenditure that includes a multiplier effect, as well as spending on veterans' affairs and other related costs. For this reason, it differs from other estimates of global *military expenditure*.

FIGURE 3.1

Composition of the global economic impact of violence, 2022

Military and internal security expenditure accounts for over 73 per cent of the global economic impact of violence.



Source: IEP

TABLE 3.1

Change in global economic impact of violence, billions of PPP 2022 US dollars, 2021–2022

The total economic impact of violence increased by 6.6 per cent from 2021 to 2022.

	2022				2021	CHANGE (2021 TO 2022)	
COST COMPONENT	DIRECT COST	INDIRECT COST	MULTIPLIER	TOTAL ECONOMIC IMPACT	TOTAL ECONOMIC IMPACT	TOTAL CHANGE	% CHANGE
Military expenditure	3,813	-	3,813	7,626	6,529	1,097.4	16.8%
Internal security	2,619	-	2,619	5,238	5,238	-0.8	0.0%
Private security	594	-	594	1,187	1,304	-116.3	-8.9%
Homicide	100	949	100	1,149	1,104	44.3	4.0%
Suicide	1	713	1	715	714	0.2	0.0%
Violent crime	45	444	45	534	532	2.4	0.5%
Refugees and IDPs	4	454	4	461	384	77.2	20.1%
GDP losses	-	281	-	281	274	7.0	2.6%
Incarceration	64	-	64	128	143	-14.7	-10.3%
Fear	-	71	-	71	68	3.7	5.4%
Conflict deaths	18	-	18	36	35	0.5	1.3%
Peacebuilding	12	-	12	24	32	-8.4	-25.9%
Small arms	11	-	11	22	24	-2.0	-8.3%
Peacekeeping	5	-	5	10	18	-8.2	-44.9%
Terrorism	1	6	1	7	8	-0.9	-11.1%
Total	7,286	2,918	7,286	17,489	16,408	1,081	6.6%

Internal security expenditure was the second largest component, comprising 29.9 per cent of the global economic impact of violence, at \$5.2 trillion. It includes spending on the police and the judicial system as well as the costs associated with incarceration.

Table 3.1 gives a more detailed breakdown of the total economic impact of violence, as well as the change in the impact from 2021 to 2022.

Globally, the economic impact of *military expenditure* increased by 16.8 per cent in 2022 equivalent to \$1.1 trillion. Much of that increase occurred as the result of the war in Ukraine, and associated military spending from countries directly and indirectly involved in the conflict.

Expenditure on private security decreased by 8.9 per cent to \$1.2 trillion. Private security is the third largest category in the model and comprises 6.8 per cent of the total. China and India had the biggest reductions in private security expenditures with a combined reduction of \$51 billion in 2022 compared to the previous year.

Homicide is the fourth largest component in the model, comprising 6.6 per cent of the global economic impact of violence, at \$1.1 trillion. This category increased by four per cent, or \$44.3 billion, from the previous year. Sixty-two countries recorded a deterioration in the economic impact of homicide, while 101 countries recorded an improvement.

The impact of suicide remained unchanged and amounted to \$714.6 billion in 2022, representing 4.1 per cent of the global total. Suicide is defined by the WHO as self-inflicted violence resulting in death.

The economic impact of violent crime increased by less than one

per cent in 2022 or by \$2.4 billion. Violent crime comprises violent assault and sexual violence and makes up 3.1 per cent of the total economic impact of violence.

TRENDS IN THE ECONOMIC IMPACT OF VIOLENCE

The overall impact of violence in real terms is 6.9 per cent higher in 2022 when compared to 2008, although it has fluctuated by 15.5 per cent in this time as shown in Figure 3.2. Substantial improvements were recorded between 2010 and 2013, after which the impact has steadily risen. In this period, 87 countries recorded increases in their economic impact of violence, while 74 had improvements.¹ Of the 87 countries that recorded higher impacts, the average increase was 55 per cent. Among those that recorded reductions, the average decrease was 18.7 per cent.

FIGURE 3.2 **Trend in the global economic impact of violence, 2008–2022**

The total economic impact of violence has increased eight times in the last 14 years.



TABLE 3.2

Change in the global economic impact of violence, billions of PPP 2022 US dollars, 2008–2022

	TOTAL ECON	IOMIC IMPACT	CHANGE (2008–2022)		
INDICATOR	2008	2022	BILLIONS	%	
Conflict deaths	8.4	35.9	27.5	326%	
Refugees and IDPs	166.3	461.3	295.0	177%	
GDP losses	194.1	280.8	86.6	45%	
Military expenditure	6,790.4	7,625.9	835.5	12%	
Suicide	645.6	714.6	69.0	11%	
Homicide	1,103.2	1,148.7	45.5	4%	
Small arms	21.3	21.9	0.6	3%	
Internal security	5,148.8	5,237.6	88.9	2%	
Fear	70.3	71.4	1.2	2%	
Incarceration	129.8	128.1	-1.8	-1%	
Violent crime	585.0	534.0	-51.0	-9%	
Private security	1,445.1	1,187.5	-257.6	-18%	
Peacebuilding	31.3	24.0	-7.2	-23%	
Terrorism	9.4	7.2	-2.2	-24%	
Peacekeeping	17.8	10.1	-7.8	-44%	
Total	16,367	17,489	1,122.2	6.9%	

Table 3.2 shows a breakdown of the change in the economic impact of violence between 2008 and 2022 by category. Between 2008 and 2022, it recorded a 6.9 per cent increase. Costs associated with conflict deaths and refugees and IDPs rose most significantly, with both more than doubling.

FIGURE 3.3

Indexed trend in the economic impact by domain, 2008–2022

The economic impact of armed conflict has doubled since 2008.



Source: IEP

ECONOMIC IMPACT BY DOMAIN

The relative long-term trends in the economic impact of violence differ among the three domains of violence. Figure 3.3 shows the indexed changes in the three domains since 2008. The total economic impact of violence increased across all three domains. Armed Conflict deteriorated substantially since 2013, while Violence Containment and Interpersonal and Self-Inflicted Violence had small relative increases.

Armed Conflict

The economic impact of Armed Conflict on the global economy in 2022 amounted to \$807.1 billion. The Armed Conflict domain includes the costs associated with violence caused by larger groups such as nation-states, militia groups and terrorist organisations.

This collective violence includes armed conflict within and

FIGURE 3.4

Breakdown of the global economic impact of the Armed Conflict domain, 2022

Forced displacement accounts for 57 per cent of the global economic impact of Armed Conflict.



between states, including militias and drug cartels, violent political repression, genocide and terrorism. The domain also includes the costs associated with the consequences of managing armed conflict, such as UN peacekeeping and peacebuilding funding. The economic impact of Armed Conflict is highest across three regions: sub-Saharan Africa, MENA and South America.

Figure 3.4 shows the composition of the economic impact of Armed Conflict in 2022. Refugees and IDPs is the largest component, accounting for approximately 57 per cent of the economic impact of Armed Conflict, followed by the GDP losses from conflict at 35 per cent.

Interpersonal Violence and Self-Inflicted Violence

The economic impact of Interpersonal and Self-Inflicted Violence aggregates homicide, violent and sexual assault, suicide and fear of violence. In 2022, the economic impact of Interpersonal and Self-Inflicted Violence on the global economy amounted to \$2.6 trillion. Compared to the previous year, the impact increased by 1.4 per cent, or \$35 billion.

Figure 3.5 shows the composition of the economic impact of the Interpersonal and Self-Inflicted Violence domain. Homicide accounts for approximately 44 per cent of the domain's economic impact, followed by suicide at 28 per cent and assault at 14 per cent.

Violence Containment

Violence Containment is the largest component of the overall economic impact of violence. It consists of all spending which aims to prevent and contain the spread of violence. Figure 3.6 shows the composition of the economic impact for this domain.

Military expenditure is the largest component of this domain, accounting for 54 per cent of the total, while internal security expenditure is the second largest component, at 37 per cent. Internal security expenditure encompasses all the expenses associated with the police and judicial system. Private security accounts for eight per cent of the economic impact of Violence Containment, while peacebuilding and peacekeeping combined account for less than one per cent.

FIGURE 3.5

Composition of the economic impact of Interpersonal Violence and Self-inflicted Violence domain, 2022

Homicide comprises almost half of the global economic impact of interpersonal violence.



Source: IEP

The distribution of the economic impact of *Violence Containment* differs considerably from region to region. In North America, the impact of *Violence Containment* equated to \$4,485 per person in 2022. This is over twice as high as in Russia and Eurasia, the region with the second highest level, as shown in Figure 3.7. However, North America is the region with the highest level of per capita income.

Central America and the Caribbean, South Asia, and sub-Saharan Africa have the lowest per capita impact. On average, the economic impact of violence containment is 11 times higher in the Middle East and North Africa than sub-Saharan Africa.

FIGURE 3.6

Composition of the Violence Containment domain, 2022

Military Expenditure accounts for over half of the global economic impact of violence containment.



FIGURE 3.7

Per capita containment spending (military and internal security) by region, 2022

Per capita violence containment spending is more than 11 times higher in MENA than in sub-Saharan Africa.



Notes: Includes expenditure on private security, internal security and the military. Source: IEP

TABLE 3.3

Military expenditure: total, per capita, and as percentage of GDP, 2022

COUNTRY	MILITARY EXPENDITURE (TOTAL, \$US BILLIONS)	COUNTRY	MILITARY EXPENDITURE (PER CAPITA, \$US)	COUNTRY	MILITARY EX (% OF
United States	\$821.0	North Korea	\$8,105.28	Ukraine**	36.9%
China	\$439.9	Qatar	\$7,102.67	North Korea**	33.4%
India	\$248.9	Ukraine**	\$4,770.25	Afghanistan	11.0%
North Korea**	\$211.3	Saudi Arabia	\$3,615.68	Palestine	9.0%
Russia	\$193.5	United Arab Emirates	\$3,493.38	Saudi Arabia	8.2%
Ukraine**	\$189.4	Singapore	\$3,227.33	Qatar	7.6%
Saudi Arabia	\$131.6	United States*	\$2,427.03	Тодо	6.0%
United Kingdom	\$75.1	Kuwait	\$2,099.29	Oman	5.7%
Germany	\$68.1	Israel	\$1,988.45	Jordan	5.3%
Korea	\$66.0	Oman	\$1,946.97	Algeria	5.3%

* estimated; Veterans affairs spending and interest on military-related debt is excluded.

Source: IEP calculations

Table 3.3 shows the ten countries with the highest military expenditure as a total, per capita, and as a percentage of GDP. The US spends the most of any country annually on its military. North Korea has the highest on per capita spending and Ukraine has the highest military spending as a percentage of its GDP.

REGIONAL AND COUNTRY ANALYSIS

There are noticeable regional differences in the economic impact of violence. In some regions, the *Violence Containment* domain, and in particular *military expenditure* accounts for most of the economic impact, whilst in other regions crime and conflict are the largest components of the economic impact of violence.

The Regional Economic Impact of Violence

The economic impact of violence deteriorated for most regions of the world in 2022. The regions with the largest percentage improvements were in Central America and the Caribbean, and sub-Saharan Africa, as shown in Figure 3.8.

The Russia and Eurasia region had the largest deterioration, driven by the costs associated with the conflict in Ukraine. The economic impact of violence increased by 479 per cent in Ukraine, compared to an average of eight per cent in other countries in the region. The deterioration in Russia and Eurasia can be attributed to an increase in military expenditure, the costs associated with refugees and IDPs and the costs associated with conflict deaths.

FIGURE 3.8

Total economic impact and change by region

Only two GPI regions recorded an improvement in the economic impact of violence.



Source: IEP

The region with the largest improvement was in Central America and the Caribbean with a 4.1 per cent reduction in the overall economic impact of violence from the previous year. The biggest reduction came from a \$3 billion reduction in the impact of homicide. Preliminary data from 2022 suggests that the fall in homicide in the region has accelerated over the past twelve months. For example, it is estimated that El Salvador's *homicide rate* dropped from 103 per 100,000 in 2015, to 7.8 per 100,000 in 2022.

The composition of violence varies substantially by region, as shown in Figure 3.9. The greatest variation between regions is in military expenditure. This represents 57.75 per cent of the economic impact for the MENA region, and less than ten per cent in the Central America and the Caribbean region.

The proportions of internal and private security spending also varies between regions, fluctuating between just under 40 per cent in Asia-Pacific to just under 30 per cent in the MENA region.

Countries with the Highest Economic Cost

Table 3.4 lists the ten countries with the highest economic cost of violence as a percentage of GDP. The economic cost of violence for the ten most affected countries ranged from 17.2 to 63.1 per cent of their GDP. These countries have high levels of armed conflict, large numbers of internally displaced persons, high levels of interpersonal violence or large militaries.

In the ten countries most affected by violence as gauged by the GPI, the economic cost of violence averaged 34.3 per cent of GDP in 2022. Among the ten most peaceful countries, the average economic cost of violence was equivalent to just under three per cent of GDP.

The country suffering the highest cost of violence is Ukraine with the economic cost increasing by 479 per cent. A large

TABLE 3.4

The ten countries with the highest economic cost of violence, percentage of GDP, 2022

There are six countries where the economic cost of violence is equivalent to more than 30 per cent of GDP.

COUNTRY	ECONOMIC COST OF VIOLENCE AS (% OF GDP)		
Ukraine	63.1		
Afghanistan	46.5		
Sudan	39.7		
North Korea	38.5		
Somalia	35.4		
Central African Republic	31.5		
Colombia	28.6		
Cyprus	23.3		
Burkina Faso	19.3		
South Sudan	17.2		
Average	34.3		

Source: IEP

portion of costs made up of *military expenditure, refugees and IDPs* as well as costs associated with conflict deaths.

High-intensity conflict-affected countries suffer from higher costs from conflict deaths, terrorism, losses from refugees and IDPs and GDP losses from their conflicts. These countries include Ukraine, Afghanistan, Sudan, Somalia, Central African Republic, Burkina Faso and South Sudan. North Korea's high costs are associated with its military while Colombia and Cyprus suffer high costs because of the number of refugees and internally displaced people.²

FIGURE 3.9 Composition of the regional economic cost of violence, 2022

The proportional regional impact of military expenditure ranges from ten to almost 58 per cent.



Notes: Other includes the economic impact from fear and small arms. Source: IEP

Methodology at a Glance

The global economic impact of violence is defined as the expenditure and economic effects related to *containing, preventing and dealing with the consequences of violence.* The estimate includes the direct and indirect costs of violence, as well as an economic multiplier. The multiplier effect calculates the additional economic activity that would have accrued if the direct costs of violence had been avoided.

Expenditure on containing violence is economically efficient when it effectively prevents violence for the least amount of spending. However, spending beyond an optimal level has the potential to constrain a nation's economic growth. Therefore, achieving the right levels of spending on public services such as the military, judicial and security is important for the most productive use of capital.

This study includes two types of costs: direct and indirect. Examples of **direct costs** include medical costs for victims of *violent crime*, capital destruction from violence and costs associated with security and judicial systems. **Indirect costs** include lost wages or productivity from crime due to physical and emotional trauma. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of *violent crime* alter their behaviour.

An important aspect of IEP's estimation is the international comparability of country estimates, thereby allowing cost/ benefit analysis of country interventions. The methodology uses constant prices purchasing power parity (PPP) international dollars, which allows for the costs of various countries to be compared with one another. By using PPP estimates, the analysis takes into consideration the differences in the average level of prices between countries. For instance, if the US-dollar cost of a basket of goods in country A is higher than the US-dollar cost of the same basket of goods in country B, then one US dollar will have a lower purchasing power in country A than in B. Thus, an expense of a certain amount of US dollars in country B will be more meaningful than a similar expense in country A. IEP's use of PPP conversion rates means that the estimates of the economic impact of violence accurately captures the true significance of that impact or expense in each country.

IEP estimates the economic impact of violence by comprehensively aggregating the costs related to violence, armed conflict and spending on military and internal security services. The GPI is the initial point of reference for developing the estimates for most variables, however some variables are not in the GPI, such as suicide, and are calculated separately.

The 2021 version of the economic impact of violence includes 18 variables in three groups, shown in Table 3.5

The analysis presents conservative estimates of the global economic impact of violence. The estimation only includes variables of violence for which reliable data could be obtained. The following elements are examples of some of the items not counted in the economic impact of violence:

- the cost of crime to business
- domestic violence
- · household out-of-pocket spending on safety and security
- spillover effects from conflict and violence.

A unit cost approach was used to cost variables for which detailed expenditure was not available. The unit costs were obtained from a literature review and appropriately adjusted for all countries included. The study uses unit costs from McCollister, French and Fang for homicides, violent and sexual crimes.³ The McCollister, French and Fang cost of homicides is also used for battle deaths and deaths from terrorism. The unit cost for fear of crime is sourced from Dolan and Peasgood.⁴

The total economic impact of violence includes the following components:

TABLE 3.5

Economic impact of violence - domains and indicators

The 18 indicators in the economic impact of violence model.

VIOLENCE CONTAINMEMNT	ARMED CONFLICT	INTERPERSONAL AND SELF-INFLICTED VIOLENCE
Military expenditure	Direct costs of deaths from internal violent conflict	Homicide
Internal security expenditure	Direct costs of deaths from external violent conflict	Violent assault
Security agency	Indirect costs of violent conflict (GDP losses due to conflict)	Sexual assault
Private security	Losses from status as refugees and IDPs	Fear of crime
UN peacekeeping	Small arms imports	Indirect costs of incarceration
ODA peacebuilding expenditure*	Terrorism	Suicide

* Official Development Assistance (ODA) for peacebuilding Source: IEP calculations

- **Direct costs** are the cost of violence to the victim, the perpetrator, and the government. These include direct expenditures, such as the cost of policing, military and medical expenses. For example, in the calculation of homicides for a given country, the total number of homicides is computed and multiplied by the unit costs estimated by McCollister, French and Fang. The result is updated and converted using country specific inflation and exchange rates.
- **Indirect costs** accrue after the violent event and include indirect economic losses, physical and physiological trauma to the victim and lost productivity.
- **The multiplier effect** represents the flow-on effects of direct costs, such as the additional economic benefits that would come from investment in business development or education, instead of the less-productive costs of containing or dealing with violence. Box 3.1 provides a detailed explanation of the peace multiplier used.

The term **economic impact of violence** covers the combined effect of direct and indirect costs and the multiplier effect, while the economic cost of violence represents the direct and indirect cost of violence. When a country avoids the economic impact of violence, it realises a **peace dividend**.

The term **economic impact of violence** covers the combined effect of direct and indirect costs and the multiplier effect, while the **economic cost of violence** represents the direct and indirect cost of violence. When a country avoids the economic impact of violence, it realises a **peace dividend**.

BOX 3.1

The multiplier effect

The multiplier effect is a commonly used economic concept, which describes the extent to which additional expenditure improves the wider economy. Every time there is an injection of new income into the economy this will lead to more spending which will, in turn, create employment, further income and additional spending. This mutually reinforcing economic cycle is known as the "multiplier effect" and is the reason that a dollar of expenditure can create more than a dollar of economic activity.

Although the exact magnitude of this effect is difficult to measure, it is likely to be particularly high in the case of expenditure related to containing violence. For instance, if a community were to become more peaceful, individuals would spend less time and resources protecting themselves against violence. Because of this decrease in violence there are likely to be substantial flow-on effects for the wider economy, as money is diverted towards more productive areas such as health, business investment, education and infrastructure.

When a homicide is avoided, the direct costs, such as the money spent on medical treatment and a funeral, could be spent elsewhere. The economy also benefits from the lifetime income of the victim. The economic benefits from greater peace can therefore be significant. This was also noted by Brauer and Tepper-Marlin (2009), who argued that violence or the fear of violence may result in some economic activities not occurring at all.⁵ More generally, there is strong evidence to suggest that violence and the

fear of violence can fundamentally alter the incentives for business. For instance, analysis of 730 business ventures in Colombia from 1997 to 2001 found that with higher levels of violence, new ventures were less likely to survive and profit. Consequently, with greater levels of violence it is likely that we might expect lower levels of employment and economic productivity over the long-term, as the incentives faced discourage new employment creation and longer-term investment.

This study assumes that the multiplier is one, signifying that for every dollar saved on violence containment, there will be an additional dollar of economic activity. This is a relatively conservative multiplier and broadly in line with similar studies.

A dollar of expenditure can create more

Economic Focus-The Impact of a Chinese Blockade of Taiwan

Key Findings

- IEP estimates that a Chinese blockade of Taiwan would lead to a drop in global economic output of USD 2.7 trillion in the first year. This estimate is considered conservative.
- The blockade would lead to a 2.8 per cent decline in global economic output in its first year. This is almost double the loss that occurred as the result of the 2008 Global Financial Crisis.
- Almost 60 per cent of the loss of economic activity would occur in China and Taiwan, with the two countries having a combined lost output of 1.6 trillion USD.
- The Chinese economy would shrink by an estimated seven per cent, while Taiwan's economy would shrink by almost 40 per cent.
- China and Taiwan account for a quarter of global trade in computers and electronics, while China alone accounts for a quarter of the global trade in textile clothing and footwear, and more than ten per cent of global trade in plastic and rubber, chemicals, and base metals.
- China's level of trade with the rest of the world would fall by more than 20 per cent. This figure assumes that some portions of China's existing trade could be immediately and smoothly rerouted or substituted with equivalent domestic products.

- The loss of economic output would be strongly felt in other parts of the world, most noticeably South-East Asia and Oceania. Losses in these regions would range from three per cent in Australia and Laos, to up to six per cent in Vietnam.
- The impact of a blockade would be especially strong on trade in computers and electronics. China and Taiwan put together dominate global trade in computer and electronics, at 31 per cent and electrical equipment at 23 per cent.
- China and several East Asian countries including South Korea and Japan are highly dependent on imports of computer and electronic components from Taiwan. The share of trade with Taiwan in total trade in this sector ranges from 10 per cent for the Philippines to 21 per cent for China.
- Taiwan is a global leader in semiconductor production, with a 20 per cent share of the total global capacity, 37 per cent of the world's logic semiconductors production capacity, and 92 per cent of the world's advanced logic semiconductors production capacity.

Introduction

This section of the report analyses the likely impact of a theoretical Chinese trade blockade on Taiwan on global trade. It looks at the effect of a blockade rather than a full-scale military invasion. This highlights that even a limited military confrontation would have devastating effects on the global economy, particularly on trade.

This analysis takes a conservative approach to estimating the impact on trade, with many potential longer-term effects excluded such as the spillover effects of revenue loss, including a rise in unemployment, supply-side inflation, or a global recession. Even given this conservative scenario, it is estimated that global economic output would fall by 2.7 trillion dollars in the first year after a blockade, leading to fall in global GDP of 2.8 per cent.

Any type of conflict between Taiwan and China would have devastating economic consequences globally. A potential conflict could take many different forms, such as a full-scale military invasion of Taiwan, a limited military operation, cyber-attacks and sabotage, or a naval blockade.

A full-scale military invasion of Taiwan by China would be a massive undertaking and would involve a wide range of military tactics and strategies. China would need to deploy a significant number of ground troops, air assets, and naval vessels to successfully invade Taiwan, which could lead to a prolonged conflict that would significantly damage the country's coastal assets and the economy. It would also cause significant loss of life. Taiwan's missile capabilities can reach significant distances within China and could cause major damage on many of their largest ports.

Rather than a full-scale invasion, China could opt for limited military action, such as targeted airstrikes on military targets and civilian infrastructure. Such tactics could be aimed at pressuring Taiwan to agree to reunification with China or to make political concessions.

China could also opt to use cyber-attacks and sabotage to disrupt Taiwan's infrastructure and military capabilities. A targeted cyber-attack on Taiwan's power grids, communication networks, or defence systems could severely hamper Taiwan's ability to defend itself. The use of cyber-attacks and sabotage might be particularly attractive for China as it could cause significant damage to Taiwan's infrastructure and economy without directly risking military assets.

Finally, China may decide to deny Taiwan's access to the outside world through a naval blockade. A Chinese blockade of Taiwan would involve the use of naval vessels to prevent goods, people, and military equipment from entering or leaving Taiwan. The blockade could be used to exert pressure on Taiwan to agree to reunification with China or to make political concessions. Any Chinese blockade would have significant consequences for Taiwan's economy, as Taiwan is heavily reliant on trade for its economic survival.

No matter which of these scenarios materialises, the consequences for the global economy would be devastating. Taiwan is a major hub for technology manufacturing and trade, and China is the second largest trading economy in the world by volume. Furthermore, any conflict between Taiwan and China would likely draw in other major powers such as the United States and its Asian and European allies, potentially escalating into a larger regional or even global conflict. Even a perceived threat of conflict could lead to increased militarization and tensions in the region, impacting trade, tourism, and regional cooperation. That is why it is imperative to understand the economic consequences of a possible conflict between China and Taiwan.

The analysis in this section differs from other studies of a potential conflict by focusing specifically on the impact on global trade of a Chinese blockade of Taiwan. A blockade in this context refers to the act of using military means by China to prevent the movement of people, goods, or military equipment into or out of Taiwan.

Other studies have investigated the economic consequences of conflict over Taiwan. One report estimated that the costs of a blockade on global industries heavily reliant on Taiwanese semiconductor industries at USD two trillion.⁶ This study only includes semiconductor industries, and industries highly dependent on them whereas IEP's analysis include all industries.

Another study projected a 5-10 per cent drop in US GDP and 25-35 decline in China's GDP in the event of a full-scale military conflict between the two countries over Taiwan.⁷ Similar studies that focused on Taiwan's production of semiconductors estimated that a year-long disruption of Taiwan's semiconductor manufacturing could cost global electronics companies USD 490 billion, and a permanent disruption would require an investment of USD 350 billion and three years to replace Taiwan's lost semiconductor capacity.⁸

No matter which of these scenarios materialises, the consequences for the global economy would be devastating.

China, Taiwan, and International Trade

China was the second largest trading country in the world in 2018, with USD 3.856 trillion of trade in valueadded.⁹ Taiwan is also a major player in international trade, despite its relatively small population. It recorded USD 470 billion of trade in value-added in 2018, making it the 19th largest trading economy in the world.

Most of China and Taiwan's major trading partners are either OECD countries or other countries in South-East Asia, as shown in Figure 3.10. China's five biggest trading partners are OECD members. They are also democracies and highly integrated economically and militarily.

China and Taiwan also trade extensively with each other. China is the largest trading partner of Taiwan, while Taiwan is China's sixth largest trading partner. If a blockade or trade disruptions were to occur, it would be a major disruption to OECD countries, countries in South-East Asia and to Taiwan and China.

As China and Taiwan are such large contributors to global trade, with many countries dependent on them in terms of their total trade. Figure 3.11 shows the countries which are most dependent on China and Taiwan as trading partners. Australia and several countries in East and South-East Asia are the most dependent on China, with all having more than 20 per cent of their total trade

FIGURE 3.10

Ten largest trading partners, China and Taiwan (Billions USD)

Taiwan is China's sixth largest trading partner in trade volume.



FIGURE 3.11

Ten countries most dependent on trade with China and Taiwan (% of total trade)

Many countries in Southeast Asia are strongly dependent on trade with China or Taiwan.



Source: IEP

FIGURE 3.12 Combined share of China and Taiwan in global trade in value-added in selected sectors

China and Taiwan dominate global trade in the computer and electronics sector.



Source: IEP

with China. Taiwan's top trading partners are not as dependent in percentage terms, but do rely on Taiwan for trade in several key industries, most notably computers and complex electronics.

CHINESE AND TAIWANESE TRADE BY SECTOR

Figure 3.12 shows China and Taiwan's combined share of global trade in value-added for several key sectors, for both OECD and non-OECD countries. China and Taiwan account for more than 21 per cent of total trade in computers and electronics, and 23 per cent of electrical equipment. China alone accounts for 25 per cent of trade in the textile, clothing, and footwear sector, and over ten per cent of global trade in the plastics and rubber, chemicals, and basic metals sectors. The difference between OECD and non-OECD countries is largest in the computer and electronics sector, where China and Taiwan account for just under 40 per cent of all trade for OECD countries, as compared

to just under 25 per cent for non-OECD countries.

Although Taiwan accounts for a far smaller percentage of global trade than China, it has an outsized influence in certain parts of the computer and electronics sector. As shown in Figure 3.13, Taiwan accounts for 20 per cent of global semiconductor production capacity, 37 per cent of the logic semiconductor production capacity and a staggering 92 per cent of the most advanced logic semiconductor production capacity.¹⁰

The Taiwan Semiconductor Manufacturing Company (TSMC), the primary chip manufacturer in Taiwan, is responsible for manufacturing 35 per cent of the global automotive microcontrollers and 70 per cent of the world's smartphone chipsets according to some estimates.¹¹ It also holds a dominant position in producing chips for top-tier graphics processing units utilised in servers and personal computers.

FIGURE 3.13

Taiwan's share in global semiconductor production capacity

Taiwan produces more than 90 per cent of advanced semiconductors.



Source: IEP

THE ECONOMIC CONSEQUENCES OF A CHINESE BLOCKADE OF TAIWAN

A conflict between China and Taiwan, even in a limited form such as a naval blockade, would have far-reaching economic consequences including a decline in investment and consumption, increased volatility in financial markets, a substantial drop in global trade, and shrinking productivity and output of any sector dependent on semiconductors.

China is the second largest recipient of foreign direct investment (FDI) and the fifth largest provider of FDI globally, at USD 334 billion and 128 billion respectively in 2021.¹² Despite Taiwan's relatively small size, its FDI inflow and outflow are also sizeable, at USD 5.4 billion and USD 10 billion respectively in 2021.¹³ A large number of countries in Africa and Asia such as Pakistan, Sri Lanka, Djibouti and Angola are heavily dependent on Chinese investments, financing and loans.¹⁴ Any disruption in the flow of capital from China to these countries would be economically and financially destabilizing.

China is a large global debtor with USD 2.5 trillion debt to international lenders.¹⁵ China is also the second largest foreign holder of US debt after Japan, with USD 867 billion in US Treasury holdings. The Chinese economy is thus deeply intertwined with the US economy. Any disruption in economic and financial ties between China and the West would have a destabilising impact on financial markets. The financial sanctions by the West that would be a likely result of the blockade would lead to asset freezes, huge exchange rate volatilities, a sell-off of Chinese assets, and stricter capital controls in China. The catastrophic impacts would also be felt by China's debtors and creditors.

The effect of a blockage on global trade would be devastating. Trade relies on confidence. Global trade dropped by more than 17 per cent immediately following the 2008 Global Financial Crisis, and substantially again after the COVID-19 pandemic.¹⁶

A Chinese blockade of Taiwan and inevitable intensification of military activities in and around the Taiwan Strait would affect business confidence and global trade through several channels. Firstly, it would make trade logistically harder for all countries that depend on trade with Asia and would make trading very difficult for Taiwan. Secondly, it would most likely lead to a sizeable decline in trade finance and marine trade insurance. Furthermore, it would be followed by a wide range of international sanctions and boycotts that would impede international trade with China.

The Taiwan Strait is one of the busiest shipping routes in the world. China's major ports for international trade (Shanghai, Dalian, and Tianjin) all rely on access to the strait. Taiwan's three largest ports are also located on the Taiwan Strait. It is a major shipping route between North Asia (China, Japan, and Korea) and the rest of the world, as well as the most direct route from South China to the US.¹⁷ Some estimates suggests that almost half of the world's container ships pass through the strait.¹⁸ One study even suggested that a conflict between China and the United States over Taiwan would almost completely halt shipping to and from the South-East Asia region.¹⁹ A naval blockade would completely halt Taiwan's maritime trade and air transportation. It would hinder the portion of international trade that relies on maritime shipping through East and South-East Asia.

A blockade would result in a fall in the level of trade financing. Financial institutions annually provide between six to eight trillion in trade finance to exporters and importers around the world.²⁰ The role of these institutions in global trade is indispensable. Most of these institutions are based in Europe and the United States.²¹ A China-Taiwan crisis would push investors of these institutions to reduce their exposure to China and East and South-East Asia. This scenario would likely happen even in the absence of any sanctions against China.

Logistical trade disruptions and currency fluctuations would increase the costs of trade financing. Delays in shipping could lead to defaults and a higher risk of non-payment by importers and exporters, which could make lenders more cautious about financing trade in the region. Volatilities in the Asian currency markets could impact the value of trade financing agreements denominated in those currencies.

In response to a Chinese blockade of Taiwan, major trade insurance providers would increase their premiums for high-risk trade and reduce their coverage to exclude certain risks. Furthermore, major providers of trade insurance would be likely to drastically reduce their exposure to trade activities that involve China, in anticipation of Western sanctions. Like the major trade finance providers, the largest trade insurance services providers are based in the United States and Europe.²² Therefore, even if a country was willing to trade with China in the event of a blockade, it would find it hard to insure and finance its trade and secure a viable trading route. Trade with other countries in East and South-East Asia would also be affected due to the heightened risks throughout the region.

Finally, disruption in Taiwan's semiconductor industry resulting from a naval blockade would create seismic aftershocks across several economic sectors. Lost revenue in industries dependent on high-end semiconductors could be as high as 1.6 trillion within one year of a Chinese blockade.²³ This estimate does not include spill over effects of the revenue loss, such as a rise in unemployment, supply-side inflation, and a global recession. Taiwan's chip manufacturing capacity could also not be easily or quickly replicated elsewhere. One estimate suggested that three years and USD 350 billion in investment would be needed to replace semiconductor production in the event of a permanent loss of Taiwan's production capacity.²⁴

The Impact on Global Trade

The following analysis focuses on the impact of a Chinese blockade of Taiwan on global economic output only through its effect on international trade in the first year of the blockade.

It does not include a wide range of longer-term consequences such as negative impacts on global FDI, the flow of people and ideas, productivity of many global industries which are highly vulnerable to disruption in the semiconductor global value chain, and Hong Kong's likely loss of its status as a global trade and finance hub. It also does not include the effect of cyber warfare on non-military targets, or the severing of Taiwan's communication channels.

THE IMPACT ON CHINA AND TAIWAN

Taiwan's national economy is heavily dependent on international trade, with trade in value-added accounting for 79 per cent of Taiwan's GDP. Taiwan is also almost completely dependent on energy imports, as it produces only 12 per cent of its energy domestically.²⁵ The rest is mostly imported in the form of liquified natural gas. China's economic growth model also relies on international trade, especially imports of energy and raw material. Moreover, the two countries are major trading partners with each other, with China being Taiwan's largest trading partner. China is also heavily reliant on Taiwanese computer, electronic, and semiconductor components.

Unsurprisingly, China and Taiwan are the parties that would lose most in the event of a blockade. The amount of lost economic output would be around USD 310 billion for Taiwan and USD 1.282 trillion for China. Taiwan and China would also incur the largest falls in total economic output, with a 40 per cent and seven per cent drop in GDP, respectively.

THE IMPACT ON GLOBAL ECONOMIC OUTPUT

A Chinese blockade of Taiwan would result in a USD 2.7 trillion dollar fall in economic activity in the first year. This is equivalent to a 2.8 per cent fall in global economic activity, almost twice as much as the Global Financial Crisis of 2008.

Countries in South-East Asia would be the most heavily affected, with Vietnam, Cambodia, Singapore, and South Korea having the highest economic losses from a blockade, with falls in GDP ranging from three to six per cent. Outside of South-East Asia, many OECD countries would be heavily impacted, mostly notably Australia, which would see a fall in GDP of three per cent.

Figure 3.14 shows the relationship between absolute economic loss, measured in USD billions, versus relative economic loss, assessed as a percentage of GDP. The greatest overall economic loss would occur in the US, with losses of over 200 billion, however this would be a relatively small fall in GDP of just under one per cent. By contrast, countries like Vietnam and Singapore have a much lower total loss of around USD 25 billion, but a much higher relative loss of over five per cent of GDP.

FIGURE 3.14

Relative vs total economic loss from chinese blockade of Taiwan

While the US would have the greatest total economic loss, the relative loss would be much higher in South-east Asia.



Methodology and Data Sources

The global economic impact of violence is defined as the expenditure and economic effects related to containing, preventing and dealing with the consequences of violence. The estimate includes the direct and indirect costs of violence, as well as an economic multiplier. The multiplier effect calculates the additional economic activity that would have accrued if the direct costs of violence had been avoided.

In 2018, global trade in value-added was USD 33.8 trillion while global GDP was USD 87.1 trillion. Global trade as percentage of economic output in that year was around 39 per cent. This ratio has been growing since the end of World War Two, albeit with some interruptions because of the 2008 Global Financial Crisis, and more recently because of the COVID-19 pandemic.

There are several studies that have looked at the historical impact of conflict on trade:

- Trade between direct belligerents in World War 1 and World War 2 dropped by 96 and 97 respectively.²⁶
- Military conflicts from late 19th century to late 20th century resulted in an 80 per cent average drop in trade during the war and were still 42 per cent lower five years after the conflict ended.²⁷
- With regards to a conflict between China and Taiwan, the highest estimates suggest that bilateral trade would drop 90 per cent in the event of a full-blown conflict.

The analysis in this section makes the following assumptions:

- In the event of a blockade, all countries on average would lose 40 per cent of their value-added trade with Taiwan. Even though all trade could theoretically fall to zero, it is assumed that only 40 per cent of total trade with Taiwan could not be rerouted or substituted by domestic production.
- Trade with China, would fall by 20 per cent for OECD countries, and 15 per cent for non-OECD countries.

The drop in trade with China and Taiwan would be due to a combination of factors, including but not limited to:

- Riskier and costlier marine transport
- Decline of global trade financing
- Costlier trade insurance options
- Fear of retaliatory trade and financial sanctions against China

There is a strong empirical support for the link between international trade and growth in economic output. Trade can promote economic growth through a range of channels, including access to larger markets, technology transfer, and increased competition. These channels can lead to greater efficiency and innovation, resulting in higher productivity and economic growth. Various studies have looked at the impact of trade on economic growth, with most estimates suggesting that a one per cent change in international trade as a share of GDP would lead to change in GDP per capita of between 0.5 to two per cent.²⁸ This analysis uses the average value and assumes that a one per cent decline in trade as a share of GDP will result in a 1.25 per cent per cent loss of economic output in the following year.²⁹ This analysis uses the World Bank's WDI dataset for GDP data, which is available up until 2021. To estimate share of bilateral trade, this analysis uses trade in value-added data from the OECD trade in value-added dataset, which is available up until 2018. This dataset encompasses all industries including agricultural and fishing, mining, and fossil fuels, 17 manufacturing sectors, 20 services sectors, and construction. This analysis assumes the share of bilateral trade among countries in different sectors and overall remained stable between 2018 and 2021.

IEP uses trade in value-added data, rather than bilateral data which has been used in similar studies in the past. Raw trade data can be misleading because it does not account for the intermediate inputs that are used in the production of goods and services. When two countries trade intermediate goods, the value of these goods can be counted multiple times in the raw trade data, leading to double counting. In contrast, trade in value-added accounts for the value-added at each stage of production and avoids double-counting. For example, an electronic board that is exported from China to Taiwan for further processing. The board has components designed, manufactured, and assembled in South Korea and Japan. Counting the board as a Chinese product would be misleading as a portion of the value of the board is created outside of China.

Measuring the value-added in each stage of trade ensures the value of the intermediate inputs will not be excluded. This is especially important in the modern global economy, where production processes are often fragmented across multiple countries. Trade in value-added data provide a more accurate picture of the true economic value of international trade.

4 Conflict Trends and Hotspots

Key Findings

- Last year saw a shift in the global distribution of violence. Major conflicts in the MENA region and South Asia declined, while conflicts in sub-Saharan Africa, Europe, and Asia-Pacific intensified.
- Russia's invasion of Ukraine is the largest war in Europe since the Balkan wars in the 1990s.
 Conservative estimates suggest there were at least 82,600 conflict-related deaths in Ukraine in 2022, although the true number is likely to be much higher.
- Even excluding the violence in Ukraine, there has been an increase in the level of conflict since 2019. Conflict-related deaths rose by 45 per cent in the year prior to Russia's invasion of Ukraine, with over 100,000 total deaths being recorded in 2021.
- Violence increased significantly in Mali, Ethiopia Myanmar, and Ukraine, making 2022 the deadliest year for armed conflict since the 1994 Rwandan genocide, and the deadliest in the history of the GPI.
- Increased geopolitical competition has fueled conflict in many countries. Both great and middles powers are competing for influence in states or regions by supporting competing interests through the supply of troops and weapons.
- Drones have also played a major role in many conflicts, with military and commercial drones utilised in large numbers in Ukraine, Ethiopia and Myanmar. The total number of drone attacks increased by 40.8 per cent in 2022, with the number of different groups using drones increasing by 24 per cent.

- Violence in Mali escalated after France withdrew its forces from the country. Mali saw a 154 per cent increase in conflict-related deaths, including a nearly four-fold increase in deaths from violence targeting civilians. There were nearly 5,000 battlefield deaths in 2022.
- Myanmar saw a shift from protest-related violence towards civil war, as various militias gained support after the February 2021 coup. Protest-related deaths fell 99.2 per cent, while conflict-related deaths increased by 86.7 per cent.
- The war in Tigray intensified with over 100,000 conflict deaths recorded between August and October 2022.
- Afghanistan recorded the largest reduction in deaths from armed conflict in 2022 with conflictrelated deaths falling 90.6 per cent, from almost 43,000 to just over 4,000.
- Conflict declined in Yemen as a truce held. Improvements in relations between Saudi Arabia and Iran may further reduce tensions.

Introduction

News headlines over the past year have been dominated by the Russia-Ukraine war, which began with Russia's full-scale invasion of Ukraine on February 24, 2022. This conflict is the largest in Europe since the Balkan wars of the 1990s and potentially the largest since World War II.

However, deaths from conflict have seen a substantial increase even when the Russia-Ukraine conflict is excluded. Fatalities from organised violence worldwide surged in the year prior to Russia's invasion, as illustrated in Figure 4.1. This escalation comes after a five-year period of steady decline, after conflictrelated deaths peaked in 2014 during the height of the Syrian civil war. Battle deaths increased by 45 per cent between 2020 and 2021, with the total number of deaths rising from 82,773 to 119,980. The sharp increase in fatalities in 2021 took place before the Russian invasion of Ukraine and can be primarily attributed to a surge in state-based violence in the Asia-Pacific and sub-Saharan Africa regions.

FIGURE 4.1

Total battle deaths globally, 2000–2022

There was a 96 per cent increase in battle deaths from 2021 to 2022.



Source: UCDP



Conflict Trends

INCREASING GEOPOLITICAL COMPETITION

The escalation of conflict in recent years has been marked by rising geopolitical competition in an increasingly multipolar world. This competition has intensified many conflicts, particularly in strategically significant areas with pre-existing disputes. This pattern aligns with a trend observed over the past two decades, during which the number of "internationalised intrastate" conflicts has consistently risen, as shown in Figure 4.2. Internationalised intrastate conflicts are now as common as intrastate conflicts.

Intervention in an intrastate conflict is nothing new. Over 80 per cent of intrastate conflicts between 1975-2017 had at least one actor receiving some form of external support.¹ However, there is an increasing willingness on the part of outside actors to directly provide troops and other forms of support.

Both great and middle powers are competing for influence in many conflicts by offering political and military assistance, intelligence, and funding. These efforts help build or strengthen relationships with the countries they support. In some situations, like in Syria, Libya, and Ukraine, multiple powerful external states back competing actors, leading to an intensification and prolonging of conflict.

One recent geopolitical shift is the willingness of more states to project power beyond their immediate region. Following the Cold War, this type of power projection was largely the domain of the United States. This is no longer the case, with great powers like Russia and China now seeking to expand their influence globally and regional actors like Türkiye, Saudi Arabia and Iran increasingly willing to play a role outside their immediate vicinity.

BOX 4.1

Conflict type definition

The UCDP-PRIO Armed Conflict Dataset classifies conflicts in three ways:

- Interstate armed conflict, occurring between two or more states.
- Instrastate armed conflict, occurring between the government of a state and one or more internal opposition groups without intervention from other states.
- Internationalised instrastate armed conflict, occurring between the government of a state and one or more internal opposition groups with intervention from other states on one or both sides.

Some countries may also use intervention in one conflict as a way of bolstering support in other international matters. For example, Russia has increased its support to the government in Mali, effectively replacing France as the primary supporter in Mali's fight against jihadist terror groups. Russia and China are both providing military assistance to Myanmar's military junta as the conflict there intensifies into a full-blown civil war. In both cases, the ruling regimes in Mali and Myanmar have both expressed support for Russia's invasion of Ukraine.

FIGURE 4.2

Number of conflicts per year by type of conflict, 1976–2021

Internationalized instrastate conflicts are now as common as intrastate conflicts.



The increasing rivalry between the US and China is likely to shape geopolitics over at least the next two decades as the countries increase their level of competition, both economically and militarily. Having wound down its engagements in Afghanistan and Iraq, the US is now facing two crises: The Russia-Ukraine war for which they are supplying considerable military support, and the rising Chinese militarisation in the Pacific and the potential for a Chinese blockade or invasion of Taiwan. The US also continues to have military bases in the Middle East, North Africa, sub-Saharan Africa, South-East Asia, and South and Central America.

While China is not currently directly involved in any external conflicts, it has become more assertive in the South China Sea and has intensified aerial operations near Taiwan. After the Russian invasion of Ukraine, China has continued to maintain a close relationship with the Russian government and increasing their economic cooperation. The recent Chinese-brokered Iran-Saudi normalisation agreement also demonstrates China's growing diplomatic influence. Furthermore, China continues to support the Myanmar government, even though it disapproves of the military coup.

While Russia's invasion of Ukraine is central to its foreign policy, it has become increasingly active outside of its immediate neighbourhood, although the running down of its military assets caused by the Russian-Ukraine war may limit its future support to its allies. Russia influence has also been spread via the state-aligned private military contractor the Wagner Group, which is active in multiple states across sub-Saharan Africa, as well as in Ukraine. Russian influence in Africa grew after France withdrew from Mali and Burkina Faso and now plays a much-reduced role in its former colonies. Other European powers are largely focused on Ukraine, in particular the United Kingdom and Germany.

Many middle powers are becoming more engaged in conflicts in their region, a trend that is likely to continue over the next decade. Türkiye is as an example of a rising middle power that has sought to expand its influence within its immediate region, such as in conflicts in Syria and Nagorno-Karabakh, as well as in more distant locations like Somalia and Libya. Moreover, Türkiye has established itself as a 'drone superpower' by exporting drones to two dozen countries, including Ethiopia, Ukraine, and Mali.² Between 2002 and 2021, Türkiye's arms exports grew by 72.7 per cent.³ Its strategic location at the crossroads of Europe, the Middle East, the Caucasus, and Central Asia makes Türkiye an influential power in the region. Turkish foreign policy has become increasingly ambitious, working to broaden its influence and maintain working relations with major players like the US, China, and Russia.

THE PROLIFERATION OF DRONES

Unmanned Aerial Vehicles (UAVs) or drones are increasingly playing a significant role in conflicts across the globe, with both state and non-state actors using them in a variety of ways. Although drones were traditionally only employed by large countries in counterterrorism operations, they are increasingly being used in more conventional military operations, targeting both troops and infrastructure.

Drones played a key role in the conflicts in Nagorno-Karabakh and Ethiopia.⁴ In 2022 drones of both military and commercial grade have been critical to the conflicts in Ukraine and Myanmar, both as mechanisms to deploy munitions and for intelligence gathering. The usage and types of drones vary from high-end military drones to weaponised versions of commercially available small drones.

Figure 4.3 highlights the significant increase in the use of drones as weapons in conflict by both state and non-state actors. The number of states using drone strikes has increased by 50 per cent since 2018, while the number of non-state groups using drones increased by more than 100 per cent over the same period.⁵ Reports of drone usage are becoming increasingly prominent on conflict monitoring and crisis reports.⁶

FIGURE 4.3

Total number of armed groups using drone strikes, 2018 to 2022

The number of non-state groups using drones doubled from 2018 to 2022.⁷



Source: IEP

One reason for the increase in drone usage is that more states now manufacture drones and are willing to export these technologies. Whilst the United States has routinely protected their highly sophisticated drone technology, states including China, Iran, Israel, the UAE, and Türkiye have become mass producers of drones across technological and cost spectrums. Of 28 heavy weapons deals delivered by Türkiye in 2022, 12 included the export of armed UAVs, including shipments to Saudi Arabia, Kazakhstan, Mali, and Ukraine.⁸

FIGURE 4.4



The total number of drone strikes increased by 264 per cent between 2018 and 2022.

Total drone strikes and deaths from drone strikes, 2018–2022

Source: IEP

The effect of this proliferation can be seen in Figure 4.4, which shows both the total number of drone strikes, and the number of deaths from drone strikes from 2018 to 2022. The total number of drone strikes now outnumbers fatalities, with total strikes increasing by almost 200 per cent from 2020 to 2022.

In 2018, drone strikes were primarily carried out by large countries for targeted assassinations of individuals or groups during counterterrorism operations, leading to a lower number of total strikes but a high average fatality rate. However, in the past few years drones have increasingly been used by smaller states and non-state actors against a range of targets, including infrastructure. The increased use of smaller, low-cost drones, and the increasing variety in target type, has led to the increase in total strikes, without an accompanying increase in deaths.

The strategic importance of drone attacks can be seen in Azerbaijan's use of Israeli and Turkish drones to target Armenian soldiers and logistics, who largely lacked UAV capacity. The drones played a critical role in Azerbaijan winning their 2020 war over Nagorno-Karabakh.⁹ The conflict in Ethiopia also shows how drones, especially where they are only held by one actor in a conflict, can significantly alter conflict dynamics.

Despite the increase in the use of drones globally, they still account for a relatively small percentage of total attacks and conflict-related deaths, particularly in larger conflicts. In Ukraine, both Ukrainian and Russian forces have used drones effectively. One estimate suggests that small drones have been used in military actions at least 900 times by both Russia and Ukraine up until March 2023.¹⁰ However, their use as weapons is still much lower than for air strikes and conventional artillery. Drone strikes caused just 79 deaths compared to over 16,200 deaths from air strikes and other explosions in Ukraine in 2022.

Unmanned Aerial Vehicles (UAVs) or drones are increasingly playing a significant role in conflicts across the globe, with both state and non-state actors using them in a variety of ways.

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Conflict Hotspots

Last year saw a shift in the global distribution of violence, with casualties from major conflicts in the MENA and South Asia regions declining, while conflict in Eastern Europe, sub-Saharan Africa and Asia-Pacific intensified.

Figure 4.5 highlights the subnational areas with the most significant changes in conflict-related deaths between 2021 and 2022. Outside of Ukraine, there were significant increases in fatalities from both battles and violence against civilians in certain regions of Mali, Myanmar, and Ethiopia. There were significant decreases across most of Afghanistan, and in a few areas in Yemen.

UKRAINE

Over the past year, the Russia–Ukraine war has become one of the deadliest conflicts seen in Europe since the end of the Second World War. In 2022 there were at least 32,300 deaths from conflict-related violence in Ukraine, and possibly hundreds of thousands. Figure 4.6 summarises the range of the estimated deaths from 2021 to 2022. The 2023 GPI uses the lowest estimate, although it is likely that these figures will be revised upwards in the coming years. Leaked US intelligence documents suggest a total of 325,000 casualties, of which around 60,000 were fatalities.¹¹ The most recent estimate suggest that there were just over 82,000 fatalities.¹²

Violence in the war in Ukraine has taken three main forms:

- **Battle deaths**, which occur in direct confrontations between forces
- **Remote violence**, such as artillery, roadside bombs, and air strikes

• **Targeted civilian violence**, in which civilians outside of a battle are directly targeted by opposition troops.

Figure 4.7 displays the geographical spread of conflict-related deaths in Ukraine, with violence against civilians highlighted in orange, and battle deaths and remote violence highlighted in red.

FIGURE 4.6

Conflict-related deaths in Ukraine, low and high estimates

The lowest estimates suggest that at least 32,300 people were killed in 2022, with the highest estimates suggesting that as many as 130,000 people were killed.



FIGURE 4.5

Subnational areas with most significant change in conflict-related deaths, 2021 to 2022

Although conflict intensified in many regions, there was a significant fall in conflict-related deaths in Afghanistan.



Source: IEP

FIGURE 4.7

Location of conflict-related deaths in Ukraine by type of violence, 24 Feb 2022–Mar 2023

The vast majority of conflict-related deaths have been in the eastern and south-eastern regions of Ukraine.



Source: ACLED; IEP Calculations

Most of the fighting in the conflict has been concentrated in eastern Ukraine, along the contested line of control between Ukrainian and Russian forces. Fifty per cent of conflict-related deaths during 2022 occurred in the two regions of Luhansk and Donetsk, together known as the Donbas.

There have been ongoing battles in eastern Ukraine since the start of the Donbas war in 2014, which coincided with the Russian invasion and annexation of Crimea. At that time, separatist republics were declared in the southern part of Luhansk and the south-eastern part of Donetsk, and although casualties were heavy early on, the intensity of fighting declined over time and had been very low from the most recent ceasefire in July 2020 to the start of the Russian invasion.

The deadliest battles since Russia's full-scale invasion of Ukraine last year have been fought along the pre-existing Donbas war front.

At least 8,500 conflict-related deaths occurred in Luhansk, the site of major Russian offensives and Ukrainian counteroffensives as Russia struggled to gain and keep control of the entire region. There were also at least 7,700 deaths in Donetsk, which includes the strategically important port city of Mariupol. Significant battles were also fought in the regions of Kherson and Zaporizhia, which were attacked from Donetsk and from Crimea in the south, and in Kharkiv, located to the north of the Donbas. Most conflict-related deaths occurred in battles or explosions targeted at armed opposition. Less than four per cent of deaths were due to violence against civilians, with most of these deaths occurring in Kyiv. Although only four per cent of all conflictrelated deaths in 2022 occurred in Kyiv and surrounding towns, 50 per cent of targeted civilian deaths occurred in these areas.

Figure 4.8 displays conflict-related deaths over time for each week from the beginning of the invasion in February 2022 until March 2023. Although violence against civilians was more prevalent in the early stages of the war, there has been relatively little targeted violence against civilians between the Russian offensive pause in early July and March 2023. There were at least 620 civilian deaths in towns surrounding Kyiv between the start of the invasion and April 2022. In May, at least 200 civilians were killed by Russian forces in the strategic port city of Mariupol, in the Donetsk region. Only 92 confirmed targeted civilian casualties were recorded after the offensive pause. Note that this figure does not include civilians who may have been killed in battles or other attacks targeting troops.

FIGURE 4.8 Weekly total deaths in Ukraine by type of violence, 24 Feb 2022–Mar 2023

Attacks targeting civilians have declined since the beginning of the war.



Source: ACLED; IEP Calculations

The rate of conflict-related deaths has increased considerably since July 2022. At least 11,500 fatalities occurred between the start of the invasion and the pause in the offensive that occurred in July 2022, a rate of 720 deaths per week. As the number of attacks increased after the pause, the rate of deaths also increased. In just eleven weeks between September and early November, the death rate increased to just under 930 deaths a week.

More than 16,000 conflict-related deaths were recorded between the early November 2022 and the end of March 2023, as Russian offensives escalated throughout the Donbas and Zaporizhia.

At the time of writing there is no clear path to the end of hostilities. The longer the conflict drags on the more depleted the Russian military supplies will become, however if Western resolves fades and military support for the Ukraine wanes then Ukraine may find itself at a substantial military disadvantage.

MALI

Mali has become an increasingly prominent conflict zone over the past decade, as violence across the Sahel has increased, with more external actors becoming involved. Figure 4.9 shows the increase in violent incidents and conflict-related deaths in Mali from 2021 to 2022.

Mali has experienced varying intensities of civil war over the past decade. Since 2014 secessionist ethnic groups in the north of the country have aligned themselves with Islamist groups. This has intensified and deepened ethnic divisions between pastoralist and farming groups leading to increases in conflict. The current crisis is also fuelled by factors such as climate change, poor governance, terrorism, and conflict over natural resource extraction.

France, the former colonial power in Mali, had been working

with the Malian government to try and stop the violence since 2013. However, the failure of French and Malian forces to stem the security crisis was a significant factor that led to the military coup in 2021. Since the coup, violence in Mali has escalated considerably, as shown in Figure 4.9, with total conflict-related deaths increasing by 154 per cent.

Over the past year conflict between the government and jihadist forces has intensified, as well as infighting amongst jihadist groups, particularly between the al-Qaeda-affiliated Group for the Support of Islam and Muslims (JNIM) and the Islamic State Sahel Province (IS-Sahel). All actors appear to be taking more aggressive approaches to the conflict, which is driving an overall surge in violence.

FIGURE 4.9

Change in violent incidents and deaths, Mali, 2021 to 2022

There was a 154 per cent increase in conflict-related deaths in 2022.



Source: ACLED

The most significant change has been the increase in violence against civilians. In 2021, at least 158 civilians were killed by state or paramilitary forces, with this number increasing to 1,058 in 2022.¹³ Most of the targeted violence against civilians has been carried out by government forces, as shown in Figure 4.10. The Malian army were responsible for 845 civilian deaths in 2022, a significant increase from 20 civilian deaths in 2021, while IS and JNIM were responsible for 221 deaths, also a significant increase from the 75 deaths they caused in 2021.¹⁴

FIGURE 4.10

Actors perpetrating violence against civilians in Mali

The Malian Armed forces have perpetrated most of the violence against civilians in 2022.



Source: ACLED, TerrorismTracker

France began to withdraw from Mali in February 2022 after its relations with the military junta began to deteriorate. The French government was criticised for its failure to stop the jihadist insurgency, and by August 2022 it had fully withdrawn its troops into Niger. France has also been forced to withdraw its troops from other countries, with the governing authorities in Burkina Faso announcing in January 2023 that all French troops would have to leave the country. The decline of French influence in Mali has led to an increase in Russian involvement in the country. The Russian government, through their private military contractor the Wagner Group, deployed to Mali in December 2021 and now operates alongside Malian forces in counterterrorism operations.

Figure 4.11 highlights how Russia has significantly increased its *weapons imports* to Mali, despite a drop in overall Russian *weapons exports* over the same period.¹⁵ Mali now imports more heavy weapons from Russia than from all other countries combined.

There are signs that geopolitical rivalries between France and Russia could hamper efforts to address the terrorism crisis in the Sahel, with counterterrorism cooperation between neighbouring states now subject to divisions between those states supported by Russia and those supported by France.¹⁶ The Malian government has declared Russia its primary security partner and has provided political support for Russia's invasion of Ukraine.

Although the use of drones in the conflict has been limited, there are signs that drone usage might increase soon. French forces operated US-made drones in Mali until their withdrawal in August 2022. In response, The Malian government purchased two Turkish Bayraktar TB2 drones in 2022, becoming one of the few countries in sub-Saharan Africa to have access to armed drone technology.

MYANMAR

Although the conflict in Myanmar intensified in 2022, violent protest and riot-related deaths declined, with protests falling 67 per cent and deaths from protests falling 99 per cent. However, there was a concurrent increase in violent conflict, as the resistance to the new government became increasingly militarised and organised. The number of conflict-related incidents rose by 36 per cent in 2022, while conflict-related deaths increased 87 per cent, as shown in Figure 4.12

FIGURE 4.11

Mali heavy weapons imports, 2008–2022 (five year moving average)

Russia exports more heavy weapons to Mali than all other countries combined.



Source: SIPRI

Myanmar has faced numerous armed conflicts since gaining independence in 1948. Groups such as the Kachin, Karen, Shan, Chin, and Rakhine have long battled the Bamar-majority government, resulting in persistent cycles of violence over the decades. However, the current conflict differs from these historical conflicts, as the Sagaing region, which has a Bamar majority, has also become a place of violent resistance.

The military junta has become increasingly isolated on the diplomatic front. To maintain power and counter its international isolation, it sought to strengthen ties with Russia and China. Myanmar also supports Russia's position on the conflict in Ukraine. This alliance with Russia was a strategic move by the junta to secure critical military assistance and bolster its position against growing opposition within Myanmar and on the global stage.

Myanmar's heavy weapons imports over the last 15 years show the changing influence of various foreign governments in the country, as shown in Figure 4.13. China has been a critical partner to Myanmar since independence. Weapons imports from China rose sharply between 2010 and 2015, but have been steadily declining over the past seven years.

Heavy weapons imports from Russia had been steadily increasing since 2015, and have increased significantly since the coup.

The conflict in Myanmar has seen a proliferation of drone usage across both state and non-state actors. Unlike in some recent conflicts where the use of drones by one side decisively tipped the balance of conflict, both sides in the conflict in Myanmar have used drones to attack a wide variety of targets. The military junta have relied on Chinese-made military drones to complement their heavy use of airstrikes, whilst supporters of the militias have relied mostly on cheap commercial drones retrofitted for military use.

FIGURE 4.12 Change in conflict-related and protest-related incidents and deaths in Myanmar, 2021 to 2022

While conflict-related deaths increased 87 per cent from 2021 to 2022, protest deaths declines by over 99 per cent.



Source: ACLED

FIGURE 4.13

Myanmar Heavy Weapons Imports, 2008–2022 (Five year moving average)

Russia is now the largest exporter of heavy weapons to Myanmar, after a sharp fall in Chinese exports.



ETHIOPIA

The war between the governments of Ethiopia and Eritrea and the Tigrayan People's Liberation Front (TPLF) was one of the largest armed conflicts of the past five years. The war ended with a peace agreement in November 2022, which has not been broken as of May 2023. The final three months of the war saw major battles involving human wave tactics that resulted in 104,000 conflict deaths.¹⁷ This was the most violent conflict event in the history of the GPI and most violent year in a single state since the Rwandan genocide. Violence also surged in Oromia, leading to a shift in the conflict from the North to the South of the country after the peace agreement.

FIGURE 4.14

Conflict-related deaths in Ethiopia, 2019–2022

There were over 100,000 deaths from conflict in 2022.



Source: UCDP GED

Other estimates have put the number of conflict-related fatalities as high as 600,000, owing to a famine caused by the humanitarian blockade of Tigray. The Ethiopian government estimates that the total number of fatalities is between 80,000 and 100,000. The internet blackout imposed on Tigray and the ban on media visits to the region has meant information has been very difficult to obtain.

The conflict began in November 2020, as the TPLF faced a large-scale military offensive from Ethiopian and Eritrean forces, as well as militias from neighbouring Amhara and Afar regions. Initially, it seemed as though the TPLF had been defeated, but they managed to counterattack and regain control of Tigray and adjacent provinces. By early 2021, there were indications that the TPLF could potentially seize power in Ethiopia as their forces advanced towards the capital, Addis Ababa.

The conflict in Ethiopia is a good example of the ability of drone usage to shift the balance of power. During late 2021, mass use of Turkish drones by the Ethiopian government forces halted the TPLF's march on the capital. The Ethiopian army used a combination of its Turkish Bayraktar TB2 drones and the small Ethiopian air force to give the government a significant asymmetric air war advantage.¹⁸ As a result, the conflict in Ethiopia had a much higher percentage of remote violence deaths caused by drone strikes compared to other conflicts. Almost a third of all remote violence deaths in the country in 2022 were caused by drone strikes, as shown in Figure 4.15.

Drone strikes are also now increasingly being seen in the response to a separate insurgency in Oromia where violence against civilians and battles surged in 2022.¹⁹ The Oromo Liberation Front/Army has led a violent insurgency which is also affecting the stability of Ethiopia. There is a long history of protests and violence in Oromia, and conflict in the region was partially responsible for the fall of the previous government, prior to the start of the Tigray war.

FIGURE 4.15 Ethiopia deaths due to drone strikes and other remote violence, 2018–2022

Deaths from drone strikes make up more than half of the deaths from airstrikes in Ethiopia from 2020 to 2022.



FIGURE 4.16

Change in conflict-related incidents and deaths in Afghanistan, 2021 to 2022

Conflict-related deaths dropped by 91 per cent between 2021 and 2022.



AFGHANISTAN

The biggest improvement in conflict-related activity occurred in Afghanistan, where incidents fell by 70 per cent, and conflict-related deaths fell by 91 per cent between 2021 and 2022, as shown in Figure 4.16.

The level of conflict fell in 2020 following the announcement of the future US troop withdrawal, however violence surged in 2021 as the Taliban began its final offensive. Since the completion of the US troop withdrawal in August 2021, the number of monthly conflict-related deaths has dropped significantly. Figure 4.17 shows the scale of the fall in conflict-related deaths following the US troop withdrawal in August 2021. The number of weekly deaths from conflict had surged to be well over 2,000 in the three months preceding the troop withdrawal. However, since the withdrawal there has only been three occasions where more than 200 deaths were recorded in a single week, and more than 100 deaths in a single week has not been recorded since October 2022.

The withdrawal of US troops and the rise to power of the Taliban has complicated the geopolitical landscape in Afghanistan. No country has recognised the Taliban as the legitimate government of Afghanistan, although both Russia and China have accredited their diplomats. In November 2022, Russia signed a deal to supply oil, gas, and wheat to Afghanistan.²⁰

China, the only major power sharing a border with Afghanistan, primarily considers its relationship with Afghanistan from a security standpoint. Afghanistan, particularly under the Taliban, has long been a haven for Islamic extremist groups from Western China, which Beijing perceives as a security threat. Since the fall of Kabul, the East Turkestan Islamic Movement has enjoyed increased freedom. However, seemingly as a concession to Beijing, the Taliban moved Uyghur militants away from the Afghan-Chinese border and relocated them within Afghanistan. Large-scale economic investments, such as mining, oil, and gas concessions obtained by China over a decade ago are yet to be developed.²¹

The reluctance of great powers to become too involved in the "graveyard of empires" might explain the absence of significant geopolitical competition. There is also a wariness about supporting the Taliban regime, which has a history of providing a safe haven for terrorist groups.

FIGURE 4.17 Weekly conflict-related deaths in Afghanistan, Jan 2021 to Mar 2023

Following a spike in violence from April 2021, there was a sharp decline in conflict-related deaths after mid-August when the Taliban took control.



Source: UCDP-PRIO

The potential for future violence is still present, despite the large fall in conflict-related activity. There were several attacks by former security forces and by populations considered to be supporting groups like the National Resistance Front in 2022. There were also increased attacks against the Taliban and the minority Hazara ethnic group by Islamic State-Khorasan terrorists. Terrorist attacks were recorded in 26 of the 34 provinces in Afghanistan in 2022. Broader anti-Taliban resistance and Taliban infighting is also a possibility.²²

FIGURE 4.18

Change in conflict-related incidents and deaths in Yemen, 2021 to 2022

Conflict-related deaths dropped by 63 per cent between 2021 and 2022.



YEMEN

Conflict in Yemen improved considerably in 2022. The civil war in Yemen was described as the world's worst humanitarian crisis in 2019.²³ Conflict-related deaths dropped by 64 per cent in Yemen in 2022, and conflict-related incidents decreased by 12 per cent, as shown in Figure 4.18. The primary driver of the fall in activity and deaths was the April 2022 truce.

The biggest declines in battle deaths between 2021 and 2022 occurred in the regions of Al-Hudaydah and Marib, where fighting had continued and escalated during 2021. All other regions had already seen a substantial drop in battle deaths during 2021. The ceasefire seems to have largely held since the truce lapsed in October.

The external dynamics of the war suggest a greater possibility for a peace agreement. In March 2023, Saudi Arabia and Iran announced a deal to improve diplomatic relations between the two countries. This development holds significance for Yemen, as Saudi Arabia has been involved in the war since its intervention in 2015, while Iran has provided military assistance to the opposing Houthi rebels. Although the Houthis are not under Iran's direct control, the hope is that Iran's improved relations with Saudi Arabia will encourage them to move toward a peace deal.

Another crucial aspect of this agreement is China's role in brokering it. China maintains strong relationships with both Iran and Saudi Arabia. The deal represents a diplomatic victory for China and given its investment in the agreement's success, China is likely to put significant effort into ensuring its stability.

5 Positive Peace

Key Findings

- Positive Peace is defined as the *attitudes,* institutions and structures that create and sustain peaceful societies.
- These same factors also lead to many other positive outcomes that society feels are important, such as economic strength, resilience and wellbeing.
- The most peaceful countries in the world perform strongly on all eight Pillars of Positive Peace.
- High Positive Peace countries are more likely to maintain stability, adapt and recover from shocks.
- Of the countries with a substantial Positive Peace Deficit in 2009, almost 80 per cent deteriorated in their GPI scores in the subsequent decade. A Positive Peace deficit is where the actual peacefulness of a country is substantially higher than what its levels of Positive Peace would suggest.
- Positive Peace improved two per cent globally from 2009 to 2022.

- Positive Peace peaked in 2019 followed in 2020 by deteriorations due to the policy responses to the pandemic. Although Positive Peace improved in 2021 and 2022 it is not back to the 2019 levels.
- Improvements in the PPI are due to the *Structures* domain of Positive Peace, which showed substantial development since 2009, while the *Institutions* domain recorded only a small improvement in the period.
- In contrast, the Attitudes domain deteriorated by two per cent globally from 2009 to 2022. This domain deteriorated in 99 of the total 163 countries assessed, reflecting increased polarisation of views on political and economic administration matters, as well as a deterioration in the quality of information disseminated to the public.

What is Positive Peace?

Positive Peace is defined as the *attitudes, institutions and structures that create and sustain peaceful societies.* The same factors also lead to many other desirable socio-economic outcomes.

Higher levels of Positive Peace are statistically linked to greater income growth, better environmental outcomes, higher levels of wellbeing, superior developmental outcomes and stronger resilience. Positive Peace is a gauge for societal resilience, or the ability to shield citizens from shocks and to promote the recovery of the socio-economic system in their aftermath.

IEP has empirically derived the Positive Peace Index (PPI) through the analysis of almost 25,000 economic and social progress indicators to determine which ones have statistically significant relationships with peace as measured by the Global Peace Index (GPI).

FIGURE 5.1 What is Positive Peace?

Positive Peace is a complementary concept to negative peace.



THE PILLARS OF POSITIVE PEACE

Positive Peace is predicated on eight key factors, or Pillars, that describe the workings of the socio-economic system:

WELL-FUNCTIONING GOVERNMENT

A well-functioning government delivers high-quality public and civil services, engenders trust and participation, demonstrates political stability and upholds the rule of law.

SOUND BUSINESS ENVIRONMENT

The strength of economic conditions as well as the formal institutions that support the operation of the private sector. Business competitiveness and economic productivity are both associated with the most peaceful countries.

ACCEPTANCE OF THE RIGHTS OF OTHERS

Peaceful countries often have formal laws that guarantee basic human rights and freedoms, and the informal social and cultural norms that relate to behaviours of citizens.

GOOD RELATIONS WITH NEIGHBOURS

Peaceful relations with other countries are as important as good relations between groups within a country. Countries with positive external relations are more peaceful and tend to be more politically stable, have better functioning governments, are regionally integrated and have lower levels of organised internal conflict.

FREE FLOW OF INFORMATION

Free and independent media disseminates information in a way that leads to greater knowledge and helps individuals, businesses and civil society make better decisions. This leads to better outcomes and more rational responses in times of crisis.

HIGH LEVELS OF HUMAN CAPITAL

A skilled human capital base reflects the extent to which societies educate citizens and promote the development of knowledge, thereby improving economic productivity, care for the young, political participation and social capital.

LOW LEVELS OF CORRUPTION

In societies with high levels of corruption, resources are inefficiently allocated, often leading to a lack of funding for essential services and civil unrest. Low corruption can enhance confidence and trust in institutions.

EQUITABLE DISTRIBUTION OF RESOURCES

Peaceful countries tend to ensure equity in access to resources such as education, health, and to a lesser extent, equity in income distribution.

The Pillars of Positive Peace interact systemically to support society's *attitudes, institutions and structures* that underpin development and peacebuilding. High levels of Positive Peace occur where attitudes make violence less tolerated, institutions are resilient and more responsive to society's needs and structures create the environment for the nonviolent resolution of grievances.

The Pillars also offer a practical framework for the implementation of small-scale Positive Peace projects. In cooperation with its global partners, IEP has implemented and supported hundreds of projects in local communities around the world using the Pillars of Positive Peace as the framework for action.

FIGURE 5.2

The Pillars of Positive Peace

A visual representation of the factors comprising Positive Peace. All eight factors are highly interconnected and interact in varied and complex ways.



Global Trends in Positive Peace

The global score for the PPI has improved by two per cent since 2009, with 125 countries improving in Positive Peace, 37 countries deteriorating and one country score being little changed. The score is calculated by taking the average country score for the 163 countries included in the Positive Peace Index.

Figure 5.3 highlights the global trend in Positive Peace. Changes in Positive Peace generally occur slowly and may take many years for the benefits to show because institution building and changes in social norms are long-term processes. As such, global changes in the PPI Pillars happen relatively slowly, and even slight changes in global Positive Peace can be considered important.

Positive Peace has improved almost continuously from 2009 until 2019, largely on the back of greater technological and economic development. It then declined because of COVID-19 and the global recession created by the policy responses to the pandemic. Although Positive Peace has improved in 2021 and 2022 it is not back to the levels of 2019. Since 2009 progress in the three domains has varied markedly. Improvements in Positive Peace has mainly been driven by the *Structures* domain which improved by 7.5 per cent since 2009, while the *Attitudes* domain deteriorated by more than two per cent since 2009. The *Institutions* domain improved by around one per cent.

Access to information, GDP per capita and life expectancy have generally improved rapidly since 2009. All of these indicators are part of the *Structures* domain. Globally, institutional effectiveness has also improved over the past decade, albeit at a much slower pace than structural factors. However, the attitudinal indicators have been deteriorating over the period. The indicators showing the deepest deteriorations are *quality of information and factionalised elites*.

FIGURE 5.3 Cumulative improvement in Positive Peace from 2009

By 2022, the global average Positive Peace score had improved by more than two per cent since 2009.



FIGURE 5.4

Changes in the Attitudes, Institutions and Structures of Positive Peace, 2009–2022

The improvement in PPI since 2009 was largely driven by structural improvements globally. Institutional functioning has remained the same over the period while attitudes have deteriorated.



Source: IEP

CHANGES IN THE POSITIVE PEACE PILLARS

Figure 5.5 shows the percentage change from 2009 to 2022 for all eight Pillars of Positive Peace. These scores reflect gradual changes within complex social systems and typically do not fluctuate drastically year to year. As such, since 2009, the average Pillar score has changed by just 2.4 per cent, and except for *Free Flow of Information* no Pillar score has changed by more than five per cent. The slow-moving nature of Positive Peace calls for long-term planning and sustained investment to improve the Pillars. Six of the eight Pillars improved with *Low Levels of Corruption* and *Well-functioning Government* both deteriorating. The deterioration in *Well-functioning Government* was driven by one indicator, Government openness and transparency, with the Rule of Law and Government effectiveness both improving slightly. *Low Levels of Corruption* mainly deteriorated because of *factionalised elites* and *control of corruption* which deteriorated slightly, while *public theft* improved.

FIGURE 5.5

Changes in the Pillars of Positive Peace, 2009–2022

Seven of the eight Pillars have improved since 2009. *Low Levels of Corruption* deteriorated by around 1.8 per cent over the period.



Twelve out of the total 24 indicators used in the PPI recorded improvements from 2009 to 2022. However, the average improvement among indicators was larger than the average deterioration. This led to an overall improvement in Positive Peace over the period.

The indicators that showed the most substantial improvements were those related to the *Structures* domain, as shown in Figure 5.6. Some examples are *individuals using the Internet*, *inequality-adjusted life expectancy* and *healthy life expectancy*. On the other hand, the *quality of information, factionalised elites* and *freedom of the press* indicators recorded the most significant deteriorations.



Positive Peace has improved almost continuously from 2009 until 2019, largely on the back of greater technological and economic development.

FIGURE 5.6

Percentage change in PPI indicators, 2009-2022

Individuals using the Internet recorded the largest improvement while hostility to foreigners and quality of information recorded the largest deteriorations.



Source: IEP

Positive Peace and Systems Theory

This section gives a brief overview of IEP's approach to Positive Peace and systems theory. It serves as an introduction to the **HALO** approach to systems analysis. There are many approaches to systems analysis, all with varying strengths and weaknesses. One that is commonly used in conflict analysis and business is Structures, Attitudes and Transactions (SAT), others are more suited to the ecology, including the Social, Ecological Systems (SES) framework.

What sets IEP's approach apart from other systems analysis methods is the multimodal approach and modularity, along with a bias towards data and an analysis framework borne out IEP's decade long research work on Positive Peace and systems thinking. It is practical and based on real-world analysis. Since it is modular, it can be scaled according to the necessary level of sophistication, available data and knowledge of the participants. It is a framework specifically designed for assessing societal systems and can be used to analyse a nation, region or small community.

The approach has been designed as a set of building blocks. This allows for an adaptive approach, that can be uniquely tailored based on many dependencies, including the size of the societal system and also the sophistication required in the analysis. Workshops and programs can be as short as two days or as long as one year using this building block approach. Different building blocks can be utilised depending on the strengths of the design team, what may suit the project best and the length of time allocated for the analysis.

The results from implementing this systems design approach will allow for more informed policy decisions because before starting systemic interventions, a thorough understanding of the system is needed. This means that institutions can now be structured to match the needs of the system.

In most cases, governments, multilaterals and other institutions engaging in societal development initiatives do not address their initiatives systemically. This can create unforeseen consequences and lead to only partially successful outcomes since there is not a wider understanding of the dynamics of that society. If institutions themselves are not set up systemically, often it will result in inefficiencies, partial solutions, interorganisational disagreements and duplication to name some of the issues.

Systems also evolve slowly over time; therefore, systems analysis can be used successfully and meaningfully again at future points in time. Analysis can be iteratively updated and additional complexity added, creating a living analysis.

The Attributes of a System

A system can be understood from many different perspectives; however, the starting point is what you wish to achieve from the analysis. For example, if the aim was to improve family planning or the containment of terrorism, within the same social system, the knowledge needed and the approach taken would be very different even though many of the components and dynamics of the system may be the same.

The following section of the report provides a brief overview of the attributes of a system. These are the building blocks that need to be incorporated into any systemic analysis in order to get the best possible understanding of the system. These building blocks are the foundation of the HALO approach.

Define the Bounds of the System

Systems have boundaries. These boundaries can be described according to a geographic area or social grouping. For example, a system can be defined by a geographic area, such as a nation, state or a forest. These types of geographic boundaries are the easiest to define. It is more difficult if the system is an ethic group or a societal function. Social functions include the education system, military, policing or a local health system. It is best to approach these as simplistically as possible at first. Some questions that help are what are the sub-systems which lie within the system, what are the legal frameworks affecting the system. For example, the health system consists of hospitals, doctors, pharmacists, government health departments, psychologists, etc.

Often relations and flows can be confused as systems, for example a conflict is an exchange between two or more systemic groups. A conflict is not a social system, but a series of relationships and flows between systems.

What are the Sub-Systems Contained Within a System?

Systems do not exist in a vacuum, as they form parts of larger systems. For example, states are systems that form part of a larger national system. However, they are also comprised of systems, such education, policing, business associations and others. Identifying the core systems, or sub-systems, within a greater system provides the basis for understanding its dynamics.

What are the Other Major Systems it Interacts with?

Systems interact with other systems. This could be an adjacent country, or district. It could be another ethnic group or an area of governance. For instance, the military, the police, the judiciary and border control can all be seen as systems that interact with one another to achieve a certain objective. Another example could be a school which interacts with families, the education department and local leaders to improve literacy rates in a community.

What is the Intent of the System?

The intent of a system is its willing pursuit of desired outputs or states. For example, the intent of a school system is to provide pupils with the best possible education through the most efficient use of resources. If the system of analysis is a social group occupying a geographic area, its intent may be to control the area and stop outsiders from accessing it and maximise the use of that area. There can be multiple intents in the same system. Attempting to rank the intents is important to understand the priorities within the system. It is also critical to differentiate between actual intent and stated or idealised intent, as the two often differ substantially.

What Measurements Exist for the System?

Where accurate and consistent data is available, a system may be characterised by a set of statistical indicators that could constitute the foundation for a deeper analysis. However, it is often the case that statistical data for the specific system or sub-system is not produced and the analysis needs to be conducted indirectly through proxy data or via qualitative or subject matter expert assessments. IEP uses three different approaches when the data is insufficient which are described later in this section.

IEP has curated a set of approximately 400 indicators grouped by specific systemic areas based around Positive Peace to assess the level of societal resilience and development in a nation. These indicators can also be compared across similar or neighboring countries, states or communities to provide a deeper insight. They can be broken down further and can grouped under IEP's Positive Peace framework to better analyse the strengths and weaknesses of the overall system. Figure 5.7 shows that Zimbabwe recorded improvements in 13 of the 18 indicators of governance performance over the past decade. However, the country's performance remains inferior to that of its sub-Saharan African neighbors in many of these indicators, despite such improvements.

This type of statistical analysis can measure, directly or indirectly, the dynamics of sectoral components of the systems and the exchanges, or flows, between them.

To determine the importance of a system, consider the number of people within it, the number of people affected by the system, the amount of money revolving within it, the number of relationships or the extent of the laws or regulations prevailing in or governing the system.
What is the Direction or Momentum of the System?

Momentum is important as it helps explain the changing dynamics of the system or sub-system, including emergence, runaway feedback loops, decay and positive functions. The data can be assessed individually or grouped. By grouping the data, the momentum of the overall system or sub-system can be ascertained.

It is also beneficial to compare the measures to the systems neighbors. This gives insight into the relative strengths and weaknesses as the neighboring systems should be the systems most similar.

Momentum is an important concept for systems analysis because it facilitates the extrapolation or forecasting of future states the system may find itself in. If those states are undesirable - according to the intent of the system interventions should be designed to slow down and possibly invert the system's momentum in that area. Where the extrapolated future state is desirable, programs can be developed to reinforce a specific momentum and take advantage of it to nudge other sub-systems into higher states of development.

The example of Figure 5.7 shows an improvement in the momentum in the Zimbabwean governance system in regards to government effectiveness and government accountability over the past decade. If this momentum is preserved, Zimbabwe may reach levels of effectiveness in these indicators on par with its sub-Saharan African neighbors. However, the country has recorded a sharp deterioration in institutions' ability to provide food security for the population since 2009, with food insecurity now being more severe than among neighbors. This is a critical area that should be prioritised in any resilience building programme for the country.

What is the Path of the System and its **Dependencies?**

Systems are path dependent. This means that the way a system will develop in the future from a given state depends on the path taken to reach that state. Path dependency can be understood as the influence that a social system's history, memory and cultural values exert on the future development of that society. These influences are expressed in the encoded norms within the system.

FIGURE 5.7 Example of changes in governance indicators, Zimbabwe and sub-Saharan Africa, 2009-2020

Zimbabwe has improved on many governance indicators over the past decade. However, the country remains less developed than its sub-Saharan African neighbours in many areas.



Arrows show how indicators have changed from 2009 to 2020 in Zimbabwe. The begining of the arrow is Zimbabwe's position in 2009 and the end, the position in

Define the Homeostasis States

All systems seek a steady state, which is a state of minimal change in the system's components, stocks and flows. In the same way the human body seeks to maintain a core temperature, societal systems also seek stability. Comprehending the main processes – encoded norms – which maintain the steady state are at the crux of understanding how a system operates. However, systems do have a tendency to grow. The steady state can be one in which the system achieves growth, however it can also cause stagnation. This can vary by sub-system.

What are the Main Encoded Norms Within the System?

Isolating the main encoded norms within a system and the bounds within which they operate provides an understanding of the mechanisms that hold the system together. The encoded norms can sometimes be very subtle and difficult to quantify and therefore it is important to focus on the important ones. They can be expressed through laws and cultural norms, rules or regulations, either formal or informal.

What Type of Feedback Loops are Occurring?

There are two main types of feedback loops – reinforcing and balancing. Reinforcing feedback loops continue to amplify the effect of the input. A reinforcing feedback loop might include population growth or economic subsidies. When such feedback mechanisms are too strong, they become runaway feedback loops and may completely destabilise the system.

Balancing feedback loops are those in which the outputs mitigate the effect of the inputs. They keep the system in balance and support the steady state.

Has the System Passed any Tipping Points?

This is important in understanding the path trajectory of the system. Tipping points are thresholds beyond which the relationships between components of a system change abruptly. It is hard to predict the timing of them in the future, however, they can be seen in the past. They may have been positive, when they lead to higher levels of societal resilience, or they may have been negative. A tipping point refers to a permanent and irreversible change in the state of a system. Identifying past tipping points might give insight into the dynamics which created the current system. Identifying the exact timing when a system may go through a future tipping point is extremely difficult, therefore understanding the past system tipping points from its history is the best approach.

How Resilient and Adaptable is the System?

There are two methods for measuring resilience and adaptability. The first is an analysis of past shocks that the system has suffered and the speed with which the system recovered back to a steady state. The second is a data driven approach based around the Positive Peace framework which is an accurate measure of resilience. Societies with greater resilience will more easily absorb the effects of shocks and recover more quickly in its aftermath.

Efficiency and Redundancy

Efficiency means that a system produces a maximum output with the minimum number of components and with the lowest level of resources. Redundancy means a system has excess capacity, or not fully used components or resources. In most cases, efficiency and redundancy are antagonistic concepts.

Efficient systems produce the highest level of output with the minimum costs and use of resources. However, if a component or sub-system is stressed or fails, the lack of alternate paths or capacity means the system may become disabled. Building redundancies in a system reduces the expected losses from failures. However, this comes at a cost to efficiency. Systems with redundancies tend to be those with the highest levels of resilience, as they are capable of absorbing shocks. However, too much redundancy may mean the system is uncompetitive.

Redundancies can be constructed in two different ways. Redundancy of components means the system has unused, or only partially used, components. For example, a factory may operate with two computers instead of one – if one breaks down the other takes over, thereby creating a failsafe environment. Another example is an over-capacity in the health system to deal with any spikes in hospitalisation rates.

Redundancy of relationships takes place when two or more components are linked by a larger number of connections than strictly necessary. An example is when two cities are interconnected through various highways instead of just one.

Follow the Money

Money flows within a system often give an idea of the size of sub-systems or the importance of encoded norms. If the amount of money is growing over time, the system may be in a virtuous cycle of development. Conversely, rising monetary power may also be an indication of an imbalance. An example would be if industry or special interest groups are subsidised by the tax payer, which enhances their ability to garner political influence with which to secure additional government money and concessions.

Function, Purpose and Potential

All components of a system can be seen through these three lenses – function, purpose and potential. All purposes in systems have functions and functions also have potential.

The function of a system or sub-system is the set of activities through which output is produced. The purpose of the system can be seen as similar to intent, however, intent is best applied to the overall system, while purpose is better applied to sub-systems. A sub-system can have multiple purposes but the best analytical approach is to focus on the most important purpose or purposes.

Potential describes what the function could be with more resources or the purpose was modified.

For example, a department that collects data on crime for the government has the function of collecting, compiling and divulging crime data. Its purpose is to inform policing policy and the allocation of the security budget. Its potential may lie in collecting additional data, operating with an increased budget to promote its findings or to communicate directly with the population to improve crime awareness.

Causality in Systems

Causality is about being able to understand the influences that lead the system to behave in certain ways. However, in systems cause and effect can become entwined. Think of a mutual feedback loop.

Different parts, events or trends can mutually influence one another, such that the differentiation between cause and effect loses usefulness. This way of thinking avoids the pitfalls and failures of the traditional cause/effect approach whereby an intervention is targeted at the presumed cause of a problem or vulnerability. Understanding mutual causality leads to a deeper perspective on agency, feedback loops, connections and relationships, which are all fundamental parts of systems mapping.

Non-Linearity of Effects

The effect of one part of a system on another is not always linear. Relationships may change depending on the state of development of the system. For example, for low peace countries, improvements in peace lead to small increases in worker productivity. However, as countries progress in peace, further reductions in violence lead to ever higher increases in worker productivity. This non-linear relationship has been discussed in IEP's Business and Peace Report 2021.¹

Emergent Properties

A system evolves through time and its current properties may not fully describe future dynamics. Finding new emerging properties is important to understand where the system is heading. The speed with which something is accelerating is good way of identifying emergence. This can be the increase in money, the number of people employed or the rate of development of new technologies.

Stocks, Flows and Transformations

A stock is a metric that defines the state of a component, a sub-system or a system. Examples of stocks could be the number of people in a country, the balance in a bank account, the amount of grain in storage or the number of persons incarcerated. Flows are movements between stocks. Examples could be money transfers, the movement of a prisoner to the workforce or immigrants entering the system. These concepts are important in understanding the dynamics of systems.

Stocks and flows are homogeneous. That means what is stocked or what is flowing remains the same across time. For instance, money can be stored in a safe or be transacted between persons, without losing or changing its attributes.

However, a transformation changes the nature of the object, service or resource within the system over a given period of time. For example, both materials and electricity flowing into a factory to produce a machine. Another example is people and knowledge in a research institute create new forms of knowledge, while a stock of food may rot and become unusable even if there has been no outflow from the storage.

Is the System Stuck in an Attractor Basin?

An attractor basin is a context or state from which the system finds it difficult to escape. Within the peace and conflict arena, the analysis of actual peace, as measured through the GPI, and Positive Peace has identified two attractor plains, as discussed in Section 2 of this report. One is called Sustainable Peace and is the state where countries have high rankings in both the GPI and the PPI. None of the countries in the Sustainable Peace area of the GPI x PPI phase plane have had a substantial fall in their levels of peace in the 15 years of the GPI. These countries tend to remain peaceful without falling in states of violence as a consequence of shocks. The other attractor plain is the Conflict Trap, defined as low rankings in both the GPI and the PPI. Countries in this plain find it difficult to improve their societal resilience because of the losses incurred by high levels of violence. Conversely, without resilience they cannot achieve higher states of peacefulness. Nations in the Conflict Trap region find it difficult to exit this region without external assistance.

Archetypes

Archetypes are common reinforcing themes or patterns of interactions that are seen in many systems. The number of archetypes varies depending on who is defining them, but generally there are seven to ten. Examples are 'limits to growth', 'seeking the wrong goals' and 'exponential success'. The value in identifying the archetypes in a system is that it short-cuts the analysis and helps in identifying solutions which are applicable for the specific archetype. A number of specific architypes is defied in the following section on performing a societal systems analysis.

Static and Dynamic modelling

Static modelling analyses the system at a given point in time, while dynamic modelling uses many iterations of data over a period of time. Static models are useful where there isn't sufficient time series data for analysis. It is also useful to provide a snapshot early in the analysis that is simpler and easier to understand before building up the dynamics.

Analysis Through Positive Peace

Positive Peace has been derived empirically to provide a holistic expression of a system and as such it can be used in this process as a check on extent to which the system has been analysed systemically. Once as model has been derived, each of items can be classified as belonging to a Pillar of Positive Peace. If the analysis is weak in a particular Pillar or Pillars, then there may be a flaw in the analysis.

Positive Peace can also be used as a method of analysis to better understand the various subsystems, stocks, flows and emergent qualities of the system.



APPENDIX A

GPI Methodology

Peace is notoriously difficult to define. The simplest way of approaching it is in terms of the harmony achieved by the absence of violence or the fear of violence, which has been described as Negative Peace. Negative Peace is a complement to Positive Peace which is defined as the attitudes, institutions and structures that create and sustain peaceful societies.

The GPI was founded by Steve Killelea, an Australian technology entrepreneur and philanthropist. It is produced by the Institute for Economics and Peace, a global think tank dedicated to developing metrics to analyse peace and to quantify its economic benefits.

The GPI measures a country's level of Negative Peace using three domains of peacefulness. The first domain, *Ongoing Domestic and International Conflict*, uses six statistical indicators to investigate the extent to which countries are involved in internal and external conflicts, as well as their role and duration of involvement in conflicts.

The second domain evaluates the level of harmony or discord within a nation; eleven indicators broadly assess what might be described as *Societal Safety and Security*. The assertion is that low crime rates, minimal terrorist activity and violent demonstrations, harmonious relations with neighbouring countries, a stable political scene and a small proportion of the population being internally displaced or made refugees can be equated with peacefulness.

Six further indicators are related to a country's *Militarisation* —reflecting the link between a country's level of military build-up and access to weapons and its level of peacefulness, both domestically and internationally. Comparable data on military expenditure as a percentage of GDP and the number of armed service officers per head are gauged, as are financial contributions to UN peacekeeping missions.

The expert panel

An international panel of independent experts played a key role in establishing the GPI in 2007—in selecting the indicators that best assess a nation's level of peace and in assigning their weightings. The panel has overseen each edition of the GPI; this year, it included:

Professor Kevin P. Clements, chairperson

Foundation Chair of Peace and Conflict Studies and Director, National Centre for Peace and Conflict Studies, University of Otago, New Zealand

Dr Sabina Alkire

Director, Oxford Poverty & Human Development Initiative (OPHI), University of Oxford, United Kingdom

Dr Ian Anthony

Research Coordinator and Director of the Programme on Arms Control, Disarmament and Non-proliferation, Stockholm International Peace Research Institute (SIPRI), Sweden

Dr Manuela Mesa

Director, Centre for Education and Peace Research (CEIPAZ) and President, Spanish Association for Peace Research (AIPAZ), Madrid, Spain

Dr Ekaterina Stepanova

Head, Unit on Peace and Conflict Studies, Institute of the World Economy and International Relations (IMEMO), Russian Academy of Sciences, Russia

The Indicators

The GPI comprises 23 indicators of the absence of violence or fear of violence. The indicators were originally selected with the assistance of the expert panel in 2007 and have been reviewed by the expert panel on an annual basis. All scores for each indicator are normalised on a scale of 1-5, whereby qualitative indicators are banded into five groupings and quantitative ones are scored from 1 to 5, to the third decimal point.

ONGOING DOMESTIC & INTERNATIONAL CONFLICT



 Number and duration of internal conflicts

Uppsala Conflict Data Program (UCDP) Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset; Institute for Economics & Peace (IEP)

- Number of deaths from external organised conflict
 UCDP Georeferenced Event Dataset
- Number of deaths from internal organised conflict
 UCDP Georeferenced Event Dataset
- Number, duration and role in external conflicts
 UCDP Battle-Related Deaths Dataset; IEP
- Intensity of organised internal conflict
 Qualitative assessment by EIU analysts

 Relations with neighbouring countries
Qualitative assessment by EIU analysts SOCIETAL SAFETY & SECURITY

Level of perceived criminality in society

Gallup World Poll, IEP estimates

Number of refugees and internally displaced people as a percentage of the population

Office of the High Commissioner for Refugees (UNHCR) Mid-Year Trends; Internal Displacement Monitoring Centre (IDMC)

Political instability
Qualitative assessment by EIU analysts

▶ Political Terror Scale Gibney, Mark, Linda Cornett, Reed Wood, Peter Haschke, Daniel Arnon, and Attilio Pisanò. 2021. The Political Terror Scale 1976-2019. Date Retrieved, from the Political Terror Scale website: http://www.politicalterrorscale.org.

▶ Impact of terrorism IEP Global Terrorism Index (GTI)

- Number of homicides per 100,000 people United Nations Office on Drugs and Crime (UNODC) Surveys on Crime Trends and the Operations of Criminal Justice Systems (CTS); EIU estimates
- Level of violent crime Qualitative assessment by EIU analysts
- ▶ Violent demonstrations Armed Conflict Location and Event Data Project (ACLED); IEP
- Number of jailed population per 100,000 people World Prison Brief, Institute for Criminal Policy Research at Birkbeck, University of London
- Number of internal security officers and police per 100,000 people UNODC CTS
- Ease of access to small arms and light weapons
 Qualitative assessment by EIU analysts



- Military expenditure as a percentage of GDP The Military Balance, IISS, EIU Estimates
- Number of armed services personnel per 100,000 people The Military Balance, IISS
- Volume of transfers of major conventional weapons as recipient (imports) per 100,000 people Stockholm International Peace Research Institute (SIPRI) Arms Transfers Database
- Volume of transfers of major conventional weapons as supplier (exports) per 100,000 people SIPRI Arms Transfers Database
- Financial contribution to UN peacekeeping missions United Nations Committee on Contributions; IEP
- Nuclear and heavy weapons capabilities
 Military Balance+, IISS; IEP

Methodological Notes

WEIGHTING THE INDEX

When the GPI was launched in 2007 the advisory panel of independent experts apportioned scores based on the relative importance of each of the indicators on a scale of 1-5. Two subcomponent weighted indices were then calculated from the GPI group of indicators:

- 1. A measure of how internally peaceful a country is;
- A measure of how externally peaceful a country is (its state of peace beyond its borders).

The overall composite score and index was then formulated by applying a weight of 60 per cent to the measure of internal peace and 40 per cent to external peace. The heavier weight applied to internal peace was agreed upon by the advisory panel, following robust debate. The decision was based on the notion that a greater level of internal peace is likely to lead to, or at least correlate with, lower external conflict. The weights have been reviewed by the advisory panel prior to the compilation of each edition of the GPI.

MEASURING THE ROBUSTNESS OF THE INDEX

▶ Robustness is an important concept in composite index analysis. It is a measure of how often rank comparisons from a composite index are still true if the index is calculated using different weightings. For example, if the GPI is recalculated using a large number of different weighting schemes and Country A ranks higher than Country B in 60 per cent of these recalculations, the statement "Country A is more peaceful than Country B" is considered to be 60 per cent robust.

- ▶ IEP finds that the Global Peace Index (GPI) is at the same level of absolute robustness as the Human Development Index (HDI), a leading measure of development since it was first constructed by the United Nations Development Programme in 1990.
- ▶ Technically, the robustness of the GPI is measured by the fact that 70 per cent of pairwise country comparisons are independent of the weighting scheme chosen. In other words, regardless of the weights attributed to each component of the index, 70 per cent of the time the pairwise comparisons between countries are the same.

The GPI is a composite index of 23 indicators weighted and combined into one overall score. The weighting scheme within any composite index represents the relative importance of each indicator to the overall aim of the measure, in the GPI's case, global peace. To fully understand the representative nature or accuracy of any measure it is necessary to understand how sensitive the results of the index are to the specific weighting scheme used. If the analysis holds true for a large subset of all possible weighting schemes then

TABLE A.1

Indicator weights in the GPI

Internal Peace 60% / External Peace 40%

INTERNAL PEACE (Weight 1 to 5)	
Perceptions of criminality	3
Security officers and police rate	3
Homicide rate	4
Incarceration rate	3
Access to small arms	3
Intensity of internal conflict	5
Violent demonstrations	3
Violent crime	4
Political instability	4
Political terror	4
Weapons imports	2
Terrorism impact	2
Deaths from internal conflict	5
Internal conflicts fought	2.56

EXTERNAL PEACE (Weight 1 to 5)	
Military expenditure (% GDP)	2
Armed services personnel rate	2
UN peacekeeping funding	2
Nuclear and heavy weapons capabilities	3
Weapons exports	3
Refugees and IDPs	4
Neighbouring countries relations	5
External conflicts fought	2.28
Deaths from external conflict	5

the results can be called robust. While it is expected that ranks will be sensitive to changes in the weights of any composite index, what is more important in a practical sense is the robustness of country comparisons. One of the core aims of the GPI is to allow for Country A to be compared to Country B. This raises the question that for any two countries, how often is the first ranked more peaceful than the second across the spectrum of weights. The more times that the first country is ranked more peaceful than the second, the more confidence can be invested in the statement "Country A is more peaceful than Country B".

To avoid the computational issue of evaluating every possible combination of 23 indicators, the robustness of pairwise country comparisons has been estimated using the three GPI domains militarisation, societal safety and security and ongoing conflict. Implementing an accepted methodology for robustness, the GPI is calculated for every weighting combination of three weights from 0 to 1 at 0.01 intervals. For computational expedience only weighting schemes that sum to one are selected, resulting in over 5100 recalculated GPI's. Applying this, it is found that around 70 per cent of all pairwise country comparisons in the GPI are independent of the weighting scheme, i.e. 100 per cent robust. This is a similar level of absolute robustness as the Human Development Index.

QUALITATIVE SCORING: THE ECONOMIST INTELLIGENCE UNIT APPROACH

The EIU's Country Analysis team plays an important role in producing the GPI by scoring five qualitative indicators and filling in data gaps on quantitative indicators when official data is missing. The EIU employs more than 100 full-time country experts and economists, supported by 650 in-country contributors. Analysts generally focus on two or three countries and, in conjunction with local contributors, develop a deep knowledge of a nation's political scene, the performance of its economy and the society in general. Scoring follows a strict process to ensure reliability, consistency and comparability:

- 1. Individual country analysts score qualitative indicators based on a scoring methodology and using a digital platform;
- Regional directors use the digital platform to check scores across the region; through the platform they can see how individual countries fare against each other and evaluate qualitative assessments behind proposed score revisions;
- Indicator scores are checked by the EIU's Custom Research team (which has responsibility for the GPI) to ensure global comparability;
- If an indicator score is found to be questionable, the Custom Research team, and the appropriate regional director and country analyst discuss and make a judgment on the score:
- 5. Scores are assessed by the external advisory panel before finalising the GPI;
- If the expert panel finds an indicator score to be questionable, the Custom Research team, and the appropriate regional director and country analyst discuss and make a final judgment on the score, which is then discussed in turn with the advisory panel.

Because of the large scope of the GPI, occasionally data for quantitative indicators do not extend to all nations. In this case, country analysts are asked to suggest an alternative data source or provide an estimate to fill any gap. This score is checked by Regional Directors to ensure reliability and consistency within the region, and by the Custom Research team to ensure global comparability. Again, indicators are assessed by the external advisory panel before finalisation.

APPENDIX B

GPI Indicator Sources, Definitions & Scoring Criteria

The information below details the sources, definitions, and scoring criteria of the 23 indicators that form the Global Peace Index. All scores for each indicator are banded or normalised on a scale of 1-5, whereby qualitative indicators are banded into five groupings and quantitative ones scored continuously from 1 to 5 at the third decimal place. The Economist Intelligence Unit has provided imputed estimates in the rare event there are gaps in the quantitative data.

INTERNAL PEACE INDICATORS

Level of Perceived Criminality in Society

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	Gallup World Poll
Measurement period	2022

Definition: This indicator uses a question from the Gallup World Poll as the basis for perceptions of criminality. The exact wording of the question is: "Do you feel safe walking alone at night in the city or area where you live?" IEP calculates the indicator score based on the percentage of people who answer 'no' to this question.

Where data is not available, IEP uses multivariate imputation by chained equations to create country-level estimates.

Scoring Bands:

1/5	2/5	3/5	4/5	5/5
0–19.9%	20-39.9%	40-59.9%	60-79.9%	> 80%

Number of Internal Security Officers and Police per 100,000 People

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	UNODC Survey of Crime Trends and Operations of Criminal Justice Systems
Measurement period	2018

Alternative Source: EIU. Where data is not provided, the EIU's analysts have filled them based on likely scores from the set bands of the actual data.

Definition: This indicator is sourced from the UNODC Survey of Crime Trends and Operations of Criminal Justice Systems and refers to the civil police force. Police refers to personnel in public agencies whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders. It is distinct from national guards or local militia.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0–199.8	199.9–399.8	399.9-599.8	599.9–799.8	> 799.9

Number of Homicides per 100,000 People

Indicator type	Quantitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	UNODC Survey of Crime Trends and Operations of Criminal Justice Systems
Measurement period	2021

Alternative Source: EIU. Where data is not provided, the EIU's analysts have filled them based on likely scores from the set bands of the actual data.

Definition: This indicator comes from the UNODC Survey of Crime Trends and Operations of Criminal Justice Systems. Intentional homicide refers to death deliberately inflicted on a person by another person, including infanticide. The figures refer to the total number of penal code offences or their equivalent, but exclude minor road traffic and other petty offences, brought to the attention of the police or other law enforcement agencies and recorded by one of those agencies.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0–1.99	2-5.99	6-9.99	10–19.99	> 20

Number of Jailed Population per 100,000 People

Quantitative
3
3.8%
Institute for Criminal Policy Research at Birkbeck, University of London, World Prison Brief
2022

Definition: Figures are from the Institute for Criminal Policy Research and are compiled from a variety of sources. In almost all cases the original source is the national prison administration of the country concerned, or else the Ministry responsible for the prison administration. Prison population rates per 100,000 people are based on estimates of the national population. In order to compare prison population rates, and to estimate the number of persons held in prison in the countries for which information is not available, median rates have been used by the Institute for Criminal Policy Research to minimise the effect of countries with rates that are untypically high or low. Indeed, comparability can be compromised by different practice in different countries, for example with regard to pre-trial detainees and juveniles, but also psychiatrically ill offenders and offenders being detained for treatment for alcoholism and drug addiction.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-126.405	126.406- 252.811	252.812- 379.217	379.218-505.624	>505.625

Additional Notes: The data provided by the Institute for Criminal Policy Research are not annual averages but indicate the number of jailed population per 100,000 inhabitants in a particular month during the year. The year and month may differ from country to country.

Ease of Access to Small Arms and Light Weapons

Indicator type	Qualitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	EIU
Measurement period	March 2022 to
	March 2023

Definition: Assessment of the accessibility of small arms and light weapons (SALW), ranked from 1-5 (very limited access to very easy access) by the EIU's Country Analysis team. Country analysts are asked to assess this indicator on an annual basis, for the period from March to March.

Scoring Criteria:

- **1** = **Very limited access:** The country has developed policy instruments and best practices, such as firearm licences, strengthening of export controls, codes of conduct, firearms or ammunition marking.
- 2 = **Limited access:** The regulation implies that it is difficult, time-consuming and costly to obtain firearms; domestic firearms regulation also reduces the ease with which legal arms are diverted to illicit markets.
- 3 = Moderate access: There are regulations and commitment to ensure controls on civilian possession of firearms, although inadequate controls are not sufficient to stem the flow of illegal weapons.
- **4** = **Easy access:** There are basic regulations, but they are not effectively enforced; obtaining firearms is straightforward.
- 5 = Very easy access: There is no regulation of civilian possession, ownership, storage, carriage and use of firearms.

Intensity of Organised Internal Conflict

Indicator type	Qualitative
Indicator weight	5
Indicator weight (% of total index)	6.3%
Data source	EIU
Measurement period	March 2022 to
	March 2023

Definition: Assessment of the intensity of conflicts within the country, ranked from 1-5 (no conflict to severe crisis) by the EIU's Country Analysis team. Country analysts are asked to assess this indicator on an annual basis, for the period March to March.

Scoring Criteria:

- 1 = No conflict.
- **2** = **Latent conflict:** Positional differences over definable values of national importance.
- **3** = **Manifest conflict:** Explicit threats of violence; imposition of economic sanctions by other countries.
- **4** = **Crisis:** A tense situation across most of the country; at least one group uses violent force in sporadic incidents.
- **5** = **Severe crisis:** Civil war; violent force is used with a certain continuity in an organised and systematic way throughout the country.

Violent Demonstrations

Indicator type	Qualitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	ACLED
Measurement period	March 2022 to March 2023

Definition: The indicator reflects the number and severity of violent demonstrations in a country for a give year. Scores vary from 1 to 5, with values close to 1 representing infrequent violent demonstrations and scores close to 5 representing frequent demonstrations with high numbers of fatalities. The data includes four types of events as classified by ACLED: "Protest with intervention" (weighted at 1), "Excessive force against protesters" (weight 2), "Violent demonstration" (weight 3), and "Mob violence" (weight 4). Note that this set of event types means that the indicator includes violent protests, riots etc, but also protests that were originally peaceful but were repressed violently by security forces. For each type of event the number of incidents and the number of fatalities are calculated. Fatalities are weighted more heavily than the number of incidents, as a gauge of incident severity. Where ACLED data are not available a transformation was used to adapt raw data from the Cross National Time Series (CNTS) data for imputation.

Score interpretation guidance

1/5	Very rare incidents of violent demonstrations, protests are almost all peaceful.
2/5	A few violent protests, mostly without fatalities.
3/5	A few violent protests or protests repressed violently by security forces. Some fatalities.
4/5	Frequent protests with violence, with a material number of fatalities.
5/5	Large number of protests with large number of fatalities. Number of incidents and fatalities are large by international and historical standards.

Level of Violent Crime

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	EIU
Measurement period	March 2022 to March 2023

Definition: Assessment of the likelihood of violent crime ranked from 1 to 5 (very low to very high) by the EIU's Country Analysis team based on the question, "Is violent crime likely to pose a significant problem for government and/or business over the next two years?" Country analysts assess this question on a quarterly basis.

Scoring Criteria

"Is violent crime likely to pose a significant problem for government and/or business over the next two years?"

1/5	Strongly no
2/5	No
3/5	Somewhat of a problem
4/5	Yes
5/5	Strongly yes

Political Instability

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	EIU
Measurement period	March 2022 to March 2023

Definition: Assessment of political instability ranked from 0 to 100 (very low to very high instability) by the EIU's Country Analysis team, based on five questions. This indicator aggregates five other questions on social unrest, orderly transfers, opposition stance, excessive executive authority and an international tension sub-index. Country analysts assess this question on a quarterly basis.

Specific Questions:

- What is the risk of significant social unrest during the next two years?
- How clear, established and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?
- How likely is it that an opposition party or group will come to power and cause a significant deterioration in business operating conditions?
- Is excessive power concentrated or likely to be concentrated in the executive so that executive authority lacks accountability and possesses excessive discretion?
- Is there a risk that international disputes/tensions will negatively affect the economy and/or polity?

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-20.4	20.5-40.4	40.5-60.4	60.5-80.4	80.5–100

Political Terror Scale

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	Gibney, Mark, Linda Cornett, Reed Wood, Peter Haschke, Daniel Arnon, and Attilio Pisanò. 2018. The Political Terror Scale 1976-2018. Date Retrieved, from the Political Terror Scale website: http://www. politicalterrorscale.org.
Measurement period	2021

Definition: The Political Terror Scale (PTS) measures levels of political violence and terror that a country experiences in a given year based on a 5-level "terror scale" originally developed by Freedom House. The data used in compiling this index comes from two different sources: the yearly country reports of Amnesty International and the US Department of State's Country Reports on Human Rights Practices. The average of the two scores is taken.

Scoring Criteria

- 1 = Countries under a secure rule of law, people are not imprisoned for their view, and torture is rare or exceptional. Political murders are extremely rare.
- 2 = There is a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beatings are exceptional. Political murder is rare.
- **3** = There is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without a trial, for political views is accepted.
- 4 = Civil and political rights violations have expanded to large numbers of the population. Murders, disappearances, and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas.
- 5 = Terror has expanded to the whole population. The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals.

Volume of Transfers of Major Conventional Weapons, as recipient (imports) per 100,000 people

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.5%
Data source	SIPRI Arms Transfers Database
Measurement period	2022

Definition: Measures the total volume of major conventional weapons imported by a country between 2017 and 2021, divided by the average population in this time period at the 100,000 people level (population data supplied by the EIU). The SIPRI Arms Transfers Database covers all international sales and gifts of major conventional weapons and the technology necessary for their production. The transfer equipment or technology is from one country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, the Trend Indicator Value (TIV) that measures military capability. The indicator raw value is measured as TIV per 100,000 population.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-7.233	7.234- 14.468	14.469- 21.702	21.703- 28.936	>28.937

Impact of Terrorism

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.5%
Data source	IEP Global Terrorism Index (GTI)
Measurement period	March 2018 to March 2023

Definition: Terrorist incidents are defined as "intentional acts of violence or threat of violence by a non-state actor." This means an incident has to meet three criteria in order for it to be counted as a terrorist act:

- A The incident must be intentional the result of a conscious calculation on the part of a perpetrator.
- **B** The incident must entail some level of violence or threat of violence, including property violence as well as violence against people.
- **C** The perpetrators of the incidents must be sub-national actors. This database does not include acts of state terrorism.

For all incidents listed, at least two of the following three criteria must be present:

- **1.** The act must be aimed at attaining a political, economic, religious or social goal.
- **2.** There must be evidence of an intention to coerce, intimidate or convey some other message to a larger audience (or audiences) than the immediate victims.
- **3.** The action must be outside the context of legitimate warfare activities.

Methodology: Using the comprehensive, event-based Terrorism Tracker, the GTI combines four variables to develop a composite score: the number of terrorist incidents in a given year, the total number of fatalities in a given year, the total number of injuries caused in a given year and the approximate level of property damage in a given year. The composite score captures the direct effects of terrorist-related violence, in terms of its physical effect, but also attempts to reflect the residual effects of terrorism in terms of emotional wounds and fear by attributing a weighted average to the damage inflicted in previous years. To assess the impact of terrorism between this date and March 2022 cutoff, IEP uses data from publicly available third party sources to estimate terrorist activity in that period.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-13.479	13.48- 181.699	181.7- 2,449.309	2,449.31- 33,015.949	>33,015.95

Number Of Deaths From Organised Internal Conflict

Indicator type	Quantitative
Indicator weight	5
Indicator weight (% of total index)	6.3%

Data source	UCDP Georeferenced
	Event Dataset
Measurement period	2021-2022

Definition: This indicator uses the UCDP's definition of conflict. UCDP defines conflict as: "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, results in at least 25 battle-related deaths in a year."

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-23 deaths	24–998	999-4,998	4,999-9,998	> 9,999
	deaths	deaths	deaths	deaths

Internal Conflicts Fought

Indicator type	Quantitative
Indicator weight	2.56
Indicator weight (% of total index)	3.2%
Data sources	IEP; UCDP Battle- Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset
Measurement period	2021

Definition: This indicator measures the number and duration of conflicts that occur within a specific country's legal boundaries. Information for this indicator is sourced from three datasets from Uppsala Conflict Data Program (UCDP): the Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset. The score for a country is determined by adding the scores for all individual conflicts which have occurred within that country's legal boundaries over the last five years.

Each individual conflict score is based on the following factors:

Number:

- The number of interstate armed conflicts, internal armed conflict (civil conflicts), internationalised internal armed conflicts, one-sided conflict and non-state conflict located within a country's legal boundaries.
- If a conflict is a war (1,000+ battle-related deaths) it receives a score of one; if it is an armed conflict (25-999 battle-related deaths) it receives a score of 0.25.

Duration:

 A score is assigned based on the number of years out of the last five that conflict has occurred. For example, if a conflict last occurred five years ago that conflict will receive a score of one out of five.

The cumulative conflict scores are then added and banded to establish a country's score. This indicator is two years lagging due to when the UCDP data is released.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
No internal conflict	Combined conflict score of up to 4.75	Combined conflict score of up to 9.5	Combined conflict score of up to 14.25	A combined conflict score of 19 or above. This shows very high levels of internal conflict.

EXTERNAL PEACE INDICATORS

Military Expenditure as a Percentage of GDP

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	International Institute for Strategic Studies, Military Balance+
Measurement period	2022

Alternative Source: When no data was provided, several alternative sources were used: National Public Expenditure Accounts, SIPRI information and the Military Balance.

Definition: Cash outlays of central or federal government to meet the costs of national armed forces—including strategic, land, naval, air, command, administration and support forces as well as paramilitary forces, customs forces and border guards if these are trained and equipped as a military force. Published EIU data on nominal GDP (or the World Bank when unavailable) was used to arrive at the value of military expenditure as a percentage of GDP.

Scoring Criteria: This indicator is scored using a min-max normalisation. Applying this method, a country's score is based on the distance of its military expenditure as a share of GDP from the benchmarks of 0% (for a score of 1) and 8.37% or above (for a score of 5). The bands, while linear, approximately conform as follows:

1/5	2/5	3/5	4/5	5/5
0-2.092	2.093-4.184	4.185-6.277	6.278-8.37	>8.371

Number of Armed Services Personnel per 100,000 people

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	International Institute for Strategic Studies, Military Balance+
Measurement period	2022

Alternative Source: World Bank population data used if unavailable from the EIU.

Definition: Active armed services personnel comprise all service men and women on full-time duty in the army, navy, air force and joint forces (including conscripts and long-term assignments from the reserves). Population data provided by the EIU.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-657.744	657.745- 1,315.489	1,315.49- 1,973.234	1,973.235- 2,630.98	>2,630.981

Additional Notes: The Israeli reservist force is used to calculate Israel's number of armed services personnel.

Financial Contribution to UN Peacekeeping Missions

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	IEP; United Nations Committee on Contributions
Measurement period	2019–2021

Methodology: The UNFU indicator measures whether UN member countries meet their UN peacekeeping funding commitments. Although countries may fund other programs in development or peacebuilding, the records on peacekeeping are easy to obtain and understand and provide an instructive measure of a country's commitment to peace. The indicator calculates the percentage of countries' "outstanding payments versus their annual assessment to the budget of the current peacekeeping missions" over an average of three years. This ratio is derived from data provided by the United Nations Committee on Contributions Status reports. The indicator is compiled as follows:

- 1. The status of contributions by UN member states is obtained.
- For the relevant peacekeeping missions, the assessments (for that year only) and the collections (for that year only) are recorded. From this, the outstanding amount is calculated for that year.
- 3. The ratio of outstanding payments to assessments is calculated. By doing so a score between 0 and 1 is obtained. Zero indicates no money is owed; a country has met their funding commitments. A score of 1 indicates that a country has not paid any of their assessed contributions. Given that the scores already fall between 0 and 1, they are easily banded into a score between 1 and 5. The final banded score is a weighted sum of the current year and the previous two years. The weightings are 0.5 for the current year, 0.3 for the previous year and 0.2 for two years prior. Hence it is a three-year weighted average.
- 4. Outstanding payments from previous years and credits are not included. The scoring is linear to one decimal place.

Scoring Criteria

1/5	0-25% of stated contributions owed
2/5	26-50% of stated contributions owed
3/5	51-75% of stated contributions owed
4/5	75-99% of stated contributions owed
5/5	100% of stated contributions owed (no contributions made in past three years)

Additional Notes: All United Nations member states share the costs of United Nations peacekeeping operations. The General Assembly apportions these expenses based on a special scale of assessments applicable to peacekeeping. This scale takes into account the relative economic wealth of member states, with the permanent members of the Security Council required to pay a larger share because of their special responsibility for the maintenance of international peace and security.

Nuclear and Heavy Weapons Capabilities

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	4.2%
Data source	IEP; SIPRI; IISS Military Balance+
Measurement period	2022

Methodology: This indicator is based on a categorised system for rating the destructive capability of a country's stock of heavy weapons. Holdings are those of government forces and do not include holdings of armed opposition groups. Heavy weapons numbers were determined using a combination of the International Institute for Strategic Studies, The Military Balance and the United Nations Register of Conventional Arms.

There are five categories of weapons, each of which receive a certain number of weighted points. The five weapons categories are weighted as follows:

- 1. Armoured vehicle and artillery pieces = 1 point
- 2. Tank = 5 points
- 3. Combat aircraft and combat helicopter = 20 points
- 4. Warship = 100 points
- 5. Aircraft carrier and nuclear submarine = 1000 points

Countries with nuclear capabilities automatically receive the maximum score of five. Other scores are expressed to the second decimal point, adopting a min-max normalisation that sets the max at two standard deviations above the average raw score.

1/5	Nil-18,185
2/5	18,185–36,368
3/5	36,368-54,553
4/5	54,553-72,737
5/5	States with nuclear capability receive a 5, or states with heavy weapons capability of 72,738 or in the top 2% of heavy weapons receive a 5.

Volume of Transfers of Major Conventional Weapons as Supplier (Exports) per 100,000 people

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	4.2%
Data source	SIPRI Arms Transfers Database
Measurement period	2022

Definition: Measures the total volume of major conventional weapons exported by a country between 2015 and 2019 divided by the average population during this time period (population data supplied by the EIU). The SIPRI Arms Transfers Database covers all international sales and gifts of major conventional weapons and the technology necessary for the production of them. The transfer equipment or technology is from one country, rebel force or international organisation to another country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, missiles, ships and engines. SIPRI uses a unique pricing system, the Trend Indicator Value (TIV) that measures military capability. The indicator raw value is measured as TIV per 100,000 population.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-3.681	3.682-7.364	7.365-11.046	11.047-14.729	>14.73

Number of Refugees and Internally Displaced People as a Percentage of the Population

Indicator type	Quantitative
Indicator weight	4
Indicator weight (% of total index)	5.7%
Data source	UNHCR Mid-Year Trends 2021; International Displacement Monitoring Centre (IDMC)
Measurement period	2022

Definition: Refugee population by country or territory of origin plus the number of a country's internally displaced people (IDPs), as a percentage of the country's total population.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-3.034	3.035- 6.069	6.07-9.104	9.105-12.139	>12.14

Relations with Neighbouring Countries

Indicator type	Qualitative
Indicator weight	5

Indicator	weight (%	of total	index)	7.1%
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Data source	EIU
Measurement period	March 2022 to
	March 2023

Definition: Assessment of the intensity of contentiousness of neighbours, ranked from 1-5 (peaceful to very aggressive) by the EIU's Country Analysis team. Country analysts are asked to assess this indicator on an annual basis, for the period March to March.

Scoring Criteria:

- 1 = Peaceful: None of the neighbours has attacked the country since 1950.
- **2** = Low: The relationship with neighbours is generally good, but aggressiveness is manifest in politicians' speeches or in protectionist measures.
- **3** = **Moderate:** There are serious tensions and consequent economic and diplomatic restrictions from other countries.
- **4** = **Aggressive:** Open conflicts with violence and protests.
- **5** = Very aggressive: Frequent invasions by neighbouring countries.

External Conflicts Fought

Indicator type	Quantitative
Indicator weight	2.28
Indicator weight (% of total index)	3.2%
Data source	IEP; UCDP Battle- Related Deaths Dataset
Measurement period	2021

Definition: This indicator measures the number and duration of extraterritorial conflicts a country is involved in. Information for this indicator is sourced from the UCDP Battle-Related Deaths Dataset. The score for a country is determined by adding all individual conflict scores where that country is involved as an actor in a conflict outside its legal boundaries. Conflicts are not counted against a country if they have already been counted against that country in the number and duration of internal conflicts indicator.

Each individual conflict score is based on the following factors:

Number:

- Number of internationalised internal armed conflicts and interstate armed conflicts.
- If a conflict is a war (1,000+ battle-related deaths) it receives a score of one; if it is an armed conflict (25-999 battle-related deaths) it receives a score of 0.25.

Duration:

• A score is assigned based on the number of years out of the last five that conflict has occurred. For example, if a conflict last occurred five years ago that conflict will receive a score of one out of five.

Role:

• If the country is a primary party to the conflict, that conflict receives a score of one; if it is a secondary party (supporting the primary party), that conflict receives a

score of 0.25.

• If a country is a party to a force covered by a relevant United Nations Security Council Resolution, then the entire conflict score is multiplied by a quarter; if not, it receives a full score.

The different conflict scores are then added and banded to establish a country's score.

Scoring Bands

1/5	2/5	3/5	4/5	5/5
No external conflict	Combined conflict score of up to 1.5	Combined conflict score of up to 3	Combined conflict score of up to 4.5	A combined conflict score of 6 or above. This shows very high levels of external conflict.

Number Of Deaths From Organised External Conflict

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renced

Alternate Source: Where applicable, IEP also uses several other open-source datasets to construct this indicator.

Definition: This indicator uses the UCDP's definition of conflict as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, results in at least 25 battle-related deaths in a year".

Scoring Bands

1/5	2/5	3/5	4/5	5/5
0-24 deaths	25-998	999-4,998	4,999-9,998	> 9,999
	deaths	deaths	deaths	deaths

APPENDIX C

GPI Domain Scores

TABLE C.1

Ongoing Domestic and International Conflict domain, most peaceful to least

COUNTRY	SCORE
Iceland	1.000
Mauritius	1.000
Singapore	1.000
Uruguay	1.000
Malaysia	1.005
New Zealand	1.009
Botswana	1.018
Ireland	1.028
Canada	1.037
Germany	1.046
Italy	1.046
Switzerland	1.046
Netherlands	1.055
Austria	1.068
Belgium	1.084
United Kingdom	1.120
Portugal	1.138
Argentina	1.201
Bulgaria	1.201
Costa Rica	1.201
Croatia	1.201
Jamaica	1.201
Mongolia	1.201
Namibia	1.201
Trinidad and Tobago	1.201
Czech Republic	1.247
Denmark	1.247
Qatar	1.247
Australia	1.258
Spain	1.352
Albania	1.403
Chile	1.403
Japan	1.403
Kuwait	1.403
Laos	1.403
North Macedonia	1.403
Montenegro	1.403
Oman	1.403
Panama	1.403
Paraguay	1.403
Slovenia	1.403
Timor-Leste	1.403
Vietnam	1.403
France	1.416
Bolivia	1.417
Hungary	1.439
Bhutan	1.448
El Salvador	1.448
Estonia	1.448
Finland	1.448
Latvia	1.448
Liberia	1.448
Lithuania	1.448
Norway	1.448
Madagascar	1.504

COUNTRY	SCORE
Sierra Leone	1.506
Romania	1.540
Senegal	1.540
The Gambia	1.540
Sweden	1.562
Nepal	1.577
Zambia	1.577
Jordan	1.602
Cyprus	1.604
Dominican Republic	1.604
Equatorial Guinea	1.604
Guyana	1.604
Honduras	1.604
Poland	1.604
Slovakia	1.604
Taiwan	1.604
Turkmenistan	1.604
Guinea-Bissau	1.613
Ghana	1.616
Papua New Guinea	1.618
Angola	1.639
Guatemala	1.641
Ecuador	1.676
United Arab Emirates	1.678
Gabon	1.696
Peru	1.701
Republic of the Congo	1.706
Cambodia	1.742
Mauritania	1.742
Tunisia	1.742
Indonesia	1.758
Côte d'Ivoire	1.760
Benin	1.763
Sri Lanka	1.763
Armenia	1.783
Eritrea	1.787
Cuba	1.805
Georgia	1.805
Greece	1.805
Kazakhstan	1.805
Kosovo	1.805
South Korea	1.805
Uzbekistan	1.805
Malawi	1.805
Eswatini	1.815
Algeria	1.810
Lesotho	1.821
Thailand	1.824
	1.844
Uganda	••••••
Azerbaijan	1.847
Bosnia and Herzegovina	1.851
China	1.897
Serbia	1.897
Brazil	1.900

COUNTRY	SCORE
Djibouti	1.960
Тодо	1.961
Rwanda	1.967
Morocco	1.989
United States of America	1.994
Bangladesh	1.997
Moldova	2.006
Nicaragua	2.006
Zimbabwe	2.006
Bahrain	2.035
South Africa	2.083
Venezuela	2.086
Colombia	2.099
Mozambique	2.000
Guinea	2.117
	••••••
Tajikistan Saudi Arabia	2.174
	2.184
Belarus	2.208
Philippines	2.230
Kenya	2.250
Haiti	2.255
Burundi	2.267
India	2.282
Kyrgyz Republic	2.284
Egypt	2.362
Libya	2.419
Israel	2.435
Lebanon	2.447
North Korea	2.610
Mexico	2.657
Palestine	2.659
Chad	2.674
Myanmar	2.778
Central African Republic	2.831
Nigeria	2.882
Cameroon	2.914
Iraq	2.926
Pakistan	2.943
Niger	2.943
Burkina Faso	3.005
Iran South Sudan	3.072
	3.080
Mali	3.085
Turkiye	3.088
Somalia	3.131
Sudan	3.263
Ethiopia	3.419
Democratic Republic of the Congo	3.421
Afghanistan	3.434
Russia	3.445
Syria	3.460
Ukraine	3.470
Yemen	3.486

TABLE C.2 Societal Safety and Security domain, most to least peaceful

COUNTRY	SCORE
Finland	1.251
Japan Iceland	1.272
Singapore	1.300
Norway	1.301
Denmark	1.305
Switzerland	1.310
Slovenia	1.339
Qatar	1.439
South Korea	1.485
Austria	1.510
Netherlands	1.519
Czech Republic	1.526
Sweden	1.528
Canada	1.537
Portugal	1.546
Ireland	1.548
Croatia	1.581
New Zealand	1.594
Australia	1.606
Bhutan	1.608
Germany	1.628
Taiwan	1.638
Estonia	1.657
Kuwait	1.693
Poland	1.710
Slovakia	1.721
United Kingdom	1.723
Hungary	1.736
Latvia Romania	1.741
Lithuania	1.753
Belgium	1.802
Spain	1.837
United Arab Emirates	1.850
Greece	1.857
Oman	1.863
France	1.872
North Macedonia	1.915
Italy	1.930
Armenia	1.987
Serbia	2.003
Bulgaria	2.008
Vietnam	2.053
Ghana	2.057
China	2.070
Albania	2.078
Laos	2.088
Malaysia	2.093
Indonesia	2.104
Mauritius	2.106
Jordan	2.125
Moldova	2.125
Saudi Arabia	2.137
Bosnia and Herzegovina	2.144

COUNTRY	SCORE
Montenegro	2.172
Senegal	2.174
Cambodia	2.176
Timor-Leste	2.182
Costa Rica	2.231
Sierra Leone	2.244
Malawi	2.250
Morocco	2.257
The Gambia	2.272
Kyrgyz Republic	2.272
Kosovo	2.275
Cyprus	2.281
Kazakhstan	2.291
Chile	2.332
Azerbaijan	2.339
ndia	2.346
Madagascar	2.347
srael	2.349
Jzbekistan	2.361
Bahrain	2.364
Tajikistan	2.365
Tanzania	2.367
Botswana	2.376
Zambia	2.380
Rwanda	2.300
Guinea-Bissau	2.407
Гunisia	2.412
Algeria	2.423
Angola	2.423
Bangladesh	2.435
Jnited States of America	2.438
liberia	2.441
Sri Lanka	2.442
Aongolia	2.442
quatorial Guinea	2.448
Georgia	2.452
Egypt	2.467
araguay	2.479
īogo	2.495
Belarus	2.495
Vamibia	2.504
Côte d'Ivoire	2.505
Argentina	2.519
Jruguay	2.528
Djibouti	2.531
Dominican Republic	2.535
Gabon	2.537
Vepal	2.541
Turkmenistan	2.550
Bolivia	2.555
Ecuador	2.571
Papua New Guinea	2.592
Thailand	2.599
Philippines	2.600
imppinee	

COUNTRY	SCORE
Panama	2.638
Kenya	2.639
Guinea	2.659
Benin	2.682
Lesotho	2.700
Cuba	2.701
Peru	2.729
Eswatini	2.746
Pakistan	2.767
Palestine	2.769
Mauritania	2.780
Zimbabwe	2.781
Jamaica	2.785
Republic of the Congo	2.788
Mozambique	2.789
Lebanon	2.815
Guatemala	2.830
Russia	2.838
Niger	2.850
Burundi	2.878
Nicaragua	2.881
Iran	2.907
Guyana	2.909
Uganda	2.914
Haiti	2.944
North Korea	2.960
Cameroon	2.974
Chad	3.030
Honduras	3.046
El Salvador	3.048
Nigeria	3.057
Turkiye	3.077
Ethiopia	3.087
South Africa	3.112
Ukraine	3.120
Mexico	3.133
Libya	3.155
Myanmar	3.211
Sudan	3.250
Burkina Faso	3.253
Brazil	3.319
Eritrea	3.428
Central African Republic	3.532
Mali	
	3.539
Venezuela	3.544
Iraq	3.577
Colombia	3.584
Somalia	3.641
Democratic Republic of the Congo	3.749
South Sudan	3.835
Syria	3.842
Yemen	3.900
Afghanistan	4.136

TABLE C.3 Militarisation domain, most peaceful to least

COUNTRY	SCORE
Iceland	1.015
Malaysia	1.180
Hungary	1.191
Portugal	1.211
Slovenia	1.230
Moldova	1.234
New Zealand	1.236
Slovakia	1.271
Czech Republic	1.279
Ireland	1.301
Mauritius	1.319
Austria	1.328
Japan	1.333
Mongolia	1.336
Bhutan	1.368
Denmark	1.403
Sierra Leone	1.406
Madagascar	1.449
Thailand	1.454
Indonesia	1.457
Cuba	1.460
Bangladesh	1.465
Canada	1.466
Latvia	1.471
Panama	1.476
Bosnia and Herzegovina	1.496
Guyana	1.499
Zambia	1.503
Rwanda	1.504
Poland	1.542
Estonia	1.545
Argentina	1.547
Cyprus	1.550
Croatia	1.575
Finland	1.585
Mozambique	1.592
Kosovo	1.597
Montenegro	1.606
Costa Rica	1.608
Bulgaria	1.619
Guatemala	1.621
Romania	1.624
Senegal	1.625
Ghana	1.625
Kenya	1.633
Uruguay	1.634
Morocco	1.644
South Africa	1.648
Kyrgyz Republic	1.658
Tajikistan	1.663
Namihia	1.664
Namibia	1.665
Albania	1.670
Belgium Vietnam	1.672
	1.072

COUNTRY	SCORE
Philippines	1.680
Timor-Leste	1.682
Dominican Republic	1.687
Eswatini	1.688
Tunisia	1.694
Peru	1.696
The Gambia	1.703
Taiwan	1.703
Côte d'Ivoire	1.704
Mexico	1.707
Eritrea	1.709
Nicaragua	1.709
Jamaica	1.713
Burundi	1.716
Haiti	1.721
Germany	1.730
Malawi	1.734
Botswana	1.735
Tanzania	1.741
Georgia	1.745
Тодо	1.749
Spain	1.751
Kazakhstan	1.759
Australia	1.772
Chile	1.776
Gabon	1.788
Cameroon	1.793
Liberia	1.798
Laos	1.805
Switzerland	1.808
Uzbekistan	1.812
Paraguay	1.814
Equatorial Guinea	1.817
Brazil	1.824
Honduras	1.825
Ethiopia	1.826
Egypt	1.831
North Macedonia	1.835
Uganda	1.835
Lithuania	1.835
Lesotho	1.838
Trinidad and Tobago	1.840
Serbia	1.846
Angola	1.847
Niger	1.853
Somalia	1.857
Sweden	1.864
Mali	1.872
Bolivia	1.872
Ecuador	1.876
Cambodia	1.870
Singapore	1.880
Jordan	1.898
	1.898
Benin	1.901

COUNTRY	SCORE
Republic of the Congo	1.911
Zimbabwe	1.912
Turkiye	1.917
Myanmar	1.921
Colombia	1.924
Algeria	1.925
Papua New Guinea	1.933
Libya	1.947
Bahrain	1.951
Mauritania	1.966
Djibouti	1.971
Azerbaijan	1.986
Nigeria	1.990
Palestine	1.991
China	2.030
Burkina Faso	2.052
Central African Republic	2.052
Armenia	2.061
Kuwait	2.062
Democratic Republic of the Congo	2.063
Guinea-Bissau	2.069
Italy	2.070
Venezuela	2.073
Netherlands	2.079
El Salvador	2.082
Turkmenistan	2.088
Qatar	2.104
Greece	2.114
Syria	2.116
Sri Lanka	2.156
Norway	2.165
Iraq	2.174
South Korea	2.182
Guinea	2.183
Chad	2.233
Iran	2.234
Yemen	2.235
Oman	2.282
Afghanistan	2.300
Sudan	2.318
South Sudan	2.347
Ukraine	2.349
Lebanon	2.384
India	2.388
United Kingdom	2.452
Pakistan	2.516
United Arab Emirates	2.633
Saudi Arabia	2.694
France	2.769
North Korea	3.000
United States of America	3.081
Russia	3.187
Israel	3.783
	-

APPENDIX D

Economic Cost of Violence

The economic impact of violence includes the direct and indirect costs of violence as well as an economic multiplier applied to the direct costs. The economic cost of violence includes only the direct and indirect costs. Per capita and percentage of GDP results are calculated using the economic cost of violence.

TABLE D.1

Economic cost of violence

Economic Cost of Violence as % of GDP, Rank	Country	Economic Impact of Violence (Millions, US\$ 2022 PPP)	Per Capita Impact (2022, US\$ PPP)	Economist cost of violence as a percentage of GDP	Economic Cost of Violence (Millions, US\$ 2021 PPP)
1	Ukraine	543,394,741,569	13,687	63%	324,502,057,387
2	Afghanistan	42,532,484,084	1,034	47%	29,017,856,711
3	Sudan	86,335,661,712	1,842	40%	68,895,854,370
4	North Korea	478,079,749,226	18,339		243,423,612,664
5	Somalia	8,539,721,295	485	35%	7,080,492,913
6	Central African Republic	1,777,359,139	319	32%	1,473,944,647
7	Colombia	271,552,298,833	5,235	29%	217,440,197,948
8	Cyprus	14,418,816,842	11,521	23%	12,140,886,177
9	Burkina Faso	13,138,325,035	579	19%	9,559,380,600
10	South Sudan	9,479,762,479	869	17%	8,408,941,532
	Azerbaijan	34,669,779,300	3,347	16%	23,454,350,119
12	Lesotho	1,015,056,592	440	15%	814,773,903
13	El Salvador	12,543,727,590	1,980	15%	8,848,350,227
14	Georgia	11,923,136,880	3,184	15%	8,821,042,510
15	South Africa	176,486,287,827	2,947	15%	118,909,878,921
16	Mali	9,848,032,531	436	14%	6,781,365,190
17	Myanmar	41,421,514,142	765	14%	30,620,590,417
	Honduras	10,935,412,162	1,048	14%	8,146,366,323
19	Iraq	82,010,771,239	1,843	14%	55,822,403,274
20	Jamaica	5,010,016,448	1,772	13%	3,596,579,438
21	Democratic Republic of the Congo	15,525,063,859	157		13,747,235,095
22	Eritrea	2,776,598,723	754	13%	2,093,771,795
23	Venezuela	66,512,442,864	2,350	12%	52,994,352,557
24	Russia	857,669,772,163	5,927	12%	481,831,463,084
25	Palestine	6,256,366,927	1,192		3,526,190,457
26	Saudi Arabia	376,085,044,094	10,330	12%	191,765,787,051
27	Bahrain	16,243,555,458	11,033	12%	8,562,694,273
28	Mauritania	4,952,041,917	1,046	11%	2,861,407,801
29	Brazil	462,881,700,253	2,150	11%	351,919,079,535
30	Botswana	6,602,004,264	2,510	11%	4,363,874,256
31	Trinidad and Tobago	5,288,045,149	3,454	11%	3,911,288,451
32	Mexico	350,239,245,483	2,747	11%	269,019,777,291
33	United States of America	4,206,923,585,346	12,436	11%	2,365,332,637,391
34	Ethiopia	37,500,421,067	304	11%	30,793,605,571
35	Libya	23,978,096,371	3,520	11%	15,729,781,348
36	Burundi	1,465,862,583	114	10%	952,067,447
37	Chad	4,095,413,473	231	10%	2,603,400,306
38	Guyana	2,652,281,506	3,280	10%	1,825,428,291
39	Guatemala	23,467,056,106	1,315	10%	15,797,754,228
40	Qatar	47,546,613,126	17,642	10%	24,307,297,065
41	Тодо	3,177,054,793	359	10%	1,816,009,309
42	Pakistan	181,755,480,661	771	9%	115,735,626,504
43	Nigeria	120,770,738,172	553	9%	100,176,213,589
44	United Kingdom	459,367,986,963	6,805	9%	282,543,881,418
45	Namibia	3,600,397,328	1,403	9%	2,168,794,787

TABLE D.1 Economic cost of violence (continued)

Economic Cost of Violence as % of GDP, Rank	Country	Economic Impact of Violence (Millions, US\$ 2022 PPP)	Per Capita Impact (2022, US\$ PPP)	Economist cost of violence as a percentage of GDP	Economic Cost of Violence (Millions, US\$ 2021 PPP)
46	Algeria	87,551,322,827	1,950	9%	45,477,569,369
47	United Arab Emirates	117,616,891,977	12,458	9%	60,309,421,302
48	Oman	28,147,405,481	6,151	9%	14,374,347,883
49	Cuba	26,895,260,952	2,399	9%	15,161,544,332
50	Israel	58,865,422,154	6,513	9%	33,066,098,508
51	Armenia	6,452,497,514	2,321	9%	3,431,334,649
52	Mozambique	4,898,304,261	149	9%	3,448,940,203
53	Syria	57,260,446,793	2,588	8%	51,367,543,630
54	Lebanon	11,161,117,967	2,033	8%	5,927,777,711
55	Montenegro	1,925,136,150	3,070	8%	1,070,136,219
56	Costa Rica	14,081,767,751	2,718	8%	8,894,920,263
57	Latvia	8,521,020,596	4,604	8%	4,721,448,949
58	Sri Lanka	39,623,757,305	1,815	8%	23,115,419,345
59	Bosnia and Herzegovina	5,845,511,652	1,808	8%	3,985,953,292
60	Serbia	20,491,777,464	2,838	8%	11,238,161,720
61	Panama	16,623,286,389	3,771	8%	10,041,778,089
62	Uruguay	9,603,779,656	2,806	8%	6,075,251,196
63	Republic of the Congo	2,160,246,172	362	8%	1,496,796,352
64	Greece	44,738,165,373	4,308	8%	23,114,307,407
65	Croatia	17,171,505,294	4,261	7%	9,527,987,132
66	Bulgaria	23,371,520,084	3,446	7%	12,353,489,211
67	The Gambia	671,327,529	248	7%	416,520,856
68	Cameroon	10,509,732,127	376	7%	7,648,469,123
69	Eswatini	1,175,208,731	978	7%	786,100,081
70	Uzbekistan	37,660,336,051	1,088	7%	19,732,518,320
71	Lithuania	13,522,855,091	4,917	7%	7,824,324,911
72	Poland	189,440,208,286	4,753	7%	100,153,227,101
73	Romania	81,582,621,682	4,150	7%	43,228,575,218
74	Timor-Leste	886,540,007	661	7%	478,026,084
75	Argentina	117,233,458,704	2,576	7%	68,673,106,798
76	Hungary	42,251,096,407	4,239	7%	23,283,491,719
77	Kuwait	24,755,464,497	5,799	7%	12,958,254,208
78	Jordan	13,595,162,294	1,205	7%	7,154,549,805
79	Niger	3,449,675,816	132	7%	2,109,435,809
80	Morocco	36,736,697,556	981	7%	20,289,593,319
81	Australia	151,986,909,972	5,806	7%	87,408,435,824
82	Estonia	6,140,332,334	4,631	7%	3,422,538,667
83	Tunisia	15,093,774,780	1,222	7%	8,468,568,184
84	France	327,903,067,143	5,074	7%	191,233,045,765
85	Belgium	62,407,310,242	5,354	7%	39,507,210,756
86	India	1,077,108,046,144	760	6%	597,546,499,142
87	Ecuador	20,293,911,420	1,127	6%	12,229,701,866
88	New Zealand	22,338,060,150	4,308	6%	13,976,776,926
89	Albania	4,622,037,195	1,626	6%	2,566,275,151
90	Slovakia	20,152,464,150	3,571	6%	10,921,258,692
91	Kosovo	5,285,577,746	3,185	6%	3,437,090,797
92	Vietnam	117,861,295,781	1,200	6%	62,758,881,320
93	North Macedonia	3,864,252,991	1,846	6%	2,071,373,241
94	Gabon	3,163,648,733	1,324	6%	1,977,217,106
95	Cambodia	8,118,576,710	484	6%	4,322,048,436
96	Kyrgyz Republic	3,482,446,929	525	6%	1,879,138,757
97	South Korea	225,697,253,780	4,356	6%	134,459,727,104
98	Angola	21,406,740,947	601	6%	12,307,775,320
99	Belarus	18,829,229,462	1,975	6%	10,940,467,422
100	Liberia	753,273,069		6%	435,760,079
101	Djibouti	512,099,868	457	6%	317,081,185
102	Iran	134,916,944,642	1,524	6%	76,062,970,131
103	Chile	48,784,318,883	2,489	6%	28,392,876,071
104	Czech Republic	44,230,129,134	4,215	6%	24,005,991,889
105	Bolivia	9,189,530,840	752	6%	5,500,835,418
106	Uganda	9,518,095,015	201	6%	5,919,475,629
107	Guinea	3,185,722,761	230	6%	2,031,504,174
108	Dominican Republic	18,346,537,449	1,634	5%	11,405,057,390
109	Canada	171,462,934,622	4,459	5%	100,367,360,488
110	Nicaragua	3,225,951,040	464	5%	2,127,870,345

TABLE D.1 Economic cost of violence (continued)

111 Benin 3,988,307,285 2.99 5% 2,247,196,655 112 Moldowa 4166,630,311 1279 5% 2,457,761,527 113 Peru 36,691,863,639 1.086 5% 22,857,84,017 114 Paraguay 8,063,011503 1.895 5% 2,027,281,403 115 Tiglikatan 3,851,499,041 387 5% 2,207,281,403 116 Sweden 48,682,027,812 4.612 5% 2,207,780,426 117 Rwanda 2,254,842,755 1.64 5% 1,800,986,693 118 Singapora 61,169,0779 5,324 5% 1,823,347,366 120 Silvenia 7,617,113,468 3,963 5% 1,226,459,457,477 1,717 5% 1,224,259,458 1,25 5,953 5% 18,269,496,633 1,324,425,559 1,33 1,13 5% 1,226,4259,459 1,26 2,259,464,470,644 1,26 Mongolia 3,165,590,779 932 5% 1,99,344,550 1,99,344,5	Economic Cost of Violence as % of GDP, Rank	Country	Economic Impact of Violence (Millions, US\$ 2022 PPP)	Per Capita Impact (2022, US\$ PPP)	Economist cost of violence as a percentage of GDP	Economic Cost of Violence (Millions, US\$ 2021 PPP)
113 Peru 36,991,863,639 1.086 5% 22,527,84,817 114 Paraguay 80,63,811503 1.189 5% 4,858,222,657 115 Tajikistan 3,851,498,041 397 5% 2,207,281,42 116 Sweden 44,658,027,812 4,612 5% 2,307,804,268 117 Rwanda 2,254,942,755 164 5% 1,600,666,983 118 Singapore 61,168,097,792 10,236 5% 3,53,347,366 120 Skownia 7,617,113,468 3,983 5% 4,235,447,868 121 Germany 39,868,573,777 4,773 5% 122,659,596,533 123 Italy 223,364,860,746 3,963 5% 125,642,259,985 124 Sierra Leone 1,201,606,218 140 5% 129,999,334,350 126 Mongolia 3,196,590,779 932 5% 149,447,0684 126 Mongolia 3,196,590,779 932 5% 149,401,927	111	Benin	3,988,307,285	299	5%	2,377,199,665
114 Paraguay 8.063.011503 1.180 5% 4.253.22.813 115 Tajikistan 3.851.498.041 397 5% 2.027.28.143 116 Sweden 4.865.027.812 4.612 5% 2.03.7160.266 117 Rwanda 2.254.842.755 164 5% 1.600.366.983 118 Singapore 61.168.07792 10.236 5% 3.28.35.606.742 119 Netherlands 9.3516.175.97 5.324 5% 4.305.347.368 120 Germany 327.485.897.25 5.553 5% 12.62.642.259.986 123 Italy 23.3964.880.746 3.963 5% 12.642.259.986 124 Battan 1.201.006.218 40 5% 703.234.488 125 Portugal 31.978.215.013 3.113 5% 17.464.476.986 127 Bhutan 667.40.527 891 5% 1.316.050.759 128 Cuinea-Bissau 3.468.520.011 166 5% 14/409.128	112	Moldova	4,186,630,311	1,279	5%	2,451,751,527
115 Tajikistan 3,851,498,041 387 5% 2,027,238,143 116 Swedon 48,658,027,812 4,612 5% 2,037,700,266 117 Rwanda 2,254,842,755 164 5% 1,600,866,993 118 Singapore 61,165,997 5,224 5% 52,835,606,742 120 Silovenia 7,617,113,468 3,593 5% 4,335,347,368 121 Germany 397,855,777 47,773 5% 222,259,985 122 Norway 32,249,589,725 5,553 5% 118,259,996,633 123 Berra Leone 1,201,606,218 140 5% 703,234,488 125 Portugal 31,978,215,013 3,113 5% 17,246,470,684 126 Guinea-Bissau 348,822,091 166 5% 14,946,960,513 127 Bhutan 697,410,527 891 5% 1,474,04,012 129 Côte d'Ivoire 10,988,014,080 390 5% 1,446,4061,128	113	Peru	36,991,863,639	1,086	5%	22,525,784,812
115 Tajkistan 3,851,498,041 387 5% 2,027,238,143 116 Sweden 48,658,027,812 46,12 5% 2,027,238,143 117 Rwanda 2,254,842,755 164 5% 1,000,866,963 118 Singapore 61,168,097,792 0,0236 5% 32,835,806,742 119 Netherlands 3,516,115,957 5,232 5% 4,333,347,358 120 Slovenia 7,617,113,468 3,593 5% 42,353,447,358 121 Germany 332,845,567,377 47,773 5% 42,259,985 122 Norway 32,249,589,725 5,553 5% 18,259,598,633 122 Norway 32,249,589,725 5,553 5% 18,259,598,633 124 Silera Leone 1,201,606,218 140 5% 17,246,470,684 125 Portugal 31,978,215,013 31,13 5% 17,464,70,684 126 Guinee-Bissau 348,822,091 166 5% 42,806,053,194 129 Côtre d'Voine 19,988,104,306 390 5%<	114	Paraguay	8,063,611,503	1,189	5%	4,858,222,657
117 Fivanda 2254,842.755 164 5% 1600,066,983 118 Singapore 61168,097,792 10,236 5% 32,835,606,742 119 Netherlands 93,556,115,957 5,324 5% 51,063,668,837 120 Slovenia 7,617,113,468 3,593 5% 4,335,347,366 121 Germany 332,845,587,577 47,773 5% 122,259,985 122 Norway 32,249,589,725 5,553 5% 112,625,9986 124 Silera Leone 1,201,606,218 140 5% 1703,234,488 126 Portugal 3198,715,013 3113 5% 443,805,61 126 Mongolia 3,166,590,779 932 5% 1,999,384,550 127 Bhutan 697,410,527 691 5% 433,805,431 128 Cótre d'Ivoire 10,989,104,808 390 5% 7,470,068,359 130 Finland 2,306,631,94 4,169 5% 1,31,443,540,575	115		3,851,498,041	387	5%	2,027,238,143
118 Singapore 61.08.097/92 10.236 5% 52.825.006.742 119 Netherlands 93.516.115.957 5.324 5% 51.063.068.837 120 Slovenia 7.67113.468 3.593 5% 4.353.347.366 121 Germany 397.885.573.777 4.773 5% 22.7124.281.555 122 Norway 32.349.589.725 5.953 5% 11.255.99.855 123 Italy 233.964.880.746 3.963 5% 11.255.42.259.985 124 Sierra Leone 1.201.606.218 140 5% 70.32.34.488 125 Portugal 31.978.215.013 3.113 5% 174.64.470.684 126 Guinea-Bissau 348.822.091 166 5% 1.99.984.550 130 Finland 23.096.633.194 4.169 5% 13.315.405.75 131 Turkinenistan 8.462.896.525 3.316 5% 4.743.042.057 133 Spain 160.077.684.295 3.866 5% 128.	116	Sweden	48,658,027,812	4,612	5%	29,377,804,266
119 Netherlands 33,516,115,957 5,324 5% 51,063,669,837 120 Slovenia 7,617,113,468 3,593 5% 4,353,347,368 121 Germany 32,348,599,725 5,953 5% 12,564,259,985 122 Norway 32,344,589,725 5,953 5% 12,564,259,985 124 Sierra Leone 1,201,606,218 140 5% 703,234,488 125 Portugal 31,978,215,013 3,113 5% 17,464,470,684 126 Guinea-Bissau 34,88,22,091 166 5% 129,99,344,550 130 Finland 20,966,331,94 4169 5% 134,091,128 129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 23,096,633,194 4169 5% 134,091,29 132 Turkiye 224,481,05,729 2,634 5% 128,018,66,111 133 Spain 160,070,694,295 3,66 5% 86,014,86,676 </td <td>117</td> <td>Rwanda</td> <td>2,254,842,755</td> <td>. 164</td> <td>5%</td> <td>1,600,866,993</td>	117	Rwanda	2,254,842,755	. 164	5%	1,600,866,993
120 Slovenia 7.617113,468 3,593 5% 4,353,347,368 121 Germany 397,885,673,777 4,773 5% 227,124,281,535 122 Norway 323,964,880,746 3,963 5% 18,259,596,633 123 Italy 233,964,880,746 3,963 5% 17,256,42,259,995 124 Sierra Leone 1,210,160,62,18 140 5% 703,234,488 125 Portugal 31,978,215,013 3,113 5% 17,446,470,684 126 Mongolia 3,466,590,779 932 5% 199,394,550 127 Bhutan 607,410,527 891 5% 429,605,631 128 Guinea-Bissau 344,822,091 166 5% 13,415,440,575 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turknenistan 8,462,86,525 1,316 5% 14,40,4252 132 Turkiya 224,816,105,729 2,634 5% 114,434,045,765 <td>118</td> <td>Singapore</td> <td>61,168,097,792</td> <td>10,236</td> <td>5%</td> <td>32,835,606,742</td>	118	Singapore	61,168,097,792	10,236	5%	32,835,606,742
121 Germany 337,886,673,777 4,773 5% 1212,121,215,353 122 Norway 32,349,589,725 5,963 5% 18,259,599,833 123 Italy 23,964,880,746 3,963 5% 125,642,259,995 124 Sierra Leone 1,201,606,218 140 5% 17,254,470,684 126 Mongolia 31,65,90,779 932 5% 1499,635,931 126 Guinea-Bissau 344,822,091 166 5% 1429,605,931 128 Guinea-Bissau 3448,822,091 166 5% 124,001,128 129 Côte d'Ivoire 10,989,104,408 390 5% 1,420,65,931 130 Finland 23,096,633,194 4,169 5% 128,106,572 131 Turkmenistan 8,462,896,525 1,316 5% 4,443,042,052 132 Turkiye 224,816,105,729 2,634 5% 128,101,86,011 133 Spain 160,070,694,295 3,366 5% 128,0146,66,	119	Netherlands	93,516,115,957	5,324	5%	51,063,669,837
122 Norway 32.349.589.725 5.953 5% 18.259.99.633 123 Italy 233.964.880.746 3.963 5% 125.642.259.983 124 Sierra Leone 1.201.606.218 140 5% 702.324.488 125 Portugal 31.978.215.013 3.113 5% 17.446.470.684 126 Mongolia 31.66.590.779 932 5% 1.999.348.550 127 Bhutan 697.410.527 891 5% 42.9605.931 128 Guinea-Bissau 348.822.091 166 5% 1.940.91.128 130 Finland 23.096.633.194 4.169 5% 1.315.440.575 131 Turkney 22.4816.105.729 2.634 5% 12.81.946.601 133 Spain 160.070.694.295 3.366 5% 86.061.468.676 134 Equatorial Cuinea 1.830.992.952 1.935 5% 11.11.546.406 134 Equatorial Cuinea 4.302.121.30 544 1.210.291.938 1.	120	Slovenia	7,617,113,468	3,593	5%	4,353,347,368
123 Italy 233,964,880,746 3,963 5% 125,642,259,985 124 Siera Leone 1,201,606,218 140 5% 703,234,488 125 Portugal 31,767,215,013 3,113 5% 11,7446,470,684 126 Mongolia 34,652,90,779 932 5% 14,99,384,550 127 Bhutan 697,410,527 891 5% 429,605,931 128 Guinea-Bissau 344,822,091 166 5% 14,019,128 129 Côte d'Ivoire 10,989,104,808 390 5% 1,470,686,359 130 Finland 23,096,633,194 4,169 5% 1,314,405,75 131 Turkmenistan 8,462,896,525 1,316 5% 1,470,646,359 132 Turkiye 224,816,105,729 2,634 5% 128,114,864,016 133 Kenya 19,715,61,488 365 4% 11,489,768,876 134 Equatorial Guinea 1830,992,995 1093 5% 114,454,406	121	Germany	397,885,673,777	4,773	5%	227,124,281,535
124 Sierra Leone 1,201606,218 140 5% 703,234,488 125 Portugal 31,978,215,013 3,113 5% 17,446,470,684 126 Mongolia 3166,590,779 932 5% 1999,344,550 127 Bhutan 697,410,527 891 5% 429,605,931 128 Guinea-Bissau 348,822,091 166 5% 194,940,91128 129 Côte d'Ivoire 10,989,104,808 390 5% 17470,686,359 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkiye 224,416,105,729 2,634 5% 128,191,860,011 133 Spain 160,076,94,295 3,666 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1093 5% 1,134,564,206 135 Kenya 19,716,531,488 365 4% 1,239,788,762 136 Mauritus 2,092,174,305 1,610 4% 2,506,9462,739	122	Norway	32,349,589,725	5,953	5%	18,259,599,633
125 Portugal 31,978,215,013 3,113 5% 17,446,470,684 126 Mongolia 3,166,590,779 932 5% 1,999,344,550 127 Bhutan 697,410,527 891 5% 4,296,05,931 128 Guinea-Bissau 348,822,091 166 5% 194,091,128 129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 2,3096,633,194 4,169 5% 1,3,315,440,575 131 Turkiye 2,24,816,105,729 2,634 5% 12,816,601 133 Spain 160,070,694,295 3,366 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 1,9715,631,488 365 4% 1,106,023,936,012 138 Laos 4,131,221,310 549 4% 2,5069,462,739 139 Zimbabwe 2,014,296,371 123 4% 2,5069,462,739	123	Italy	233,964,880,746	3,963	5%	125,642,259,985
126 Mongolia 3,166,590,779 932 5% 1,999,384,550 127 Bhutan 697,410,527 891 5% 429,605,931 128 Guinea-Bissau 348,822,091 166 5% 194,091,128 129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkiye 224,816,105,729 2,634 5% 128,191,866,011 133 Spain 160,070,694,295 3,366 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 197,156,31,488 365 4% 1,282,946,876 136 Mauritius 2,007,370,710,410 1,455 4% 1,006,023,938,012 138 Laos 4,313,221,310 549 4% 2,5068,422,739 141 Thaiwan 45,914,049,718 1,922 4% 2,5069,422,739<	124	Sierra Leone	1,201,606,218	140	5%	703,234,488
126 Mongolia 3,166,590,779 932 5% 1,999,384,550 127 Bhutan 697,410,527 891 5% 4226,059,31 128 Guinea-Bissau 348,822,091 166 5% 194,091,128 129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 23,096,633,194 4169 5% 1,315,440,575 131 Turkinemistan 8,462,896,525 1,316 5% 4,743,042,052 132 Turkiye 224,816,105,729 2,634 5% 18,191,866,071 133 Spain 160,070,694,295 3,366 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,544,406 135 Kenya 19,715,631,488 365 4% 1,202,91,938 137 China 2,075,370,710,410 1,445 4% 1,06,023,938,012 138 Laos 4,313,122,1310 549 4% 2,506,942,739	125	Portugal	31,978,215,013	3,113	5%	17,446,470,684
127 Bhutan 697,410,527 891 5% 429,605,931 128 Guinea-Bissau 348,822,091 166 5% 194,091,128 129 Côte d'Ivoire 10,989,104,608 390 5% 7,470,686,359 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkmenistan 8,462,896,525 1,316 5% 4,743,042,052 132 Turklye 224,816,105,729 2,634 5% 128,191,866,011 133 Spain 160,070,694,295 3,366 5% 81,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 11,14,546,406 135 Kenya 19,715,631,488 365 4% 1,210,239,938,9402 138 Laos 4,131,221,310 549 4% 2,593,839,402 139 Zimbabwe 2,014,296,371 123 4% 150,202,948 140 Taiwan 45,914,049,718 1,922 4% 52,940,785,082	126				5%	-
128 Guinea-Bissau 348,822,091 166 5% 194,091,128 129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkmenistan 8,462,896,525 1,316 5% 47,43,042,052 132 Turkiye 224,816,105,729 2,634 5% 186,061,488,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 11,14,546,406 135 Kenya 19,715,631,488 365 4% 1,1399,786,876 136 Mauritius 2,022,174,305 1,610 4% 1,202,919,938 137 China 2,075,370,710,410 1,455 4% 1,502,072,948 140 Taiwan 45,914,049,718 1,922 4% 25,069,462,739 141 Thailand 89,280,802,693 1,245 4% 52,940,785,082 142 Zambia 4,283,070,952 2,14 4% 2,7		•••••••••••••••••••••••••••••••••••••••		891	5%	
129 Côte d'Ivoire 10,989,104,808 390 5% 7,470,686,359 130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkmenistan 8,462,896,525 1,316 5% 4,743,042,052 132 Turkiye 224,816,105,729 2,634 5% 128,191,866,011 133 Spain 160,070,694,295 3,366 5% 86,061,488,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 11,145,464,066 135 Kenya 19,715,631,488 365 4% 1,289,768,876 136 Mauritius 2,002,174,305 1,610 4% 1,259,383,402 138 Laos 4,131,221,310 544 4% 2,5069,462,739 137 China 459,4049,718 1,922 4% 52,609,462,739 139 Zimbabwe 2,014,296,371 123 4% 52,699,462,739 140 Taiwan 45,914,049,718 1,922 4% 52,699,462,7	•	Guinea-Bissau	*	•	••••••	•
130 Finland 23,096,633,194 4,169 5% 13,315,440,575 131 Turkmenistan 8,462,896,525 1,316 5% 4,743,042,052 132 Turkiye 224,816,105,729 2,634 5% 128,918,66,011 133 Spain 160,070,694,295 3,366 5% 866,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 19,715,631,488 365 4% 1,210,291,938 137 China 2,075,370,710,410 1,455 4% 1,106,023,938,012 138 Laos 4,131,21,2130 549 4% 2,508,348,394,02 139 Zimbabwe 2,014,296,371 123 4% 1,502,072,948 140 Taiwan 45,914,049,718 1,922 4% 52,906,9462,739 144 Denmark 23,632,447,896 4,018 4% 52,849,819,666 144 Denmark 23,632,447,896 4,018 4% 52,849		Côte d'Ivoire		390	5%	7.470.686.359
131 Turkmenistan 8,462,896,525 1,316 5% 4,743,042,052 132 Turkiye 224,816,105,729 2,634 5% 128,191,866,011 133 Spain 160,0794,295 3,366 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 19,715,631,488 365 4% 1,1389,766,876 136 Mauritius 2,092,174,305 1,610 4% 1,210,291,938 137 China 2,075,370,710,410 1,455 4% 1,502,072,948 139 Zimbabwe 2,014,296,371 123 4% 1,502,072,948 140 Taiwan 4,283,070,952 214 4% 52,940,785,082 141 Thailand 89,280,802,693 1,245 4% 52,849,89,866 144 Demmark 23,632,447,896 4,018 4% 13,664,147,217 145 Yernen 44,746,521,656 1,328 4% 36,680,639,89	•••••••••••••••••••••••••••••••••••••••	******		•		
132 Turkiye 224,816,105,729 2,634 5% 128,191,866,011 133 Spain 160,070,694,295 3,366 5% 86,061,488,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 19,715,631,488 365 4% 1,1389,766,876 136 Mauritius 2,092,174,305 1,610 4% 1,210,291,938 137 China 2,075,370,710,410 1,455 4% 1,106,023,936,012 138 Laos 4,131,221,310 549 4% 2,593,839,402 139 Zimbabwe 2,014,296,371 123 4% 1,502,072,948 140 Taiwan 45,914,049,718 1,922 4% 25,069,462,739 141 Thailand 89,280,802,693 1,245 4% 52,940,785,082 142 Zambia 4,283,070,952 214 4% 52,689,819,636 144 Denmark 23,632,447,896 4,018 4% 13,664,147,217<				•		•••••••••••••••••••••••••••••••••••••••
133 Spain 160,070,694,295 3,366 5% 86,061,468,676 134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 19,715,631,488 365 4% 11,386,876 136 Mauritius 2,072,73,071,0410 1,455 4% 1,210,291,938 137 China 2,075,370,710,410 1,455 4% 1,200,203,80,012 138 Laos 4,131,221,310 549 4% 2,593,839,402 139 Zimbabwe 2,014,296,371 123 4% 1,500,2072,948 140 Taiwan 45,914,049,718 1,922 4% 25,069,462,739 141 Thailand 89,280,802,693 1,245 4% 52,940,785,082 142 Zambia 4,283,070,952 214 4% 52,889,819,636 143 Egypt 97,697,467,859 880 4% 52,889,819,413,64 144 Denmark 23,632,447,896 4,018 4% 36,680,639,891 <td>•••••••••••••••••••••••••••••••••••••••</td> <td>********</td> <td></td> <td>•</td> <td></td> <td></td>	•••••••••••••••••••••••••••••••••••••••	********		•		
134 Equatorial Guinea 1,830,992,985 1,093 5% 1,114,546,406 135 Kenya 19,715,631,488 365 4% 11,389,768,76 136 Mauritius 2,092,174,305 1,610 4% 1,210,291,938 137 China 2,075,370,710,410 1,455 4% 1,106,023,936,012 138 Laos 4,131,221,310 549 4% 2,593,839,402 139 Zimbabwe 2,014,296,371 123 4% 1,500,272,948 140 Taiwan 45,914,049,718 1,922 4% 25,069,462,739 141 Thailand 89,280,802,693 1,245 4% 52,940,785,082 142 Zambia 4,283,070,952 214 4% 52,849,819,636 144 Denmark 23,632,447,896 4,018 4% 13,664,147,217 145 Yemen 44,746,521,656 1,328 4% 36,680,639,891 146 Nepal 8,097,520,804 265 4% 1,853,492,6873	•			•		•••••••••••••••••••••••••••••••••••••••
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Endnotes

SECTION 1

 Barnes, Julian E., Helene Cooper, Thomas Gibbons-Neff, Michael Schwirtz, and Eric Schmitt. "Leaked Documents Reveal Depth of U.S. Spy Efforts and Russia's Military Struggles." The New York Times, April 8, 2023. https://www.nytimes.com/2023/04/08/us/politics/leaked-documentsrussia-ukraine-war.html.

SECTION 2

- Salehyan, Idean. "Transnational Rebels: Neighboring States as Sanctuary for Rebel Groups." World Politics 59, no. 2 (2007): 217–42. https://doi. org/10.1353/wp.2007.0024.
- Buhaug, Halvard, and Kristian Skrede Gleditsch. "Contagion or confusion? Why conflicts cluster in space." International studies quarterly 52.2 (2008): 215-233.
- De Groot, Olaf J. "The spillover effects of conflict on economic growth in neighbouring countries in africa." Defence and peace economics 21.2 (2010): 149-164.
- "SIPRI Military Expenditure Database." Stockholm International Peace Research Institute. https://www.sipri.org/databases/milex.
- 5. Institute for Economics and Peace, Global Peace Index, 2022.
- 6. "Between Continuation and Adaptation: The Baltic States' Security Policy and Armed Forces." OSW Centre for Eastern Studies, April 19, 2018. https://www.osw.waw.pl/en/publikacje/osw-commentary/2015-11-24/ between-continuation-and-adaptation-baltic-states-security#_ftn10.
- 7. Belarus: EU Broadens Scope for sanctions to tackle hybrid attacks and ... Accessed May 30, 2023. https://www.consilium.europa.eu/en/press/pressreleases/2021/11/15/belarus-eu-broadens-scope-for-sanctions-to-tacklehybrid-attacks-and-instrumentalisation-of-migrants/.
- 8. Adebajo, Adekeye (2002) Building Peace in West Africa: Liberia, Sierra Leone, and Guinea-Bissau. Lynne Rienner Publishers, Boulder p. 24.

SECTION 3

- **1.** Palestine and South Sudan are removed from this calculation.
- FY22 List of Fragile and Conflict-affected Situations accessed 17/03/2022 from https://thedocs.worldbank.org/en/doc/bb52765f38156924d682486726 f422d4-0090082021/original/FCSList-FY22.pdf.
- McCollister, Kathryn E., Michael French and Hai Fung, 'The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation', Drug and Alcohol Dependence, April 2010.
- Dolan, Paul, and Tessa Peasgood, 'Estimating the Economic and Social Costs of the Fear of Crime', The British Journal of Criminology, April 2006.
- Brauer, Jurgen, and John Tepper Marlin, 'Defining Peace Industries and Calculating the Potential Size of a Peace Gross World Product by Country and by Economic Sector', ResearchGate, May 2009.
- Vest, Charlie, Agatha Kratz, and Reva Goujon. "The Global Economic Disruptions from a Taiwan Conflict." Rhodium Group, 2022. Accessed May 30, 2023. https://rhg.com/research/taiwan-economic-disruptions/.
- 7. Gompert, David C., Astrid Stuth Cevallos, and Cristina L. Garafola, War with China: Thinking Through the Unthinkable. Santa Monica, CA: RAND Corporation, 2016. Accessed May 30, 2023. https://www.rand.org/pubs/research_reports/RR1140.html.
- Varas, Antonio, Raj Varadarajan, Jimmy Goodrich, and Falan Yinug. "Strengthening the global semiconductor supply chain in an uncertain era." Boston Consulting Group and Semiconductor Industry Association (2021). Accessed May 30, 2023. https://www.semiconductors.org/ wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-SemiconductorValue-Chain-April-2021_1.pdf.
- 9. OECD. "FDI IN FIGURES." 2022. Accessed May 30, 2023. https://www. oecd.org/investment/investment-policy/FDI-in-Figures-October-2022.pdf.
- 10. Varas, Antonio, Raj Varadarajan, Jimmy Goodrich, and Falan Yinug. "Strengthening the global semiconductor supply chain in an uncertain era." Boston Consulting Group and Semiconductor Industry Association (2021). Accessed May 30, 2023. https://www.semiconductors.org/ wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-SemiconductorValue-Chain-April-2021_1.pdf.
- Vest, Charlie, Agatha Kratz, and Reva Goujon. "The Global Economic Disruptions from a Taiwan Conflict." Rhodium Group, 2022. Accessed May 30, 2023. https://rhg.com/research/taiwan-economic-disruptions/.
- OECD. "FDI IN FIGURES." 2022. Accessed May 30, 2023. https://www. oecd.org/investment/investment-policy/FDI-in-Figures-October-2022.pdf.

- **9.** Ayissi, Anatole. "Three Decades of Disarmament, Demobilization, and Reintegration of Ex-Combatants in Africa: Lessons Learned and Challenges Ahead." The State of Peacebuilding in Africa, 2020, 141–62. https://doi.org/10.1007/978-3-030-46636-7_9.
- 10. Edu-Afful, Fiifi, and Kwesi Aning. "Peacekeeping Economies in a Sub-Regional Context: The Paradigmatic Cases of Liberia, Sierra Leone and Côte d'Ivoire." Journal of Intervention and Statebuilding 9, no. 3 (2015): 391–407. https://doi.org/10.1080/17502977.2015.1070020.
- 11. Dragonfly Terrorism Tracker.
- 12. Institute for Economics and Peace, Global Terrorism Index, 2023.
- "How Has Mauritania Managed to Stave off Terror Attacks?" ISS Africa, December 6, 2019. https://issafrica.org/iss-today/how-has-mauritaniamanaged-to-stave-off-terror-attacks.
- 14. "Senegal: Extremism and Terrorism." Counter Extremism Project. https:// www.counterextremism.com/countries/senegal-extremism-and-terrorism.
- Braithwaite, Alex. "Resisting infection: How state capacity conditions conflict contagion." Journal of Peace Research 47.3 (2010): 311-319.
- Statista. "Value of foreign direct investment (FDI) outflows from Taiwan from 2011 to 2021." Feb 27, 2023. Accessed May 30, 2023. https://www. statista.com/statistics/1267438/taiwan-foreign-direct-investment-outflows/.
- Buchholz, Katharina. "The Countries Most In Debt To China [Infographic]." Forbes. Aug 19, 2022. Accessed May 30, 2023. https://www.forbes. com/ sites/katharinabuchholz/2022/08/19/the-countries-most-in-debt-tochinainfographic/?sh=5a504f0c61d8.
- CEIC. "China External Debt." 2022. Accessed May 30, 2023. https://www. ceicdata.com/en/indicator/china/external-debt.
- 16. Uren, David. "What if...? Economic consequences for Australia of a US-China conflict over Taiwan." Australian Strategic Policy institute, (2021). Accessed May 30, 2023. https://ad-aspi. s3.ap-southeast-2.amazonaws.com/2021-06/What%20if_0. pdf?VersionId=F4HBNSAt208IUBDV4YZQ08mGSiS5.rZ4.
- Uren, David. "A blockade of Taiwan would cripple China's economy." The Strategist. August 8, 2022. Accessed May 30, 2023. https://www. aspistrategist.org.au/a-blockade-of-taiwan-would-cripple-chinas-economy/.
- 18. Varley, Kevin. "Taiwan Tensions Raise Risks in One of Busiest Shipping Lanes." Bloomberg. August 2, 2022. Accessed May 30, 2023. https://www. bloomberg.com/news/articles/2022-08-02/taiwan-tensions-raise-risks-inone-of-busiest-shipping-lanes.

Endnotes

SECTION 4

- Meier, Vanessa, Niklas Karlén, Therése Pettersson, and Mihai Croicu. "External Support in Armed Conflicts: Introducing the UCDP External Support Dataset (ESD), 1975–2017." Journal of Peace Research, 2022, 2234332210798. https://doi.org/10.1177/00223433221079864.
- 2 Soyaltin-Collela, Digdem, and Tolga Demiryol. "Unusual Middle Power Activism and Regime Survival: Turkey's Drone Warfare and Its Regime-Boosting Effects." Third World Quarterly 0, no. 0 (January 10, 2023): 1–20. https://doi.org/10.1080/01436597.2022.2158080.
- 3 Soyaltin-Collela, Digdem, and Tolga Demiryol. "Unusual Middle Power Activism and Regime Survival: Turkey's Drone Warfare and Its Regime-Boosting Effects." Third World Quarterly 0, no. 0 (January 10, 2023): 1–20. https://doi.org/10.1080/01436597.2022.2158080.
- 4 Watling Jack and Kaushal Sidharth, "The Democratisation of Precision Strike in the Nagorno-Karabakh Conflict." Royal United Services Institute, October 22, 2020. https://rusi.org/explore-our-research/publications/ commentary/democratisation-precision-strike-nagorno-karabakh-conflict; Gatopoulos, Alex. "How Armed Drones May Have Helped Turn the Tide in Ethiopia's War." Military I Al Jazeera, December 10, 2021. https://www. aljazeera.com/features/2021/12/10/how-armed-drones-may-have-helpedturn-tide-in-ethiopia-conflict.
- 5 There were also at least 27 People's Defense Force (PDF) units and 46 other local militias in Myanmar that weaponised drones in 2022, but we exclude them here because these groups only emerged as distinct non-state actors since 2021.
- 6 Crisis Watch scrape
- 7 Combines armed groups in Myanmar into two-groups: pro-Junta and anti-Junta.
- 8 "SIPRI Arms Transfers Database." Stockholm International Peace Research Institute. https://www.sipri.org/databases/armstransfers.
- 9 Watling Jack and Kaushal Sidharth, "The Democratisation of Precision Strike in the Nagorno-Karabakh Conflict." Royal United Services Institute, October 22, 2020. https://rusi.org/explore-our-research/publications/ commentary/democratisation-precision-strike-nagorno-karabakh-conflict.
- 10 Greenwood, Faine. "The Drone War in Ukraine Is Cheap, Deadly, and Made in China." Foreign Policy, February 16, 2023. https://foreignpolicy.com/2023/02/16/ukraine-russia-war-drone-warfare-china/.
- 11 Low estimate from ACLED in 2021 and 2022. High estimate for 2021 from 'high' UCDP estimate, and for 2022 based on UK government estimates and combined Russian and Ukrainian public claims, including approximately 7000 civilians reported by the UN: https://ukraine.un.org/ sites/default/files/2023-01/Ukraine%20-%20civilian%20casualty%20 update%20as%20of%202%20January%202023%20ENG.pdf.

SECTION 5

1 Institute for Economics and Peace, Business and Peace Report 2021, May 2021, section 'Worker Productivity' page 9, www.visionofhumanity.org.

- 12 Davies, Shawn, Therese Pettersson & Magnus Öberg (2023). Organized violence 1989-2022 and the return of conflicts between states?. Journal of Peace Research 60(4).
- 13 Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen. "Introducing ACLED: An Armed Conflict Location and Event Dataset." Journal of Peace Research 47, no. 5 (2010): 651–60. https://doi. org/10.1177/0022343310378914.
- 14 Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen. "Introducing ACLED: An Armed Conflict Location and Event Dataset." Journal of Peace Research 47, no. 5 (2010): 651–60. https://doi. org/10.1177/0022343310378914.
- **15** Trend Indicator Value is a SIPRI measure for arms exports across trends and time to retain consistency.
- 16 Moody, Jessica, "The New 'Cold War' in Africa OZY I A Modern Media Company." January 12, 2023. https://www.ozy.com/pg/newsletter/ the-daily-dose/455558/.
- 17 Davies, Shawn, Therese Pettersson & Magnus Öberg (2023). Organized violence 1989-2022 and the return of conflicts between states?. Journal of Peace Research 60(4).
- 18 Gatopoulos, Alex. "How Armed Drones May Have Helped Turn the Tide in Ethiopia's War." Military I Al Jazeera, December 10, 2021. https://www. aljazeera.com/features/2021/12/10/how-armed-drones-may-have-helped-turn-tide-in-ethiopia-conflict.
- 19 "Ethiopia's Economy Struggles as War Reignites in Tigray," AP NEWS. September 13, 2022. https://apnews.com/article/africa-economygovernment-spending-kenya-826141a7a692574d9609462d2549bffb.
- 20 East Asia Forum. "Russia and Afghanistan's Partnership of Convenience," November 2, 2022. https://www.eastasiaforum.org/2022/11/03/russia-andafghanistans-partnership-of-convenience/.
- 21 Zhou, Jiayi, Fei Su, and Jingdong Yuan. "Treading Lightly: China's Footprint in a Taliban-Led Afghanistan." Stockholm International Peace Research Institute, November 18, 2022. https://doi.org/10.55163/ OVBO3684.
- 22 Rafi, Kambaiz. "Afghanistan: With Civil War on the Cards, the West Needs to Identify a Moderate Ally to Support." The Conversation, October 24, 2022. http://theconversation.com/afghanistan-with-civil-war-on-the-cardsthe-west-needs-to-identify-a-moderate-ally-to-support-191700.
- 23 "Humanitarian Aid: EU Announces over €161.5 Million for Yemen Crisis." Parlement.com. https://www.parlement.com/id/vkwchdw0ytst/nieuws/ humanitarian_aid_eu_announces_over_161_5.

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