GLOBAL PEACE INDEX 2022

Measuring peace in a complex world

Institute for Economics & Peace

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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, The Hague, Mexico City, Brussels 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 16th 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 data-driven 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 2022 GPI, the report includes an analysis of the military conflict in Ukraine. It covers likely increases in military spending, new and emerging uses of technology in the war, its impact on food prices and global shipping routes. The report also contains a deeper analysis on violent demonstrations around the world.

This year's results found that the average level of global peacefulness deteriorated by 0.3 per cent. Although slight, this is the eleventh deterioration in peacefulness in the last fourteen years, with 90 countries improving, 71 deteriorating and two remaining stable in peacefulness, highlighting that countries tend to deteriorate much faster than they improve.

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 New Zealand, Ireland, Denmark and Austria.

Afghanistan is the least peaceful country in the world for the fifth consecutive year, followed by Yemen, Syria, Russia and South Sudan. All of these countries have been among the ten least peaceful countries for the last three years.

Unsurprisingly, two of the five countries with the largest deteriorations in peacefulness were Russia and Ukraine, they were joined by Guinea, Burkina Faso and Haiti. All of these deteriorations were due to ongoing conflict.

Europe is the most peaceful region in the world, where seven of the ten countries most peaceful countries are located.

Five of the nine regions in the world became more peaceful over the past year. The largest improvements occurred in South Asia and the Middle East and North Africa (MENA) region. South Asia's result was driven by a substantial improvement in the *Ongoing Conflict* domain, as many countries experienced reductions in the number of *deaths from internal conflict*s. MENA recorded improvements across all three GPI domains, with the region's result being driven by improvements in *military expenditure, deaths from internal conflict, terrorism impact* and *nuclear and heavy weapons*.

Predictably, the largest regional deterioration in peacefulness was Russia and Eurasia, followed by North America. The conflict between Russia and Ukraine led to a large rise in the number of conflict deaths, as well as sharp deteriorations in indicators such as *refugees and IDPs*, *political instability* and *political terror*. The conflict in Ukraine had immediate repercussions outside the Russia and Eurasia region, especially for the *neighbouring countries relations* indicator, which recorded a sharp deterioration.

Of the 23 indicators in the GPI, ten recorded improvements, while 13 deteriorated.

The largest deteriorations occurred in *political instability*, *political terror scale*, *neighbouring country relations* and *refugees and IDPs* indicators in 2022 relative to the previous year. These indicators have reached their worst levels since the inception of the GPI in 2008. Given rising inflation, likely depressed GDP growth in the coming years and increased costs of servicing record levels of debt, these indicators are likely to deteriorate further. Other indicators to deteriorate were *deaths from external conflict* and *intensity of internal conflict*s.

On a more positive note, there were substantial improvements in the annual scores for a number of indicators, including *terrorism impact*, *nuclear and heavy weapons*, *deaths from internal conflict*, *military expenditure*, *incarceration rates* and *perceptions of criminality*. *Terrorism impact* is now at its lowest level since the inception of the GPI in 2008.

In the past fourteen years, peacefulness has fallen, with the average country score deteriorating by 3.2 per cent. Of the 163 countries in the GPI, 84 recorded deteriorations, while 77 recorded improvements and two recorded no change in score. Fifteen of the 23 GPI indicators deteriorated between 2008 and 2021 while eight improved.

Two of the three GPI domains deteriorated since 2008, with *Ongoing Conflict* deteriorating by 9.3 per cent and *Safety and Security* deteriorating by 3.6 per cent.

Militarisation was the only domain to improve. Some of the largest indicator deteriorations were for *internal conflicts fought*, *external conflicts fought*, *number of refuges and IDPs* and *intensity of internal conflict*. Forty-seven nations recorded deteriorations in their *internal conflicts fought* scores, versus 30 in which the indicator improved. Similarly, 65 countries saw their *external conflicts fought* scores deteriorate since 2008, in comparison with 38 that recorded improvements.

Violent demonstrations recorded the largest deterioration of all indicators since 2008, deteriorating by nearly 50 per cent. A total of 126 nations, or 77 per cent, recorded deteriorations. Some of the countries to record the biggest deteriorations over this period were India, Colombia, Bangladesh and Brazil.

Counter-intuitively, the *Militarisation* domain has improved by 5.2 per cent since 2008, the only GPI domain to record an improvement in the last 14 years. The *armed service* rate has fallen in 112 countries, and *military expenditure as a percentage of GDP* fell in 94 nations. The *nuclear and heavy weapons* indicator also improved overall, with 108 nations reducing their holdings of such weaponry. The trend improvement in *Militarisation* is broadly based, with all regions recording improvements. The largest improvements were in Asia-Pacific, Europe and South Asia. Given the commitment of NATO countries to reach the NATO target of two per cent of GDP spent on the military there may be a reversal of this trend in Europe.

The economic impact of violence on the global economy in 2021 was $16.5 trillion in purchasing power parity (PPP) terms. This figure is equivalent to ten per cent of the world's economic activity (gross world product) or $2,117 per person. The economic impact of violence increased by 12.4 per cent from the previous year. This was mainly driven by an increase in global military expenditure, which rose by 18.8 per cent, although more countries reduced their expenditure as a percent of GDP. China, the US and Iran were the countries with the largest increases in military expenditure in nominal terms.

Violence continues to have a significant impact on the world's economic performance. For the ten countries most affected by violence, the average economic impact of violence was equivalent to 34 per cent of GDP, compared to 3.6 per cent in the countries least affected by violence. Syria, South Sudan and the Central African Republic incurred the largest proportional economic cost of violence in 2021, equivalent to 80, 41 and 37 per cent of GDP, respectively.

The outbreak of war in Ukraine has impacted global peacefulness in multiple ways, much of which will be captured in next year's GPI. If NATO countries meet their new pledges on military spending, their expenditure will rise by seven per cent in the coming years which will adversely affect their scores. The war has underlined the importance of technology in shaping the conduct of conflict, highlighting how fifth generation (5G) mobile technologies, the social media revolution, artificial intelligence, and the greater affordability of drones have changed warfare. The conflict has highlighted a move away from static, curated intelligence to real-time gathering through social media. Information is fluid and content-driven, as it is meant to be broadly shared in a raw, uncensored format.

The key to building peacefulness in times of conflict and uncertainty is Positive Peace. It can also be used to forecast future falls in peacefulness, with accuracy rates of up to 80 per cent. Positive Peace is defined as the *attitudes, institutions and structures* that create and sustain peaceful societies. Countries that have higher levels of peace, as measured by the GPI, than their Positive Peace measures are said to have a 'Positive Peace deficit'. This is where a country records a higher level of peacefulness than can be sustained by its level of socio-economic development. Of the countries with large Positive Peace deficits in 2009, 80 per cent had deteriorated in the GPI by 2022.

Moving forward, the 2022 GPI reveals a world in which many nations have begun to recover from the shock of the COVID-19 pandemic. However, many of the ramifications of the lockdowns remain, including supply chain disruptions and delays, product shortages, higher energy and food prices. It is also a world that is suffering from increasing inflation, the highest levels in forty years in some countries and without an improvement in sight. The rise in food and fuel costs has increased food insecurity and political instability globally, but especially in low-resilience regions such as sub-Saharan Africa, South Asia and MENA.

It is in these already unstable conditions that Russia launched an attack on Ukraine in February 2022. The conflict will only exacerbate these issues further. The conflict will accelerate global inflation, with Western sanctions further contributing to shortages and hikes in prices. The impacts have been only partially captured in 2022 GPI. These near-term implications to global peacefulness may lead to deteriorations in food security, increases in militarisation and military expenditures in Europe, and greater likelihood of political instability and violent demonstrations.

KEY FINDINGS

SECTION 1: RESULTS

- The average level of global peacefulness deteriorated by 0.3 per cent in the 2022 Global Peace Index. Although small, this deterioration continues a long-standing trend, with the GPI deteriorating in eleven of the past 14 years.
- In the past year, 90 countries recorded an improvement, while 71 recorded a deterioration in peacefulness. Three countries recorded no change in their overall score.
- Of the 23 GPI indicators, ten recorded improvements and 13 recorded deteriorations.
- The largest deteriorations were recorded in the *political terror scale, neighbouring country relations, intensity of internal conflict, number of refugees and IDPs* and *political instability*.
- There were a number of indicators that recorded strong yearly improvements, including *terrorism impact, nuclear and heavy weapons, deaths from internal conflict, military expenditure, incarceration rates* and *perceptions of criminality.* Deaths from terrorism have been decreasing for the past seven years.
- The Middle East and North Africa (MENA) region remained the world's least peaceful. It is home to two of the five least peaceful countries in the world. However, it recorded the second largest regional improvement over the past year.
- Europe remains the most peaceful region in the world. The region is home to four of the five most peaceful countries, and only one country in Europe is ranked outside the top half of the index.
- Iceland is the most peaceful nation; a position it has held since the inception of the index. Afghanistan remains the least peaceful country; a position it has held for the last five years.
- The five countries with the largest deteriorations were Ukraine, Guinea, Burkina Faso, Russia and Haiti.
- The five countries with the largest improvements were Libya, Egypt, Saudi Arabia, Philippines and Algeria.
- *Ongoing Conflict* recorded the largest yearly deterioration by domain, the *Safety and Security* domain also deteriorated.
- Peacefulness improved for the *Militarisation* domain, although the impact of the outbreak of the war in Ukraine has only been partially incorporated in this year's GPI, including pledges for higher military spending.
- *Military spending as percentage of GDP* decreased in 99 countries, compared to increases in only 39 countries, while the *armed services personnel rate* improved in 105 countries compared to deteriorations in 40 countries last year.
- In addition to Russia and Ukraine, the five biggest deteriorations for the *Ongoing Conflict* domain occurred in Guinea, Burkina Faso and Haiti.
- *Deaths from external conflict* recorded a sharp deterioration driven by the Russian invasion of Ukraine.
- *Political instability* also deteriorated, with 51 countries recording a fall in peacefulness in this indicator while only 26 improved in the past year. This indicator is now at its worst level since 2008.
- The *political terror* indicator rose to its highest level in 15 years of the GPI, deteriorating by 3.2 per cent in 2022. This was driven by deteriorations in a number of African countries, as well as many governments' response to the threat of COVID-19. Ten countries now have the worst possible score including Yemen, Venezuela, Afghanistan, Syria, North Korea and Myanmar.

SECTION 2: TRENDS

- Since 2008, the level of global peacefulness has deteriorated by 3.2 per cent, with 84 countries deteriorating and 77 improving in the GPI. The world has become successively less peaceful each year since 2014.
- The average level of global peacefulness has deteriorated for eleven of the past 14 years.
- The gap between the least and the most peaceful countries continues to grow. Since 2008, the 25 least peaceful countries deteriorated on average by 16 per cent, while the 25 most peaceful countries improved by 5.1 per cent.
- Conflict in the Middle East has been the key driver of the global deterioration in peacefulness since 2008.
- Of the three GPI domains, two recorded deteriorations and one improved. *Ongoing Conflict* and *Safety and Security* deteriorated by 9.3 and 3.6 per cent respectively. However, *Militarisation* improved by 5.2 per cent, although it is likely to deteriorate in the future because of the Ukraine war.
- The improving trend in *Militarisation* since 2008 was widespread, with 113 of the 163 countries covered in the GPI improving. Ninety-four countries reduced their *military expenditure as a percentage of GDP*, although military spending increased in absolute terms.
- A total of 112 nations recorded reductions in their *armed forces personnel rate* since 2008, while 42 countries increased.
- However, most of this improvement in *Militarisation* happened in the earlier part of the 2010s, and has partially reversed since 2014. In addition, the 2022 conflict in Ukraine has sparked many pledges of increases in military expenditure in the near future.
- *Violent demonstrations* recorded the largest deterioration of any indicator, deteriorating by almost 50 per cent since 2008. This indicator worsened in 126 countries of the 163 nations assessed in the GPI. MENA was the only region not to deteriorate.
- Full democracies recorded the sharpest deterioration in *violent demonstrations* with the score deteriorating by 73 per cent in the decade to 2022. Despite this, the score for full democracies remains better than for any other type of government. On average, full democracies tend to record less violent demonstrations than any other type of regime.
- The number of forcibly displaced people around the world increased from 31 million in 2008, to over 88 million in 2022.
- The rise in violent demonstrations is in line with the deterioration in the *Attitudes* domain of Positive Peace, and suggests that individuals and groups have grown more polarised, more critical of existing administrative structures and less tolerant of dissenting views.
- There are now 17 countries where at least five per cent of the population are either refugees or internally displaced. South

Sudan has over 35 per cent of its population displaced, while Somalia and the Central African Republic have more than 20 per cent displaced.

- Since 2008, 116 countries reduced their *homicide rate*. There are now 33 countries that have a homicide rate of less than one per 100,000 people
- The number of countries experiencing violent internal conflict rose from 29 in 2008, to 38 in 2022 although the number of people killed in internal conflicts has fallen since 2017.

SECTION 3: ECONOMIC IMPACT OF VIOLENCE

- The global economic impact of violence was $16.5 trillion in 2021, equivalent to 10.9 per cent of global GDP, or $2,117 per person.
- The 2021 result represented an increase of 12.4 per cent – or $1.8 trillion – from the previous year, primarily due to higher levels of military expenditure.
- In 2021, 132 countries increased their military expenditure from the previous year, compared to 29 countries that reduced spending. The economic impact was $7.7 trillion, an increase 18.8 per cent.
- In 2021, the economic impact of armed conflict increased by 27 per cent to $559.3 billion. This was driven by increases in the number of refugees and internally displaced people, and in GDP losses from conflict.
- All regions of the world recorded increases in the economic impact of violence from 2020 to 2021.
- MENA and Russia and Eurasia were the regions with the largest proportional increases, at 32 per cent and 29 per cent, respectively.
- Syria, South Sudan and Central African Republic incurred the highest relative economic costs of violence in 2021, equivalent to 80, 41 and 37 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 2021, compared to 3.6 per cent for the ten least affected countries.
- The global economic impact of refugees and internally displaced persons was more than three times higher than the GDP losses from conflict.
- Guyana, Libya and Angola were the countries with the steepest increases in the economic cost of violence. All these nations recorded increases above 85 per cent from 2020 to 2021. South Sudan, Burundi and Togo recorded the largest decreases, all above 25 per cent.
- From 2007 to 2021, 84 countries recorded decreases in their economic cost of violence, while 77 saw increases.
- As a proportion of GDP, global military expenditure rose in both 2020 and 2021. The war in Ukraine in 2022 led many countries to increase projections of their defence spending.
- Among NATO countries, military expenditure will rise by 7 per cent by 2024 if all members lift their expenditure to the minimum level required by the bloc.
- The economic impact of suicide was $757.1 billion in 2021, or 4.6 per cent of the global impact of violence, increasing by 4.7 per cent from the previous year.
- Expenditure on Peacebuilding and Peacekeeping was $41.8 billion in 2021, equal to only 0.5 per cent of military spending.

SECTION 4: THE IMPACT OF THE WAR IN UKRAINE ON PEACEFULNESS

- Military spending has doubled since 1980 to nearly $2 trillion, however as a percentage of GDP it has fallen from four per cent to two per cent.
- The conflict between Russia and Ukraine that began in February 2022 has already triggered fundamental changes in defence postures and policies, supply chains, and food security.
- Inflation has risen around the world, reaching eight per cent per year in the US and seven per cent in Europe early in 2022. The ongoing conflict in Ukraine will likely result in further inflation.
- Global military spending, which had been increasing at a moderate pace since 2014, received a boost in 2022. Many NATO countries have pledged to raise their defence budgets to levels closer to or above the NATO's recommended two per cent of GDP threshold by 2024.
- If all members adhere to the bloc's minimum defence requirements, NATO's defence budget could increase by seven per cent in the near future.
- Nations such as Germany, Italy, Denmark, Belgium, Spain, Norway and others have agreed to increase their defence budgets towards NATO's recommended minimum in the coming years.
- France and Poland have pledged further increases in defence funding well above the two per cent level, while the US will increase spent to $813 billion or 3.8 per cent of GDP.
- China has announced an increase in military spending – with a 7.1 per cent rise planned for 2022 relative to the previous year. However, this does not appear to be directly related to the outbreak of war in Europe, but rather to international and regional geopolitics.
- Twenty-five countries in Europe increased their expenditure as percentage of GDP in 2020 and 2021 compared eleven countries that reduced expenditure.
- Social media is changing the way intelligence is gathered, for example Ukrainians are using Meta to crowd source data on Russian troop movements. Intelligence is also shared instantaneously, raw and with little analysis.
- The war and the international sanctions placed on Russia have put additional pressure on food prices, as both Russia and Ukraine are large exporters of agricultural commodities. The two countries also export natural gas – an important component in the production of fertiliser.
- Some of the sub-Saharan African nations already struggling with food insecurity and undernourishment have been historically highly reliant on grain supplies from Russia and Ukraine.
- In the Ukrainian conflict, fifth generation (5G) mobile technologies, the social media revolution, artificial intelligence, and the greater affordability of drones have changed warfare.

SECTION 5: POSITIVE PEACE

- Positive Peace is a measure of societal resilience that is associated with many desirable socio-economic outcomes such as higher income, greater economic stability and more efficient, transparent and inclusive governance. The Positive Peace Index (PPI) gauges the state of societal resilience across 163 nations using statistical indicators of socio-economic development grouped across the eight Pillars of Positive Peace.
- On average, every one index-point improvement in the PPI – for example, if a country's PPI score changes from a three to a two – is associated with a tenfold rise in GDP per capita. The direct relationship between PPI and GDP outcomes can be seen for all Pillars of Positive Peace.
- From 2009 to 2020, the per-capita GDP of countries that improved in the PPI rose by an average of 3.1 per cent per year. This compares with a growth of 0.4 per cent per year for the other countries.
- Inflation in countries where the PPI improved was on average three times less volatile than where Positive Peace deteriorated in the past decade.
- Household consumption in nations where the PPI improved grew two times faster from 2009 to 2020 than where it deteriorated.
- Countries that have a higher rank in Negative Peace than in Positive Peace are said to have a Positive Peace deficit. This is where a country records a higher level of peacefulness than can be sustained by its level of societal resilience. Most countries in this situation record increasing levels of violence over the subsequent decade.
- Of the countries with a substantial Positive Peace deficit in 2009, 80 per cent deteriorated in the Global Peace Index (GPI) in the subsequent decade.
- Countries with a high Positive Peace deficit in 2009 recorded an average deterioration of 11.6 per cent in the GPI in the subsequent decade. This compares with very little change recorded for other countries.

1 RESULTS

KEY FINDINGS

- The average level of global peacefulness deteriorated by 0.3 per cent in the 2022 Global Peace Index. Although small, this deterioration continues a long standing trend, with the GPI deteriorating in eleven of the past 14 years.
- In the past year, 90 countries recorded improvements in peacefulness, while 71 recorded deteriorations. Three countries recorded no change in their overall score.
- Of the 23 GPI indicators, ten recorded improvements and 13 recorded deteriorations.
- The largest deteriorations were recorded in five indicators: *political terror, neighbouring country relations, intensity of internal conflict, number of refugees* and *IDPs and political instability*.
- There were a number of indicators that recorded substantial improvements, including *terrorism impact, nuclear and heavy weapons, deaths from internal conflict, military expenditure, incarceration rates* and *perceptions of criminality*. Deaths from terrorism have been decreasing for the past seven years.
- The Middle East and North Africa region remained the world's least peaceful. It is home to two of the five least peaceful countries in the world. However, it recorded the second largest regional improvement over the past year.
- Europe remains the most peaceful region in the world. The region is home to four of the five most peaceful countries, and only one country in Europe is ranked outside the top half of the index.
- Iceland is the most peaceful country; a position it has held since the inception of the index. Afghanistan remains the least peaceful country, a position it has held for the last five years.
- The five countries with the largest deteriorations were Ukraine, Guinea, Burkina Faso, Russia and Haiti.
- The five countries with the biggest improvements were Libya, Egypt, Saudi Arabia, the Philippines and Algeria.
- *Ongoing Conflict* recorded the largest deterioration of any GPI domain, while the *Safety and Security* domain also deteriorated.
- Peacefulness improved for the *Militarisation* domain, although the impact of the outbreak of the war in Ukraine has only been partially incorporated in this year's GPI, including pledges for higher military spending.
- Military spending as percentage of GDP decreased in 99 countries, compared to increases in only 39 countries. The armed services personnel rate improved in 105 countries and deteriorated in 40 countries.
- *Deaths from external conflict* recorded a sharp deterioration driven by the Russian invasion of Ukraine.
- *Political instability* also deteriorated, with 51 countries recording a fall in peacefulness in this indicator while only 26 improved in the past year. This indicator is now at its worst level since 2008.
- The *political terror* indicator rose to its highest level since the inception of the GPI in 2008, deteriorating by 3.2 per cent in 2022. This was driven by deteriorations in a number of African countries, as well as many governments' responses to the threat of COVID-19. Ten countries have the worst possible score including Yemen, Venezuela, Afghanistan, Syria, North Korea and Myanmar.

Highlights

Global peacefulness has deteriorated by a small margin, 0.3 per cent, over the past year, although the 2022 Global Peace Index (GPI) only partially captures the effects of the invasion of Ukraine. These effects will be more fully captured in the 2023 report. This is the third consecutive year in which the world has recorded a fall in peacefulness.

Despite the overall deterioration relative to 2021, more countries recorded an improvement in peacefulness than a deterioration, with 90 countries recording an improvement, while 71 recorded a deterioration. This shows that the deteriorations in the GPI tended to be sharper than the improvements. For those countries which saw their score deteriorate, the average deterioration was 3.1 per cent. Among those that improved, the average improvement was 1.9 per cent.

The GPI measures more than just the presence or absence of war. It captures the absence of violence or the fear of violence across three domains: *Safety and Security*, *Ongoing Conflict* and *Militarisation*. Both the *Ongoing Conflict* and *Safety and Security* domains recorded deteriorations, with only the *Militarisation* domain recording an improvement.

The deteriorations in *Safety and Security* and *Ongoing Conflict* domains coincided with conflicts, such as the Russian invasion of Ukraine in February 2022.

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> The world is now less peaceful than it was at the inception of the index.

Of the 23 GPI indicators, ten recorded an improvement and 13 deteriorated over the past year.

Significant deteriorations in *political instability*, *political terror*, *neighbouring country relations* and *refugees and IDPs* indicators occurred in 2022, with these indicators reaching their worst levels since the inception of the GPI in 2008. Other indicators to deteriorate were *deaths from external conflict* and *intensity of internal conflicts*.

The Ukrainian conflict has caused a large displacement of Ukrainian citizens, with the country now featuring among the ten worst scores for *refugees and IDPs*. *Neighbouring countries relations* has recorded a steady decline since 2011, with 45 countries deteriorating and only 20 improving. Of the ten biggest deteriorations in *neighbouring countries relations* in 2022, six are in Europe – Turkey, Sweden, Latvia, Lithuania, Romania and Finland. Other conflicts also influenced the fall in peacefulness, with political and economic instability resulting in five coups occurring within the past year. These took place in Burkina Faso, Guinea, Chad, Sudan and Mali.

On a more positive note, there were substantial improvements for the scores for a number of indicators, including *terrorism impact*, *nuclear and heavy weapons*, *deaths from internal conflict, military expenditure*, *incarceration rates* and *perceptions of criminality*. *Terrorism impact* is now at its best level in six years. The *violent demonstration* indicator also improved in 2022, albeit marginally. This is in contrast to the trend since 2008, which has seen the indicator deteriorate by 49.6 per cent. The biggest improvements in 2022 in the *violent demonstrations* indicator were in recorded in Iceland, Romania and Ecuador, while the largest deteriorations were seen in Kazakhstan, Papua New Guinea and Rwanda.

Iceland remains the world's most peaceful nation, a position it has held since the first iteration of the GPI. Afghanistan is the world's least peaceful country for the fifth consecutive year. Denmark and Slovenia were the only countries to fall in rankings out of the ten most peaceful countries, driven by deteriorations in *violent demonstrations* and other indicators. Over the history of the GPI high peace countries scores have remained consistently good, highlighting how Positive Peace underpins the necessary resilience to maintain high levels of peace.

The world is now less peaceful than it was at the inception of the index in 2008. Since then, the average level of country peacefulness has deteriorated by 3.2 per cent. Year-on-year deteriorations in peacefulness have been recorded for ten of the last 14 years. The fall in peacefulness since 2008 was caused by a wide range of factors, including:

- increases in violent demonstrations;
- the intensification of conflicts in the Middle East, Africa and Russia and Eurasia;
- rising regional tensions in Europe and Northeast Asia;
- increasing numbers of refugees;
- heightened political tensions in Europe and the US; and
- most recently, impacts of the COVID-19 pandemic.

Despite the overall deterioration in peacefulness, some indicators have recorded significant improvements since the beginning of the index. There are 116 countries that have seen their homicide rate fall since 2008, and 91 countries where people feel safer walking alone owing to improved *perceptions of criminality*. However, the largest improvement since 2008 occurred in the *Militarisation* domain where:

- 112 countries have reduced their *armed personnel rates*;
- 111 countries have improved the timeliness of their *UN peacekeeping funding* contributions;
- 108 countries have lowered their levels of *nuclear and heavy weapons*;
- 94 countries have reduced *military expenditure as a percentage of GDP*; and
- 38 countries have reduced their *weapons exports*.

The Middle East and North Africa (MENA) region remained the world's least peaceful. It is home to two of the five least peaceful countries in the world, with no country from the region ranked higher than 23rd in the GPI. However, despite ongoing armed conflict and instability in the region, it did record the second largest improvement in peace over the past year. *Terrorism impact* and the *number of deaths from internal conflict* continued to fall, while *military expenditure as a percentage of GDP* also improved.

Europe remains the most peaceful region and is home to four of the five most peaceful countries in the world. It recorded a slight improvement in peacefulness in the 2022 GPI, owing to improvements on the *Militarisation* and *Safety and Security* domains. Of the 36 European countries in the GPI, 24 recorded an improvement in peacefulness between 2021 and 2022. Greece had the largest improvement of any country in the region, owing to improvements in the *violent demonstrations* and *perceptions of criminality* indicators. However, Europe has higher levels of militarisation than many regions around the world, particularly in regards to weapons imports and exports. The *Ongoing Conflict* domain deteriorated for the region, largely reflecting worsening *neighbouring countries relations*.

The largest regional deterioration in peacefulness occurred in the Russia and Eurasia region, owing to large deteriorations in peacefulness in Russia and Ukraine as a result of the conflict that broke out in February 2022. Both countries were among the five countries with the largest deteriorations in the GPI, with Ukraine recording the largest and Russia recording the fourth largest. The Russian invasion of Ukraine drove large increases in deaths from internal *and deaths from external conflict*, as well as a deterioration in *political terror* in these countries.

Surprisingly, at the global level, *deaths from internal conflict* decreased in 2022. While the conflict in Ukraine has had wide media coverage, a number of other internal conflicts around the world have recorded substantial declines in deaths, such as in Afghanistan, Syria, Nigeria and Somali. There was also a significant increase in the number of refugees and internally displaced persons, with Ukraine recording the largest deterioration globally.

At the global level, the only GPI domain to improve in the 2022 GPI was *Militarisation*, owing to improvements in *nuclear and heavy weapons*, *weapons exports*, *armed services personnel rate* and *military expenditure as a percentage of GDP*.

The *Safety and Security* domain deteriorated very slightly in the 2022 GPI. Despite this deterioration, 86 countries recorded an improvement in this domain, while 77 recorded a deterioration. The improvement in *terrorism impact* that began in 2016 and has continued, with 89 countries recording an improvement since then. The Global Terrorism Index 2022 found that deaths from terrorism have remained fairly consistent since 2018, falling by only 1.2 per cent in 2021, to 7,142 total victims. The primary driver of this fall was a reduction in intensity of conflict in the Middle East and specifically the decline of Islamic State in Iraq and Syria.

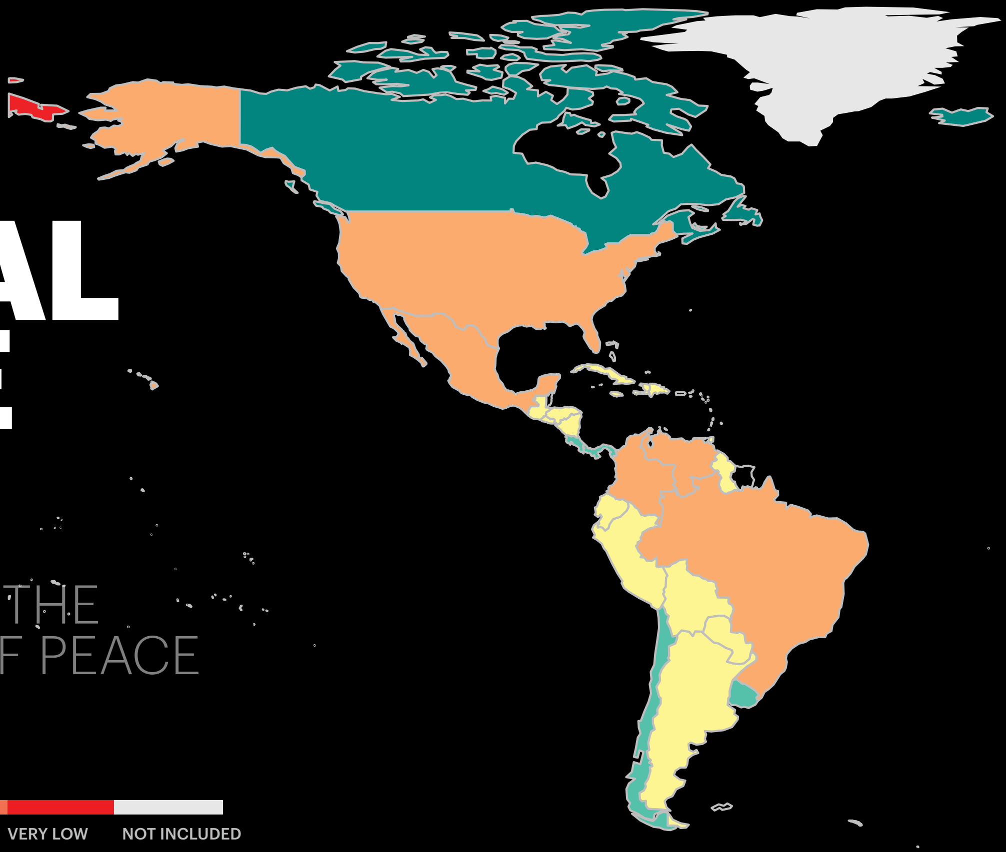
The biggest deterioration on the *Safety and Security* domain occurred in the political terror indicator. Only 29 countries recorded an improvement in this indicator compared with 44 which deteriorated. The country with the largest deterioration in this domain was Ukraine, reflecting large increases in the proportion of *refugees and IDPs*, as well as access to small arms and *political instability*. The second steepest deterioration took place in Mozambique. The country deteriorated on a broad range of indicators, including *political terror, violent demonstrations*, *perceptions of criminality* and number of *refugees and IDPs*.

Political instability also deteriorated, with 51 countries recording a fall in peacefulness in this indicator while only 26 improved in the past year. This indicator is now at its worst level since 2008. Ukraine was the country with the largest deterioration in *political instability*, followed by Peru and Belarus.

As the world enters a new period following the height of the COVID-19 pandemic, it is clear that the pandemic exacerbated economic and political issues that were already present before 2020. The pandemic pushed many countries towards economic and political crises, while also heightening levels of anti-government sentiment and distrust of authority. Countries that had become progressively more peaceful experienced outbreaks of protests and violence aimed particularly at the government's handling of the pandemic. Countries such as Canada and Estonia recorded their first substantial deteriorations in peacefulness in more than decade.

2022 GLOBAL PEACE INDEX

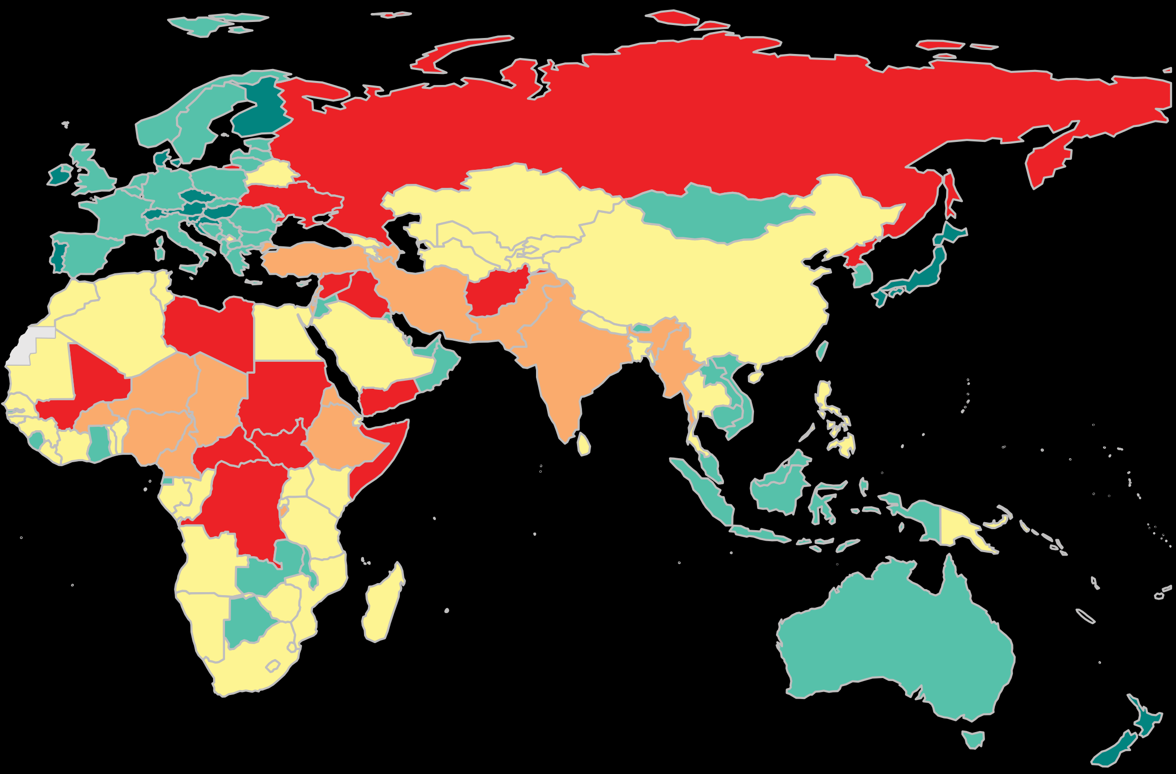
A SNAPSHOT OF THE GLOBAL STATE OF PEACE



THE STATE OF PEACE

VERY HIGH | HIGH | MEDIUM | LOW | VERY LOW | NOT INCLUDED

RANK	COUNTRY	SCORE	CHANGE
1	Iceland	1.107	↔
2	New Zealand	1.269	↔
3	Ireland	1.288	↑ 3
4	Denmark	1.296	↓ 1
5	Austria	1.3	↑ 2
6	Portugal	1.301	↓ 1
7	Slovenia	1.316	↓ 3
8	Czech Republic	1.318	↑ 1
9	Singapore	1.326	↑ 1
10	Japan	1.336	↑ 1
11	Switzerland	1.357	↑ 1
12	Canada	1.389	↓ 4
13	Hungary	1.411	↑ 2
14	Finland	1.439	↓ 1
15	Croatia	1.44	↓ 1
16	Germany	1.462	↑ 3
17	Norway	1.465	↔
18	Malaysia	1.471	↑ 4
19	Bhutan	1.481	↓ 3
20	Slovakia	1.499	↑ 5
21	Netherlands	1.522	↑ 2
22	Belgium	1.526	↑ 2
23	Qatar	1.533	↑ 6
24	Bulgaria	1.541	↑ 3
25	Poland	1.552	↓ 4
26	Sweden	1.564	↓ 6
27	Australia	1.565	↓ 9
28	Mauritius	1.57	↑ 2
29	Spain	1.603	↑ 3
30	Taiwan	1.618	↑ 3
31	Romania	1.64	↓ 5
32	Italy	1.643	↑ 2
33	Estonia	1.662	↓ 5
34	United Kingdom	1.667	↑ 2
35	Latvia	1.673	↓ 4
36	North Macedonia	1.704	↑ 1
37	Lithuania	1.724	↓ 2
38	Costa Rica	1.732	↑ 1
39	Kuwait	1.739	↓ 1
40	Ghana	1.759	↑ 1
41	Albania	1.761	↑ 3
42	Mongolia	1.775	↓ 2
43	South Korea	1.779	↑ 8
44	Vietnam	1.786	↑ 6
45	The Gambia	1.792	↑ 10
46	Uruguay	1.795	↓ 4
47	Indonesia	1.8	↓ 2
=48	Botswana	1.801	↓ 5
=48	Montenegro	1.801	↔
50	Sierra Leone	1.803	↑ 2
51	Laos	1.809	↓ 5
52	Serbia	1.832	↓ 5
53	Greece	1.838	↑ 14
54	Timor-Leste	1.839	↔
55	Chile	1.84	↓ 6
56	Zambia	1.841	↑ 10
57	Jordan	1.849	↑ 15
58	Bosnia and Herzegovina	1.85	↓ 1
59	Equatorial Guinea	1.863	↓ 6
60	United Arab Emirates	1.865	↑ 1
61	Panama	1.876	↓ 1
=62	Cambodia	1.882	↑ 6
=62	Moldova	1.882	↓ 6
64	Oman	1.889	↔
=65	France	1.895	↑ 7
=65	Malawi	1.895	↓ 2
67	Cyprus	1.903	↓ 2
68	Namibia	1.908	↓ 9
69	Argentina	1.911	↑ 5
70	Senegal	1.916	↓ 12
71	Kosovo	1.938	↑ 8
72	Rwanda	1.945	↑ 9
73	Nepal	1.947	↑ 7
74	Morocco	1.969	↑ 9
=75	Gabon	1.973	↑ 9
=75	Liberia	1.973	↑ 1
77	Paraguay	1.976	↑ 8
78	Angola	1.982	↑ 14
79	Ecuador	1.988	↑ 11
80	Bolivia	1.989	↑ 14
=81	Dominican Republic	1.99	↓ 3
=81	Jamaica	1.99	↓ 4
83	Armenia	1.992	↑ 3



IMPROVEMENTS

90

countries recorded improvements in peacefulness

DETERIORATIONS

71

countries were less peaceful in 2022 than in 2021

OVERALL AVERAGE CHANGE (%)

+0.3

The average level of global peacefulness deteriorated by 0.3 per cent in the 2022 Global Peace Index

RANK	COUNTRY	SCORE	CHANGE
84	Madagascar	1.995	↓ 9
85	Tunisia	1.996	↓ 3
=86	Tanzania	2.001	↓ 15
=86	Uzbekistan	2.001	↑ 7
88	Trinidad and Tobago	2.005	↑ 2
89	China	2.01	↑ 6
90	Sri Lanka	2.02	↑ 13
91	Kyrgyz Republic	2.028	↓ 21
92	Tajikistan	2.031	↑ 6
93	Eswatini	2.033	↓ 31
94	Papua New Guinea	2.046	↑ 2
95	Georgia	2.065	↓ 9
96	Bangladesh	2.067	↑ 6
97	Kazakhstan	2.071	↓ 29
98	Cuba	2.083	↓ 9
99	Bahrain	2.085	↑ 1
100	Lesotho	2.089	↑ 5
101	Peru	2.091	↓ 13
102	Togo	2.094	↑ 7
103	Thailand	2.098	↑ 9
104	Turkmenistan	2.116	↑ 5
105	Benin	2.125	↑ 2
106	Guatemala	2.139	↑ 7
107	Guyana	2.14	↓ 1
108	Cote d' Ivoire	2.144	↔
109	Algeria	2.146	↑ 10
110	Guinea-Bissau	2.156	↓ 9
111	Republic of the Congo	2.184	↑ 7

RANK	COUNTRY	SCORE	CHANGE
112	Mauritania	2.193	↑ 5
113	Djibouti	2.213	↓ 9
114	El Salvador	2.231	↔
115	Haiti	2.254	↓ 16
116	Belarus	2.259	↔
117	Honduras	2.269	↑ 5
118	South Africa	2.283	↑ 5
119	Saudi Arabia	2.288	↑ 8
120	Kenya	2.303	↑ 1
121	Uganda	2.309	↓ 6
122	Mozambique	2.316	↓ 11
123	Guinea	2.332	↓ 26
124	Nicaragua	2.334	↔
125	Philippines	2.339	↑ 4
126	Egypt	2.342	↑ 5
127	Zimbabwe	2.35	↓ 2
128	Azerbaijan	2.437	↓ 8
129	United States of America	2.44	↓ 1
130	Brazil	2.465	↔
131	Burundi	2.47	↓ 5
132	Eritrea	2.494	↑ 3
133	Palestine	2.552	↔
134	Israel	2.576	↑ 8
135	India	2.578	↑ 3
136	Chad	2.591	↑ 1
137	Mexico	2.612	↑ 2
138	Lebanon	2.615	↑ 6

RANK	COUNTRY	SCORE	CHANGE
139	Myanmar	2.631	↓ 7
140	Niger	2.655	↑ 1
141	Iran	2.687	↑ 2
142	Cameroon	2.709	↑ 4
143	Nigeria	2.725	↑ 2
144	Colombia	2.729	↑ 2
145	Turkey	2.785	↑ 5
146	Burkina Faso	2.786	↓ 12
147	Pakistan	2.789	↑ 1
148	Venezuela	2.798	↑ 3
149	Ethiopia	2.806	↓ 9
150	Mali	2.911	↓ 1
151	Libya	2.93	↑ 5
152	North Korea	2.942	↑ 1
153	Ukraine	2.971	↓ 17
154	Sudan	3.007	↓ 2
155	Central African Republic	3.021	↓ 1
156	Somalia	3.125	↑ 2
157	Iraq	3.157	↑ 2
158	Democratic Republic of the Congo	3.166	↓ 1
159	South Sudan	3.184	↑ 1
160	Russia	3.275	↓ 5
161	Syria	3.356	↔
162	Yemen	3.394	↔
163	Afghanistan	3.554	↔

Results

The 2022 GPI finds that the world became less peaceful for the eleventh time in the last 14 years, with the average level of country peacefulness deteriorating by 0.3 per cent over the past year. Figure 1.1 shows the change in the average levels of peacefulness in the overall score and for each of the GPI domains, as well as the percentage of countries that improved or deteriorated. In total, peacefulness improved in 90 countries and deteriorated in 71, highlighting that falls in peacefulness are generally larger than improvements.

The main driver of the overall deterioration in peacefulness in 2022 was the *Ongoing Conflict* domain. Within this domain, *neighbouring countries relations* recorded the largest deterioration, with largest deteriorations being recorded for countries such as Romania, Australia, Burkina Faso, Estonia, Finland, Latvia, Lithuania, Myanmar, Sweden and others. Other important contributors to the deterioration in this domain were *intensity of internal conflict* and *deaths from external conflict.*

There was a slight deterioration on the *Safety and Security* domain, driven by deteriorations in *political terror*, *political instability* and *refugees and IDPs*. Improvements were seen in the *terrorism impact*, *perceptions of criminality* and *incarceration rate* indicators.

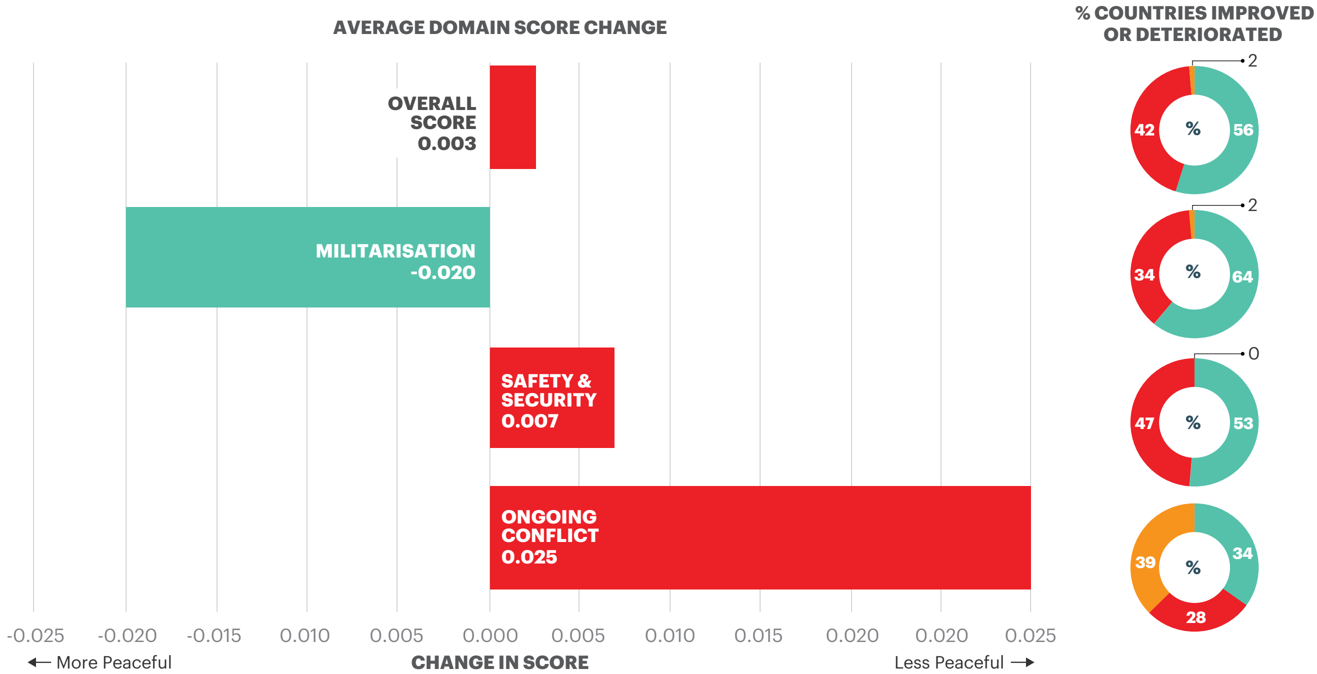
The *Militarisation* domain improved in 2022 after recording a deterioration in the preceding year. However, this improvement does not take into consideration the wave of pledges for higher spending on weapons and personnel in which followed the invasion of Ukraine. If they materialise, these increases in expenditure will be recorded in the coming years, and in some cases will be substantially eroded by rising global inflation, and surging fuel costs. In 2022, there were improvements in the *nuclear and heavy weapons*, *military expenditure*, *weapons exports* and *armed services personnel* indicators.

Ten of the 23 GPI indicators improved on average, with the remaining thirteen deteriorating, though two – *homicide rate* and weapons imports – deteriorated by a very small margin. Figure 1.2 shows the average percentage change for each indicator from the 2021 to the 2022 GPI. The largest average deterioration was in the *deaths from external conflict* indicator, while *nuclear and heavy weapons* had the largest improvement.

FIGURE 1.1

Year-on-year change in GPI score by domain, 2022

The *Ongoing Conflict* domain had the largest overall change.



Source: IEP

FIGURE 1.2

Percentage change in score by indicator, 2021–2022

Indicators of *Ongoing Conflict* increased, but *nuclear and heavy weapons, deaths from internal conflict* and *impact of terrorism* continue to fall.

Source: IEP

The number of *deaths from external conflict* increased in seven countries. The largest increases occurred in Russia, Iraq and the Democratic Republic of the Congo. This is the first year since 2016 that more than five countries have deteriorated in this indicator.

The growth of political violence and terror continued through 2021 and into 2022, with 44 countries recording a deterioration in the *political terror* indicator, compared to 29 that recorded an improvement. Large deteriorations occurred in Mozambique, Burundi, Belarus, Azerbaijan, Argentina and Djibouti. The average *political terror* score is now the highest it has been since 2008.

Terrorism impact recorded the third largest indicator improvement, with 86 countries recording an improvement, and 18 countries recording deteriorations. Total deaths from terrorism have been following a downward trend since 2015. The largest improvements occurred in Spain, Ethiopia, Ecuador, Bahrain and Sweden.

The *nuclear and heavy weapons* indicator recorded the second largest overall improvement. This is the first improvement for the indicator since 2016. Improvements were recorded in 129 countries, with deteriorations in only four countries and no change in 30 countries. The largest improvements occurred in Turkey and Japan, while the countries which deteriorated – Rwanda, Trinidad and Tobago, Burundi and Guyana – each recorded a deterioration of less than one per cent.

FIVE MOST & LEAST PEACEFUL COUNTRIES BY DOMAIN

TABLE 1.1
Safety and Security domain

Rank	Country	2021 Score	Score change	Rank change
1	Iceland	1.325	-0.088	↑ 5
2	Norway	1.265	0.001	↔
3	Japan	1.248	0.035	↓ 2
4	Denmark	1.312	-0.017	↑ 1
5	Singapore	1.307	0.009	↓ 1

Rank	Country	2021 Score	Score change	Rank change
163	Afghanistan	4.185	-0.058	↔
162	Venezuela	3.959	-0.13	↔
161	Yemen	3.697	0.092	↓ 2
160	Democratic Republic of the Congo	3.796	-0.049	↑ 1
159	South Sudan	3.623	0.073	↓ 1

TABLE 1.2
Ongoing Conflict domain

Rank	Country	2021 Score	Score change	Rank change
= 1	Botswana	1	0	↔
= 1	Bulgaria	1	0	↔
= 1	Iceland	1	0	↔
= 1	Mauritius	1	0	↔
= 1	Singapore	1	0	↔

Rank	Country	2021 Score	Score change	Rank change
163	Syria	3.828	0.095	↔
162	Yemen	3.687	0.021	↔
161	Russia	3.079	0.616	↓ 9
160	Afghanistan	3.641	0.009	↑ 1
159	Somalia	3.613	-0.132	↑ 1

TABLE 1.3
Militarisation domain

Rank	Country	2021 Score	Score change	Rank change
1	Iceland	1.028	-0.008	↔
2	Slovenia	1.129	0.014	↔
3	New Zealand	1.197	-0.029	↑ 1
4	Hungary	1.17	0.014	↓ 1
5	Malaysia	1.266	-0.061	↑ 1

Rank	Country	2021 Score	Score change	Rank change
163	Israel	3.828	-0.015	↔
162	Russia	3.234	-0.013	↔
161	North Korea	3.135	-0.015	↓ 1
160	United States of America	3.172	-0.083	↑ 1
159	France	2.78	-0.007	↔

FIVE LARGEST IMPROVEMENTS AND DETERIORATIONS

TABLE 1.4

Five largest improvements in peacefulness				
Rank	Country	2021 Score	Score change	Rank change
151	Libya	2.930	-0.171	↑ 5
126	Egypt	2.342	-0.145	↑ 5
119	Saudi Arabia	2.288	-0.124	↑ 8
125	Philippines	2.339	-0.113	↑ 4
109	Algeria	2.146	-0.112	↑ 10

Five largest deteriorations in peacefulness				
Rank	Country	2021 Score	Score change	Rank change
153	Ukraine	2.971	0.413	↓ 17
123	Guinea	2.332	0.280	↓ 26
146	Burkina Faso	2.786	0.243	↓ 12
160	Russia	3.275	0.237	↓ 5
115	Haiti	2.254	0.181	↓ 16

Regional Overview

Five of the nine regions in the world improved in peacefulness in 2022, while the other four deteriorated. Europe, Asia-Pacific, South America, South Asia and MENA were the regions that improved.

Of the regions that deteriorated, the Russia and Eurasia region recorded the largest average deterioration of 4.1 per cent, with North America recording the second largest fall, at two per cent. Russia and Eurasia had deteriorations across two of the three GPI domains, with the largest occurring in the *Ongoing Conflict* domain, which was driven by the Russian invasion of Ukraine.

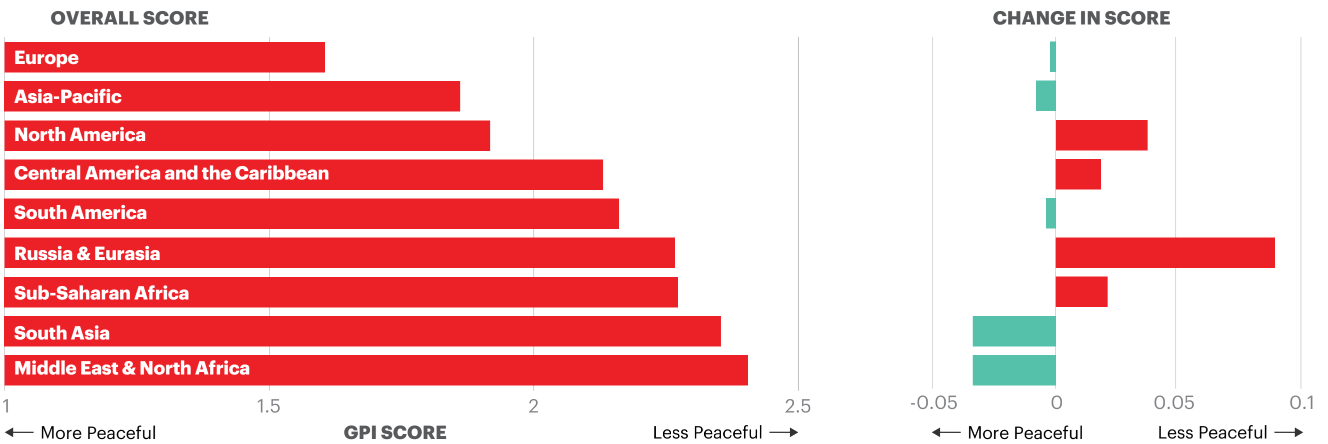
Europe maintained its position as the most peaceful region in the world, which it has held since 2008, with the MENA remaining the least peaceful. However, both regions continue to record an improvement in the 2022 GPI.

Figure 1.3 shows the overall score for each region in the 2022 GPI, as well as the change in score from the 2021 to the 2022 GPI.

FIGURE 1.3

Regional GPI results, 2022

Four of the nine global regions experienced deteriorations in peacefulness.



Source: IEP

ASIA-PACIFIC

The Asia-Pacific region recorded a slight improvement in peacefulness in the 2022 GPI, its first in three years, with an average improvement in overall score of 0.008 points, or 0.4 per cent. Only six countries in the region recorded deteriorations in their score, compared to ten in the year prior.

The rise in peacefulness was driven by improvements in all three GPI domains, with the largest occurring in *Safety and Security*. The improvement in the *Militarisation* domain was only marginal, with only two of the six indicators in the domain more peaceful than the global average. There was also a substantial deterioration in the timeliness of *UN peacekeeping funding* which deteriorated 9.7 per cent in a single year, the largest deterioration of any region.

New Zealand remains the most peaceful country in the region and the second most peaceful country overall in the 2022 GPI. New Zealand recorded a slight improvement in score in the 2022 GPI, as a result of a decrease in *incarceration rate*, *military expenditure* and *terrorism impact*. Improvements were recorded across all domains except for *Ongoing Conflict*, which remained stable between 2021 and 2022.

Singapore remains the second most peaceful nation in the region for the third consecutive year. Singapore improved significantly in the *Militarisation* domain, with large improvements particularly in *nuclear and heavy weapons* as well as *weapons exports* between 2021 and 2022.

The Philippines recorded the largest improvement in the region and the fifth largest improvement in peacefulness in the 2022 GPI, improving by 4.6 per cent. The improvement in peacefulness was driven by changes in the *Safety and Security* and *Ongoing Conflict* domains. The country recorded its lowest score in a decade, largely driven by significant improvements in *political stability*, the impact of terrorism and *homicide rate*s. Despite this improvement, the Philippines continues to be the third least peaceful country in the region for the second consecutive year.

TABLE 1.5
Asia-Pacific

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	New Zealand	1.269	-0.015	2
2	Singapore	1.326	-0.02	9
3	Japan	1.336	-0.019	10
4	Malaysia	1.471	-0.049	18
5	Australia	1.565	0.08	27
6	Taiwan	1.618	-0.035	30
7	Mongolia	1.775	0.017	42
8	South Korea	1.779	-0.046	43
9	Vietnam	1.786	-0.031	44
10	Indonesia	1.8	0.019	47
11	Laos	1.809	0.027	51
12	Timor-Leste	1.839	0	54
13	Cambodia	1.882	-0.036	62
14	China	2.01	-0.04	89
15	Papua New Guinea	2.046	-0.005	94
16	Thailand	2.098	-0.055	103
17	Philippines	2.339	-0.113	125
18	Myanmar	2.641	0.153	139
19	North Korea	2.942	0.025	152
REGIONAL AVERAGE		1.86	-0.008	

Thailand recorded its best score since the inception of the GPI, as well as the second highest improvement in GPI 2022 score in the region. Thailand is now amongst the top 100 most peaceful nations globally, with improvements observable across all three domains. This comes after a period of significant instability coinciding with the COVID-19 pandemic and culminating in anti-government demonstrations throughout 2020 and 2021.[1]

Myanmar recorded the largest deterioration in peacefulness in the Asia-Pacific region, as the country grapples with the fall-out from a military coup in early February 2021. There were large deteriorations in all domains in 2022 after the coup continues to impact the peacefulness of the nation, with large increases in civil unrest and violent crime. Hundreds of people have been killed and security forces have been accused of human rights abuses, including murder, enforced disappearances, persecution and genocide.[2]

CENTRAL AMERICA & THE CARRIBEAN

Peacefulness deteriorated slightly in Central America and the Caribbean in the 2022 GPI, with an average deterioration in score of 0.019 points, or 0.9 per cent. Of the twelve countries in the region, seven recorded deteriorations in peacefulness, compared to nine in the year prior. *Ongoing Conflict* and *Safety and Security* deteriorated in 2022, while *Militarisation* recorded improvements across all six indicators in the domain. The overall fall in peacefulness was largely driven by a large rise in violent crime, which increased by 4.4 per cent to the highest level since 2008. Haiti had the largest deterioration in peacefulness in the region, dropping 14 places in the global rankings in a single year.

TABLE 1.6
Central America & The Carribean

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Costa Rica	1.732	0.017	38
2	Panama	1.876	-0.009	61
3	Dominican Republic	1.99	0.02	81
4	Jamaica	1.99	0.021	81
5	Trinidad and Tobago	2.005	-0.018	88
6	Cuba	2.083	0.063	98
7	Guatemala	2.139	-0.024	106
7	El Salvador	2.231	0.051	114
9	Haiti	2.254	0.181	115
10	Honduras	2.269	-0.061	117
11	Nicaragua	2.334	0.001	124
12	Mexico	2.612	-0.014	137
REGIONAL AVERAGE		2.126	0.019	

Costa Rica remains the most peaceful country in the region, ranking 38th overall in the 2022 GPI. However, the country recorded a deterioration in peacefulness over the past year, owing to increases in *violent demonstrations*, the importation of weapons and rising violent crime and *political instability*. Despite these deteriorations, Costa Rica still scores very well on both the *Militarisation and Ongoing Conflict* domains, with improvements in the former owing to an improvement in the timeliness of its *UN peacekeeper funding* and a fall in *military expenditure* as a percentage of GDP.

After recording the largest overall deterioration in the region in 2021, Honduras increased its level of peacefulness with large improvements across all three domains. Improvements in *political terror* and *UN peacekeeping funding* saw its overall score improve by 2.6 per cent. However, the country remains the third least peaceful nation in the region, with its *violent crime* and *homicide rate* deteriorating to the worst possible scores for each of these indicators.

Mexico is the largest and most populous country in Central America, and it remained the least peaceful country in the region in 2022. Mexico recorded a 0.5 per cent improvement in peacefulness in the 2022 GPI, the first improvement since 2019. More than half of its GPI indicators remained stable between 2021 and 2022, while only four indicators deteriorated during the period: *incarceration rate*, *external conflicts fought*, *military expenditure* as a percentage of GDP and *UN peacekeeping funding*. The latter indicator deteriorated substantially, with an almost 30 per cent deterioration in the timeliness of Mexico's *UN peacekeeping funding* in 2022. Mexico continues to be amongst the countries with the highest *homicide rates*, with the eight most violent cities in the world all being located in the country: Zamora, Ciudad Obregón, Zacatecas, Tijuana, Celaya, Ciudad Juárez, Enseada and Uruapan.[3] There was an improvement in the *Safety and Security* domain, with the impact of terrorism dropping by 12 per cent and *political instability* recording a ten per cent improvement, the country's first in this indicator since 2018.

Haiti recorded the biggest deterioration in peacefulness in the region and the fifth largest deterioration in the 2022 GPI, with falls in peacefulness across *Safety and Security* and *Ongoing Conflict* GPI domains. The largest change occurred in the *Ongoing Conflict* domain owing to an increased *intensity of internal conflict* and a rising number of *deaths from internal conflict*. Haiti has experienced an abrupt increase in violence, especially in the wake of the assassination of the Haitian President Jovenel Moïse in July 2021.[4] Gang-related violence continues to grow in Haiti, with gang leaders continuing to exert their power over the territories under their control, defy the rule of law and commit criminal acts such as kidnapping, extortion and murder.[5]

EUROPE

Europe was one of five regions to record an improvement in peacefulness in the 2022 GPI, with an average improvement in overall score of 0.003 points, or 0.2 per cent. Europe remains the most peaceful region in the world, and is home to seven of the ten most peaceful countries. The improvement in peacefulness in Europe was driven by the continued improvement of the *terrorism impact* indicator, and a fall in average *perceptions of criminality*. Of the 36 countries in the region, 24 had improvements in peacefulness and 12 had deteriorations.

TABLE 1.7

Europe

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Iceland	1.107	-0.039	1
2	Ireland	1.288	-0.019	3
3	Denmark	1.296	0.003	4
4	Austria	1.3	-0.018	5
5	Portugal	1.301	-0.002	6
6	Slovenia	1.316	0.021	7
7	Czech Republic	1.318	-0.013	8
8	Switzerland	1.357	-0.027	11
9	Hungary	1.411	-0.047	13
10	Finland	1.439	0.033	14
11	Croatia	1.44	-0.012	15
11	Germany	1.462	-0.032	16
13	Norway	1.465	-0.018	17
14	Slovakia	1.499	-0.046	20
15	Netherlands	1.522	-0.003	21
16	Belgium	1.526	-0.005	22
17	Bulgaria	1.541	-0.021	24
18	Poland	1.552	0.039	25
19	Sweden	1.564	0.067	26
20	Spain	1.603	-0.038	29
21	Romania	1.64	0.08	31
22	Italy	1.643	-0.018	32
23	Estonia	1.662	0.099	33
24	United Kingdom	1.667	-0.005	34
25	Latvia	1.673	0.039	35
26	North Macedonia	1.704	0.017	36
27	Lithuania	1.724	0.056	37
28	Albania	1.761	-0.008	41
29	Montenegro	1.801	0.005	48
30	Serbia	1.832	0.047	52
31	Greece	1.838	-0.079	53
31	Bosnia and Herzegovina	1.85	-0.01	58
33	France	1.895	-0.035	65
34	Cyprus	1.903	-0.011	67
35	Kosovo	1.938	-0.038	71
36	Turkey	2.785	-0.066	145
REGIONAL AVERAGE		1.601	-0.003	

The outbreak of the conflict between Russia and Ukraine in February 2022 had a substantial impact on peace within the European region. While Russia and Ukraine are part of the Russia and Eurasia region, the conflict had repercussions that crossed many international borders. Of the ten countries in Europe with the largest deteriorations in peacefulness in 2022, six share a border with either Russia or Ukraine. These countries largely had deteriorations in indicators such as *political instability* and *neighbouring countries relations*, with the former also likely impacted by rising anti-government sentiment as a result of the COVID-19 pandemic. The *neighbouring countries relations* indicator saw a deterioration of ten per cent in 2022, rising to the highest level seen in Europe since the inception of the GPI in 2008.

Iceland remains the most peaceful country in the region and the world in the 2022 GPI, with an improvement in its score of 3.4 per cent. Both the *violent demonstrations* and *perceptions of criminality* indicators improved. Iceland recorded a 55 per cent decrease in *violent demonstrations* score after recording its highest score in 2021, while its *perceptions of criminality* score is now the tenth lowest globally.

Greece recorded the largest improvement in the region and is now ranked 53rd overall, with this year's score being its most peaceful to date. The country recorded significant improvements in *violent demonstrations*, *perceptions of criminality*, *UN peacekeeping funding* and *nuclear and heavy weapons*, while all indicators in the *Ongoing Conflict* domain remained static. Despite this, Greece experienced its highest level of *military expenditure* as a percentage of GDP since 2008, with the country increasing its defence budget as a result of growing tensions with Turkey.[6]

While Turkey continues to be the least peaceful country in the region for 15th year, the country recorded a slight improvement in peacefulness, of 2.3 per cent. This was largely driven by improvements in *nuclear and heavy weapons*, *deaths from internal conflict*, *UN peacekeeping funding* and *terrorism impact*. Despite the improvements in peacefulness, Turkey recorded a significant deterioration in *external conflicts fought*, driven by the country's ongoing involvement in the conflict in Syria.

Estonia had the largest deterioration in peacefulness in Europe, falling six places to rank 33rd in the overall GPI, its least peaceful year since 2012. Deteriorations were observed across all domains in 2022, with the highest being in the *Ongoing Conflict* domain, where Estonia's *neighbouring countries relations* deteriorated by a third. This fall in peacefulness was driven by the Russia-Ukraine conflict, with Estonia supporting Ukraine by being one of the first countries to send Ukraine military aid. There was a large deterioration in the country's *violent demonstrations* score, especially as a consequence of protests against the administrative measures enacted to contain the COVID-19 pandemic. Estonia's *homicide rate* also contributed to its fall in peacefulness, with the rate rising by 13.2 per cent, now the second highest in the region.

MIDDLE EAST & NORTH AFRICA

Middle East and North Africa (MENA) remains the least peaceful region in the world for the seventh consecutive year, despite recording improvements in peacefulness since 2020. MENA improved by 0.034 points, or 1.4 per cent, from 2021 to 2022. All three GPI domains improved in the region, with the largest improvement occurring in the *Militarisation* domain, which experienced an average decrease of 1.8 per cent in score.

There were improvements in the overall score in 12 of the 20 countries in the region, with an average overall increase in peacefulness of 1.4per cent, which is the largest MENA has experienced since 2008. Eight countries in the region recorded a deterioration in peacefulness. The primary drivers of the improvement in peacefulness in the region were declines in the impact of terrorism, deaths from conflict and *military expenditure* as a percentage of GDP.

TABLE 1.8

Middle East & North Africa

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Qatar	1.533	-0.048	23
2	Kuwait	1.739	0.037	39
3	Jordan	1.849	-0.081	57
4	United Arab Emirates	1.865	-0.025	60
5	Oman	1.889	-0.013	64
6	Morocco	1.969	-0.027	74
7	Tunisia	1.996	0.002	85
8	Bahrain	2.085	0.01	99
9	Algeria	2.146	-0.112	109
10	Saudi Arabia	2.288	-0.124	119
11	Egypt	2.342	-0.145	126
12	Palestine	2.552	0.032	133
13	Israel	2.576	-0.059	134
14	Lebanon	2.615	-0.104	138
15	Iran	2.687	0.012	141
16	Libya	2.93	-0.171	151
17	Sudan	3.007	0.099	154
18	Iraq	3.157	-0.074	157
19	Syria	3.356	0.06	161
20	Yemen	3.394	0.052	162
REGIONAL AVERAGE		**2.399**	**-0.034**	

Yemen is the least peaceful country in the MENA region for the second consecutive year, a position that was held by Syria since 2014. Yemen is also the second least peaceful country globally, with recorded falls in the country's peacefulness every year since 2018. Yemen recorded deteriorations in all domains, with the largest deterioration occurring in the *violent demonstrations* and violent crime indicators. The latter coincided with the COVID-19 pandemic, the country's struggling economy and intensifying internal conflict.[8] The deterioration of the *violent demonstrations* indicator was driven by a significant increase in the number of fatalities incurred during *violent demonstrations*, with deaths increasing four times in a single year to 33 fatalities.

Sudan experienced the largest deterioration in peacefulness in the MENA region in 2022 and is now the fourth least peaceful country in the region. The country experienced a deterioration across all domains apart from *Militarisation*, which improved slightly by 0.04 per cent. The fall in peacefulness was largely driven by a deterioration in *Ongoing Conflict* domain, with the *intensity of internal conflict* indicator registering the maximum score of five for the first time since 2012. This coincides with Sudan entering the third year of its democratic transition, which continues to be hampered by the government failing to implement key institutional and law reforms stipulated in the constitutional charter signed in August 2019.[9]

Qatar remains the most peaceful country in the MENA region for the 15th consecutive year and is the only MENA country to be amongst the 25 most peaceful countries globally. Qatar only deteriorated in three of the 23 GPI indicators in 2022: *refugees and IDPs*, *perceptions of criminality* and *weapons exports*. *Perceptions of criminality* has deteriorated in the country, but the overall level of crime in 2022 remains low. Twelve indicators experienced no change in the last year, while eight improved. The highest improvement occurred in the *political instability* indicator, which improved by 28.6 per cent, the second largest improvement of any nation globally.

Libya recorded the largest increase in peacefulness in the region and the largest improvement globally, with its score improving by 5.6 per cent in the 2022 GPI. Libya has recorded improvements in peacefulness for four of the past five years, although it remains one of the least peaceful countries in the world, ranking 151st in the GPI. Libya only deteriorated in one indicator, *UN peacekeeping funding*, while the largest improvements occurred in the *Safety and Security* domain, with substantial improvements in *violent demonstrations*, *refugees and IDPs* and *perceptions of criminality*. The latter indicator recorded its lowest ever score in Libya in 2022, having improved by 26.3 per cent since 2008.

NORTH AMERICA

North America recorded the second largest deterioration of any region in the 2022 GPI, with the average level of peacefulness in the region deteriorating by two per cent. However, the average score for this region is volatile and subject to large changes, given that it comprises only two nations. The region dropped to the third most peaceful region on average – behind Europe and Asia-Pacific – after maintaining second place for 14 of the last 15 years.

Despite consistently being amongst the top ten most peaceful countries in the world since the 2013 GPI, Canada recorded the largest deterioration in score in the North America region in 2022. Significant deteriorations in the *Safety and Security* domain in 2022 led to Canada falling four places in the GPI 2022 to 12th place, a 4.8 per cent deterioration. Anti-government sentiment in response to measures put in place to curb the spread of COVID-19 coincided with significant deteriorations in *violent demonstrations*, *perceptions of criminality* and *political terror* indicators. Despite this fall in peacefulness, Canada continues to be the most peaceful nation in the region with notable reductions in the *terrorism impact* and *nuclear and heavy weapons* indicators.

The COVID-19 pandemic continues to have a significant impact on both the United States and Canada, with Canada reaching over 3.7 million cases and the United States recording over 82 million cases as of April 2022.[10] The pandemic continues to hamper economic and social activity in both countries, with both countries recording a deterioration in *political terror* and *violent demonstrations* indicators since the beginning of the pandemic.

TABLE 1.9

North America

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Canada	1.389	0.064	12
2	United States of America	2.44	0.01	129
REGIONAL AVERAGE		**1.915**	**0.037**	

Canada remains the most peaceful country in the region and is ranked as the 12th most peaceful country in the world overall. Despite this, Canada recorded a deterioration in peacefulness from the 2021 to the 2022 GPI, with its overall score deteriorating by 4.8 per cent. The deterioration was driven by significant increases in *political terror* scale and *violent demonstrations* indicators with the former doubling in a year. This was largely driven by anti-government sentiment in response to pandemic restrictions which resulted in large scale protests namely the blockades at Ambassador Bridge that occurred in early 2022. Despite these deteriorations, there were major improvements particularly in the *terrorism impact* and *nuclear and heavy weapons* indicators, with the former falling to the lowest level seen since 2015.

The United States experienced a slight deterioration in peacefulness over the past year, the continuation of a trend that began in 2015. The level of peacefulness in the US is now lower than at any time since 2008. Civil unrest continues to be the primary driver of the deterioration, leading to a 3.9 per cent rise in the *Safety and Security* domain, particularly in the *political terror* and *political instability* indicators. However, there were also significant improvements in indicators across all three domains, with largest being in the *UN peacekeeping funding* indicator which recorded an almost 30 per cent improvement, followed by a 17.7 per cent improvement in *internal conflicts fought*.

RUSSIA & EURASIA

The Russia and Eurasia region experienced the largest deterioration in peacefulness in the world in 2022, and remained the fourth least peaceful region for the third year. The region's GPI score deteriorated sharply in 2022, following three consecutive years of improvements.

Only four of the 12 countries in the region recorded improvements in peacefulness in 2022. Eight countries recorded deteriorations, including Ukraine and Russia, which had the largest and fourth largest global deteriorations respectively. Changes within the region were driven by deteriorations within the *Ongoing Conflict* and *Safety and Security* domains, with

TABLE 1.10

Russia & Eurasia

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Moldova	1.882	0.034	62
2	Armenia	1.992	-0.024	83
3	Uzbekistan	2.001	-0.031	86
4	Kyrgyz Republic	2.028	0.109	91
5	Tajikistan	2.031	-0.027	92
6	Georgia	2.065	0.049	95
7	Kazakhstan	2.071	0.153	97
8	Turkmenistan	2.116	-0.028	104
9	Belarus	2.259	0.034	116
10	Azerbaijan	2.437	0.151	128
11	Ukraine	2.971	0.413	153
12	Russia	3.275	0.237	160
REGIONAL AVERAGE		**2.261**	**0.089**	

deaths from internal conflict, *deaths from external conflict*, *political terror*, *political instability* and the number of *refugees and IDPs* all recording large deteriorations over the past year.

Russia remains the least peaceful nation in the region and is one of the least peaceful countries in the world in the 2022 GPI, with an overall rank of 160. After two successive years of improvements in peacefulness, Russia experienced an almost eight per cent deterioration in its GPI score in 2022, the fourth largest deterioration in the world. Peace is now at its lowest level in Russia since the inception of the GPI in 2008. A significant increase in *deaths from external conflict* as a result of the Russian-Ukrainian war was the major driver of the fall of peacefulness in the country. Despite this, Russia improved in the *Militarisation* domain, driven by improvements of at least one per cent in the *military expenditure* as a percentage of GDP, *UN peacekeeping funding* and *weapons imports* indicators.

Ukraine is now the second least peaceful country in the Russia and Eurasia region, ranking 153rd in the overall 2022 GPI. The country had the largest deterioration in peacefulness in both the region and the world. Indicators that deteriorated included *refugees and IDPs*, *political instability*, *deaths from internal conflict* and *access to small arms*. The conflict with Russia has driven these deteriorations, with an estimated 11 per cent of the total Ukrainian population now either refugees or internally displaced. This figure can be expected to rise as the conflict escalates. In the year prior, this figure stood at just 1.7 per cent of the population.

Elsewhere in the region, Uzbekistan recorded the largest improvement in in peacefulness, improving by 1.5 per cent. This is Uzbekistan's most peaceful year since 2008, having risen seven places to 86th in the global GPI 2022 rankings. The country recorded an improvement in the *Militarisation* domain, with four of the six indicators improving, the largest being in Uzbekistan's *UN peacekeeping funding*, which improved by over 24 per cent. Sixteen of the 23 GPI indicators remained unchanged in Uzbekistan in 2022, with only three indicators deteriorating: *perceptions of criminality*, *homicide rate* and weapons imports. These indicators deteriorated by six per cent, three per cent and 0.1 per cent, respectively.

Moldova continues to be the most peaceful nation in the Russia and Eurasia region for the 15th consecutive year, despite recording an almost two per cent decline in peacefulness. The outbreak of the war between neighbouring Ukraine and Russia significantly impacted Moldova's *neighbouring countries relations* score, with the indicator deteriorating by a third. *Violent demonstrations* also experienced a substantial deterioration. This marks Moldova's least peaceful year since 2017, with further deteriorations expected in the coming year as a result of the Russo-Ukrainian war.

SOUTH AMERICA

South America experienced the third largest regional improvement in the 2022 GPI, owing to improvements in the *Safety and Security* and *Militarisation* domains. This is the region's first improvement since 2017. The average level of peacefulness in South America rose by 0.2 per cent over the past year, with six countries recording improvements and five recording deteriorations. The improvement in peacefulness in the 2022 GPI in the region was driven by a decrease in *violent demonstrations* and *terrorism impact*, as well as an improved *perceptions of criminality*. However, only one South American country is ranked amongst the 50 most peaceful in the world, with Uruguay ranked 46th, after Chile dropped six places to 55th.

TABLE 1.11

South America

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Uruguay	1.795	0.032	46
2	Chile	1.84	0.042	55
3	Argentina	1.911	-0.02	69
4	Paraguay	1.976	-0.039	77
5	Ecuador	1.988	-0.035	79
6	Bolivia	1.989	-0.049	80
7	Peru	2.091	0.073	101
8	Guyana	2.14	0.025	107
9	Brazil	2.465	0.011	130
10	Colombia	2.729	-0.008	144
11	Venezuela	2.798	-0.08	148
REGIONAL AVERAGE		**2.157**	**-0.004**	

Uruguay remains the most peaceful country in South America. However, it had the third largest deterioration in peacefulness in the region, and now has its lowest levels of peacefulness since the inception of the index in 2008. Its overall score deteriorated by 1.8 per cent in 2022, driven by increasing *violent demonstrations*, *incarceration rate* and *military expenditure* as a percentage of GDP, as well as a 49 per cent deterioration in its *UN peacekeeping funding*. This year marked Uruguay's least peaceful year in terms of *violent demonstrations* since 2020, with security forces firing rubber bullets and detaining participants from transportation unions who were demanding better pay and working conditions.[12]

Despite remaining the least peaceful nation in the South America region for the third consecutive year, Venezuela recorded the largest improvement in peacefulness in the region and is now ranked 148th in the world. This is the country's best result since 2019. The improvement in peacefulness was driven by improvements in *deaths from internal conflict*, a fall in the rate of incarceration and a decrease in *violent demonstrations*. The only indicator to deteriorate in the country in 2022 was *UN peacekeeping funding* which deteriorated by just over three per cent. Venezuela continues to record the highest possible scores in *homicide rate*, violent crime and *political terror*, with the country recording the worst score on the *political terror* in the region.

Peru had the largest deteriorated in overall score, owing to increases in *political instability* and *political terror*. Peru's overall score rose by 3.6 per cent to the least peacefulness level seen since the inception of the GPI in 2008. The country fell 13 places to now be ranked 101st in the GPI. The increase in *political instability* coincided with the 2021 elections and the accusations of voter fraud made by Peru's opposition leader, Keiko Fujimori, after she was defeated.[13] Since being declared as the winner of the election in July 2021, President Pedro Castillo has cycled through four cabinets, with Peru's political situation being described as chaotic and dysfunctional.[14]

Peacefulness deteriorated in Chile over the past year, the second highest deterioration in the region, with a rise in *intensity of internal conflict* being the main driver. This coincides with a

TABLE 1.12

South Asia

Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Bhutan	1.481	0.003	19
2	Nepal	1.947	-0.034	73
3	Sri Lanka	2.02	-0.075	90
4	Bangladesh	2.067	-0.01	96
5	India	2.578	-0.037	135
6	Pakistan	2.789	-0.038	147
7	Afghanistan	3.554	-0.046	163
REGIONAL AVERAGE		**2.348**	**-0.034**	

continuation of the long-standing conflict between the government and Mapuche land-rights activists in the country's south. In October 2021, then-President Sebastián Piñera declared a state of emergency over the Mapuche conflict, with troops deployed to four states in the south to curb rising civil unrest.[15] Despite this deterioration in peacefulness, Chile remains the second most peaceful nation in South America for the third year.

SOUTH ASIA

South Asia recorded the largest improvement in peacefulness of all the regions over the past year. Despite this, it remains the second least peaceful region overall. The average level of peacefulness in the region improved by 1.4 per cent, with improvements occurring in all but one of the seven countries in the region. South Asia recorded improvements in the *Militarisation and Ongoing Conflict* domains. There is a wide disparity between the least and most peaceful countries in the region, with Bhutan ranked 19th overall and Afghanistan being the least peaceful country in the world in the 2022 GPI.

Afghanistan has been the least peaceful country in the world for the past five years. However, it did record an improvement in peacefulness over the past year, especially in the *Militarisation* domain. The country's *UN peacekeeping funding* and *nuclear and heavy weapons* stock recorded improvements of 15.4 and 16 per cent respectively. The *Safety and Security* domain also improved in 2022. While the impact of terrorism in Afghanistan fell for the third consecutive year, the country still has the highest impact of any country. *Perceptions of criminality* have improved in the country, although they remain among the worse levels in the world, with the score for the *perceptions of criminality* indicator being 4.92 in 2022. The collapse of the government and the Taliban's recapture of Afghanistan in August 2021 means that the country is no longer at war, which should be reflected in the 2023 GPI, though peacefulness is expected to remain low in the coming years.

Bhutan is the most peaceful country in South Asia and is ranked 19th overall in the 2022 GPI, despite recording a slight deterioration in peacefulness of 0.2 per cent. It is 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 rise in its importation of weapons as well as a 3.4 per cent increase in the country's *homicide rate*. However, Bhutan remains one of the least militarised countries in the world, with the 13th lowest score on the *Militarisation* domain.

In March 2022, Sri Lanka saw the beginning of nationwide anti-government protests. Demonstrators accused the government of mismanaging the economy and causing high inflation, daily blackouts and shortages of fuel and other essential items. The demonstrations were repressed violently, with clashes between protesters and security forces resulting in many deaths and injuries. These events took place after the cut-off date for the production of the GPI figures, but will be fully incorporated in next year's index. Prior to these events, Sri Lanka had experienced a 3.6 per cent improvement in overall score in the 2022 GPI. This was driven by improvements in *UN peacekeeping funding* and *terrorism impact* and other indicators.

India is the most populous country in the region and ranks as the 135th most peaceful nation in the 2022 GPI. The country experienced an improvement of 1.4 per cent in overall peacefulness over the past year, driven by an improvement in the *Ongoing Conflict* domain. However, India experienced an uptick in the violent crime and *perceptions of criminality* indicators. These deteriorations coincided with a weaker economy and increases in *political instability* following the COVID-19 pandemic as well as continued communal violence between Hindu and Muslim citizens.[16]

SUB-SAHARAN AFRICA

Sub-Saharan Africa recorded a slight fall in peacefulness in the 2022 GPI, with the average country score deteriorating by 0.022 points, or one 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. Five coups[17] as well as disputes over election results and allegations of corruption led to a rise in civil unrest and *political instability* across the region, resulting in an average deterioration across the region in the *political terror* indicator of 6.9 per cent.

The most peaceful country in the region is Mauritius, which is ranked 28th in the 2022 GPI. The country recorded a slight improvement of 1.3 per cent in its GPI score. The biggest change occurred in the *Militarisation* domain, most notably in the number of weapons imported into the country, which improved by 18.4 percent. Mauritius also improved in terms of its *UN peacekeeping funding* by 15.3 per cent. For the second consecutive year, the country experienced increased *violent demonstrations* after citizens continue to protests against the handling of a massive oil spill in August 2020 as well as alleged corruption and fraud within the government.[18]

South Sudan remains the least peaceful country in the region and one of the least peaceful countries in the world, despite an improvement in peacefulness in the 2022 GPI. Although levels of internal conflict in the country remain high, the number of deaths from the conflict improved by 15 per cent in 2022. South Sudan's *homicide rate* is now at its lowest level since the country's establishment in 2011, recording 4.42 homicides per 100,000 people.

The largest improvement in peacefulness in the region occurred in Zambia, which recorded a 3.9 per cent improvement in its GPI score. This was largely driven by an improvement in Zambia's relationship with its neighbours as well as a 17 per cent fall in *military expenditure* as a percentage of GDP. However,

TABLE 1.13

Sub-Saharan Africa

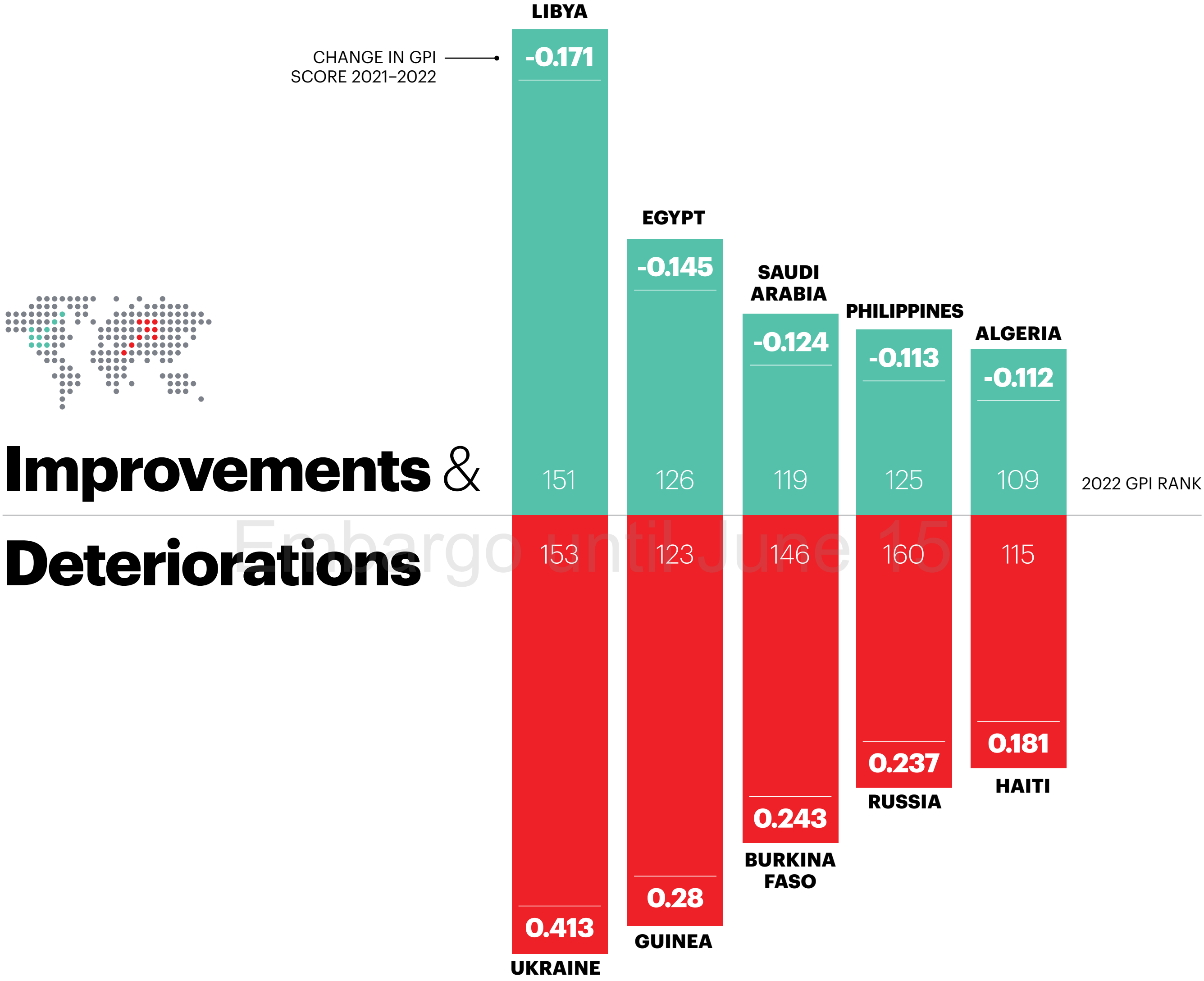
Regional Rank	Country	Overall Score	Score Change	Overall Rank
1	Mauritius	1.57	-0.02	28
2	Ghana	1.759	0	40
3	The Gambia	1.792	-0.055	45
4	Botswana	1.801	0.036	48
5	Sierra Leone	1.803	-0.025	50
6	Zambia	1.841	-0.074	56
7	Equatorial Guinea	1.863	0.028	59
8	Malawi	1.895	-0.005	65
9	Namibia	1.908	0.025	68
10	Senegal	1.916	0.038	70
11	Rwanda	1.945	-0.039	72
12	Gabon	1.973	-0.025	75
13	Liberia	1.973	0.012	75
14	Angola	1.982	-0.043	78
14	Madagascar	1.995	0.044	84
16	Tanzania	2.001	0.073	86
17	Eswatini	2.033	0.14	93
18	Lesotho	2.089	-0.021	100
19	Togo	2.094	-0.05	102
20	Benin	2.125	0.002	105
21	Cote d' Ivoire	2.144	0.007	108
22	Guinea-Bissau	2.156	0.08	110
23	Republic of the Congo	2.184	-0.055	111
24	Mauritania	2.193	-0.044	112
25	Djibouti	2.213	0.114	113
26	South Africa	2.283	-0.048	118
27	Kenya	2.303	-0.022	120
28	Uganda	2.309	0.095	121
29	Mozambique	2.316	0.166	122
30	Guinea	2.332	0.28	123
31	Zimbabwe	2.35	-0.031	127
32	Burundi	2.47	0.061	131
33	Eritrea	2.494	-0.057	132
34	Chad	2.591	0.013	136
35	Niger	2.655	0.024	140
36	Cameroon	2.709	-0.028	142
37	Nigeria	2.725	-0.008	143
38	Burkina Faso	2.786	0.243	146
39	Ethiopia	2.806	0.179	149
40	Mali	2.911	0.081	150
41	Central African Republic	3.021	-0.015	155
42	Somalia	3.125	-0.056	156
43	Democratic Republic of the Congo	3.166	0.005	158
44	South Sudan	3.184	-0.064	159
REGIONAL AVERAGE		**2.268**	**0.022**	

Zambia's *UN peacekeeping funding* deteriorated by almost 23 per cent, with the indicator now at its lowest level since the inception of the GPI.

The largest deterioration in peacefulness in the region occurred in Guinea following a coup in September 2021. This was also the second largest deterioration of any country in the 2022 GPI. Peacefulness fell to the lowest level since 2008, with a deterioration of 13.7 per cent when compared to the year prior. The coup and arrest of President Alpha Condé led to large deteriorations across all domains, with the most significant in the *Ongoing Conflict* and *Militarisation* domains. As expected following the dissolution of the government, internal conflict indicators deteriorated significantly, notably the *intensity of internal conflict* indicator which doubled in a single year.

Burkina Faso experienced the second largest fall in peacefulness in the region, with deteriorations in all three domains largely influenced by a coup in January 2022. Large deteriorations occurred for the *internal conflicts fought*, *intensity of internal conflict*, *neighbouring countries relations* and *UN peacekeeping funding* indicators. The military detained President Roch Marc Christian Kaboré, citing the deteriorating security situation amid the government's inability to manage the deepening Islamic insurgency as the reason for this action.[19] Burkina Faso is the third most impacted country in the world by terrorism with the 2022 Global Terrorism Index, as it registered the second highest number of deaths from terrorist attacks of any country in 2021.[20]

Improvements & Deteriorations



FIVE LARGEST IMPROVEMENTS IN PEACE

Libya — Rank: 151

CHANGE IN SCORE 2021–22: **-0.171**

CHANGE IN RANK 2021–22: **↗ 5**

Libya recorded the largest improvement in peacefulness in the 2022 GPI, with its score improving by 5.5 per cent. It rose five places to 151st in the global rankings. Libya has recorded improvements in peacefulness in four of the last five years after a period of significant deteriorations coinciding with the Arab Spring of 2011 and subsequent civil wars. However, Libya still faces many challenges to peace, particularly in the *Ongoing Conflict* domain.

The biggest improvement occurred in the *Safety and Security* domain, which improved by 8.3 per cent. This improvement was primarily driven by improvements in the *violent demonstrations* and *refugee and IDPs* indicators. However, *access to small arms*, *violent crime* and *political terror* continue with the worst possible scores of five for the fourth consecutive year, indicating that violence remains at a significantly high level within the country.

The largest improvements in peacefulness in the remaining domains occurred in the *deaths from internal conflict* indicator, which fell by 21 per cent. This decrease in deaths was largely driven by the October 2020 ceasefire agreement between former Government of National Accord and Khalifa Haftar's Libyan Arab Armed Forces (LAAF).[21] However, even with this fall in deaths, the *intensity of internal conflict* indicator remains high.

Egypt — Rank: 126

CHANGE IN SCORE 2021–22: **-0.145**

CHANGE IN RANK 2021–22: **↗ 5**

Egypt recorded the second largest increase in peacefulness in the 2022 GPI, with its score improving by 5.8 per cent. The country is now ranked 126th overall, with improvements across all three GPI domains. This is the largest improvement in peacefulness in Egypt in the last decade.

The largest changes occurred in the *Ongoing Conflict* domain, with improvements in *internal conflicts fought*, *external conflicts fought*, *deaths from internal conflict* and *neighbouring countries relations*. The level of *Ongoing Conflict* has largely stabilised in Egypt over the past five years, with minor peaks in 2018 and 2021. Despite this, the domain has now deteriorated by 45 per cent since the inception of the index in 2008.

In the *Safety and Security* domain, there were significant improvements in the *violent demonstrations*, *terrorism impact* and *political terror* indicators. Violent Demonstrations improved by 30 per cent in 2022, after an increase in violence in the year prior, which was driven by anti-government protests that were suppressed violently by the security forces.[22] The *terrorism impact* indicator in Egypt improved for the fifth consecutive year, with the country recording a 4.7 per cent improvement in score, the largest of the last decade. While the *political terror* indicator improved in 2022 by 11 per cent, it remains a high threat to peace within the nation.

Saudi Arabia — Rank: 119

CHANGE IN SCORE 2021–22: **-0.124**

CHANGE IN RANK 2021–22: **↗ 8**

Saudi Arabia had the third largest increase in peacefulness in the 2022 GPI, with a 5.1 per cent improvement in its score. The country rose eight places in the GPI rankings and is now ranked tenth in MENA and 119th overall. Saudi Arabia improved across all three domains, with the most significant improvements occurring in *Ongoing Conflict* and *Safety and Security*.

Safety and Security improved, driven by the *violent demonstrations* indicator, which improved by 56 per cent. However, this could be driven by suppression of freedom of expression and assembly by Saudi authorities who have convicted activists on charges arising from previous demonstrations. There are also individuals who are currently serving prison sentences for criticisms of Saudi Arabia in the media and on social media platforms.[23]

The impact of terrorism also fell in Saudi Arabia, a trend that has continued in the country since the peak of terrorism in 2015. Since that peak, Saudi Arabia's *terrorism impact* indicator has fallen by over 12 per cent, with the country now ranked amongst the top ten least impacted by terrorism in the MENA region.

The *Militarisation* domain improved slightly, owing to a large improvement in Saudi Arabia's *military expenditure* as a percentage of GDP and a smaller improvement in its *nuclear and heavy weapons*. Despite these improvements, Saudi Arabia recorded deteriorations in *armed services personnel rate* and its commitment to *UN peacekeeping funding*. Of the 20 countries in the MENA region, Saudi Arabia is one of the largest importers of weapons.

Philippines — Rank: 125

CHANGE IN SCORE 2021–22: **-0.113**

CHANGE IN RANK 2021–22: **↗ 4**

The Philippines had the fifth largest increase in peacefulness in the 2022 GPI, with a 4.6 per cent improvement in its score. The country rose four places in the GPI rankings and is now placed 125th in the overall GPI rankings. The Philippines improved across all three domains, with the most significant improvements occurring in *Safety and Security* and *Ongoing Conflict* domains.

The *Safety and Security* domain was the most improved in 2022, with the largest improvements occurring in the *homicide rate* and *political terror* indicators. The country's *homicide rate* decreased by 16.7 per cent in a single year, and is now at its lowest level since the inception of the GPI. Similarly, *political terror* in the Philippines fell by 11.1 per cent.

The Philippines also improved in the *Ongoing Conflict* domain, with the number of deaths as a result of internal conflict falling by 15.5 per cent. Despite this improvement, there was a significant deterioration in the *internal conflicts fought* indicator, with an increase of 3.2 per cent recorded in 2022.

The *Militarisation* domain improved slightly, owing to a large improvement in the Philippines' commitment to *UN peacekeeping funding* and a smaller improvement in its *nuclear and heavy weapons* indicator. Despite this, the Philippines recorded a significant deterioration in *military expenditure* as a percentage of GDP, with the country's score for this indicator deteriorating by 15.5 per cent.

Algeria — Rank: 109

CHANGE IN SCORE 2021–22: **-0.112**

CHANGE IN RANK 2021–22: ↗ **10**

Algeria had the fourth largest increase in peacefulness in the 2022 GPI, with a five per cent improvement in its score. The country rose ten places in the GPI rankings and is now ranked 109th overall. This is Algeria's most peaceful score since the inception of the GPI. The increase in peacefulness was largely driven by improvements in the *Militarisation* domain, which improved by 9.2 per cent in 2022.

Of the 23 indicators in the GPI, only two recorded deteriorations, police rate and *armed services personnel rate*, and these deteriorations were both very minor. Nine indicators remained unchanged between 2021 and 2022. The *weapons import* indicator had the largest improvement, and is now at its lowest level since 2009. *Military expenditure* as a percentage of GDP closely followed with an improvement of 13.7 per cent.

Of the eleven indicators in the *Safety and Security* domain, there were improvements in six indicators, with the most significant being in the *political terror*, *perceptions in criminality* and *violent demonstrations* indicators. Since the inauguration of President Abdelmadjid Tebboune and the implementation of his new constitution in November 2020, Algeria has experienced a period of relative stability.[24]

The *Ongoing Conflict* domain improved slightly owing to an improvement in the *intensity of internal conflict* in Algeria. This is the lowest score for the domain since 2008.

FIVE LARGEST DETERIORATIONS IN PEACE

Ukraine — Rank: 153

CHANGE IN SCORE 2021–22: **0.413**

CHANGE IN RANK 2021–22: ↘ **17**

Ukraine recorded the largest deterioration in the 2022 GPI, with its overall score deteriorating 16 per cent. The country is now ranked 153rd globally on the index after falling 17 places in the rankings. Ukraine's deterioration in peacefulness was driven by the Russo-Ukrainian conflict, which escalated dramatically following the invasion by Russian forces in February 2022. The country's score deteriorated across all three GPI domains.

The deterioration in the *Safety and Security* domain was primarily the result of a significant increase in refugees and displaced persons after Russia's invasion. It is estimated that over 11 per cent of the total Ukrainian population are now either refugees or internally displaced. In the year prior, this figure stood at just 1.7 per cent of the population. *Political instability* deteriorated by almost 26 per cent in 2022, followed by the ease of *access to small arms*, which deteriorated by 25 per cent. The latter was driven by President Zelensky's call for Ukrainians to take up arms and defend their country.

The conflict with Russia also resulted in a significant increase in the *intensity of internal conflict* and *deaths from internal conflict*, with the former deteriorating by a quarter and deaths increasing by over 61 per cent. The cut-off date for data included in the GPI is 31 March. The impact of war will be more fully accounted for in the 2023 GPI. More information on the war in Ukraine and its impact on global peacefulness can be seen in Section 4 of this report.

Guinea — Rank: 123

CHANGE IN SCORE 2021–22: **0.28**

CHANGE IN RANK 2021–22: ↘ **26**

Guinea had the second largest deterioration in peacefulness in the 2022 GPI. It fell 26 places to now be ranked 123rd globally and 30th in the sub-Saharan Africa region. This year is Guinea's least peaceful year since the inception of the GPI, with a deterioration of 13.7 per cent when compared to the year prior. The overthrow of the government of President Alpha Condé in September 2021 led to large deteriorations across all domains, with the most significant in the *Ongoing Conflict* and *Militarisation* domains.

Guinea recorded the largest deterioration in its *Ongoing Conflict* domain in the sub-Saharan Africa region, with a deterioration in score of 55.6 per cent in a single year. The substantial deterioration in the *Ongoing Conflict* domain was driven by major deteriorations in the *intensity of internal conflict*, *neighbouring countries relations*, *deaths from internal conflict* and *internal conflicts fought* indicators. This coincides with the coup, which came as a result of a period of instability following the 2020 constitutional referendum that allowed Condé to run for a third term. These developments resulted in the *political instability* and *political terror* indicators also recording significant deteriorations.[25] The coup also had a significant impact on Guinea's commitment to *UN peacekeeping funding*, which deteriorated by nine per cent to the worst level since 2018.

Despite these major deteriorations, Guinea recorded a slight improvement in *violent crime* and *violent demonstrations* indicators.

Burkina Faso — Rank: 146

CHANGE IN SCORE 2021–22: **0.243**

CHANGE IN RANK 2021–22: ↘ **12**

Burkina Faso deteriorated by 9.6 per cent in the 2022 GPI, leading to a fall of 12 places in the overall rankings. The country is placed 146th in the 2022 GPI. This is the second consecutive year that Burkina Faso is amongst the five countries with the largest deteriorations. The country's deterioration was driven by increases in internal conflict that led to a coup in January 2022. The country now has its worst GPI score since the inception of the index in 2008. The largest deteriorations occurred in the *Ongoing Conflict* and *Militarisation* domains.

Burkina Faso continues to be in a state of extreme instability, with the deteriorating security situation and deficits in governance culminating in the coup of 2022, the fifth coup in West Africa in less than two years.[26] Internal conflict in the country is at an all-time high, with the *intensity of internal conflict* indicator reaching the highest possible score of five for the first time in 2022.

The indicator *refugees and IDPs* has also increased by almost 23 per cent in 2022, driven by the political turmoil, internal conflict and increasing threat of terrorism in the Sahel region. It is estimated that over 6.4 per cent of the total population are now either refugees or internally displaced. In 2020, this figure stood at just 0.29 per cent of the population before rising to 4.6 per cent in 2021.

Russia — Rank: 160

CHANGE IN SCORE 2021–22: **0.237**

CHANGE IN RANK 2021–22: ↘ **5**

Russia had the fourth largest deterioration in peacefulness in the 2022 GPI, with its overall score deteriorating by 7.8 per cent. It is now ranked 160th globally, and is the least peaceful nation in the Russia and Eurasia region for the fifth consecutive year. Peace is now at its lowest level in Russia since the inception of the GPI in 2008. A significant increase in *deaths from external conflict* as a result of the country's invasion of Ukraine was the major driver of the fall in peacefulness in Russia.

The *Ongoing Conflict* domain experienced a deterioration of over 20 per cent, driven by a large increase in the number of deaths as a result of the conflict with Ukraine. Russia continues to record the worst possible score for the *neighbouring countries relations* indicator, as a result of its hostile relationship with surrounding countries following its invasion of Ukraine.

The dramatic escalation of the conflict with Ukraine also drove a deterioration in *Safety and Security* domain, with *political instability* now at the highest level ever recorded in Russia on the GPI, deteriorating by 16 per cent in 2022. However, public opinion surveys suggest that President Putin approval rates inside Russia are high.[27] *Violent demonstrations* also experienced an increase of 12.5 per cent, with attempts by the Russian government to suppress anti-war protests. An estimated 4,366 people were detained following anti-war protests in over fifty cities including Vladivostok and Irkutsk.

The *Militarisation* domain experienced a slight improvement owing to Russia's small decrease of 3.4 per cent in *military expenditure* as a percentage of GDP. Minor improvements of under two per cent were also recorded in *UN peacekeeping funding* and weapons imports indicators. Despite these improvements, Russia continues to record the highest possible score of five for both the *nuclear and heavy weapons* and the *weapons exports* indicators for the 15th consecutive year.

Haiti — Rank: 115

CHANGE IN SCORE 2021–22: **0.181**

CHANGE IN RANK 2021–22: ↘ **16**

Haiti had the fifth largest deterioration in peacefulness in the 2022 GPI and the largest in the Central American and Caribbean region. Its overall score deteriorated by 8.7 per cent, with peacefulness in the country now at its lowest level since the inception of the GPI. Haiti fell 16 places in the rankings and is now ranked 115th overall. The fall in peacefulness was driven by a deterioration on the *Ongoing Conflict* domain.

The assassination of President Jovenel Moïse in the midst of the COVID-19 pandemic, associated economic crisis and a 7.2 magnitude earthquake in August 2021 have exacerbated the deteriorating peacefulness in Haiti.[29] Intensifying gang conflict drove a significant deterioration in the *intensity of internal conflict* and *deaths from internal conflict* to amongst the highest in the Central America and Caribbean region, with the latter more than doubling in a single year.

The power vacuum left in the wake of President Moïse's assassination in July 2021 coincided with a deterioration in the *Safety and Security* domain, with indicators such as *political instability* increasing by almost 22 per cent. This was followed by *homicide rate* and *violent crime*, which each recorded deteriorations of around 16 per cent.

The *Militarisation* domain recorded a slight improvement owing to Haiti's increased commitment to *UN peacekeeping funding*, the third best score of any country in the region. All other indicators in the domain remained unchanged apart from *military expenditure* as a percentage of GDP, which deteriorated slightly by 2.7 per cent.

2 TRENDS

KEY FINDINGS

- Since 2008, the level of global peacefulness has deteriorated by 3.2 per cent, with 84 countries deteriorating and 77 improving in the GPI. The world has become successively less peaceful each year since 2014.
- The average level of global peacefulness has deteriorated for ten of the past 14 years.
- The gap between the least and the most peaceful countries continues to grow. Since 2008, the 25 least peaceful countries deteriorated on average by 16 per cent, while the 25 most peaceful countries improved by 5.1 per cent.
- Conflict in the Middle East has been the key driver of the global deterioration in peacefulness since 2008.
- Of the three GPI domains, two recorded deteriorations and one improved. Ongoing Conflict and Safety and Security deteriorated by 9.3 and 3.6 per cent respectively. However, Militarisation improved by 5.2 per cent, although it is likely to deteriorate in the future as a result of the Ukraine war.
- The improving trend in Militarisation since 2008 was widespread, with 113 of the 163 countries covered in the GPI improving. Ninety-four countries reduced their military expenditure as a percentage of GDP, although military spending increased in absolute terms.
- A total of 112 nations experienced reductions in their *armed forces personnel rate* since 2008 while 42 countries increased.
- However, most of the improvements in Militarisation occurred in the earlier part of the 2010s, and have partially reversed since 2014. In addition, the 2022 conflict in Ukraine has sparked many pledges of increases in military expenditure in the near future.
- Violent demonstrations recorded the largest deterioration, rising by 49 per cent since 2008. This indicator deteriorated in 126 countries of the 163 nations assessed in the GPI. MENA was the only region not to deteriorate.
- Full democracies recorded the sharpest deterioration in violent demonstrations, with the score deteriorating by 73 per cent in the decade to 2022. However, the score for full democracies is still better than any other type of government.
- The number of forcibly displaced people around the world increased from 31 million in 2008, to over 88 million in 2022.
- The rise in violent demonstrations is in line with the deterioration in the Attitudes domain of Positive Peace, and suggests that individuals and groups have grown more polarised, more critical of existing administrative structures and less tolerant of dissenting views.
- There are now 17 countries where at least five per cent of the population are either refugees or internally displaced. South Sudan has over 35 per cent of its population displaced, while Somalia and the Central African Republic have more than 20 per cent displaced.
- 116 countries reduced their homicide rate since 2008. There are now 33 countries that have a homicide rate of less than one per 100,000 people
- The number of countries experiencing violent internal conflict rose from 29 in 2008, to 38 in 2022 although the number of people killed in internal conflicts has fallen since 2017.

GPI Trends

The world is considerably less peaceful now than it was in 2008, with the average level of country peacefulness deteriorating by 3.2 per cent in the period. Peacefulness has declined year-on-year for eleven of the last 14 years.

Since 2008, 84 countries have become less peaceful, compared to 77 that have improved. Figure 2.1 highlights the overall trend in peacefulness from 2008 to 2022, as well as the year-on-year percentage change in score.

The deterioration in peacefulness since 2008 was relatively broadly distributed, with five regions accounting for most of the global increase in violence: the Middle East and North Africa (MENA), sub-Saharan Africa, South America, Central America and North America. Russia and Eurasia also deteriorated in this period, but the latest conflict in Ukraine has been only partially captured in the GPI indicators. Future versions of the index will capture the conflict more fully.

Europe remains the most peaceful region in the world and is slightly more peaceful now than in 2008. However, over this period the *Ongoing Conflict* domain has deteriorated, *Militarisation* and *Safety and Security* have both improved. Despite its high level of peacefulness overall, Europe has seen substantial deteriorations in the *violent demonstrations*, *neighbouring* country relations, *political instability*, *internal conflicts fought*, *intensity of internal conflict* and *refugees and internally displaced people* indicators.

MENA remains the least peaceful region in the world, with its *Ongoing Conflict* and *Safety and Security* domain scores deteriorating markedly since 2008.

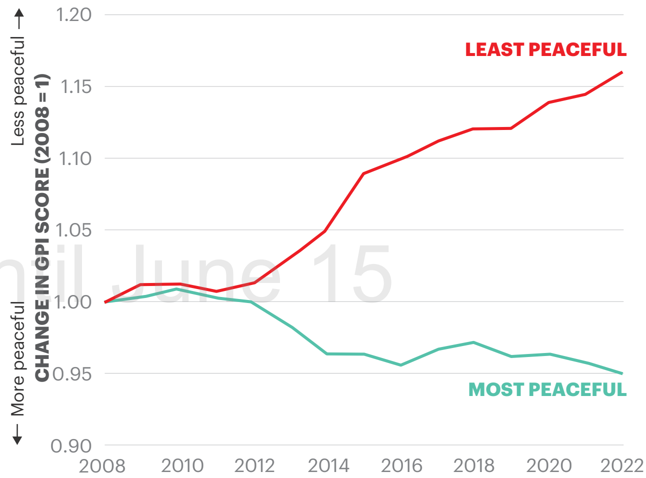
The gap in peace between the most and least peaceful countries in the world has widened since 2012, as shown in Figure 2.2.

While the 25 most peaceful countries in 2022 had recorded an average improvement of 5.1 per cent in their GPI scores since 2008, the 25 least peaceful nations saw their scores deteriorate by 16 per cent in the period.

FIGURE 2.2

Trend in peace, 25 most and 25 least peaceful countries, 2008–2022

The 25 least peaceful countries deteriorated in peacefulness by an average of 16 per cent, while the most peaceful improved by 5.1 per cent.

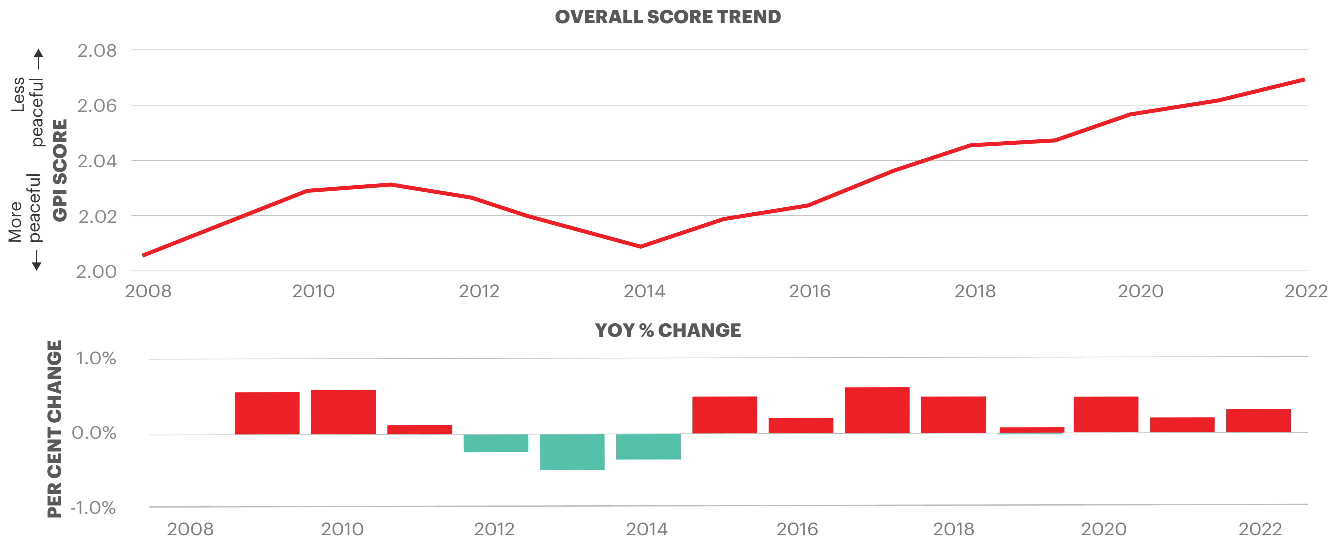


Source: IEP

FIGURE 2.1

GPI overall trend and year-on-year percentage change, 2008–2022

Peacefulness has declined year-on-year for eleven of the last fourteen years.



Source: IEP

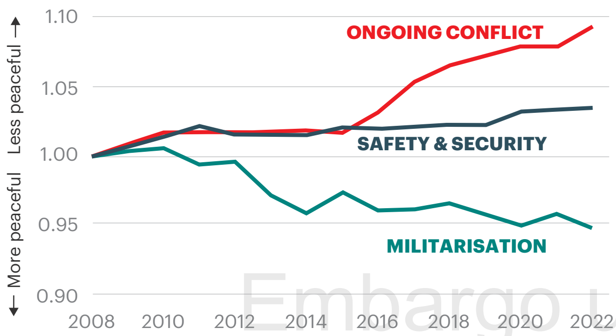
Domain Trends

The Global Peace Index (GPI) measures peacefulness across three domains: *Safety and Security*, *Ongoing Conflict*, and *Militarisation*. While the world has become less peaceful over the last decade, there have been some notable improvements in peace. The average country score on the *Militarisation* domain improved by 5.2 per cent, driven largely by improvements in *UN peacekeeping funding* and the size of the armed forces in many countries. However, there has been little improvement in this domain since 2014, and there are some signs that *militarisation*, especially in regards to military spending, may begin to deteriorate in the near future. The *Safety and Security* domain deteriorated by 3.6 per cent, and the *Ongoing Conflict* domain also deteriorated by 9.3 per cent (Figure 2.3).

FIGURE 2.3

Indexed trend in peacefulness by domain, 2008 to 2022 (2008=1)

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



Source: IEP

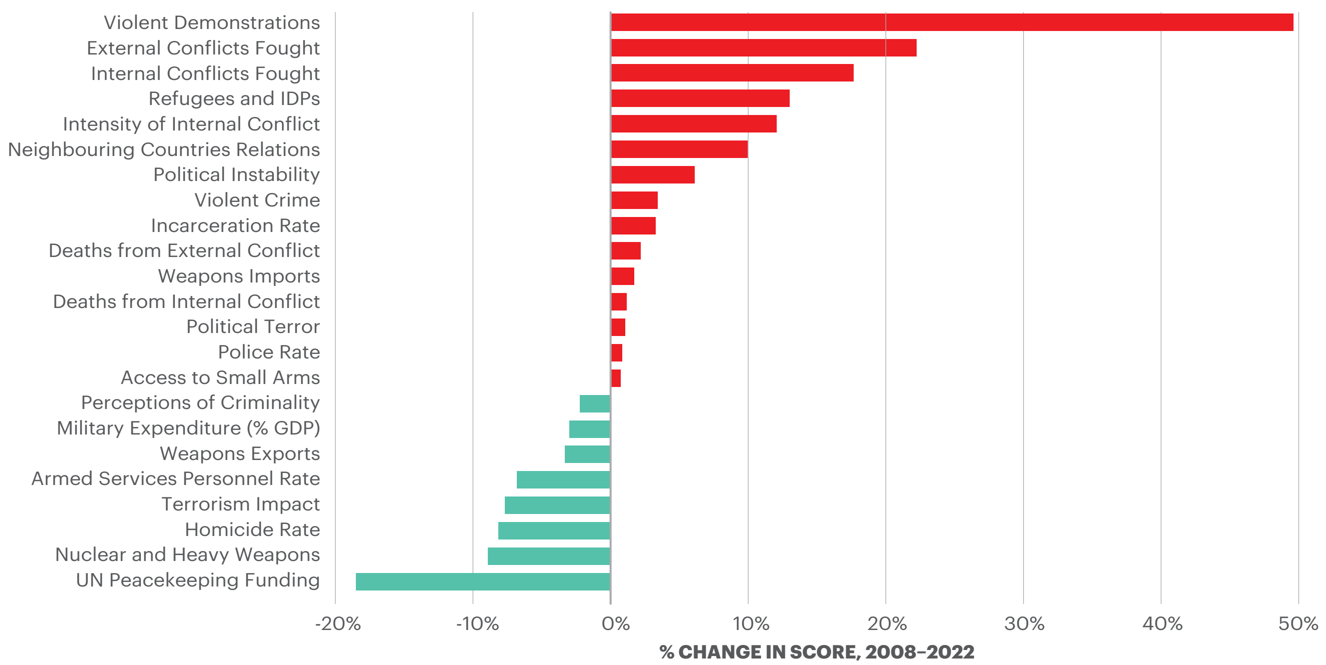
Figure 2.4 shows the percentage change in score for each indicator from the 2008 to the 2022 GPI. Of the 23 GPI indicators, 15 recorded deteriorations with the remaining eight recording improvements. The largest deterioration was recorded for *violent demonstrations*, which changed by 49.6 per cent over the period. This was a significant movement and reflects the increased frequency and severity of violent protests, riots and confrontations with security forces around the world. More information on this can be found in the section 'Trends in Violent Demonstrations'.

The number and severity of external and *internal conflicts fought* also deteriorated since 2008, with the indicators deteriorating by 22 per cent and 17.5 per cent respectively. *Refugees and IDPs* also posted a substantial deterioration of almost 13 per cent in the period. On the other hand, there have been substantial improvements in the *UN peacekeeping funding*, *nuclear and heavy weapons*, *homicide rate* and *terrorism impact* indicators.

FIGURE 2.4

Percentage change by indicator, 2008–2022

Funding for UN peacekeeping operations had the biggest improvement, while the indicator for violent demonstrations had the largest deterioration from 2008 to 2022.

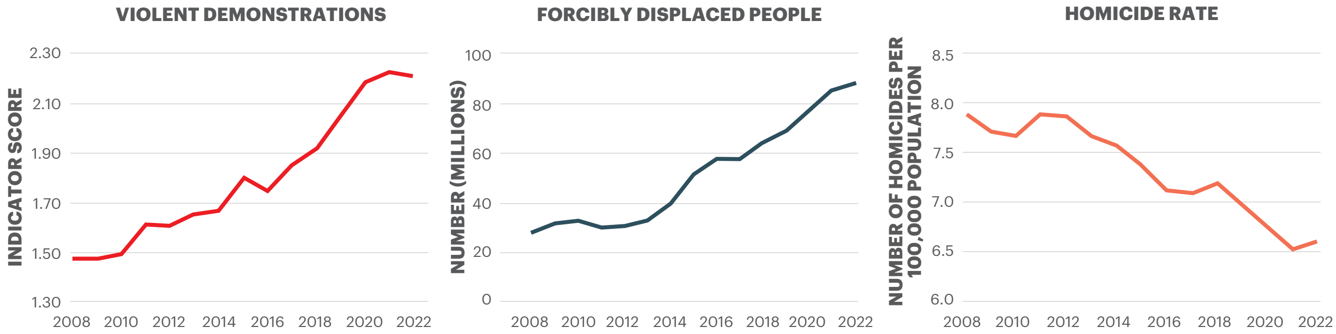


Source: IEP

FIGURE 2.5

Trends in key safety and security indicators

Over 80 million people globally have been forcibly displaced.



Source: ACLED, UNHCR, UNODC, IEP calculations

SAFETY & SECURITY

The *Safety and Security* domain deteriorated 3.6 per cent between 2008 and 2022. Of the 11 domain indicators, eight deteriorated and three improved. The largest deterioration occurred in the *violent demonstrations* indicator, with 126 countries seeing the impact of violent demonstrations increase between 2008 and 2022 (Figure 2.5).

After *violent demonstrations*, the *refugees and IDPs* indicator had the second largest deterioration, with the total number of forcibly displaced people increasing from around 40 million in 2008, to over 88 million in 2022. The impact was felt most in a relatively small number of countries, with the biggest increases being reported in Syria, the Central African Republic, and Yemen. In all of these countries the number of refugees or IDPs increased by over ten percentage points.

Homicide rate had the largest improvement of any *Safety and Security* indicator over the past decade, with 116 countries reducing their homicide rate since 2008. The unweighted average homicide rate across all GPI nations fell from 7.9 to 6.6 per 100,000, from 2008 to 2022. There are now 33 countries globally that have a homicide rate of less than one per 100,000 people, and 63 which have a rate under two per 100,000.

This occurred despite substantial increases in homicides for some countries, especially in Central America, with Central America and the Caribbean being the only region to record a deterioration in the *homicide* rate indicator since 2008. There have been significant deteriorations in Mexico, Trinidad and Tobago, Haiti and Costa Rica, while improvements were recorded in the Dominican Republic, Jamaica, Guatemala, Honduras, Nicaragua and Cuba.

The epicentre of terrorism has shifted out of the Middle East and North Africa, and into South Asia, with countries such as Afghanistan and Pakistan recording poor scores in the *terrorism impact* indicator. The impact of terrorism has increased in sub-Saharan African region, especially in the Sahel where armed conflict has become a key driver of terrorist activity.

Despite the improvements in homicide, terrorism, and other indicators in *Safety and Security* over the past five years, the number of forcibly displaced people has continued to climb, rising almost every year since 2008. There are now over 88 million refugees and internally displaced people, as asylum seekers, and other populations of concern to the UNHCR, who have been forcibly displaced in some way by conflict. The number of forcibly displaced people almost tripled between 2008 and 2022.

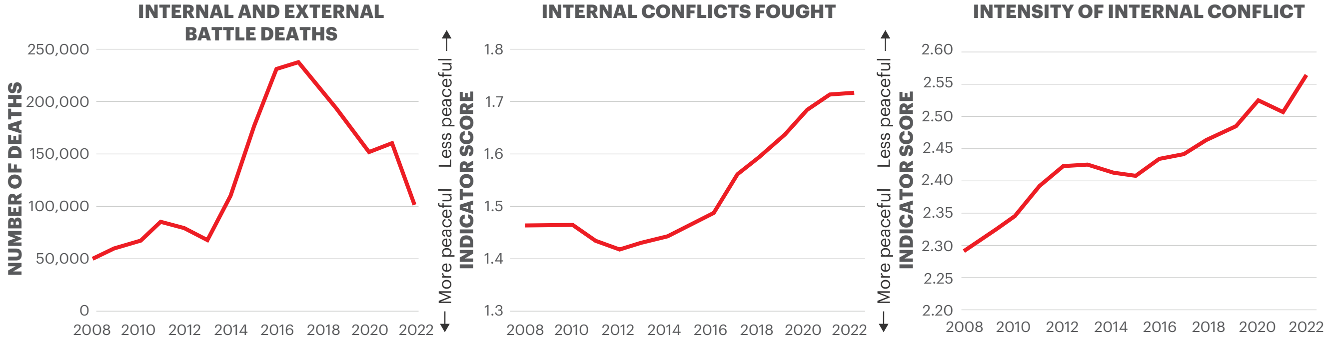
There are now 17 countries where at least five per cent of the population are either refugees or internally displaced. Somalia and the Central African Republic both have more than 20 per cent of their population displaced, while South Sudan has over 35 per cent of its population displaced. However, the extent of displacement is greatest in Syria, where the impact and aftermath of the Syrian civil war has led to 77 per of the entire population being either internally displaced or refugees at the end of the war. Around 11 per cent of the population of Ukraine has been displaced as a result of the Russian invasion.

> Of the three GPI domains, two recorded a deterioration, while one improved since 2008. *Ongoing Conflict* deteriorated by 9.3 per cent and *Safety and Security* deteriorated by 3.6 per cent. However, *Militarisation* improved by 5.2 per cent.

FIGURE 2.6

Trends in key ongoing conflict indicators

While battle deaths have fallen since 2014, the number and intensity of conflicts continued to increase.



Source: UCDP, EIU, IEP calculations

ONGOING CONFLICT

Ongoing Conflict had the largest deterioration of any domain in the GPI, deteriorating by 9.3 per cent between 2008 and 2022. All of the six *Ongoing Conflict* indicators deteriorated. In total, 90 countries recorded a deterioration in this domain, with 58 recording an improvement, and 13 registering no change since 2008. Figure 2.6 shows the trend for three key conflict indicators: the total number of battle deaths, the average score for the *internal conflicts fought* indicator and the average score on the *intensity of internal conflict* indicator.

Conflict deaths – including internal and external conflicts – rose around the middle of the 2010s to reach a peak of almost 238,000 in 2017. The dramatic increase was concentrated in a handful of countries, with the majority of the deaths being attributable to the war in Syria. There were also significant increases South Sudan, Nigeria and the Central African Republic at that time.

Since 2017, the number of deaths has declined as the intensity of the conflict in Syria began to recede. There were also reductions in fatalities in Palestine, Lebanon, Iraq, Nigeria and the Central African Republic.

While the number of deaths from conflict has been declining in recent years, the total number of conflicts has continued to rise. This includes state-based violence, non-state violence, and one-sided violence. Non-state violence is conflict between two armed groups within a country, neither of which is a state, while one-sided violence is the organized use of armed force by the state against civilians, excluding extra-judicial killings.

The average *intensity of internal conflict* has also been risen, despite the total number of *deaths from internal conflict* declining across the world. This has been driven by conflict becoming more widespread, even as the intensity of major conflicts such as Syria and Iraq continues to decrease.

The average *intensity of internal conflict* indicator score increased from 2.29 to 2.56. A score of one in this indicator for a single country indicates that there is no conflict. A score of two indicates that there is a strong ideological conflict within that country but no major outbreaks of violence, while a score of three indicates open conflict, with the existence of explicit threats of violence between different groups in that country. In 2008, 104 countries had a score of two or less in this indicator, suggesting no conflict or only latent conflict. By 2022, this number had fallen to 87. 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 38 in 2022.

MILITARISATION

Militarisation was the only GPI domain to record an improvement from 2008 to 2022. The average score in this domain improved by 5.2 per cent over this period, with 113 countries recording an improvement and 48 deteriorating. Five of the six indicators on the *Militarisation* domain improved, with only the *weapons imports* indicator recording a deterioration. The most noticeable improvements occurred on the *UN Peacekeeping Funding* indicator, where 111 countries improved, and the *nuclear and heavy weapons* indicator, where 108 countries improved. A total of 112 nations recorded improvements in *armed personnel rate*. Figure 2.7 shows the trend for the *armed forces rate* and *military expenditure* average numbers, 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 460 soldiers per 100,000 population in 2008 to 389 soldiers per 100,000 population by early 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 reductions in their ratios of military spending as a proportion of respective GDPs. More information on global military expenditures can be found in Section 3 'Economic Impact of Violence' and Section 4 'Impact of the War in Ukraine on Peacefulness.'

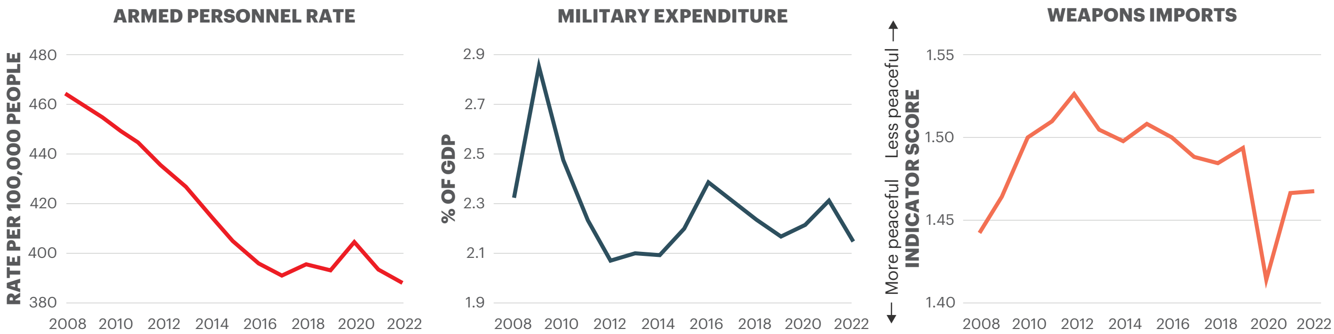
Military expenditure as a percentage of GDP improved in 94 countries between 2008 and 2022. It improved on average for five of the nine regions, with the biggest improvement occurring in South America, where average *military expenditure* score fell by 18 per cent. The largest deterioration by region occurred in the Central America and Caribbean, and South Asia, where average *military expenditure* score deteriorated by over 15 per cent each.

There was a slight deterioration in the *weapons imports* indicators, the only *Militarisation* indicator to show a

FIGURE 2.7

Trends in key militarisation indicators

Both the armed forces rate and average military expenditure as a percentage of GDP have fallen since 2008.



Source: Military Balance, IEP calculations

deterioration over the past decade. The number of countries that recorded no weapons imports in 2008 was 29. By 2021 that number had fallen to 16. The average value per capita of weapons imports increased the most in the Middle East and North Africa. Seven of the ten countries with the largest per capita *weapons imports* are from the Middle East and North Africa region.

Weapons exports remain highly concentrated, with 105 countries registering no exports at all in 2022. A number of otherwise highly peaceful countries also performed poorly on this indicator, with Sweden, the Netherlands, Switzerland, and South Korea all being ranked amongst the ten highest weapons exporters per capita in 2022. Seven 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 30 per cent.

TRENDS IN VIOLENT DEMONSTRATIONS

The number of protest movements and demonstrations has increased sharply across the world, particularly in recent years. In most situations, protests and demonstrations are conducted peacefully, however, instances of events incorporating violence – either perpetrated by demonstrators or by the security forces – are becoming more frequent. Among the GPI indicators, *violent demonstrations* recorded the worst deterioration, changing by 49.6 per cent since 2008 (Figure 2.8).

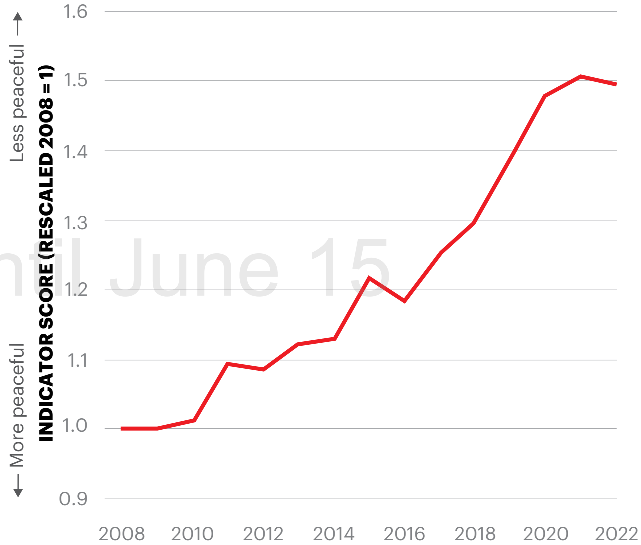
Since 2008, 126 countries have deteriorated in *violent demonstrations*, while only 22 recorded improvements and 13 had no change. Out of the nine GPI regions, eight experienced deteriorations in score since 2008 (Figure 2.9).

By 2022, South Asia was the region with the highest frequency and intensity of violent demonstrations. This was followed by sub-Saharan Africa and South America. Europe and Asia-Pacific were the two most peaceful regions in regards to violent demonstrations.

FIGURE 2.8

Violent demonstrations, 2008–2022

The violent demonstrations GPI score deteriorated by 49.6 per cent since 2008.



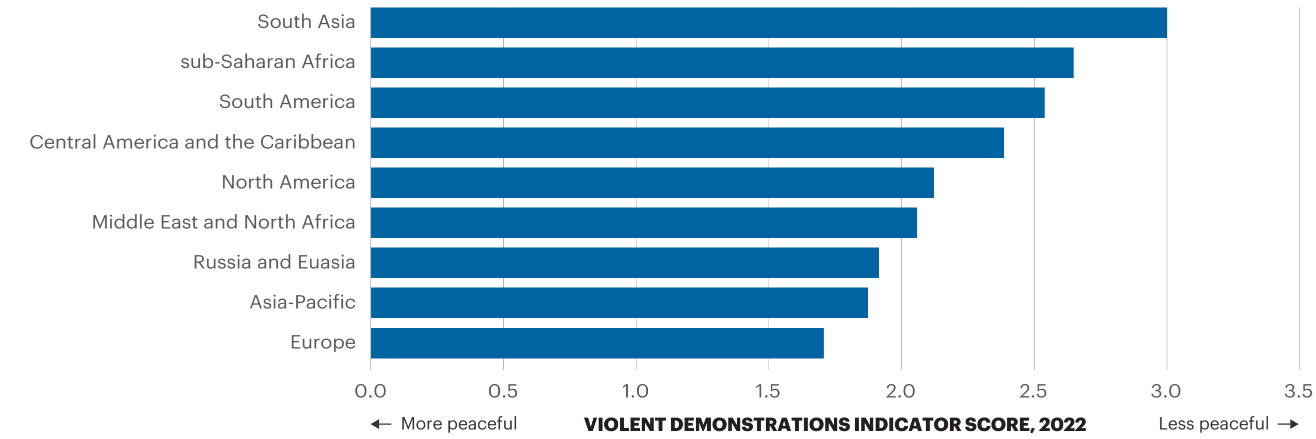
Source: ACLED, IEP calculations

> The rise in violent demonstrations is in line with the deterioration in the Attitudes domain of Positive Peace, and suggests that individuals and groups have grown more polarised, more critical of existing administrative structures and less tolerant of dissenting views.

FIGURE 2.9

Violent demonstrations scores by region, 2022

South Asia and sub-Saharan Africa are the two least peaceful regions in regards to violent demonstrations.



Source: ACLED, IEP calculations

BOX 2.1

How the violent demonstrations indicator is calculated

Violent demonstrations is a quantitative indicator developed by IEP using data from the Armed Conflict Location & Event Data Project (ACLED). It captures the frequency and severity of violence during protests, demonstrations and riots, perpetrated either by the demonstrators themselves or by the security forces sent in to control or quell these events. The indicator is constructed by aggregating data on the following four types of events as recorded by ACLED.

1. “Protest with intervention;”
2. “Excessive force against protesters;”
3. “Violent demonstrations;” and
4. “Mob violence.”

For the computation of the indicator, each type of event receives weights progressively higher than the previous. For instance, “excessive force against protestors” events are more heavily weighted than “protest with intervention” events, and less heavily weighted than “violent demonstrations,” and so forth. This is to account for these event types having different average levels of fatalities, according to historical data. Events with historically higher levels of fatalities on average such as “mob violence” are treated as more severe and are more heavily weighed than others.

For each event type, the number of incidents and the number of fatalities are computed for each nation and each year of coverage. The number of fatalities is more heavily weighted than the number of events, as an event with fatalities is usually more detrimental to social peacefulness than another without them. The indicator is then calculated and banded between 1 and 5, with higher scores denoting poorer performance.

TRENDS

MILITARISATION

The improving trend in Militarisation since 2008 was widespread, with 113 of the 163 countries covered in the GPI improving. Ninety-four countries reduced their military expenditure as a percentage of GDP, although military spending increased in absolute terms.

VIOLENT DEMONSTRATIONS

Violent demonstrations recorded the largest deterioration, rising by 49 per cent since 2008. This indicator deteriorated in 126 countries of the 163 nations assessed in the GPI. MENA was the only region not to deteriorate.

REFUGEES AND IDPS

5%

There are now 17 countries where at least five per cent of the population are either refugees or internally displaced.

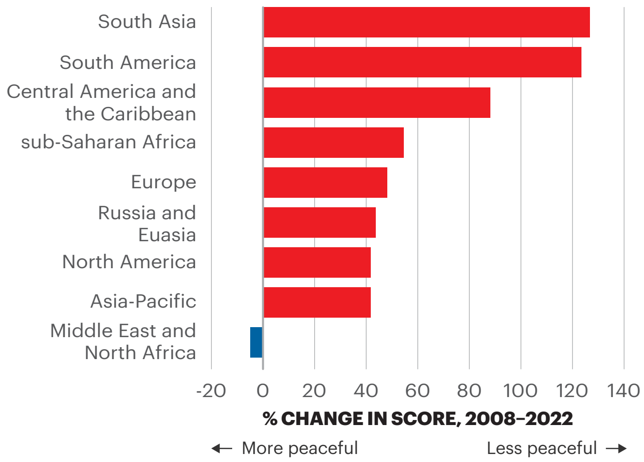
REGIONAL TRENDS

The frequency and severity of violent demonstrations has increased across almost all regions of the world. There have been sharp deteriorations in the *violent demonstrations* indicator for South America, South Asia and Central America and the Caribbean since 2008 (Figure 2.10). However, there have also been noticeable deteriorations in sub-Saharan Africa, Russia and Eurasia, Asia-Pacific, Europe and North America.

FIGURE 2.10

Changes in violent demonstrations by region, 2008–2022

MENA was the only region not to record a deterioration in violent demonstrations since 2008.



Source: ACLED, IEP calculations

MENA was the only region to record an improvement since 2008, despite the indicator recording large fluctuations within this period.

Arguably, **MENA** recorded the first widespread wave of demonstrations in the 2010s with the Arab Spring uprisings of 2010 and 2011. The MENA *violent demonstrations* score jumped abruptly by 30 per cent with the onset of the Arab Spring, but returned to previous average levels by 2013 and 2014 (Figure 2.11). Despite the improvement observed in 2012 and 2013, MENA's *violent demonstrations* score remained high in the second half of the decade, reflecting elevated unrest across the region. There were violent demonstrations in the region in the mid-2010s related to the conflicts in Syria, Iraq and Yemen. These conflicts led to a large number of persons from Syria, Iraq and other nations being forcibly displaced from their homes.

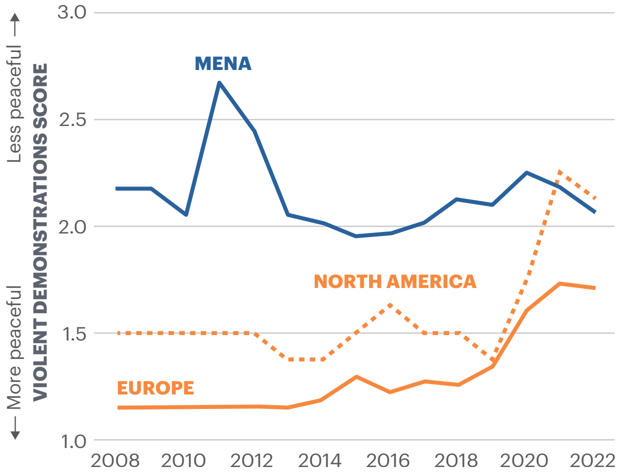
The ensuing immigration crises was felt in **Europe** which received large inflows of refugees. This led to an increase of demonstrations and dissatisfaction with government policies in 2015 by those who perceived that the refugee intake was excessive. Anti-immigration sentiment was a contributing factor in the 'Brexit' vote of 2016, whereby UK residents elected to leave the European Union. At the time, there were other similar movements in other EU member nations.[1]

By 2020, the COVID-19 pandemic and the administrative measures enacted to combat it further exacerbated the underlying social tensions in Europe. Between 2019 and 2021, the European *violent demonstrations* score deteriorated by 29 per cent. There were widespread protests across most European

FIGURE 2.11

Violent demonstrations by region, MENA, North America and Europe, 2008–2022

MENA was the only region not to record a large deterioration since 2008, despite the upheaval of the Arab Spring in 2011.



Source: ACLED, IEP calculations

nations, especially in Belgium, France, the Netherlands, Austria, Croatia and the UK. Demonstrators rallied against the lockdown regimes and the creation of 'COVID passes,' whereby governments attempted to limit access to public spaces only to those that had been vaccinated.

Similar developments took place in **North America**, where anti-lockdown demonstrations were recorded in the US and Canada in 2020 and 2021. However, the US also saw socially and politically motivated demonstrations over this period. The killing of George Floyd by Minneapolis police in May 2020 rekindled racial tensions and sparked a wave of protests throughout the country. 'Black Lives Matter' – a social movement initiated in 2013 – then rose to prominence in 2020 and gained representation in many demonstrations even outside the US. In January 2021, a large number of demonstrators in Washington DC took control of Capitol Hill claiming that there were irregularities in the 2020 presidential elections.

In **Central America and the Caribbean**, protests began around the mid-2010s, especially with caravans of immigrants passing through Mexico on their way to the US (Figure 2.12). Some of these caravans clashed with local law enforcement or fell prey to criminal organisations involved in human trafficking and people smuggling. There were protests against high levels of crime, difficult economic conditions and the COVID-19 lockdowns in Mexico, Panama, El Salvador and other nations.

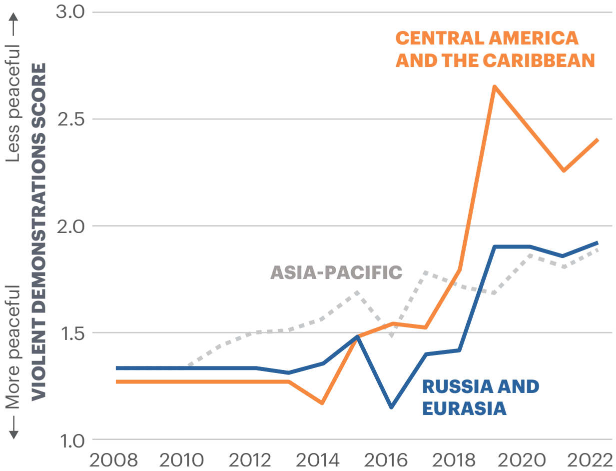
Russia and Eurasia saw a spike in protests in 2014 with the 'Euromaidan Protests' in Ukraine and a number of subsequent clashes between pro-Western and pro-Russian groups in Crimea and the Donbas region. Later, in 2020 Belarus recorded large demonstrations against a government perceived as non-democratic in the country. There were also anti-government demonstrations in dozens of Russian cities in 2020 and 2021 in support of arrested opposition leader Alexei Navalny, with supporters demanding greater openness and accountability in the country.

Asia Pacific recorded a steady rate of deterioration in *violent*

FIGURE 2.12

Violent demonstrations by region, Asia-pacific, Russia and Eurasia, and Central America and the Caribbean, 2008–2022

All three regions recorded strong deteriorations over the past decade.

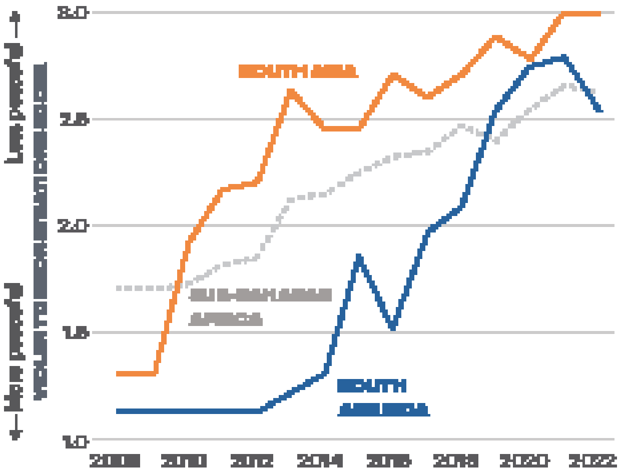


Source: ACLED, IEP calculations

FIGURE 2.13

Violent demonstrations by region, South Asia, South America and Sub-saharan Africa, 2008–2022

South Asia has recorded the sharpest deterioration in violent demonstrations of all regions in percentage points.



Source: ACLED, IEP calculations

demonstrations throughout the 2010s. There were pro-democracy protests in Hong Kong from 2014, known as the 'Umbrella Movement' which brought large numbers of people to the streets and were repressed violently by the security forces. In 2019, Hong Kong citizens protested against newly introduced legislation that allowed the government to transfer persons detained in Hong Kong to Taiwan and mainland China if these jurisdictions so requested. Demonstrations grew in size and continued well into 2020, despite being harshly repressed by authorities. In 2020 Indonesia recorded a number of protests across several cities against the so-called 'Omnibus Law' which relaxed some of the labour and environmental restrictions in place in the country. In Myanmar, the military seized power in February 2021, which sparked violent protests nationwide throughout the year. Opposition activists formed the Campaign for Civil Disobedience and helped organise demonstrations which were violently repressed by the security forces.

The *violent demonstrations* score for **South Asia** deteriorated continuously in the 2010s, with an overall deterioration of 127 per cent from 2008 to 2022 (Figure 2.13). This was the largest regional deterioration in percentage points. There have been large numbers of ethnically and religiously motivated riots in India throughout the 2010s. In one example, violence broke out between indigenous inhabitants of the Assam region and the Bengali speaking Muslims that settled in the area. The rioting led to the displacement of 400,000 people and the deaths of 77 locals. In 2020 and 2021, Indian farmers protested against newly introduced laws that removed some guarantees and subsidies on agricultural products. In 2018 and 2019, the Sinhalese and Muslims clashed in Sri Lanka in what became known as the "Anti-Muslim Riots." In 2019, Pakistanis demonstrated on the streets for several weeks demanding the resignation of the Prime Minister and calling for new elections.

With a 124 per cent deterioration from 2008 to 2022, **South America** saw the second steepest regional deterioration in the *violent demonstrations* scores, behind only South Asia. Violent demonstrations began to deteriorate in South America around the middle of the 2010s, when a wave of anti-corruption and anti-crime protests swept the continent. In 2015, more than 135,000 Brazilians demonstrated in the streets of São Paulo demanding the impeachment of the President over accusations of mismanagement of the economy and corruption. There were widespread protests and riots in Argentina in 2019, as people rallied against economic mismanagement, high inflation and recession. At the same time, similar demonstrations were recorded in Bolivia, Chile, Ecuador and Colombia.

Sub-Saharan Africa's *violent demonstration* score deteriorated by 54 per cent since 2008. The region also saw a steady deterioration in the indicator throughout the 2010s. There are a multitude of examples of violent protests and ethnic or political rioting in sub-Saharan Africa. In 2012 and 2013, ethnic tensions led to a series of riots and clashes in the Tana River district of Kenya. A total of 118 people were killed and 13,500 were displaced by the rioting. From 2017 to 2020 Nigeria saw the rise of the '#EndSARS' movement whereby protesters sought to disband the country's Special Anti-Robbery Squad (SARS), accused of abuse of power against the population. During the protests, demonstrators and the security forces clashed, with reports of 51 civilians and 11 police officers dying as a result. In 2021, riots spread throughout South Africa, as looting and arson gripped cities such as Durban, Phoenix, Cape Town and others. Some estimates suggest this resulted in 350 deaths, 2,500 arrests and $3.3 billion in damages.[2] At least originally, rioters protested against the imprisonment of former President Jacob Zuma.

RECENT DETERIORATIONS IN VIOLENT DEMONSTRATIONS

The trend of deterioration in the *violent demonstrations* indicator decelerated to some extent in recent years. This was in part due to the COVID-19 pandemic and the social isolation measures enacted by governments around the world to curb it. The lockdowns and movement restrictions have prevented further deteriorations in violent demonstrations in some countries, although the overall level of protests – including those against the lockdown measures themselves – remained relatively high in 2020 and 2021.

This section discusses recent developments in violent

TABLE 2.1

Largest increases in violent demonstrations, 2021–2022

The ten largest deteriorations in violent demonstrations in the past year.

		VIOLENT DEMONSTRATION INDICATOR			
RANK	COUNTRY	SCORE IN 2022	SCORE IN 2021	CHANGE IN SCORE FROM 2021 TO 2022	RANK CHANGE FROM 2021 TO 2022
1	**Kazakhstan**	**4.000**	**1.750**	**2.250**	↓ **126**
2	**Papua New Guinea**	**3.250**	**1.500**	**1.750**	↓ **120**
3	Rwanda	2.250	1.000	1.250	↓ 89
4	Botswana	2.250	1.500	0.750	↓ 72
5	Dominican Republic	2.500	1.750	0.750	↓ 76
6	Lesotho	2.500	1.750	0.750	↓ 76
7	North Korea	1.750	1.000	0.750	↓ 34
8	**Eswatini**	**3.250**	**2.500**	**0.750**	↓ **39**
9	Bosnia and Herzegovina	1.500	1.000	0.500	↓ 15
10	Chad	3.250	2.750	0.500	↓ 23

Source: IEP

demonstrations focusing on three countries that have seen higher levels of social unrest in recent times: Kazakhstan, Papua New Guinea and Eswatini. These are among the ten largest country deteriorations in the *violent demonstrations* indicator from 2021 to 2022 (Table 2.1). Some comments on the recent unrest in Sri Lanka are found in Box 2.2 at the end of the section.

Kazakhstan saw the largest deterioration in the violent demonstrations GPI score between 2020 and 2021, followed by Papua New Guinea. Regionally, five of the top ten countries came from the sub-Saharan Africa region.

Kazakhstan

Kazakhstan experienced the largest increase in the violent demonstration score between 2020 and 2021. While the number of violent protests in the country in 2021 remained close to 2020, the increase in the score was primarily caused by an increase in number of deaths (Table 2.2).

TABLE 2.2

Violent demonstrations in Kazakhstan, 2021–2022

COMPONENTS OF THE VIOLENT DEMONSTRATIONS INDICATOR	2021	2022
Number of Protests with Interventions	39	37
Number of Excessive force against protesters events	0	4
Number of Violent Demonstrations	12	11
Number of Mob Violence events	8	12
Number of Deaths	0	207
Violent Demonstrations Score	1.750	4.00

Source: ACLED, IEP

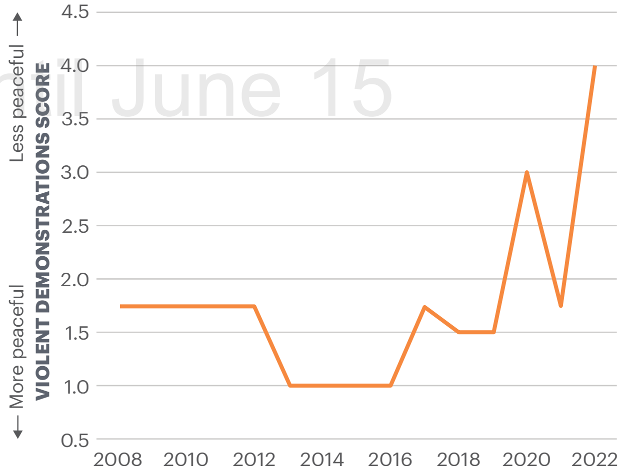
The deadliest incidents were a series of month-long protests ignited on 2 January 2022 in the oil-rich western part of the country, after the government lifted price controls over the liquefied petroleum gas (LNG), which led to LNG prices for locals more than doubling. The spike in fuel prices quickly expanded to nation-wide discontent over corruption, poverty and unemployment. On 5 January, police used tear gas and grenades to break up protests in the nation's most populous city, Almaty. President Kasym-Jomart Tokaev announced a state of emergency and requested military help from the Collective Security Treaty Organisation (CSTO), a six-country regional military alliance led by Russia. According to reports, in January 2022 alone, over 200 people died in Kazakhstan during the protests.[3]

For years Kazakhstan had been considered the most peaceful country in Central Asia. Under the rule of former president Nursultan Nazarbayev, who was in office since the country's independence in 1991 until 2019, protests were uncommon. In recent years, the number and severity of protests have increased sharply (Figure 2.14). Despite the promises by the government regarding easing restrictions on freedom of assembly, the right to protest in Kazakhstan is often denied by authorities, and protests, if they occur, are suppressed.

FIGURE 2.14

Violent demonstrations score, Kazakhstan, 2008–2022

The number and severity of protests in Kazakhstan have increased dramatically in recent years.



Source: ACLED, IEP calculations

Papua New Guinea

Papua New Guinea (PNG) ranked second among the largest deteriorations in *violent demonstrations* in 2022, when compared to the previous year. The two main reasons for this deterioration were a sharp increase in the frequency and lethality of mob violence (Table 2.3 and Figure 2.15).

Ethno-linguistic diversity in Papua New Guinea continues to influence outbreaks of violent demonstrations. Although ethnic conflicts do not usually present a threat to the national government, apart from the Bougainville Civil War from 1988 to 1998, they are not uncommon and often result in deaths. The Eastern Highlands province is one of the most affected by ethnic rioting and conflict. For instance, recent fighting between local clans over land ownership disputes killed 19 people.[4]

TABLE 2.3

Violent demonstrations in Papua New Guinea, 2021–2022

COMPONENTS OF THE VIOLENT DEMONSTRATIONS INDICATOR	2021	2022
Number of Protests with Interventions	0	1
Number of Excessive force against protesters events	0	0
Number of Violent Demonstrations	0	5
Number of Mob Violence events	9	41
Number of Deaths	0	39
Violent Demonstrations Score	1.500	3.250

Source: ACLED, IEP

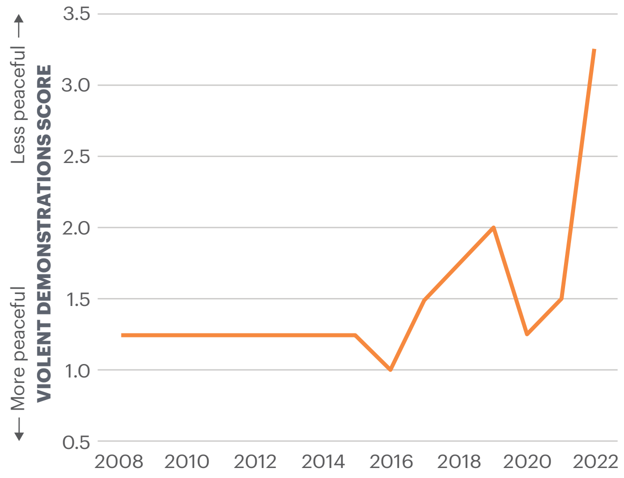
Additionally, the COVID-19 pandemic highlighted ongoing challenges in PNG, with economic difficulties and a very under-resourced health care system being drivers of unrest.[5] In 2021 social tensions were rising over distrust regarding COVID-19 vaccination, which led to an increase in violence against health workers. In one occasion on 2 November 2021, protesters gathered in the capital Port Moresby over the rumour of the introduction of mandatory vaccination. In consequence, authorities banned people from protesting against vaccination in the beginning of November 2021. Vaccination rates against COVID-19 in PNG remain among the lowest in the world.

Mob violence may increase towards the middle of 2022 around national elections scheduled for 11 June 2022, as well as in the post-election period, if election results are disputed.

FIGURE 2.15

Violent demonstrations score, Papua New Guinea, 2008–2022

The year of 2022 saw a large deterioration in the violent demonstration indicator.



Source: ACLED, IEP calculations

Eswatini

Eswatini recorded deteriorations in all components of the *violent demonstrations* score, signalling rising discontent in the country against the only remaining absolute monarchy in Africa (Table 2.4 and Figure 2.16). King Mswati III has ruled the landlocked country since 1986.

TABLE 2.4

Violent demonstrations in Eswatini, 2021–2022

COMPONENTS OF THE VIOLENT DEMONSTRATIONS INDICATOR	2021	2022
Number of Protests with Interventions	3	22
Number of Excessive force against protesters events	0	11
Number of Violent Demonstrations	6	42
Number of Mob Violence events	6	29
Number of Deaths	4	25
Violent Demonstrations Score	2.500	3.250

Source: ACLED, IEP

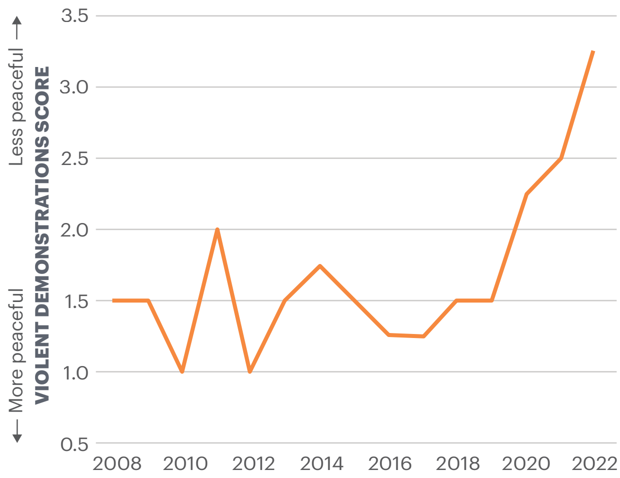
An initial wave of protests started in May 2021, following the death of a 25-year old law student in circumstances that suggested police involvement. This was followed by petitions calling for the end of police brutality and led to protests, mostly by students and teachers calling for more accountability in the country. The Acting Prime Minister issued a decree banning protests, which marked a hard-line approach towards demonstrators. This was followed by law enforcement quashing protests with water cannons and tear gas. Activists accused authorities of human rights violations, extrajudicial killings and forced interrogations. The government introduced a national curfew and deployed security forces on the streets in an attempt to suppress protests. In July, the King issued a decree banning petitions to the government calling for democratic reforms, which caused further unrest. Protests became increasingly violent and the political demands of the demonstrators calling for reforms intensified. In an attempt to avert further demonstrations, the King announced a process of national dialogue which yielded only tentative results.

On 1 October 2021 over 10,000 protesters marched to the US embassy in the capital city Mbabane appealing for support and two weeks later the internet was shut down. Protests were

FIGURE 2.16

Violent demonstrations score, Eswatini, 2008–2022

The indicator deteriorated sharply in Eswatini since 2019.



Source: ACLED, IEP calculations

repressed and by 18 October 2021 the death toll had risen to over 80.[6] On 22 October, police injured 30 nurses when suppressing a protest of civil servants. In response the nurses announced that they would no longer be treating police officers. By the end of 2021, the protests had fizzled out. More than half of the country lives below the poverty line and more than a third of the population has no access to basic sanitation.

TRENDS BY GOVERNMENT TYPE IN THE PAST DECADE

The profile of violent demonstrations over time tends to differ according to the type of government prevailing in a country. Authoritarian and hybrid regimes have seen smaller rates of deterioration since 2008 than other types of government (Figure 2.17, a definition of the different types of government can be seen in Box 2.3). Presumably this reflects that non-democratic regimes have a history of suppressing dissenting protests. By 2022, the *violent demonstrations* scores for authoritarian and hybrid regimes had deteriorated by 9 and 39 per cent respectively. Nevertheless, authoritarian and hybrid regimes have seen worse overall levels of violent demonstrations than flawed democracies for almost all of the 2010s.

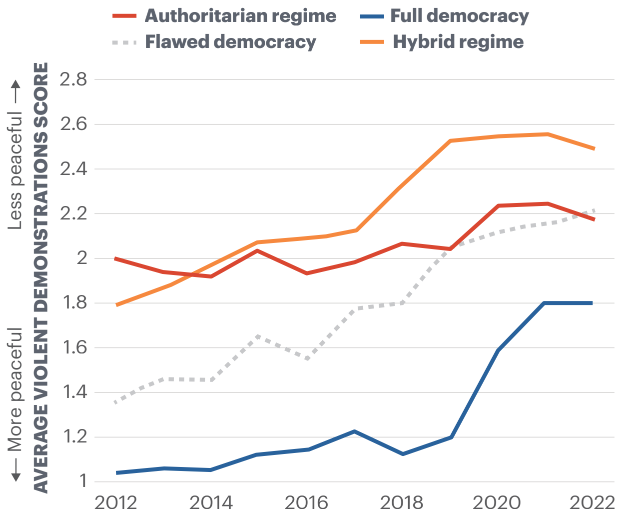
The average *violent demonstrations* score for flawed democracies has suffered a steady deterioration through the decade, this resulted in its 2022 score being 63 per cent worse than in 2012.

The sharpest deterioration, however, was recorded among full democracies. The average *violent demonstrations* score for this category deteriorated by 73 per cent over the decade to 2022. Violent demonstrations had deteriorated only moderately throughout most of the 2010s for full democracies. However, in 2019 there was an increase in protest activity around the world including in many full democracies. In France, there were violent protests against economic reforms proposed by the government. There were street demonstrations, strikes and rioting, in a movement that became known as *Gilets Jeunes* (yellow vests). In

FIGURE 2.17

Violent demonstrations score by government type, 2012–2022

Full democracies have the lowest rates of violent demonstrations than any other type of government.



Source: ACLED, IEP calculations

Spain, demonstrators clashed with police in the city of Barcelona, as protests against the detention of Catalonian separatist leaders deteriorated into rioting. In the 'Sardines' protest, tens of thousands of people demonstrated in Rome and other cities against the Italian government's perceived alliances with the far right. The COVID-19 pandemic and the administrative measures enacted to curb it in 2020 and 2021 resulted in a further deterioration in the indicator, as citizens protested against the lockdowns, social distancing measures, the rise in unemployment, compulsory vaccinations and 'COVID-passes.' Despite this abrupt deterioration, full democracies still have by far the lowest level and intensity of violent demonstrations of any type of government.

BOX 2.2

Sri Lanka in 2022

On 31 March 2022, anger over months of soaring food prices, shortages of staples like medicine and fuel, lengthy power cuts and spiralling inflation, led to mass demonstrations in Sri Lanka's capital, Colombo. Within days, the rallies spread across the country and grew even stronger in April.

Sri Lanka in 2022 is facing its worst economic crisis since independence, exacerbated by the COVID-19 pandemic and administrative measures to curb it. Prior to this, the country had already been experiencing governance and economic difficulties. Demonstrators accused president Nandasena Gotabaya Rajapaksa, and his brother, prime minister Percy Mahinda Rajapaksa, who have controlled country's politics since 2005, of economic mismanagement, corruption, nepotism and authoritarianism.

Protests in 2022 started as a peaceful rally, but quickly turned violent when hundreds of people tried to storm the President's private residence with law enforcement using teargas and water cannons to suppress the crowd. According to reports, 50 people were injured, including journalists, and a further 45 people were arrested.[7] In response to the violence authorities enacted and restricted social media access. The prime Minister and the cabinet all resigned, but the protests continued. The president refuses to resign.

As the GPI measures events up to 31st March, these events are not reflected in the Sri Lankan score in 2022. In this year's report, Sri Lanka ranks 136 (out of 163 nations assessed in the GPI) in the violent demonstrations score. As the situation develops over the coming months, Sri Lanka would be expected to fall in ranking in the 2023 GPI report.

VIOLENT DEMONSTRATIONS AND POSITIVE PEACE

The rise in violent demonstrations across the world correlate with some developments observed in the evolution of Positive Peace over the past decade. The Positive Peace Report 2022 discusses how the *Attitudes* domain of Positive Peace has deteriorated since 2009. The report is available at www.visionofhumanity.org. The deterioration of this domain coincides conceptually and empirically with the deterioration in violent demonstrations observed globally in the past decade.

Positive Peace is defined as the attitudes, institutions and structures that create and sustain peaceful societies. It can be seen as a measure of socio-economic resilience that helps the societal system shield itself and recover from negative shocks. The Positive Peace Report 2022 demonstrates how the three domains of Positive Peace have displayed diverging trends over the past decade:

- The **Structures** domain measures the technological, scientific and economic foundations that support social development. The global score for this domain has improved by eight per cent since 2009. Much of this is related to improvements in developmental scores related to health, per capita income and communications.

- The **Institutions** domain assess the effectiveness, transparency and inclusiveness of society's administrative organisations. The global score for this domain has also improved since 2009, by 1.4 per cent.

- The **Attitudes** domain gauges how members of a society view and relate to one another and to the institutions that buttress the social system. In contrast to the two other domains, *Attitudes* deteriorated since 2009, by 1.8 per cent.

These diverging trends mean that the overall improvement in Positive Peace recorded over the past decade has been uneven (Figure 2.18). On one hand, society has become wealthier, poverty has been reduced and technology has been disseminated at a very fast pace throughout the globe. These trends have been captured by the sharp improvement in the *Structures* domain. The *Institutions* that manage society have also improved – albeit less pronouncedly – and become more efficient and transparent, at least in terms of global averages. On the other hand, our social interrelationships and our relationships with social institutions – as captured by the *Attitudes* domain – have deteriorated. Individuals have become more inflexible, more politically polarised, more critical of existing administrative structures and less tolerant of dissenting views.

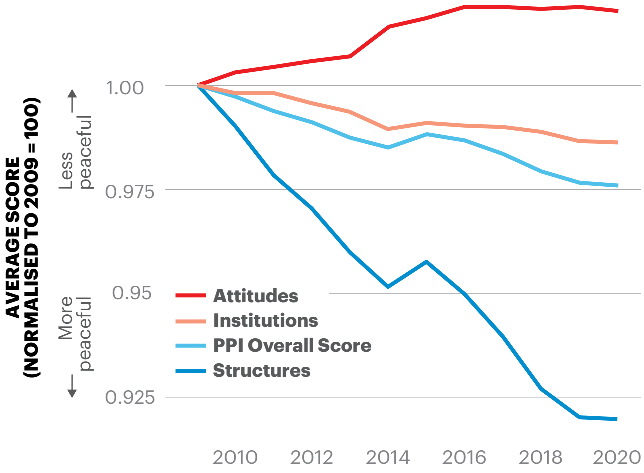
This attitudinal deterioration is consistent with a rise in violent demonstrations over the past decade or so. As some individuals and groups have become more polarised, intolerant and radicalised over time, it is not surprising that demonstrations – including those containing violence or those that are repressed violently – have become more frequent.

There are several possible reasons for the deterioration in attitudes globally. One possibility is that the dissemination of information technology could have raised individual's awareness of economic and administrative hindrances such as lingering economic inequality, low political representation, low administrative efficiency and high levels of perceived corruption. In fact, the Pillars of Positive Peace that capture changes in administration and corruption – *Well-Functioning Governments* and *Low Levels of Corruption* – have performed poorly since 2009. *Well-Functioning Government* was broadly unchanged over the past decade, while most other Pillars posted substantial improvements (Figure 2.19). *Low Levels of Corruption* deteriorated since 2009, since that perceptions of corruption have become more heightened, either because there has been an actual increase in corrupt activities or there has been more awareness of and discussion about the level of corruption that has always existed in the global social system.

FIGURE 2.18

Changes in the Attitudes, Institutions and Structures of Positive Peace, 2009–2020

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

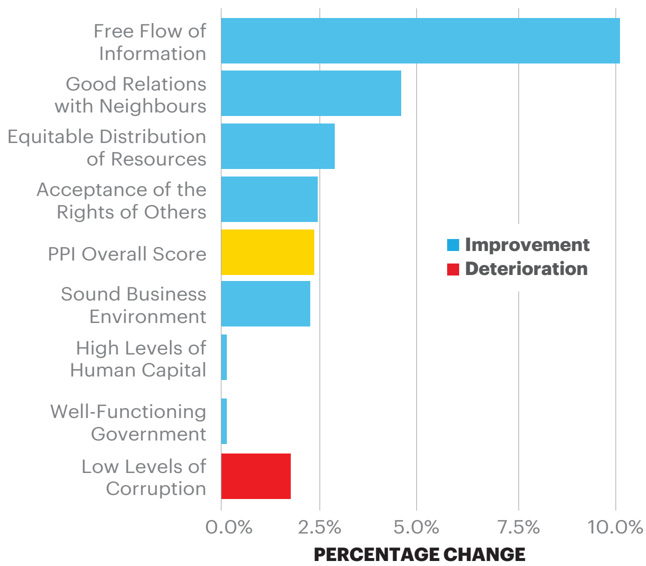


Source: IEP

FIGURE 2.19

Changes in the Pillars of Positive Peace, 2009–2020

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



Source: IEP

BOX 2.3

Government type

IEP uses the government type definitions provided by the Economist Intelligence Unit (EIU), based on country scores from its annual Democracy Index. The four types of regimes are defined as:

Full democracies: Countries in which basic political freedoms and civil liberties are respected by the government, the people and the culture. Elections are free and fair. The government is generally well-functioning and mostly free from bias and corruption due to systems of checks and balances.

Flawed democracies: Countries in which elections are free and fair and basic civil liberties are respected. There may be significant weaknesses in other areas of democracy, such as problems in governance, minimal political participation or infringement on media freedom.

Hybrid regimes: States that hold elections that are not necessarily free and fair. There may be widespread corruption and weak rule of law, with problems regarding government functioning, political culture and political participation. The media and the judiciary are likely to be under government influence.

Authoritarian regimes: Countries in which political pluralism is absent or severely limited, many of which can be characterised as dictatorships. Corruption, infringement of civil liberties, repression and censorship are common. The media and the judiciary are not independent of the ruling regime.

3 THE ECONOMIC IMPACT OF VIOLENCE

HIGHLIGHTS

- The global economic impact of violence was $16.5 trillion in 2021, equivalent to 10.9 per cent of global GDP, or $2,117 per person.
- The 2021 result represented an increase of 12.4 per cent – or $1.8 trillion – from the previous year, primarily due to higher levels of military expenditure.
- In 2021, 132 countries increased their military expenditure from the previous year, compared to 29 countries that reduced spending. The economic impact of military spending was $7.7 trillion, an increase 18.8 per cent.
- In 2021, the economic impact of Armed Conflict increased by 27 per cent to $559.3 billion. This was driven by increases in the number of refugees and internally displaced people, and in GDP losses from conflict.
- All regions of the world recorded increases in the economic impact of violence from 2020 to 2021.
- The Middle East and North Africa (MENA) and Russia and Eurasia were the regions with the largest proportional increases, at 32 per cent and 29 per cent respectively.
- Syria, South Sudan and the Central African Republic incurred the highest relative economic costs of violence in 2021, equivalent to 80, 40.8 and 37 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 2021, compared to 3.6 per cent for the 10 least affected countries.
- The global economic impact of refugees and internally displaced persons was more than three times higher than the GDP losses from conflict.
- Guyana, Libya and Angola were the countries with the steepest increases in the economic cost of violence. All these nations recorded increases above 85 per cent from 2020 to 2021. South Sudan, Burundi and Togo recorded the largest decreases, all above 25 per cent.
- From 2007 to 2021, 84 countries recorded decreases in their economic cost of violence, while 77 saw increases.
- As a proportion of GDP, global military expenditure rose in both 2020 and 2021. The war in Ukraine in 2022 led many countries to increase projections of their defence spending.
- Among NATO countries, military expenditure will rise by 7 per cent by 2024 if all members lift their expenditure to the minimum level required by the bloc, this would represent an increase of $83 billion.
- The economic impact of suicide was $757.1 billion in 2021, or 4.6 per cent of the global impact of violence, increasing by 4.7 per cent from the previous year.
- Expenditure on Peacebuilding and Peacekeeping was $41.8 billion in 2021, which equals just 0.5 per cent of military spending.

The Economic Value of Peace

In 2021, the global impact of violence on the economy amounted to $16.5 trillion, in constant 2021 US dollars in purchasing power parity (PPP) terms. This is equivalent to 10.9 per cent of global GDP, or $2,117 per person. This was an increase of 12.4 per cent, or $1.82 trillion, from the previous 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 value of peace is the reciprocal concept to the economic impact of violence. That is, increases in the impact of violence equate to reductions in the economic benefits arising from peacefulness.

The total economic impact of violence has three components that represent different ways in which violence saps global prosperity: direct costs, indirect costs and a multiplier effect. Box 3.1 gives a brief explanation of the economic costing model and some key concepts discussed in this section.

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. For more details on the peace multiplier, see Box 3.4 on page 56. A comprehensive explanation of how the economic impact of violence is calculated is provided in Appendix B.

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 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. Measuring the cost of violence and its containment, therefore, has important implications for assessing the benefits that would accrue to nations if violence were reduced.

It may be argued that expenditure on violence containment is an economic transfer like any other that makes the economy tick. For example, the wages of a police officer are a transfer from the government to the officer, who will in turn, spend the salary on goods and services like any other worker would. However, excessive spending on security is undesirable because it is symptomatic of an unwelcome feature of society – violence. In addition, certain types of transfers would be far more productive to the economy than security payments. For instance, if there is less need for policing, some of the security spending could be transferred to, say, the education system. Teachers would spend their salaries on goods and services, just like police officers do. But in addition, they would educate students and workers, thereby lifting productivity, innovation and wellbeing permanently.

It is in this light that IEP's model, consistent with other academic work, includes expenses arising from violence containment as part of the economic impact of violence.

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.

“

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 propensity to invest and consume.

BOX 3.1

The economic impact of violence – definitions and model

The *economic impact of violence* is defined as the *expenditure and economic effect related to containing, preventing and dealing with the consequences of violence*. It comprises the economic cost of violence – both direct and indirect – plus a multiplier effect (Table 3.1).

Direct costs are incurred by the victim, the government and the perpetrator and is directly associated with the specific act of violence. These include medical expenses, policing costs, expenses with the justice system, incarceration costs and others. **Indirect costs** are second-order additional costs that accrue as a result of violence. These include lost productivity arising from physical or psychological trauma, income forgone as a result of violent acts, reductions in investment due to fear of violence and others. The **multiplier effect** represents the economic benefits forgone because the expenditure was not directed towards more productive alternatives. The analysis assumes that the size of the multiplier effect is one. This means that for every dollar directly spent on one sector, the amount of the forgone benefits would equal another dollar. This is a relatively conservative multiplier and is broadly in line with similar studies.

TABLE 3.1

Economic impact of violence - components

The economic impact of violence comprises the economic costs of violence plus a multiplier effect.

IMPACT	COMPONENTS		COMMENTARY
Economic Impact of Violence	Economic Cost of Violence	i) Direct Costs	Immediate costs directly attributable to violence and its prevention
		ii) Indirect Costs	Medium- and long-term losses arising from acts of violence
	iii) Multiplier Effect		Economic benefits forgone by investing in violence contention and not in other more productive activities

Source: IEP

IEP uses 18 indicators in the estimation of the economic impact of violence (Table 3.2). Each indicator is allocated to one of the three domains *Violence Containment, Armed Conflict* and *Interpersonal and Self-Inflicted Violence*, as shown in Table 3.1. For some indicators, all three cost components – direct, indirect and the multiplier effect – are calculated. For others, just a subset of these is computed.

The cost components for each indicator are calculated in constant 2021 prices purchase power parity (PPP) US dollars. This has two benefits. The first is that the effect of US dollar inflation has been removed from the figures. If a cost estimate increases from one year to the next, the change will reflect a real increase, not inflation. The second is that estimates are comparable across countries because they take into consideration the different purchasing power that one US dollar has on different countries.

The year of 2022 is the latest year for which the GPI scores have been estimated using partial data. However, the economic impact of violence has been produced using calendar-year data for 2021.

TABLE 3.2

Economic impact of violence - domains and indicators

The 18 indicators in the economic impact of violence model.

	ECONOMIC IMPACT OF VIOLENCE		
DOMAINS	**VIOLENCE CONTAINMEMNT**	**ARMED CONFLICT**	**INTERPERSONAL AND SELF-INFLICTED VIOLENCE**
Indicators:	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

THE ECONOMIC VALUE OF PEACE IN 2021

The economic impact of violence was $16.5 trillion in 2021 (Table 3.3). This represented a 12.4 per cent increase from the previous year, largely reflecting higher *military expenditure*, more conflict deaths and economic impact from larger flows of *refugees and IDPs* (Table 3.4).

Figure 3.1 displays the breakdown of the total economic impact of violence by category for 2021. The single largest component was global *military expenditure* at $7.7 trillion, representing 46.7 per cent of the total impact. Note that this is an economic measure of *military expenditure*, that is, it includes a multiplier effect. For this reason, it differs from other cash-based measures of global military expenditure estimated by various other sources (Box 3.2).

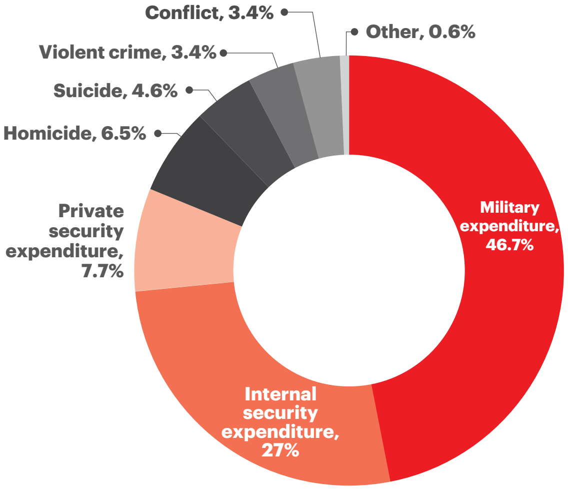
Globally, the impact of *military expenditure* increased by 18.8 per cent in 2021, the equivalent of $1.2 trillion. However, this was primarily driven by greater spending from six countries – the US, Iran, Russia, India, China and Saudi Arabia – which equates to a combined increase of $733.9 billion. In 2021, 132 countries increased their *military expenditure* from the previous year, while 29 countries reduced their spending.

Internal security expenditure was the second largest component, comprising 27 per cent of the global economic impact of violence, at $4.3 trillion. It includes spending on the police and the judicial system as well as the costs associated with incarceration.

FIGURE 3.1

Breakdown of the global economic impact of violence, 2021

Government spending on the military and internal security comprises almost three-quarters of the global economic impact of violence.



Source: IEP

Internal security spending increased by 8.3 per cent in 2021, the equivalent of $331 billion. In 2021, more countries increased their internal security expenditure from the previous year, with 85 countries increasing, while 77 countries reduced spending. Iran, Russia and the United States recorded the largest increases in internal security expenditure in 2021.

TABLE 3.3

Composition of the global economic impact of violence, billions of ppp 2021 US dollars, 2021

Military expenditure is the largest cost in the economic impact of violence.

DOMAIN	INDICATOR	DIRECT COSTS	INDIRECT COSTS	THE MULTIPLIER EFFECT	TOTAL
Armed conflict	Conflict deaths*	11.7	-	11.7	23.4
	GDP losses	-	106.7	-	106.7
	Refugees and IDPs	3.8	382.4	3.8	390
	Small arms	11.3	-	11.3	22.6
	Terrorism	0.4	4.2	0.4	5
Interpersonal and Self-Inflicted Violence	Fear	-	70.3	-	70.3
	Homicide	93.6	891.6	93.6	1,078.8
	Incarceration	70.9	-	70.9	141.8
	Suicide	1	755	1	757
	Violent crime**	47.5	467.9	47.5	562.9
Violence containment	Internal security expenditure#	2,157.7	-	2,157.7	4,315.4
	Military expenditure	3,855.4	-	3,855.4	7,710.8
	Peacebuilding	12.1	-	12.1	24.2
	Peacekeeping	8.8	-	8.8	17.6
	Private security	635.9	-	635.9	1,271.8
TOTAL		**6,910.1**	**2,678.1**	**6,910.1**	**16,498.3**

* Combine internal and external conflict deaths; ** combine violent assault and sexual assault; # includes security agency; totals may not match due to rounding.
Source: IEP

TABLE 3.4

Change in global economic impact of violence, billions of PPP 2021 US dollars, 2020–2021

Almost all of the increase in the economic impact of violence in 2021 was due to greater military spending.

				CHANGE 2020–2021	
DOMAIN	INDICATOR	2020	2021	(BILLIONS)	(%)
Armed conflict	Conflict deaths*	10.0	23.4	13.4	134.0
	GDP losses	87.4	106.7	19.3	22.1
	Refugees and IDPs	288.7	390.0	101.3	35.1
	Small arms	22.7	22.6	-0.1	-0.4
	Terrorism	5.8	5.0	-0.8	-13.8
Interpersonal and Self-Inflicted Violence	Fear	65.3	70.3	5.0	7.7
	Homicide	1,052.2	1,078.8	26.6	2.5
	Incarceration	147.9	141.8	-6.1	-4.1
	Suicide	723.3	757.0	33.7	4.7
	Violent crime**	527.2	562.9	35.7	6.8
Violence containment	Internal security expenditure#	3,984.2	4,315.4	331.2	8.3
	Military expenditure	6,493.1	7,710.8	1,217.7	18.8
	Peacebuilding	32.1	24.2	-7.9	-24.6
	Peacekeeping	25.1	17.6	-7.5	-29.9
	Private security	1,210.4	1,271.8	61.4	5.1
TOTAL		**14,675.4**	**16,498.3**	**1,822.9**	**12.4**

* Combine internal and external conflict deaths; ** Combine violent assault and sexual assault; # includes security agency; totals may not match due to rounding discrepancies.
Source: IEP

Expenditure on private security is the third largest category in the model, comprising 7.7 per cent of the total. Private security incorporates the cost of security personal globally. In 2021, the impact was $1.3 trillion.

Homicide is the fourth largest component, comprising 6.5 per cent of the global economic impact of violence, at $1.1 trillion. This category deteriorated by 2.5 per cent, or $26.5 billion, from the previous year. Deteriorations in many national *homicide rate*s have resulted in a rise in its economic impact. Mexico and Iran both recorded substantial rises in the impact of homicide, increasing by $22.9 billion and $9.7 billion from 2020, respectively.

Suicide is defined as self-inflicted violence resulting in death by the World Health Organization (WHO). Its impact amounted to $757.1 billion in 2021 and represented 4.6 per cent of the global total, deteriorating by 4.7 per cent.

The economic impact of violent crime deteriorated in 2021, increasing by 6.8 per cent to $562.9 billion. Violent crime comprises violent assault and sexual violence and makes up 3.4 per cent of the total economic impact of violence.

BOX 3.2

Differences in military expenditure estimates

It is important to remember that IEP's estimates for military expenditure of $7.7 trillion in 2021 should not be compared with most other measures of military expenditure estimated by other research organisations. For instance, the Stockholm International Peace Research Institute (SIPRI) has estimated that global military expenditure rose in 2021 to reach $2.1 trillion in 2021.[1]

The difference lies in three characteristics of IEP's estimation. Firstly, IEP's figures portray economic costs – not just cash-based outlays. This means that IEP's military expenditure includes the multiplier effect, which captures the indirect impact on the broader economy of the direct expenditure outlays made on military assets and maintenance. Secondly, IEP's figures are adjusted on a purchase power parity (PPP) basis. This means that the same $1 is worth a lot more in a country where the average level of prices is low than in a country with very high prices. The PPP adjustment takes into consideration the greater purchasing power that $1 would have in low-price countries. This is done to facilitate the comparability of the estimates across countries, but it tends to make the global aggregate expenditure larger than a straightforward cash-based estimate would be. Thirdly, IEP's numbers use constant 2021 US-dollar prices, which means that the impact of inflation from one year to another has been removed from the figures. This way, changes from year to year reflect real changes in expenditure, and not the US-dollar inflation adjustment of prices. These considerations apply for all of the economic impact of violence indicators in this report, not just to military expenditure.

GLOBAL TRENDS IN THE ECONOMIC IMPACT OF VIOLENCE

The overall impact of violence in real terms has had little change from 2007 to 2021, although it has fluctuated by 18 per cent in this time (Figure 3.2). In this period, 84 countries recorded increases in their economic impact of violence, whereas 77 saw decreases. Of the 84 countries that recorded higher impacts, the average increase was 41.7 per cent. Among those that recorded reductions, the average decrease was 23.7 per cent. In absolute terms, among the countries where the economic impact of violence fell, the average reduction was $17.3 billion, compared to an average increase of $15.2 billion for countries where economic impact of violence has risen.

The economic impact of violence recorded a large increase in 2010. The largest increase was in the economic impact of conflict, which rose by 17.2 per cent from 2009. Among the regions, it was Russia and Eurasia which showed the highest increase in the economic impact of violence, rising by 67.7 per cent.

Between 2012 and 2017 the economic impact of violence rose by 8.3 per cent. This increase coincided with the start of the Syrian war and rising violence in Libya, Yemen and other parts of the MENA region. The economic impact of violence began to fall again in 2018, with the defeat of ISIL in Iraq and Syria leading to an improvement in the security situation in the region. However, spill overs from the conflict still remain, leading to higher costs, including larger numbers of *refugees and IDPs*. Currently, 84 million people are forcibly displaced worldwide — the highest on record.[3]

Prior to the Russia-Ukraine escalation in 2022, Europe had already reported substantial increases in arm purchases. This followed a commitment from North Atlantic Treaty Organisation (NATO) allies to increasee military budgets.[4]

In terms of *military expenditure*, Europe had the largest rise of all regions, increasing by 26.3 per cent between 2017 and 2021. This amounts to a lift in spending of $219 billion. Many European nations increased their military budgets due to the deterioration in relations with Russia over the past decade. Some of the factors mentioned to justify this greater militarisation were Russia's invasion of the Crimea in 2014, the on-going conflict in Ukraine's eastern provinces of Donetsk and Luhansk, and disinformation campaigns and cyber-attacks attributed to Russia.

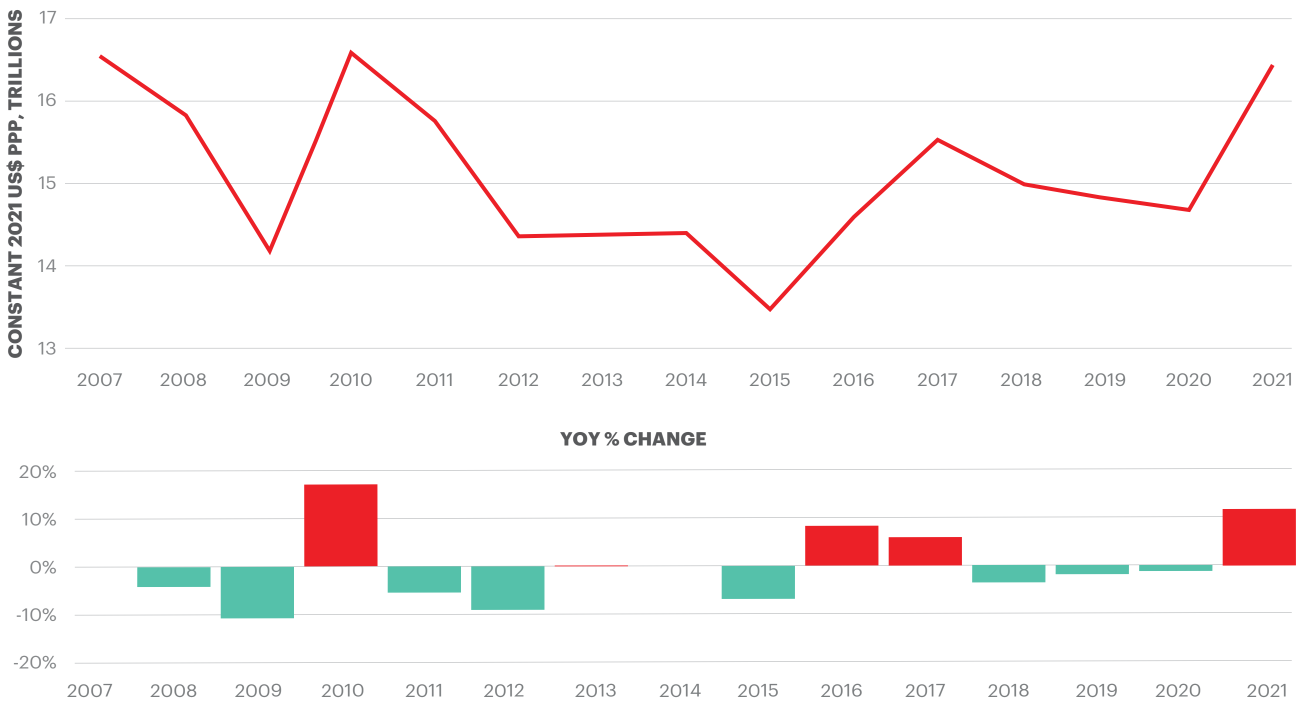
Between 2007 and 2021, the global impact of violence experienced only a marginal 0.2 per cent decrease. This was largely due to a 0.5 per cent reduction in the *Violence Containment* domain, given that this domain accounts for the largest share of the total economic impact. *Interpersonal and Self-Inflicted Violence* also declined in this period, shedding 6 per cent, or $159 billion.

In contrast, the economic impact of *Armed Conflict* rose sharply, by 59 per cent since 2007. This was mainly due to a steep rise in conflict deaths and higher costs associated with refugees and internally-displaced persons (Table 3.5). Mali, Mozambique and Brazil are the three countries with the highest proportional increases in the economic impact of conflict deaths from 2007 to 2021.

FIGURE 3.2

Trend in the global economic impact of violence and the year-on-year percentage change, 2007–2021

An increase of 18.8 per cent in military spending drove the increase in the economic impact of violence in 2021.



Source: IEP

TABLE 3.5

Change in global economic impact of violence, billions of PPP 2021 us dollars, 2007–2021

The global impact of violence was little changed from 2007 to 2021.

DOMAIN	INDICATOR	2007	2021	CHANGE 2007 - 2021	
				(BILLIONS)	(%)
Armed conflict	Conflict deaths*	12.1	23.4	11.3	93.4
	GDP losses	27.8	106.7	78.9	283.8
	Refugees and IDPs	254.1	390.0	135.9	53.5
	Small arms	22.7	22.6	-0.1	-0.4
	Terrorism	28.3	5.0	-23.3	-82.3
Interpersonal and Self-Inflicted Violence	Fear	71.3	70.3	-1.0	-1.4
	Homicide	1,230.6	1,078.8	-151.8	-12.3
	Incarceration	129.8	141.8	12.0	9.2
	Suicide	728.5	757.0	28.5	3.9
	Violent crime**	609.7	562.9	-46.8	-7.7
Violence containment	Internal security expenditure#	4,911.6	4,315.4	-596.2	-12.1
	Military expenditure	6,772.9	7,710.8	937.9	13.8
	Peacebuilding	32.4	24.2	-8.2	-25.3
	Peacekeeping	10.1	17.6	7.5	74.3
	Private security	1,684.1	1,271.8	-412.3	-24.5
TOTAL		**16,526.0**	**16,498.3**	**-27.7**	**-0.2**

* Combine internal and external conflict deaths; ** Combine violent assault and sexual assault; # include security agency; totals may not match due to rounding discrepancies

Source: IEP

ECONOMIC IMPACT BY DOMAIN

The long-term trends in the economic impact of violence differ among the three domains of violence. *Armed Conflict* deteriorated substantially since 2007, while *Violence Containment* was little changed over that period (Figure 3.3). In contrast, *Interpersonal and Self-Inflicted Violence* recorded a small improvement from 2007 to 2021.

Armed Conflict

The economic impact of *Armed Conflict* on the global economy in 2021 amounted to $547.7 billion. The *Armed Conflict* domain includes the costs associated with violence caused by larger groups such as nation-states, militia groups and terrorist organisations in order to achieve political, economic or social objectives or security.[5]

This collective violence includes armed conflict within and between states, 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 concentrated across three regions — sub-Saharan Africa, MENA and South America.

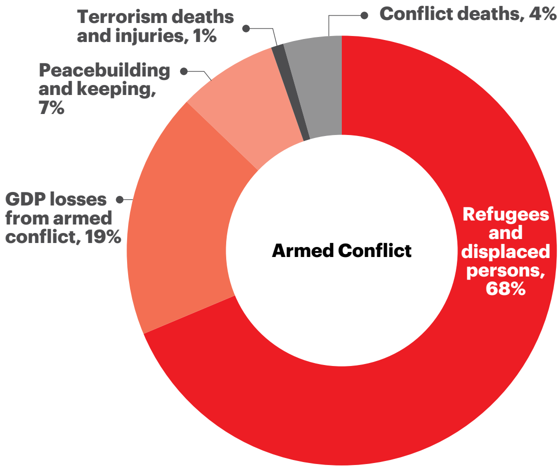
In 2021, three countries suffered exceptionally high costs of *Armed Conflict* — Syria, South Sudan and the Central African Republic. At 74.6 per cent of GDP, Syria recorded the largest economic cost of *Armed Conflict*. South Sudan followed this at 39 per cent and the Central African Republic at 33.8 per cent of GDP. Afghanistan's losses were 19.2 per cent of GDP.[6]

Armed Conflict makes up the vast majority of the economic impact of violence in conflict countries. For example, the total economic impact of violence in Syria equates to 80.3 per cent of the country's GDP. For South Sudan, this proportion is 40.8 per cent. More detail on conflict countries is discussed in the section 'Countries with the Highest Economic Impact' .

FIGURE 3.4

Breakdown of the global economic impact of Armed Conflict, 2021

Forced displacement accounts for two thirds of the global economic impact of *Armed Conflict*.



Source: IEP

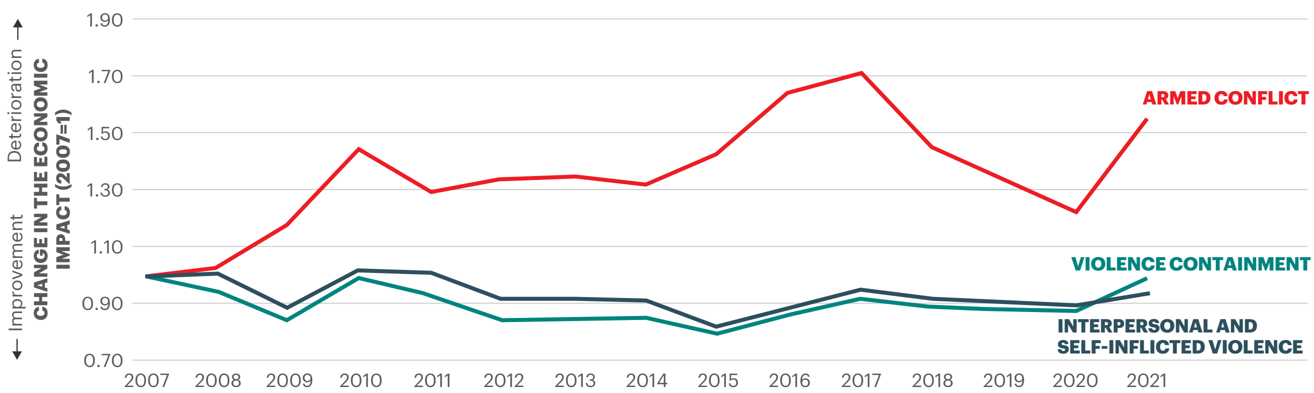
Refugees and IDPs is the largest component, accounting for approximately 68 per cent of the economic impact of *Armed Conflict*, followed by the GDP losses from conflict at 19 per cent. Figure 3.4 provides a detailed breakdown of the indicators contained in the domain.

The impact of *Armed Conflict* rose sharply from 2007 to 2010, increasing by 44 per cent (Figure 3.3). This coincided with a number of conflicts such as the Gaza War between Israeli forces and Hezbollah in the Gaza Strip, the Boko Haram insurgency in Niger, Cameroon, Nigeria and Chad, an escalation of the war in Afghanistan where a coalition of nations combatted the Taliban, and the latter part of the US-Iraq war.

FIGURE 3.3

Indexed trend in the economic impact by domain, 2007–2021

In 2021, *Interpersonal and Self-Inflicted Violence* and *Violence Containment* were both slightly lower relative to 2007.

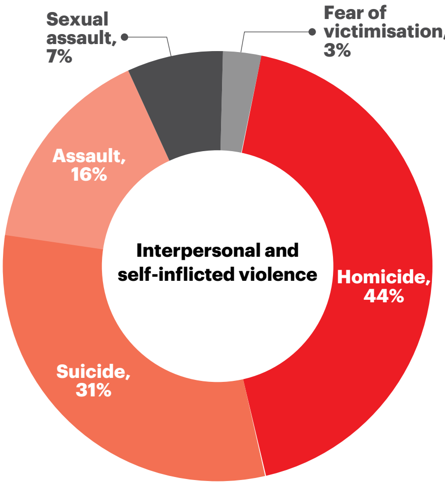


Source: IEP

FIGURE 3.5

Composition of the economic impact of interpersonal violence and self-inflicted violence, 2021

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

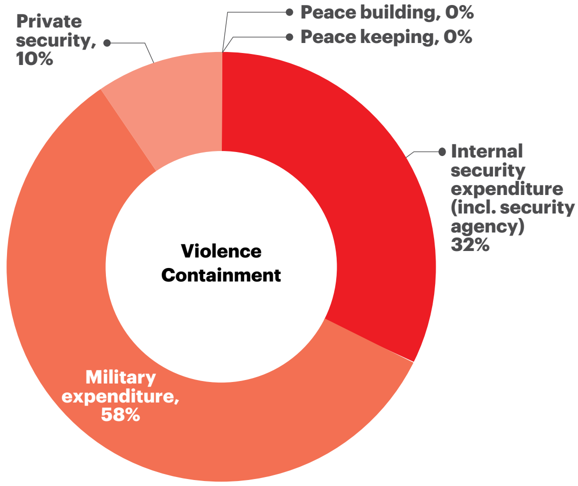


Source: IEP

FIGURE 3.6

Composition of the economic impact of violence containment, 2021

Military expenditure is the largest component of the violence containment domain.



Source: IEP

After stabilising for a few years, the impact of *Armed Conflict* once again rose between 2015 and 2018. This coincided with ISIL insurgencies in Iraq, Syria and with the Yemeni Civil War. The impact of *Armed Conflict* rose by almost 30 per cent from 2015 to 2017 before receding in 2018. In 2021, the domain picked up again as a result of the instability in Myanmar, clashes between Armenia and Azerbaijan, fighting between Kyrgyzstan and Tajikistan, multiple clashes in Western Sahara and others.

Interpersonal 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 2021, 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 3.8 per cent, or $95 billion.

Homicide accounts for approximately 44 per cent of the domain's economic impact, followed by suicide at 31 per cent and assault at 16 per cent. Figure 3.5 provides a detailed breakdown of the economic impact of the domain.

Violence Containment

Violence Containment is the largest component of the overall economic impact of violence. This domain is largely driven by military expenditure, which accounted for 58 per cent of the total impact in 2021 (Figure 3.6). This was followed by internal security expenditure, which includes expenses associated with security agencies, at 32 per cent. Internal security encompasses all of the expenses associated with the police and judiciary system, as well as other ancillary costs. Private security is a relatively small cost category, accounting for only 10 per cent of the total impact of this domain. Peacebuilding and Peacekeeping account for a small proportion of the total spend.

As the largest individual component of the *Violence Containment* domain, *military expenditure* is a critical component of the overall economic impact of violence. This category of expenditure rose by 18.8 per cent in 2021 relative to the previous year to reach $7.7 trillion. Given the outbreak of war in Ukraine in 2022, military spending will most likely increase rapidly in the coming years (Box 3.3).

> The impact of violence containment is driven by its largest component *Military Expenditure*, which accounts for 58 per cent of total.

BOX 3.3

Future trends in military expenditure

Global expenditure on the military – expressed as a proportion of GDP – had declined in the first half of the 2010s and increased moderately in the second half of that decade. From a level of 1.94 per cent of global GDP in 2014, the spend on defence rose to 2.02 per cent of GDP by 2021.

The outbreak of the Russia – Ukraine war in February 2022 led numerous countries to review their defence commitments and stances. Many European nations that are also members of NATO have pledged to increase their defence expenditure to the 2 per cent of GDP minimum threshold recommended by NATO. Before the war, around two-thirds of NATO members used to spend less than this threshold (Figure 3.7).

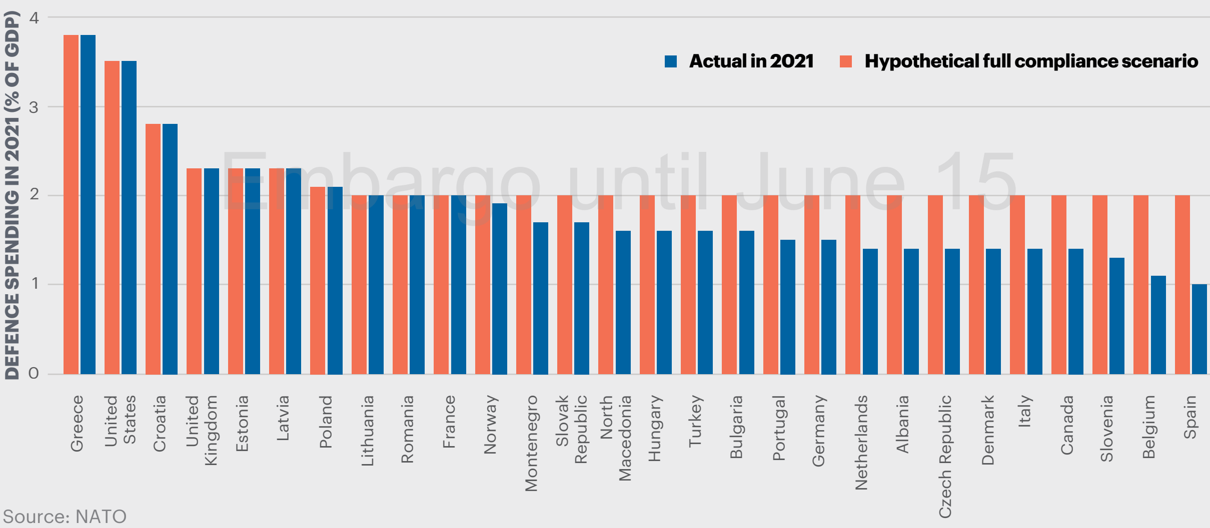
In March 2022, nations such as Germany, Belgium, Spain, Italy, the Netherlands and others announced they will increase defence spending in the coming years to match or surpass the recommended minimum. France and Poland already meet the requirement but still announced increases in spending. Some NATO members have not yet announced expenditure increases, but may do so in the remainder of 2022 depending on how the Russia and Ukraine war continues to develop. In the hypothetical scenario where all members of NATO spend at least 2 per cent of GDP, the overall military expenditure of the bloc would be 7 per cent higher than current levels.

This would represent an increase by $83 billion, although given the currently high level of inflation, some of this increase would go towards meeting higher fuel and other costs.

FIGURE 3.7

NATO Military expenditure

Two-thirds of NATO members spend less than the required 2 per cent of GDP in defence. If all members complied, NATO expenditure would increase by 7 per cent in real terms.



Source: NATO
Note: Luxembourg excluded as it is not in the GPI

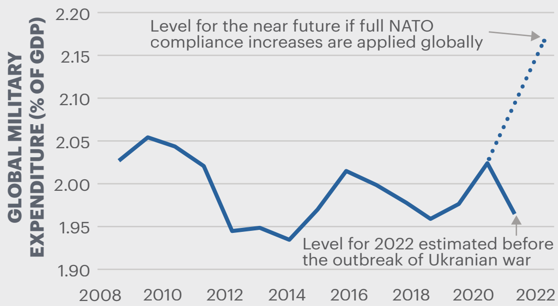
China has already announced that its military budget will be increased by 7.1 per cent in 2022 relative to the previous year. Similarly, India has also announced that its defence budget for 2022-23, totalling $70 billion, will be 9.8 per cent higher than the allocation for 2021-22.[7]

Assuming a 7 per cent rise in real terms from 2021 levels for NATO countries, the global military expenditure would reach 2.17 per cent of GDP – a level that is substantially higher than previous expectations of expenditure for 2022 and beyond (Figure 3.8). In proportional terms, this would represent a rise three times larger than that already recorded from 2020 to 2021.

FIGURE 3.8

Trends in global military expenditure

If global spend rises according to the expected rise among NATO members, military expenditure could rise to 2.17 per cent of global GDP in the near term.



Source: Military Balance+; IEP

The distribution of *Violence Containment* spending differs considerably from region to region. In North America, violence spending equated to $5,123 per person in 2021. This is almost three times higher than the second largest per capita spend, Russia and Eurasia (Figure 3.9).

Central America and the Caribbean, South Asia, and sub-Saharan Africa have the lowest per capita expenditure. On average, countries in sub-Saharan Africa spend 11 times less on violence containment than in MENA.[8]

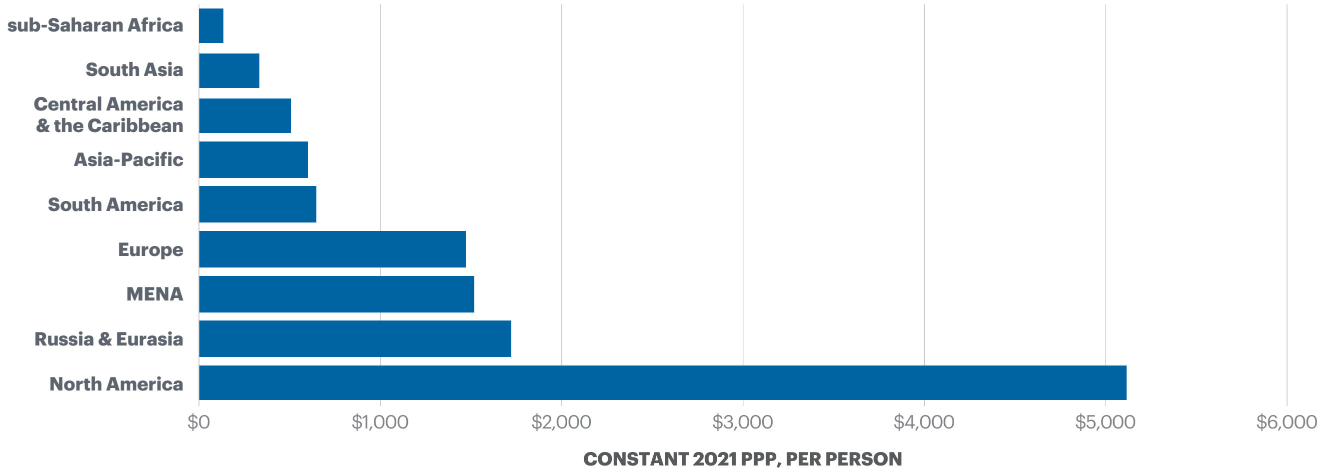
Table 3.6 contains three tables of ten countries highlighting the highest *military expenditure* for 2021 as a total, per capita, and as a percentage of GDP.

The US spends the most of any country annually on its military. However, on a per capita basis, the US is the second-largest spender, spending US$2,595 per person, the equivalent of 3.7 per cent of its per capita GDP. North Korea, Oman and Libya have the highest percentage of their GDP spent on the military.

FIGURE 3.9

Per capita containment spending (military and internal security) by region, 2021

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



Source: IEP

TABLE 3.6

Military expenditure: total, per capita, and as percentage of GDP, 2021

Total military expenditure in the US is higher than the next nine highest countries combined.

COUNTRY	MILITARY EXPENDITURE (TOTAL, US$ BILLIONS)
United States*	858.2
China	295.1
India	84.9
Saudi Arabia	71.2
Russia	70.2
United Kingdom	69.8
France	61.0
Germany	59.2
South Korea	51.9
Japan	50.9

COUNTRY	MILITARY EXPENDITURE (PER CAPITA, US$)
Israel	2,803.16
United States*	2,595.44
Qatar	2,286.27
Singapore	2,121.53
United Arab Emirates	2,033.16
Saudi Arabia	2,007.35
Oman	1,916.70
Kuwait	1,814.21
Norway	1,592.72
Australia	1,291.86

COUNTRY	MILITARY EXPENDITURE (% OF GDP)
North Korea	24.0%
Oman	10.9%
Libya	10.5%
Saudi Arabia	8.4%
Palestine	8.2%
Algeria	6.7%
Kuwait	6.5%
Syria	6.1%
Israel	5.6%
Azerbaijan	5.4%

* estimated; Veterans affairs spending and interest on military-related debt is excluded. China's spending is likely to be underestimated
Source: IEP calculations

REGIONAL AND COUNTRY ANALYSIS

There are noticeable regional differences in the patterns of the economic impact of violence. In some regions, the preponderant component is military expenditure while in others most of the impact of violence comes from crime and conflict.

The Regional Economic Impact of Violence

The economic impact of violence deteriorated across all geographical regions of the world in 2021. The regions with the largest percentage deteriorations were the Middle-East and North Africa (MENA), Russia and Eurasia, and South America (Figure 3.10).

The deterioration in MENA can be attributed to rising *military expenditure*, which subsequently led to a 31.7 per cent increase in the region's overall economic impact. Iran and Saudi Arabia recorded the largest increase in their economic impact, which rose by $192.8 billion and $107.8 billion in 2021 compared to 2020. In both countries, the rise in the economic impact of violence during the same period was due to greater expenditure on military and internal security.

The economic impact of violence in 2021 for Russian and Eurasian nations increased on average by 16.1 per cent from the previous year. Moldova was the only country in the region to reduce its economic impact, decreasing by 15.1 per cent from previous year, whereas all other countries increased.

In South America, all of the countries increased at an average rate of 21 per cent compared to 2020. Guyana recorded 98.8 per cent increase in its economic impact from the previous year. This large increase was primarily driven by a 69.7 per cent increase in the economic impact of *refugees and internally displaced people*. The second largest increase was in Chile, at 35.6 per cent and was driven by greater expenditure on the military, internal security and private security.

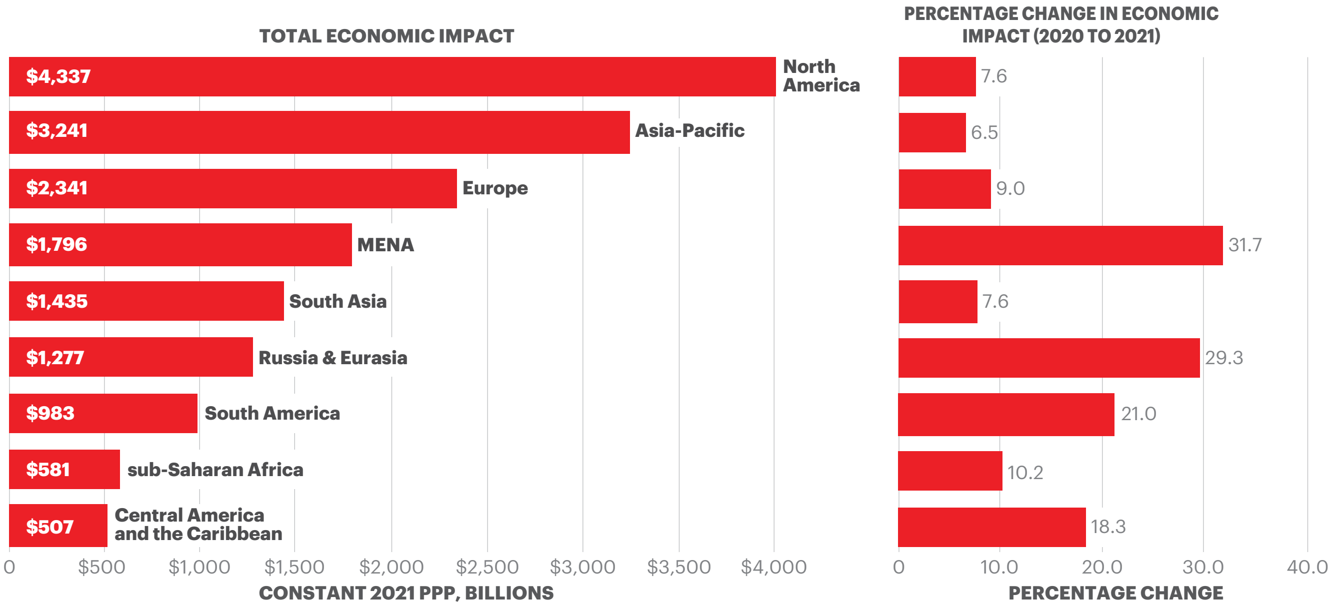
North America recorded the highest overall economic impact in 2021 at $4.3 trillion. This was followed by Asia-Pacific and Europe at $3.2 and $2.3 trillion, respectively. These three regions have substantially higher levels of expenditure than others on internal security and the military, which in 2021 made up more than 70 per cent of each region’s total impact of violence (Figure 3.10).

> “
>
> The economic impact of violence deteriorated across all geographical regions of the world in 2021.

FIGURE 3.10

Total economic impact (2021) and change (2020 to 2021) by region

All nine GPI regions recorded an increase in their economic impact of violence.

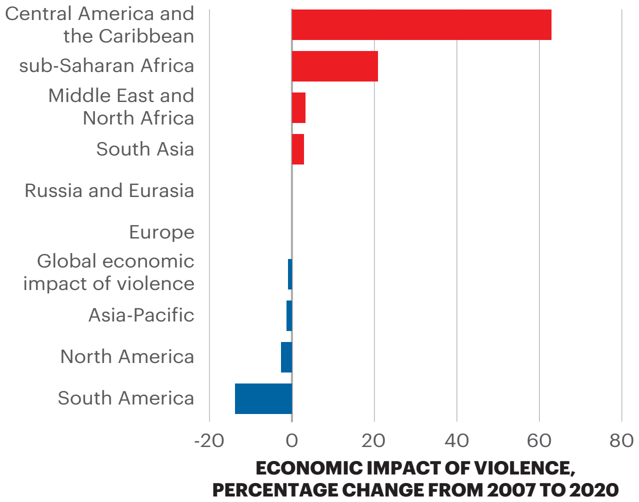


Source: IEP

FIGURE 3.12

Change in economic impact of violence by region, 2007–2021

Between 2007 and 2021, Central America and the Caribbean recorded the largest increase in the economic impact of violence.



Source: IEP

The composition of violence varies substantially by region, as shown in Figure 3.11. The greatest variation between regions is *military expenditure*. This represents 57.7 per cent of the economic impact for the MENA region and only 10 per cent in Central America and the Caribbean.

The proportions of internal and private security spending are fairly stable across regions, fluctuating between just above 30 per cent in MENA and just below 40 per cent in Russia and Eurasia.

In contrast, the impact of violent crime is vastly different across regions. In Central America and the Caribbean, this category accounts for over 40 per cent of the total impact of violence. Violent crime is similarly prevalent in sub-Saharan Africa and South America. However, for all other regions the category has a relatively small financial impact, with the proportion amounting to only 6.6 per cent of the total impact of violence in the MENA region.

Almost all of the global impact of violence due to armed conflict takes place in sub-Saharan Africa, South America, Central America and the Caribbean, Russia and Eurasia, and MENA.

Four regions have increased their economic impact of violence since 2007. Over the 15 years to 2021, no other region experienced an increase in economic impact greater than in Central America and the Caribbean, which rose by 63 per cent from 2007 levels. This was followed by sub-Saharan Africa, which recorded a 21.2 per cent increase from 2007. Europe, and Russia and Eurasia saw almost no change in the economic impact of violence from 2007 to 2021 (Figure 3.12). Figure 3.13 shows the trend in the economic impact of violence for Central America and the Caribbean compared to the base year 2007.

COUNTRIES WITH THE HIGHEST ECONOMIC IMPACT

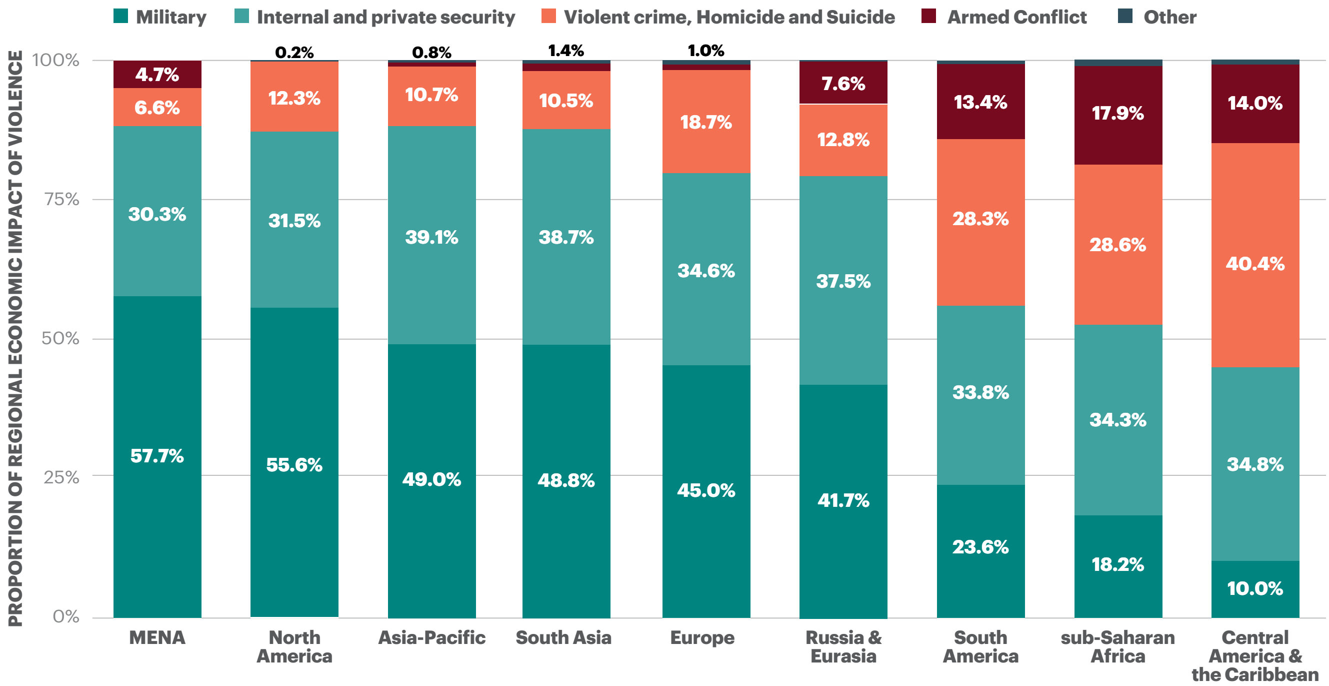
The economic cost of violence for the ten most affected countries ranged from 20 to 80.3 per cent of their GDP. These countries have high levels of armed conflict, large numbers of internally displaced people, high levels of interpersonal violence or large militaries. Table 3.7 lists the ten most affected countries as a percentage of GDP.

High-intensity conflict-affected countries such as Syria, Yemen,

FIGURE 3.11

Composition of the regional economic cost of violence, 2021

At the regional level, military expenditure accounts for between 57.7 and 10 per cent of the economic impact of violence.

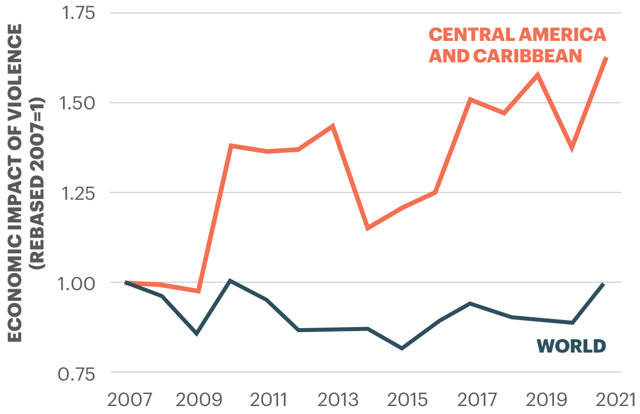


Source: IEP

FIGURE 3.13

The regional economic impact of violence, 2007–2021

Between 2007 and 2021, Central America and the Caribbean recorded the largest increase in the economic impact of violence.



Source: IEP

Afghanistan and Somalia, suffer from higher costs from conflict deaths, terrorism, losses from *refugees and IDPs* and GDP losses from conflict. Additionally, the Central African Republic and South Sudan — countries affected by medium-intensity conflict — suffer similar conflict costs, particularly the losses from *refugees and IDPs*. Colombia and Cyprus also suffered high costs from the losses from refugees and displacements.[9]

El Salvador and Venezuela recorded the highest cost of homicide globally, equivalent to 11 and 8.3 per cent of GDP, respectively.

Equatorial Guinea, Togo and Bulgaria were the countries with the steepest decreases to the economic impact of violence, all recording a reduction of above 20 per cent from 2020 to 2021. All of these countries recorded significant reductions in their military expenditure.

Myanmar, Ethiopia and Burkina Faso recorded the largest increases, all above 30 per cent. Myanmar and Burkina Faso recorded increases in their *military expenditure*. The economic impact of *Armed Conflict* increased by 90 per cent in Ethiopia from the previous year, driven by the costs of terrorism, displacements and conflict deaths.

In the ten countries most affected by violence as gauged by the GPI, the economic cost of violence averaged 33.8 per cent of GDP in 2021. Among the ten most peaceful countries, the average economic cost of violence equalled just 3.6 per cent of GDP.

TABLE 3.7

The ten countries with the highest economic cost of violence, percentage of GDP, 2021

In Syria, South Sudan, Central African Republic, and Somalia the economic cost of violence was more than 30 per cent of GDP.

COUNTRY	ECONOMIC COST OF VIOLENCE AS (% OF GDP)
Syria	80.3
South Sudan	40.8
Central African Republic	36.6
Somalia	32.8
Afghanistan	29.9
North Korea	27.2
Colombia	25.9
Yemen	23.0
Sudan	20.8
Cyprus	20.7
Average	**33.8**

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 to ensure 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 as a result of 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 correctly 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 (Table 3.8).

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
- judicial system expenditure - however, incarceration is included
- domestic violence
- household out-of-pocket spending on safety and security
- spill over 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

TABLE 3.8

Economic impact of violence - domains and indicators

The 18 indicators in the economic impact of violence model.

	ECONOMIC IMPACT OF VIOLENCE		
DOMAINS	VIOLENCE CONTAINMEMNT	ARMED CONFLICT	INTERPERSONAL AND SELF-INFLICTED VIOLENCE
Indicators:	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

McCollister, French and Fang (2010) for homicides, violent and sexual crimes. The McCollister, French and Fang (2010) cost of homicides is also used for battle deaths and deaths due to terrorism. The unit cost for fear of crime is sourced from Dolan and Peasgood (2006).

The total economic impact of violence includes the following components:

- **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 (2010). 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 3.4 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 3.4

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.

> "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. 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.

4 IMPACT OF THE WAR IN UKRAINE ON PEACEFULNESS

KEY FINDINGS

- Military spending has doubled since 1980 to nearly $2 trillion. However, as a percentage of GDP it has fallen from 4 per cent of GDP to 2 per cent in the period.
- The conflict between Russia and Ukraine that began in February 2022 has already triggered fundamental changes in defence postures and policies, supply chains, and food security.
- Inflation has increased around the world, reaching eight per cent per year in the US and seven per cent in Europe early in 2022. The ongoing conflict will likely result in further inflation.
- Global military spending, which had been increasing at a moderate pace since 2014, received a boost in 2022. Many NATO countries have pledged to raise their defence budgets to levels closer to or above the NATO's recommended two per cent of GDP threshold by 2024.
- If all members adhere to the bloc's minimum defence requirements, NATO's defence budget could increase by seven per cent in the near future.
- Nations such as Germany, Italy, Denmark, Belgium, Spain, Norway and others have agreed to increase their defence budgets towards NATO's recommended minimum in the coming years.
- France and Poland have pledged further increases in defence funding well above the recommended two per cent, while the US will increase spent to $813 billion or 3.8 per cent of GDP.
- China has announced an increase in military spending – with a 7.1 per cent rise planned for 2022 relative to the previous year. However, this does not appear to be directly related to the outbreak of war in Europe, but rather to international and regional geopolitics.
- Twenty-five countries in Europe increased their expenditure as percentage of GDP in 2020 and 2021 compared eleven countries that reduced expenditure.
- Social media is changing the way intelligence is gathered, for example Ukrainians are using Meta to crowd source data on Russian troop movements. Intelligence is also shared instantaneously, raw and with little analysis.
- The war and the international sanctions placed on Russia have put additional pressure on food prices, as both Russia and Ukraine are large exporters of agricultural commodities. The two countries also export natural gas – an important component in the production of fertiliser.
- Some of the sub-Saharan African nations already struggling with food insecurity and undernourishment have been historically highly reliant on grain supplies from Russia and Ukraine.
- In the Ukrainian conflict fifth generation (5G) mobile technologies, the social media revolution, artificial intelligence, and the greater affordability of drones have changed warfare.

The decision by President Vladimir Putin to launch a military operation against Ukraine on 24 February 2022 has had far-reaching consequences on peacefulness. The impact of this war is only partially captured in the Global Peace Index 2022, as the conflict broke out shortly before the cut-off date for the compilation of some GPI indicators. Nevertheless, the conflict has already triggered fundamental changes in defence policies, defence postures, and food security. Some nations have announced increases in military spending, others have rethought their historical defence posture, including joining defensive alliances such as the North Atlantic Treaty Organisation (NATO), in the hope of deterring acts of aggression.

The war has caused major disruptions in global energy and food supply chains. The prices of oil, natural gas, and agricultural commodities have increased, further exacerbating the upward trend established when national economies started to recover from the COVID-19 pandemic in 2021. An analysis of the conflict, and its consequences on terrorism can be found in IEP's report 'Ukraine-Russia Crisis: Terrorism Briefing,' available at **www.visionofhumanity.org**. This section delves deeper into the potential impact of the war on military spending, defence postures, military technology, food security and global logistics. The full impact on food prices and supply chains will not be felt until later in the year.

Military Spending

One of the most important consequences of the war in Ukraine is the potential acceleration of the re-militarisation trend observed globally in recent years. Spending on the military can be controversial when it comes to the analysis and practice of peacebuilding and peacekeeping.

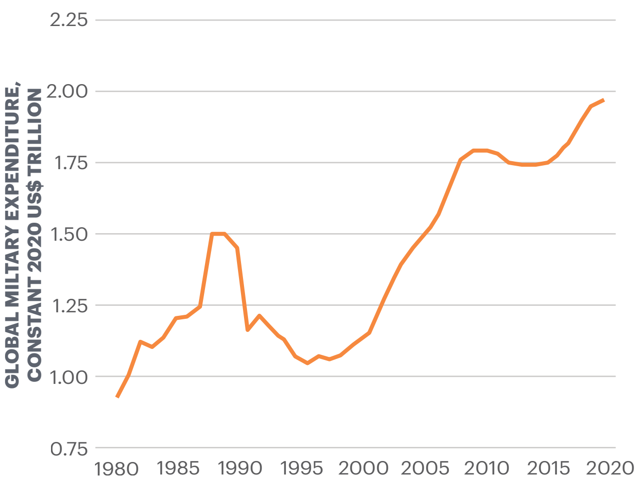
Military expenditure can divert scarce resources away from higher yielding sectors such as education, health and technological research, and could lead to destabilising arms races. However, a well-developed military can act as a deterrent to foreign and internal threats, and could contribute to international peacekeeping operations. Understanding the right level of *military expenditure* is difficult and influenced by multiple factors including assessments of future risks, public perceptions of safety and the posturing of other states. Increases in military spending cause a deterioration in GPI scores as the definition of peacefulness is the absence of violence or fear of violence. Countries increase their military spending due to concerns for their safety or to increase their coercive powers. Therefore, increases in defence spending resulting from the war in Ukraine are a concerning new development.

Importantly, the *military expenditure* discussed in this section refers to actual outlays in US dollar equivalent, or as a proportion of GDP. This differs from the analysis in Section 3 Economic Impact of Violence, where the broader economic concept of *military expenditure* includes the multiplier effect and an adjustment for the different domestic purchasing power of currencies.

FIGURE 4.1

Long-term trends in military expenditure, 1980–2021

Adjusted for inflation, global expenditure declined in the 1990s after the end of the Cold War but resumed its upward trend from 2000 onwards.



Source: SIPRI

A LONG-TERM PERSPECTIVE

Military expenditure was extremely high during the Cold War period (1947 – 1991), especially towards the end of the 1990s. Figures compiled by the Stockholm International Peace Research Institute (SIPRI) show that in the late 1980s global expenditure had reached $1.5 trillion per year in today's dollars after adjusting for inflation (Figure 4.1). After the dissolution of the Soviet Union from 1988 to 1991 and the end of its arms race with the US, global military spending fell by almost one-third. The 2000s saw a resumption on military spending, largely on the back of the US 'war on terror' and a number of conflicts in the Middle East and North Africa.

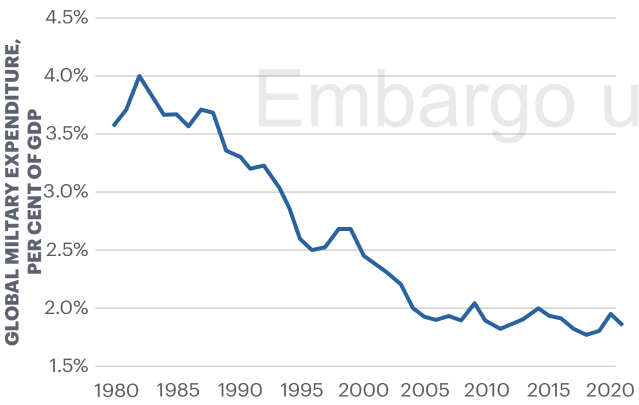
However, the increase in military spending over the past four decades was entirely a function of growing economies and rising government budgets. When estimated as a proportion of GDP, global military spending declined from four per cent in the early 1980s to less than two per cent by the 2010s (Figure 4.2). These values were computed by averaging individual countries' expenditure-to-GDP ratios, although other methodologies lead to similar conclusions.[1]

The figures suggest that nations across the world, by design or not, have attempted to keep defence spending slightly below the level of two per cent of GDP on average in the past two decades. Indeed, this two per cent threshold is the minimum required by NATO, but the average spend, even among member countries remained at 1.8 per cent of GDP by 2021. This will be discussed in more detail in the 'Europe' sub-section below.

FIGURE 4.2

Long-term trends in military expenditure relative to GDP, 1980–2021

As a proportion of global income, spending on the military halved over the past forty years. Since 2010, the average expenditure ratio has remained mostly below two per cent of GDP.



Source: SIPRI
Note: Unweighted average of nations' military expenditure to GDP ratios. Excludes Kwait around its invasion in 1990 where the country reported rates above 100%.

Military expenditure has also fallen relative to government budgets worldwide in the past three decades. From 12 per cent of government expenditure in the early 1990s, defence spend fell to just above six per cent by 2021 (Figure 4.3).

In broad terms, the decade of the 2010s was characterised by military spend growing in line with GDP at a proportion just below two per cent, and in line with government budgets at a proportion of around five per cent of expenditure.

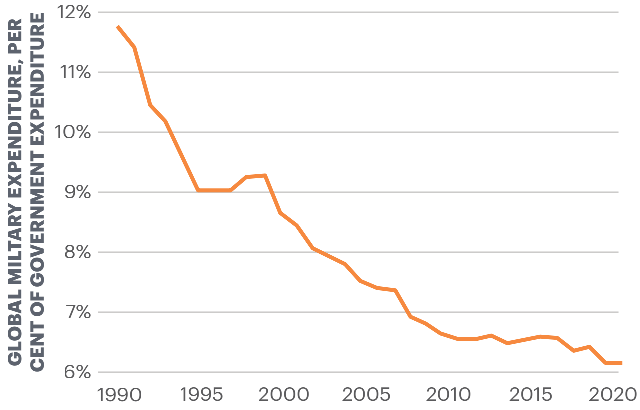
RECENT TRENDS AND GPI SCORES

Global military expenditure relative to GDP had declined in the first half of the 2010s, and increased modestly in the second half of that decade.[2] This change led to an improvement in the global score for the *military expenditure* GPI indicator in the years leading to 2014 and a moderate deterioration subsequently (Figure 4.4).[3]

FIGURE 4.3

Military spending as a share of government outlays, 1990–2021

The military burden on government budgets has halved over the past three decades to around six per cent of total expenditure in 2021.



Source: SIPRI
Note: Unweighted average of nations' military expenditure as a proportion of their respective total government spending. Excludes Zimbabwe due to the distortionary effects of its hyperinflation.

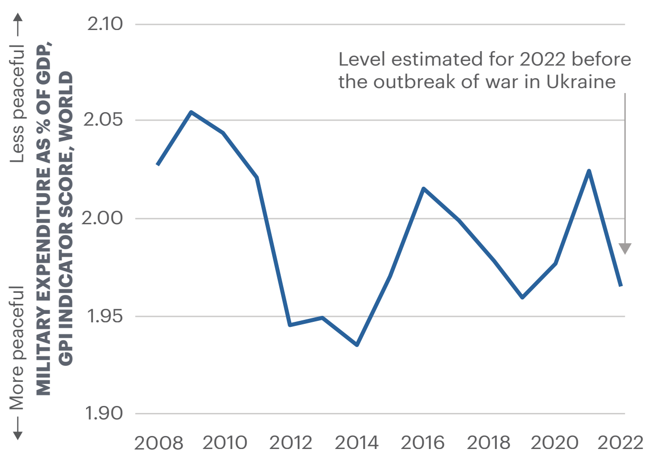
In the beginning of the 2010s, the US and other nations were paring back their involvement on a number of conflicts in the MENA region. In addition, there was a push to reduce expenditure on defence in many Western nations, as government balance sheets had been negatively impacted by the Global Financial Crisis of 2008 and 2009.

However, the outbreak of conflict in Ukraine's Crimea and Donbas regions in 2014, the intensification of the Syrian war in 2015 and the continuation of fighting in Iraq, Yemen, Nigeria, Afghanistan, Somalia and Pakistan contributed to an increase in *military expenditure* as a proportion of GDP in the second half of the 2010s.

FIGURE 4.4

Military expenditure GPI indicator score, global, 2008–2022

Global military expenditure improved in the first half of the 2010s, but has been deteriorating since 2014.



Source: Military Balance+; IEP
Note: Unweighted average of nations' military expenditure to GDP ratios.

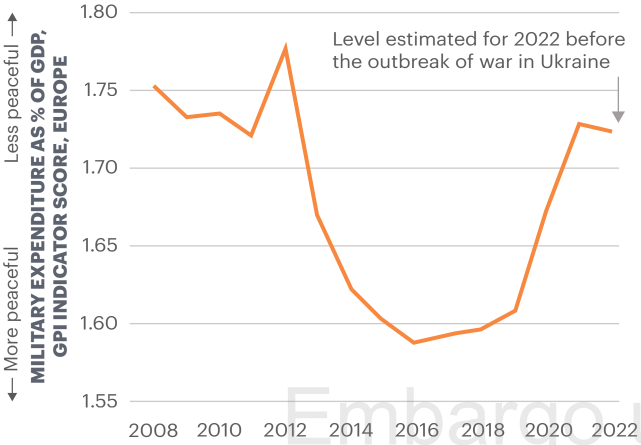
EUROPE

After several years (2001-2014), during which time Europeans reduced defence spending from an average of 1.9 per cent of GDP to less than 1.5 per cent, they have started to increase spending.[4] From 2016 to 2021, the European military expenditure indicator score deteriorated by 8.5 per cent, with most of this change taking place in 2020 and 2021 (Figure 4.5). Twenty-five countries in Europe increased their expenditure as percentage of GDP in 2020 and 2021 compared to eleven countries that decreased expenditure.

FIGURE 4.5

Military expenditure GPI indicator score, Europe, 2008–2022

The European score recorded sharp deteriorations in 2020 and 2021.



Source: Military Balance+
Note: Unweighted average of nations' military expenditure to GDP ratios.

The rise in expenditure had multiple drivers. Firstly, following the annexation of the Crimean Peninsula by Russia in 2014, NATO advocated for greater military preparedness among the European member states. In the US, the Trump administration also called for greater *military expenditure* from NATO members. The on-going conflict in Ukraine's eastern regions of Donetsk and Luhansk – collectively known as the Donbas – had also been a source of apprehension for many European nations and intensified calls for greater defence capabilities.

Concurrently, around the middle of the 2010s, the Syrian civil war intensified and the insurgent group, Islamic State (IS), rose to prominence assuming territorial control over large areas in Syria and Iraq (around 245,000 square kilometres in 2016). Europe was directly affected, as vast numbers of refugees from the Middle East were relocated to Germany, Sweden, France, Austria and other nations. Some European countries such as the UK, France and Turkey were directly involved in the Syrian conflict. The crisis underscored concerns about security throughout Europe and prompted NATO to call for greater spending from European members.

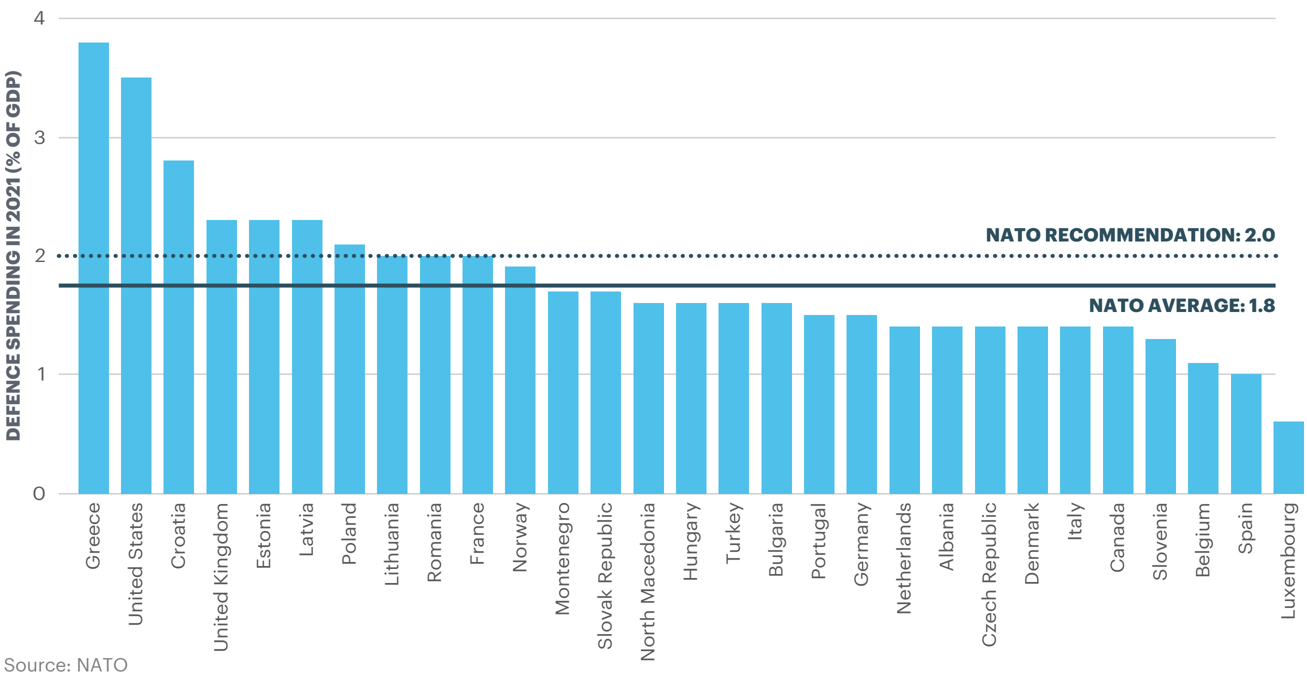
In the second half of the 2010s, European military expenditure increased to bring the NATO defence spending to 1.8 per cent of GDP (Figure 4.6).

The 2022 invasion of Ukraine is likely to contribute to the trend of rising defence spending in Europe. Nations such as Italy, Denmark, Belgium, Spain, Norway and others have agreed to increase their defence budgets towards the recommended minimum of two per cent of GDP in the coming years.[5,6,7] Despite already spending around two per cent of its GDP on the military, France has also pledged further increases in defence funding.[8] Poland will boost its defence spending from the current level of 2.2 per cent of GDP to three per cent by 2023.[9] Germany, the largest European economy, is discussed separately below.

FIGURE 4.6

Military spending, NATO, 2021

Two-thirds of member nations are below NATO's recommended level of defence spending of two per cent of GDP.



Source: NATO
Note: The European average spend in 2021 numerically equals the NATO average spend

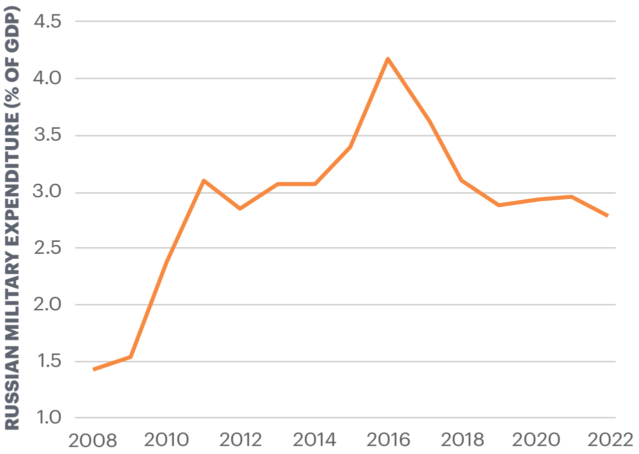
RUSSIA

Russia's military expenditure as a proportion of GDP reached a peak of 4.2 per cent of GDP in 2016 as the country was heavily involved in the Syrian civil war (Figure 4.7). Since then, the ratio has declined to three per cent of GDP by 2021. On a dollar basis, Russia's military spending rose by 2.9 per cent in 2021 to reach $65.9 billion. To put this into perspective, France's military expenditure was $59 billion in 2021.

FIGURE 4.7

Military spending, Russia, 2008–2022

Russian military spending had remained around three per cent of GDP in recent years.



Source: Military Balance+

By 2016, Russia had become heavily involved in the Syrian civil war. Russian involvement in Syria began on 30 September 2015, when Russian jets carried out military strikes in Syrian locations the Russians believed were held by the Islamic State of Iraq and the Levant (IS). The Russian Federation Council approved President Putin's decision to dispatch military forces to Syria because the Assad government had made an official request for support against IS.

In 2017, the US adopted the Countering America's Adversaries Through Sanctions Act (CAATSA), highlighting that the US recognised Russian attempted to influence the elections and carried out cyber-attacks during the 2016 presidential election. CAATSA not only tightened the sanction regime but also introduced new sanctions against individuals and entities deemed responsible for the operations and attacks. What was different about these sanctions is that they were global in scope. In other words, the person or entity needed not to be in the United States.[10]

The period from 2018 to 2020 would see a significant reduction in Russian military spending. Several factors help explain the apparent decline. Firstly, a fall in the price of oil in 2018, followed by the outbreak of Covid-19 placed substantial pressure on Russia's government budget. From Russia's perspective, the global outlook appeared positive because of rising tensions between the UK and the EU over the terms of Brexit. It also appeared to have fragmented Western politics. Additionally, in 2018, France was rocked by the *gilets-jaunes* (yellow-vest), protests which dampened President Macron's ability to continue reforming France's economy. Two other key events were Angela Merkel's decision to step down as head of the Christian Democratic Union and voters electing a coalition led by Matteo Salvini in Italy, leading to increased tensions between Rome and Brussels.

Russia's ability to raise its military expenditure in 2021 probably lay in an April 2020 meeting between Russia and Saudi Arabia. This meeting saw the two large oil producers reach a historic agreement to reduce global oil production by ten per cent to address the sharp decline in oil prices – at one point a barrel of crude was selling for less than $28 – because of fears of a global recession and severe travel restrictions reduce the demand.[11] The reduction in production saw oil prices recover and by early 2021 the barrel was trading at above $40. Throughout the year, prices continued to climb as the global demand started to recover from the pandemic lockdowns and social isolation, reaching $80 per barrel by October. This recovery allowed Russia to increase its domestic spending, including on their military.

UKRAINE

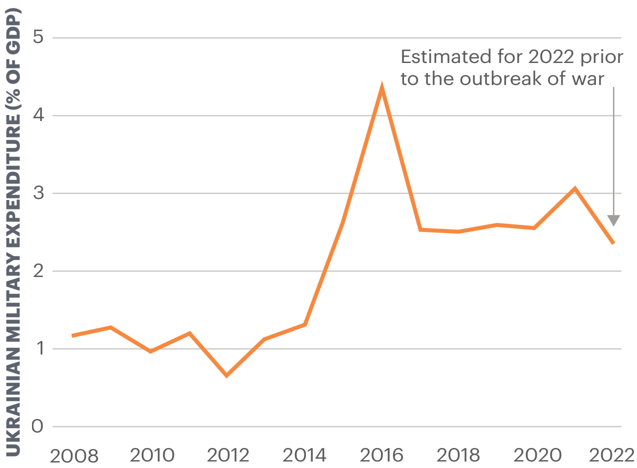
Ukraine spent three per cent of its GDP on the military in 2021, a level that was higher than the 2.6 per cent of GDP in the preceding year (Figure 4.8).

After the annexation of Crimea by Russia in 2014, Ukraine secured the help of the US and the European Union to update its military. Russia had claimed that the annexation was a response to the *Maidan* riots of 2014, when pro-Europe protests spread throughout the country and threatened ethnic Russian populations in Crimea and the Donbas region.

FIGURE 4.8

Military spending, Ukraine, 2008–2022

Since the Maidan in 2014, Ukrainian expenditure on the military has been high as the country had conducted a war in the Donbas region.



Source: Military Balance+

Ukraine's military expenditure, as a proportion of GDP, rose from 1.1 per cent in 2013 to 3.4 per cent in 2016. By 2020, the economic impact of *military expenditure* was around $41.5 billion, a 145 per cent rise from 2013.

The Ukrainian government professionalised the armed forces, which meant setting up new units, improving combat capabilities for the existing units, and developing reserves.[12] In 2014, the Ukrainian government also created a national guard force composed of around 50,000 officers, equipping it with armoured vehicles, artillery, antitank and anti-air weapons. President Poroshenko in 2015 committed to increase the maximum size of the military personnel count from 184,000 to 250,000. In 2016, Ukraine's economic impact of *military expenditure* rose by 103 per cent from the previous year, with the country having over 200,000 active-service military personnel.

In 2016, NATO agreed on the Comprehensive Assistance Package.[13] The intention was to identify Ukraine's defence and security needs, including establishing trust funds – voluntary financial contributions that interested allies could provide Ukraine with security and defence projects.[14]

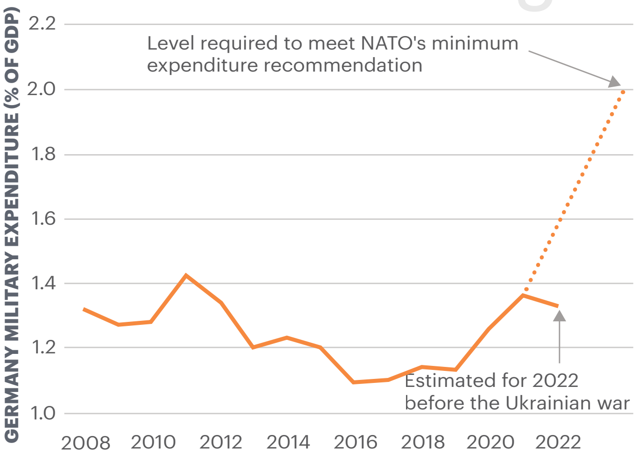
GERMANY

Since World War II, Germany has had a complex relationship with defence spending. During the Cold War, the country was considered a NATO stalwart, spending around three per cent of GDP on defence. It also hosted approximately 250,000 US military personnel.[15] With the unification of the eastern and western portions of the country, German defence spending declined substantially, falling by about 25 per cent between 1991 and 1997.[16] Troop numbers declined from 500,000 in 1991 to 200,000 in 2022. In 2011 Germany decided to put conscription into abeyance, professionalise its military and change the focus of the defence corps to crisis management.[17]

FIGURE 4.9

Military spending, Germany, 2008–2022

To meet NATO's requirement of defence spending of two per cent of GDP, Germany will have to increase spending in the near future by an amount three times larger than the increase in spending already recorded since 2016.



Source: Military Balance+; IEP

Following the 2008-2009 Global Financial Crisis, there were further spending reductions. These cuts affected the country's military capabilities, exemplified by the fact that in 2017 and 2018, none of Germany's six existing submarines were operational.[18]

Persistent pressures from the US and other NATO allies such as the UK, coupled with changes to the international geopolitical environment, led Germany to make new spending guarantees. A 2016 Defence White Paper pointed to a revisionist Russia looking to use force to advance its national interests and to the need for measures to counter that potential threat. A year later, the government declared it was looking to add some 20,000 active personnel to the Bundeswehr by 2024.[19] By 2021 defence spending had risen to almost 1.4 per cent of GDP (Figure 4.9).

The Russian invasion of Ukraine has impacted Germany's approach to defence spending. Chancellor Olaf Schultz announced Germany would create $121 billion special fund, known as the "Bundeswehr special fund" to modernise the armed forces.[20] The measure is controversial as it would not be a real asset but rather consist primarily of new debt, raising several legal issues, in lieu of Germany's "debt brake" – a constitutional provision that prevents annual borrowing from exceed 0.35% of nominal GDP. Chancellor Schultz has opted to create the 'special fund' because by anchoring it to Germany's Basic Law (the German Constitution), a two-thirds majority in the Bundestag and Bundesrat, the money is guaranteed and can only be used for the Bundeswehr.[21] The move seems to have the support of the public, with one poll indicating a 69 per cent in favour of the increase in spending, up from 39 per cent in 2018.[22] The Chancellor also committed Germany to raise defence spending above NATO's two per cent GDP target.

For Chancellor Schultz, the decision to increase defence spending may have been difficult from the political point of view. The governing coalition includes the Greens, who have historically taken an anti-weapons stance, and the Free Democrats, who look to reduce the size of the state by curtailing expenditure.

UNITED STATES

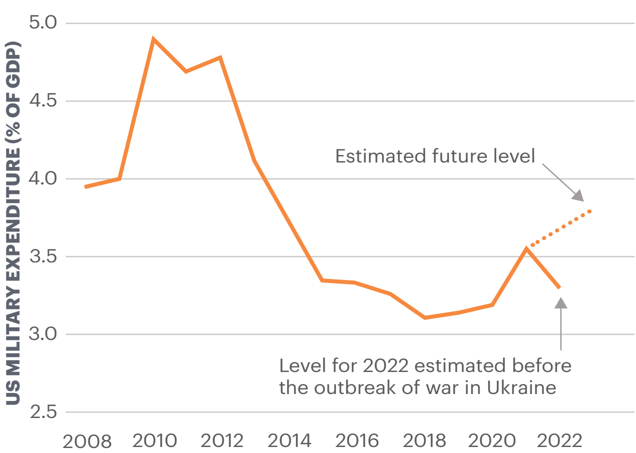
Before 2012, US annual spending on defence averaged between 4.5 and five per cent of GDP (Figure 4.10). This high proportion was in part due to the US being engaged in two major conflicts – Iraq and Afghanistan – as well as in a 'war on terror'.[23] Between 2012 and 2015, the US substantially reduced military operations in the Middle East, allowing for a big cut in overall spending on defence.

In December 2021, the US Congress approved a military budget

FIGURE 4.10

Military spending, United States, 2008–2022

US spending has risen since 2018 but remains low by historical standards.



Source: Military Balance+; IEP

of $768 billion, making the 2021-2022 budget the highest since 2011, when the US was deeply involved in wars in Iraq and Afghanistan. The December 2021 budget amounted to a $30 billion increase on President Trump's last military budget. The rise also comes after the US withdrew from Afghanistan, on which the country spent around $300 million dollars per day, every day, for two decades.[24]

In April 2022, President Biden submitted a new defence budget request for 2022-2023, asking for a further increase to military spending, which if adopted, would push US defence spending to $813 billion, or approximately 3.8 per cent of GDP.[25]

CHINA

In March 2022, China's premier, Li Keqiang announced that military spending would continue to rise by 7.1 per cent in 2022 relative to the previous year.[26] Li Keqiang emphasized that the rise was needed because China wants to focus on modernising the military's logistics and asset management systems. China, he said, will also spend more on "modern weaponry and equipment management system."[27] The spending does not include investment on military-related infrastructure, such as border roads, which appear under non-defence headings in the budget.

The announced rise in military spending, which has come without details about specific spending priorities, does not appear to be directly connected to the outbreak of war in Europe. In other words, it is in line with what China has been doing for years. Analysts state that China's concerns are more to do with the defence build-up of the US and its allies in the Pacific region, especially around Taiwan. Also of concern are the on-going tensions along the border with India. It is worth remembering that in 2020, Indian and Chinese soldiers engaged in a violent brawl in the Galwan Valley, Ladakh, in which 20 Indian soldiers and four Chinese died.[28]

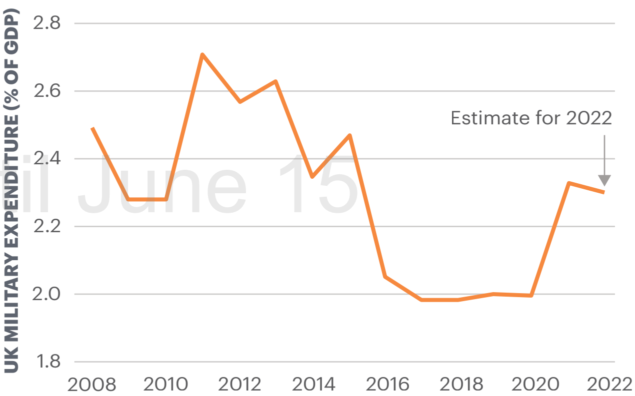
THE UNITED KINGDOM

In 2020, the UK became the fifth largest spender on defence, allocating $59.2 billion to it, which also made it second biggest spender on defence in NATO after the United States. A year later, the UK's military expenditure of $71.6 billion was the third largest in the world, behind the US's $754 billion and China's $207 billion.[29]

The UK spent 2.3 per cent of GDP on defence in 2021 (Figure 4.11). The allocation appears high, considering that until February 2022, Western Europe had not experienced a major war or a threat of a major war on its soil for decades. The UK is a founding member of NATO.

By April 2022 there had been no official pledge for higher military spending. However, several British politicians have argued that Ukraine requires the British government to push it defence spending to at least 4 per cent of GDP over the next decade because the only way to deter war is through strength. It is also notable that what could impact the UK defence spending is the high cost of energy, as the Ministry of Defence annually spends approximately $790 million on energy and fuel.[31]

FIGURE 4.11
Military spending, United Kingdom, 2008–2022
British spending has risen in 2021 but no formal pledges for further rises have been issued in response start of the war in Ukraine in February 2022.



Source: Military Balance+

Twenty-five countries in Europe increased their expenditure as percentage of GDP in 2020 and 2021 compared eleven countries that reduced expenditure.

Defence Postures

The war in Ukraine and the subsequent rise in geopolitical tensions led to a sweeping rethink about deterrence, alliances and nuclear weapons, all of which impact peacefulness.

Since the outbreak of the war, several countries indicated a push towards adopting policies that promote deterrence, which explains some of the recent acquisitions of high-power weapons. For example, Germany's March 2022 decision to acquire 35 F-35 fighter jets, is significant as these can carry US tactical nuclear weapons.

In other countries, not only has military spending increased, but the entire approach to alliance formation has changed. Finland and Sweden have now shown a serious interest in joining NATO. Two surveys, one conducted in 2020 and the second in February 2022, highlight changing views about alliances, in that in the former only 20 per cent of Finns were in favour of their country joining NATO, whereas by 2022, the proportion had risen to 53 per cent, leading to a various debate in the parliament about joining NATO.[32]

Sweden offers another important example of how countries have changed their defence posture because the country had been geopolitically neutral for 200 years. Its current Social Democrat minority government had resisted calls for the country to join NATO. However, the war in Ukraine and the recognition that Finland was intending to join NATO, led the government to review a possible alliance with or membership of NATO.[33]

Ukraine has raised questions as to whether China would use the crisis to test the American resolve to defend Taiwan.[34] In March, Taiwan's Defence Minister, Chiu Kuo-Cheng raised the prospect of extending conscription to women, lengthening mandatory service for 18-year-old males from four months to a year, and increasing reservist training.[35] To reaffirm its commitment, the US government reassured Taiwan's President Tsai Ing-Wen, Defence Minister Chiu Kuo-Cheng and others, that the US will support a peaceful resolution to the historical differences between the island and mainland China.[36]

Dual-use Technology and Emerging Technology

The war has underlined the importance of technology in shaping the conduct of conflict highlighting how fifth generation (5G) mobile technologies, the social media revolution, artificial intelligence, and the greater affordability of drones have changed warfare.

One feature of the war in Ukraine is the role played by individuals and corporations. For example, billionaire Elon Musk has provided Ukraine with access to his *Starlink* satellite communication systems to support military and civilian communication in the country. Other examples are discussed in Box 4.1.

New technologies have raised the possibility of initiating conflict with 'false flag' operation with some speculation that a 'deepfake' video or audio could serve as the pretext for conflict.[37] A 'false flag' operation is one in which the aggressor's true affiliation is falsified and 'deepfake' refers to the use of technology to create an image or a narrative that is untrue. Using artificial intelligence, it is possible to make simulated footage appear real, creating misconceptions and potentially misleading the population or armed forces on the ground. The impact that this could have on peacefulness is significant in that nefarious actors could create images, photos, and videos that aimed at undermining international peace and security.

Another important development that has come of age in the conflict in Ukraine is the widespread use of drones, particularly the Turkish Bayraktar TB2 drone, which Ukraine had begun to use as combat weapons in October 2021 in the Donbas region.[38,39] In January 2022, Ukraine purchased 16 Bayraktar TB2 drones, and other Turkish weapon systems. Ukraine paid around $60 million for the equipment; 30 times more than it spent on defence equipment from Turkey during the same period a year earlier.[40] The success of these drone in the conflict have only served to reinforce the view of many scholars, policy makers and security practitioners who have noted the emerging threat drones pose to peace and security. In recent years, there have been examples of attempted assassinations and high precision military strikes only possible because of the use of drones.[41] In Ukraine, drones have been used to map and scout the terrain, collect copious amounts of data that could be analysed by artificial intelligence to support offensive and defensive operations.

Governments have also been able to use the communication revolution to control and manipulate the information being disseminated. For instance, the adoption of the War Censorship Law enables the Russian government to ensure that the war is referred to as a 'special operation' and that domestic views opposing the operation are not shared among the population.

BOX 4.1

Information technology in the Ukrainian War

Meta and other platforms have been used to collate information about troop locations and guide armed drones and new generation light anti-tank weapons (NLAW) in Ukraine's defence. 5G technologies have also impacted the warfighting with private citizens collecting intelligence, engaging in surveillance and reconnaissance, and the sharing of information, including undertaking propaganda operations.

The Ukraine conflict has highlighted a move away from static intelligence and communication, whereby reports are standardised and formatted in a specific manner. In Ukraine, information is fluid and content-driven, as it is meant to be shared in a raw, uncensored format. Similar approaches occurred in Iraq and in Syria. But what makes the Ukrainian War different is the large volume of data and the way the content is fed directly into the process of warfare. There have been examples of footage broadcast live on social media being used by forces on the ground to identify possible targets. Live information about the conflict has also been used to shape narratives and raise international sympathy and support, with the Ukrainians recognising that an active social media campaign is as valuable as military hardware.

Food Security

The Russian invasion of Ukraine has called for a closer look into these countries' roles in food security. Both Russia and Ukraine are large producers and exporters of grains, with Russia producing 11 per cent of the world's wheat and Ukraine producing another three per cent.

The current war and the international sanctions imposed on Russia have disrupted grain exports and added further upward pressure on global food prices, which were already rising since late 2020 (Figure 4.12). Countries such as Lebanon, Egypt and Yemen rely heavily on grain produced in Ukraine and Russia. With rising prices and competition over the wheat, barley and corn supplies, poorer nations are increasingly struggling with food insecurity.[42] The full effect of these increases in prices is not likely to be felt until later in the year.

In 2020 and 2021, the administrative measures implemented to combat the COVID-19 pandemic also created significant disruptions to food production and logistics. Processing plants were shuttered, workers were furloughed or dismissed, businesses were closed and the seasonal flows of workers to help with harvests were halted. These disruptions saw food prices begin to climb in the second half of 2020.

As some countries began to lift pandemic restrictions throughout 2021, aggregate demand, including for food products, started to pick up. But as many of the production and logistic ruptures in food markets of 2020 had not yet been remedied, the rise in prices accelerated.

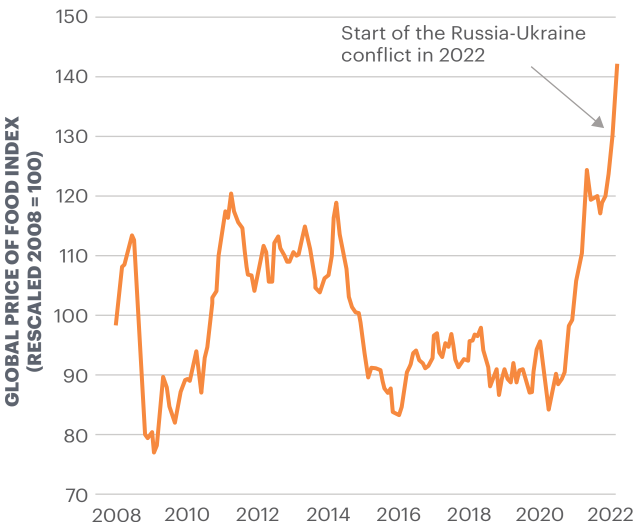
The war in Ukraine in 2022 further contributed to this trend in three ways. Firstly, it removed two of the largest grain producers and exporters from the global market. Secondly, it disrupted the supply of natural gas, of which Russia and Ukraine export large amounts. Natural gas is an important component in the production of fertilisers (discussed below).

Disruptions in food production and supply can have negative humanitarian, social and geopolitical consequences. In 2010, a severe drought in vast areas of Russia and Ukraine led to sharp reductions in grain production and contributed to a steep rise in global food prices.[43] This led to food insecurity and economic

FIGURE 4.12

Global food prices, 2008–2022

Global food prices had already been increasing quickly before the conflict broke out in February 2022.



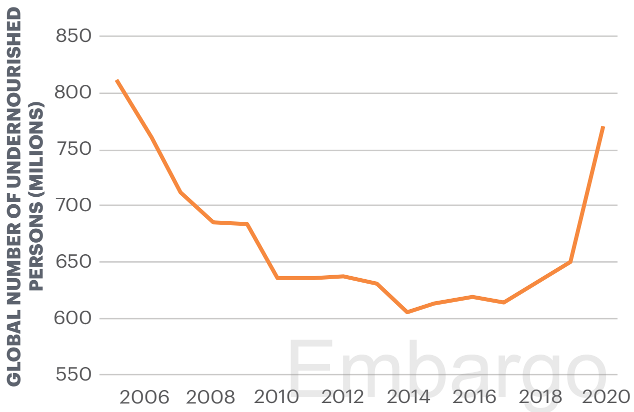
Source: Federal Reserve Bank of St Louis hardship, which in turn contributed to civil unrest in Northern Africa and may have been one of the drivers of the Arab spring of 2010 and 2011.

In 2022, the war in Ukraine and the disruption in grain supplies comes at a time when two-thirds of people in sub-Saharan Africa currently face food insecurity, the highest rate of any region. A total of 264 million sub-Saharan Africans suffer from undernourishment, and the number of undernourished persons globally has been rising even before the war in Europe (Figure 4.13). A more in-depth analysis can be found in the Ecological Threat Report 2021 which can be accessed at www.visionofhumanity.org.

FIGURE 4.13

Global number of undernourished persons, 2005–2020

The number of undernourished people rose by an estimated 118 million in 2020 relative to the previous year. By 2020 a total of 768 million people were undernourished.



Source: Food and Agriculture Organisation of the United Nations

Much of Ukraine's wheat production is located in the east of the country, which is where much of the fighting is taking place. This means that even after the conflict ends, wheat production will not resume instantly, as the fields have been affected by the fighting and many of farm workers have also been dislocated.

The need for wheat and its role in ensuring food security has to be understood in relation to the rapid population growth in Africa and the fact that Sub-Saharan Africa produces less than half – and often as little as one-third – of the wheat it consumes. For example, between 2007 and 2019, Africa's population rose by 32 per cent; annual wheat imports rose from 27.3 million tons to 47 million.[44] Several factors explain this change ranging from rising incomes, urbanisation and globalisation leading to changes in eating habits.

Russia and Ukraine account for one-fifth of maize exports, one-third of global wheat exports, and 60 per cent of sunflower oil production.[45] The increase in oil and natural gas prices resulting from the conflict will have an impact on food security, as natural gas is used in the production of fertilisers. For example, in Greece the cost of fertilising a 10-hectare olive grove has doubled to $310 since the conflict broke out, whereas in China the price of potash — potassium-rich salt used as fertiliser — is up 86 per cent from 2021.[46] Another example of the impact of the lack of fertiliser availability is that the price for cabbages, potatoes and broccoli has risen in the second quarter of 2022 by as much as 75 per cent in Australia. The expectation is that prices will remain high for some time and likely increase further.[47] Such rising costs affect the poor even in Canada where a recent survey revealed that almost half of all respondents (49 per cent) are within CA$200 of insolvency.[48]

Other issues arising from the conflict that impact food security are the closure of ports, the decision by Russia and Ukraine to limit the export of food to cater for their domestic populations, the destruction of cropland and the conscription of many Ukrainian farm workers into the defence forces.[49]

For Russia, Africa has become an important partner when it comes to agriculture. Firstly, following the imposition of EU sanctions in 2014, Russia has turned to places such as Morocco to get citrus and South Africa for fish, as it could no longer access Norwegian salmon. Conversely, African countries are highly reliant on wheat imports, with Russia and Ukraine. Since Russia invaded Ukraine, supply disruptions have meant that the price of wheat on the Chicago Board of Trade rose by over 50 per cent to nearly $13 per bushel.[50] Moreover, because of the nature of their economies, many African countries have little economic capacity to adapt to supply disruptions and price increases.

Relations between Russia and African countries began to change in 2006, when President Putin led a delegation of Russian business leaders to South Africa with the intention of rekindling the relationship. This led to the development of a multi-layered approach that involves trade, politics and international security, with Russia contributing more peacekeepers in Africa than France, the United Kingdom, and the United States combined. Russian troops are part of operations in the Democratic Republic of the Congo, Côte d'Ivoire, Ethiopia, Eritrea, Liberia, Sudan, South Sudan, and the Western Sahara.[51]

Speaking at the tenth BRICS – Brazil, Russia, India, China, and South Africa – Summit in Johannesburg in July 2018, the Russian President emphasized his intention to increase Russia's influence in Africa. A year later, at a meeting in Sochi, attended by 45 African heads of state, 92 military contracts worth over around $14.5 billion were signed.[52]

“

In 2022, the war in Ukraine and the disruption in grain supplies comes at a time when two-thirds of people in sub-Saharan Africa currently face food insecurity, the highest rate of any region.

Global Shipping Routes

The conflict in Ukraine, the rise in support for NATO, the re-militarisation of Europe and rising tensions between the West and eastern powers such as Russia and China have brought into sharp focus the fragility of global logistics.

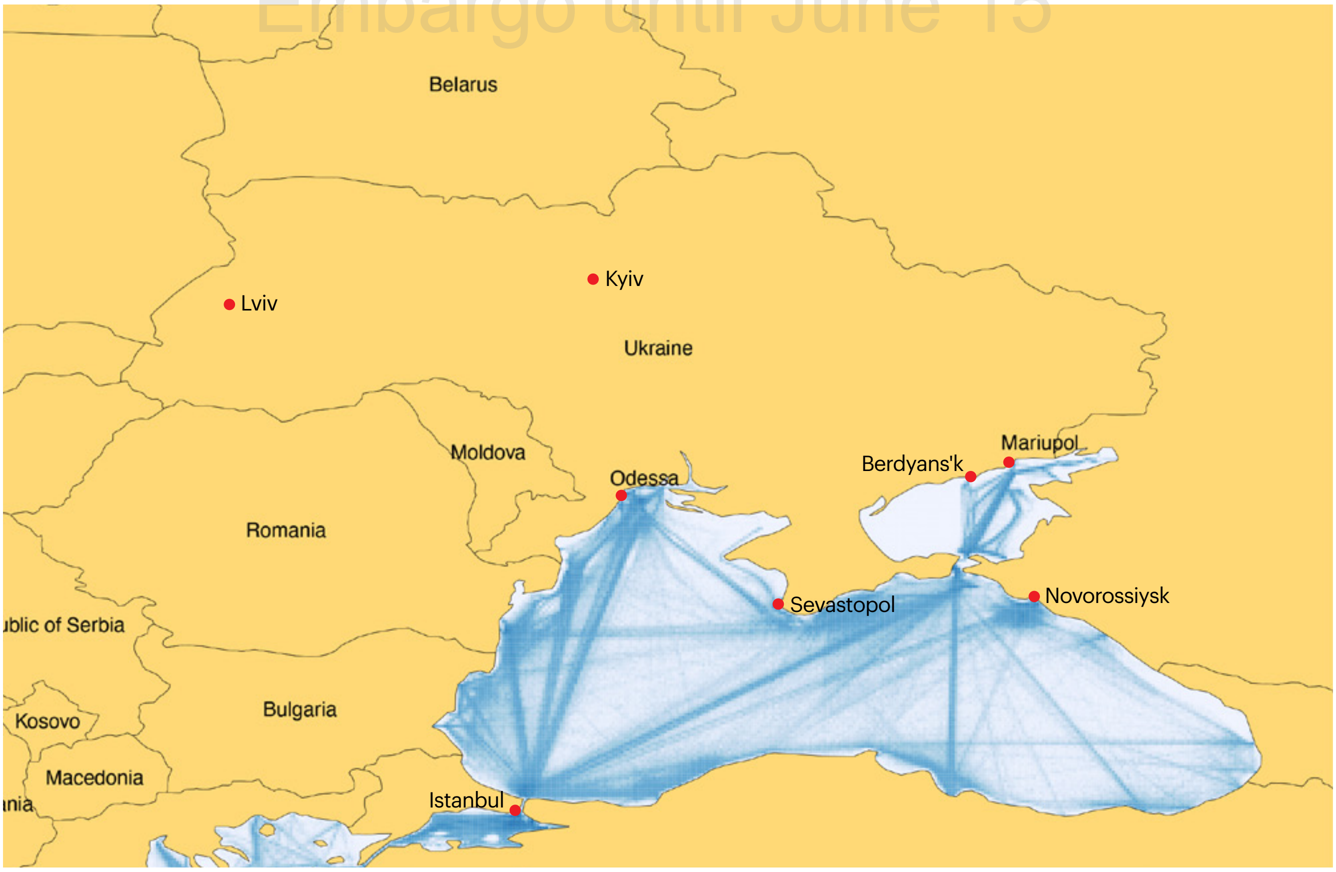
Global supply lines had already been put to the test in 2020 and 2021 as a result of the COVID-19 pandemic and the administrative measures enacted to curb it. The conflict in Ukraine disrupted oil and food markets at the global scale, as it affected the production of energy and agricultural commodities, but also how this production is transported to consumers.

Conflict in areas of high concentration of logistical lines could have adverse consequences by increasing fuel or insurance costs, delaying the transit of goods and commodities or outright cutting the flow of trade. Since the outbreak of war, commerce in the Black Sea has been seriously hampered (Figure 4.14). Another sensitive area – combining the high flow of trade with geopolitical tensions – is the South China Sea and is discussed in Box 4.2 and Figure 4.15.

In addition to the production of food and oil, the war in Ukraine has also disrupted the logistics distribution through the Black Sea. Ukraine ships 98 per cent of its grain for export through its seaports, and almost all of the country's seaport throughput flows through the ports of Pivdennyi, Odessa, Mykolaiv, Chornomorsk and Mariupol (Figure 4.14).[53,54] Russian forces threaten the areas around Odesa, Mykolaiv and Chornomorsk and activity in these ports has been heavily impacted. Mariupol has also been in the centre of combat and has fallen under Russian control. It is in close proximity to the provinces of Donetsk and Luhansk, which had been in conflict since 2014. These are important locations from which Ukrainian grain and oil is shipped to Turkey or through the Bosphorus Strait (Turkey) into the Sea of Marmara and the Aegean Sean and towards Egypt, and further afield in sub-Saharan Africa, Bangladesh and Pakistan.

In 2021, exports of Ukrainian goods had reached $68 billion, according to the country's Ministry of Economy.[55] A substantial proportion of these exports have now been compromised with the outbreak of the war. Russia's exports – around $211 billion in 2021 – have been reduced in 2022 as a consequence of the conflict and the sanctions imposed on the country.

FIGURE 4.14
Shipping traffic in the Black Sea, 2021
Ukraine ships 98 per cent of its grains for exports through its seaports. Blue lines indicate shipping routes.



Source: IISS; World Bank

BOX 4.2

Security and logistics in the South China Sea

The South China Sea is one of the busiest regions for the logistics of goods and resources, with this region being responsible for between 20 per cent and 33 per cent of global trade. There are many different shipping routes, but there are six major transit chokepoints, one of which is the Malacca Straits. Looking at Figure 4.15, which shows Global Shipping Routes in relations to US and Chinese ports in the Indo-Pacific, it becomes clear that there are several critical points that emphasize supply line chains but also interdependence. For example in 2021, Apple had to cut production of the iPhone 13 because of supply chain bottleneck.[57] Globalisation has produced complex logistical links, with the iPhone, for example, using parts produced in 43 different nations spread across six continents.[58]

At its most basic, there is clear evidence that the region will have a decisive influence on the future of the international rules-based order, on which international prosperity rests, as China remains the workshop of the world.

The figure also displays the location of key Chinese and US naval bases, which underlies the possibility of terrorist groups whose goal is to undermine the region's peacefulness and prosperity. For instance, in 2010 Admiral Abdul Aziz Jaafar, Malaysia's navy chief warned that that there was credible evidence of terrorists looking to attack oil tankers in the Malacca Straits and off the coast of Singapore. The 900-km long Malacca Straits are one of the world's busiest sea-lanes with more than 50,000 ships going through it annually, but at 2.7 kilometres at its narrowest point is highly vulnerable.[59]

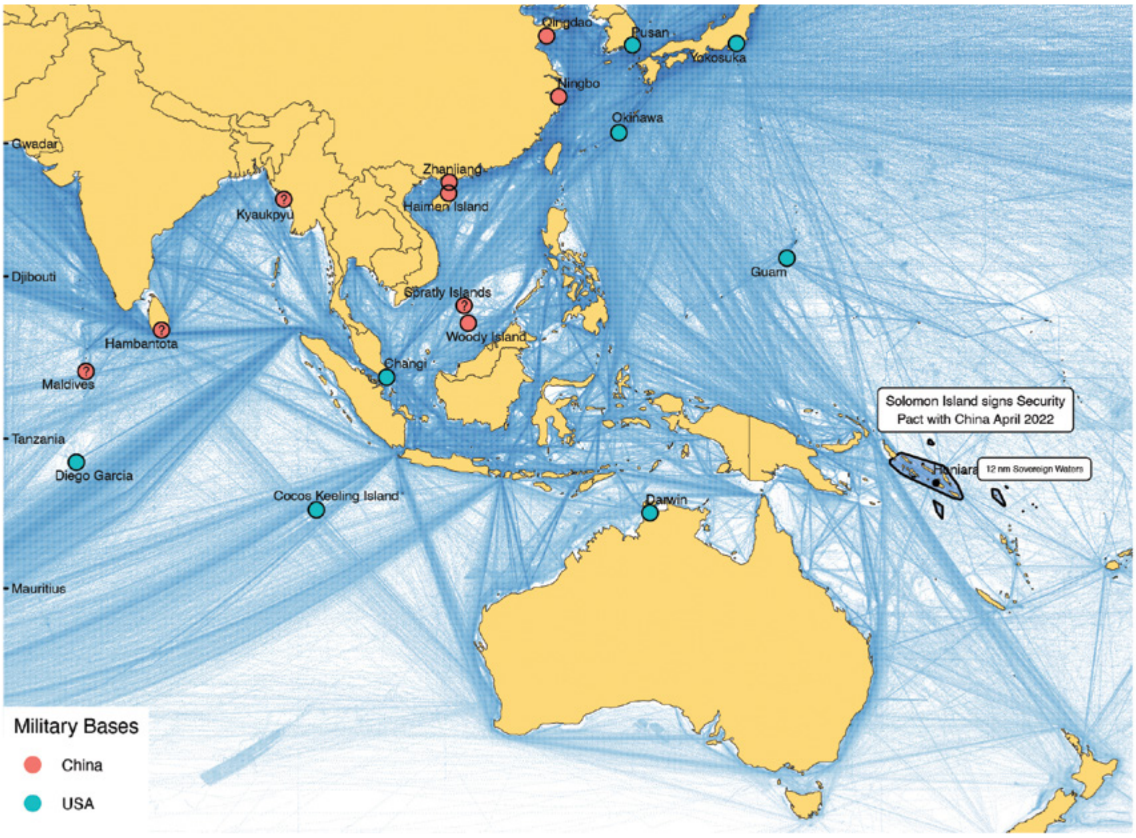
The war in Ukraine, specifically, the sinking of the Moskva, serves to further highlight the changing nature of warfare. Allegedly, the Moskva, which was the flagship of Russia's Black Sea Fleet, was attacked with a Neptune cruise missile after using drones to confuse the ship's radar systems.[60]

FIGURE 4.15

Global shipping traffic in the South China Sea, 2022

Up to one-third of global trade transits through the South China Sea. Blue lines represent shipping routes.

Global Shipping Routes



Source: IISS; World Bank

5 POSITIVE PEACE

KEY FINDINGS

- Positive Peace is a measure of societal resilience that is associated with many desirable socio-economic outcomes such as higher income, better ecological performance, greater economic stability, and more efficient, transparent and inclusive governance.
- Countries that improved in Positive Peace from 2009 to 2020 recorded an average annual growth rate in per capita GDP 2.7 percentage points higher than countries where Positive Peace had deteriorated.
- Inflation in countries where the PPI improved was on average three times less volatile than where Positive Peace deteriorated in the past decade.
- Household consumption in countries where the PPI improved grew two times faster from 2009 to 2020 than where it deteriorated.
- Foreign Direct Investment for countries that improved on the PPI rose at an annual rate of 5.2 per cent, contrasting with an increase of 2.6 per cent for countries in which Positive Peace deteriorated in the decade to 2019.
- Countries that have a higher rank in Negative Peace than in Positive Peace are said to have a Positive Peace deficit. Most countries in this situation record increasing levels of violence over the subsequent decade.
- Of the countries with a substantial Positive Peace deficit in 2009, 80 per cent deteriorated in the Global Peace Index (GPI) in the subsequent decade.
- Countries with a high Positive Peace deficit in 2009 recorded an average deterioration of 11.6 per cent in the GPI in the subsequent decade. This compares with very little change recorded for other countries.

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 its 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 implements and supports a number of projects in local communities around the world using the Pillars of Positive Peace as the main framework to plan action and design measurement. IEP has developed a framework for the analysis of a country or a community from the point of view of social systems thinking. This framework is called Halo and has been discussed in detail in the Positive Peace Report 2022.[1] Halo provides stakeholders with an open source and standardized toolbox for describing problems systemically to inform effective responses (Box 5.1).

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.

BOX 5.1

A new framework and methodology for analysing societies from a systems perspective

The Halo approach has been designed as a set of 24 building blocks for the analysis of societal systems and the design of resilience building programs. This allows for an adaptive approach, that can be uniquely tailored based on many dependencies, including the size of the societal system and the sophistication required in the analysis. Halo 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.

Analysing social systems can be lengthy, resource intensive and expensive. One of the most critical difficulties in the process is the lack of comprehensive information on the state and dynamics of a system. Therefore, it is important to understand the scope of the work that the research team can undertake and the limitations they face. Arguably the best approach is to start with the simplest depiction of a system and progressively build its complexity.

Once the analysis is complete there will be enough knowledge to help design the interventions that need to be performed to rectify the imbalances within the system and set it on a new course. In defining interventions, it is generally better to attempt to do many small nudges, rather than large, fundamental changes to the status quo. This approach lessens the possibility of mistakes. One big mistake is difficult to recover from, whereas small changes can be undone more easily, even if they are numerous. In addition, drastic changes – even those in the right direction – can be disruptive and, in extreme cases, destabilising for the system. Abrupt changes create a great deal of uncertainty and individuals groups or organisations may be unsure about how they fit in the new systemic structure.

The Benefits of Positive Peace

This section contains an updated compilation of some benefits of Positive Peace especially in relation to economic development and stability, value for business and social governance. The results presented in this section come from IEP's analysis of 163 countries that comprise the PPI and cover the period from 2009 to 2020 for which the index has been calculated.

INCOME

Higher levels of Positive Peace are associated with greater per-capita income (Figure 5.3). The factors that create a robust business environment are the same that create highly peaceful and stable societies. Some of these factors are lower levels of corruption, effective and representative governance, the free flow of information through society and higher levels of human capital.

There is also a clear relationship between developments in Positive Peace and growth in per capita income across time. From 2009 to 2020, per capita GDP in countries that recorded improvements in the PPI rose by 3.1 per cent per year as shown in Figure 5.4. This compares with 0.4 per cent per year for countries in which Positive Peace deteriorated.

VOLATILITY OF INFLATION

The volatility of inflation is an impediment to economic development. It makes it difficult to forecast future prices and demand for goods and services, prompting firms to cut back on investment and employment. In a volatile scenario, households' uncertainty about their economic safety increases, prompting many to reduce consumption.

Countries that improved in Positive Peace from 2009 to 2020 experienced substantially lower volatility of inflation over this period (Figure 5.5). Over the past decade or so, the volatility of inflation rates in countries where Positive Peace deteriorated was three times higher than in those countries that improved.

HOUSEHOLD AND BUSINESS ACTIVITY

Household consumption is particularly responsive to improvements in Positive Peace. Among countries that recorded such improvements, the average annual growth in household consumption from 2009 to 2020 was 3.5 per cent, around twice the rate for countries in which Positive Peace deteriorated (Figure 5.6). This confirms previous IEP findings that consumption is a key component of how socio-economic systems respond to improvements in peacefulness.

The business sector is responsible for much of the production of goods and services in most economies. A gauge of activity in this sector is the gross value added (GVA), which measures the value of all goods and services produced minus the variable cost of producing them. Thus, firms' profits equal GVA minus fixed costs (overheads).

FIGURE 5.3

Positive Peace and GDP per capita, 2020

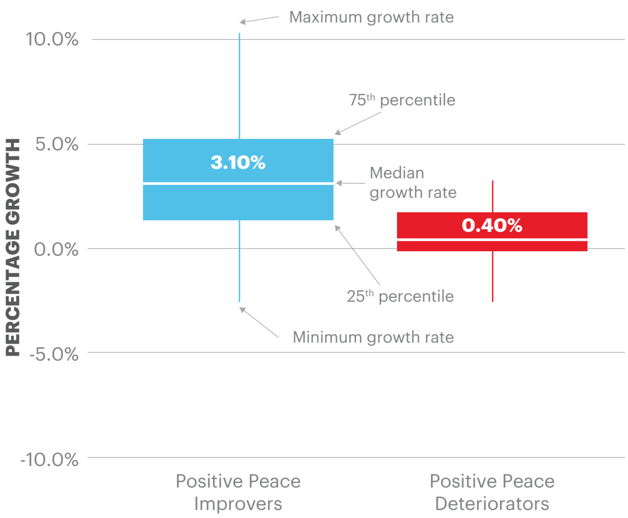
On average, every one index-point improvement in the PPI is associated with a tenfold rise in US$ GDP per capita.

Source: IEP, IMF

FIGURE 5.4

Positive Peace and income growth, 2009–2020

Countries that improved in Positive Peace from 2009 to 2020 recorded an average annual growth rate in per capita GDP 2.7 percentage points higher than nations where Positive Peace had deteriorated.

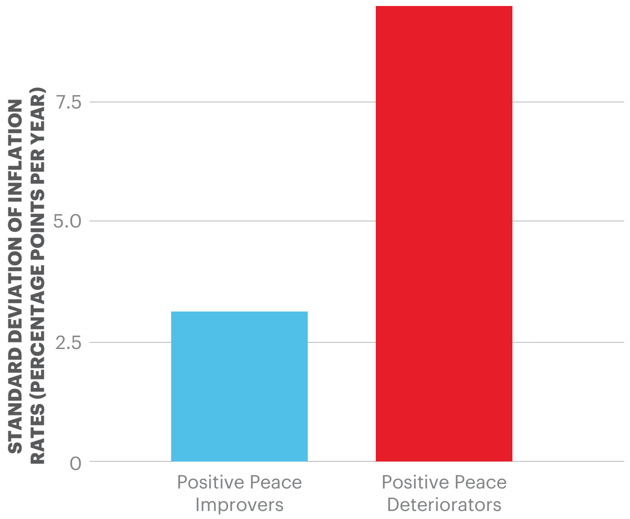


Source: IEP, IMF

FIGURE 5.5

Volatility of inflation rates by Positive Peace outcome, 2009–2020

Countries in which Positive Peace improved had less volatile inflationary outcomes.



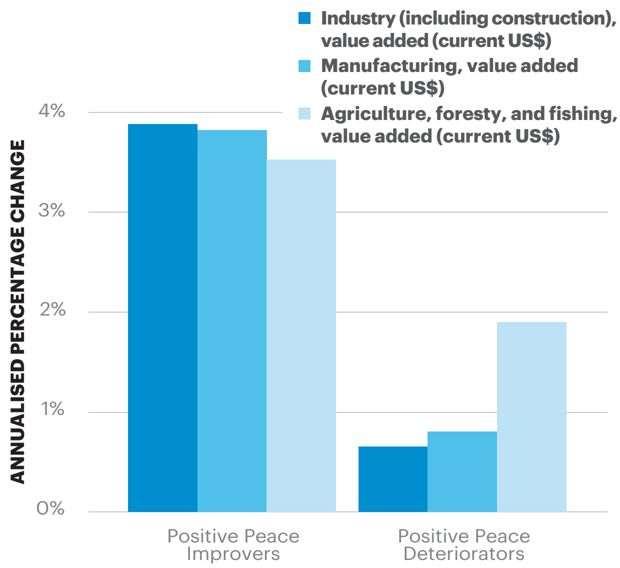
Source: IEP, World Bank

Among the multiple business sectors, industry and construction are the most responsive to improvements in Positive Peace. Growth in these sectors' GVA was 3.8 per cent per year among countries in which Positive Peace improved. This compares with 0.6 per cent where Positive Peace deteriorated (Figure 5.7). Similarly, manufacturing is also highly reliant on Positive Peace improvements. The agricultural GVA growth differential for Positive Peace improvers is smaller but still positive. This is because the agricultural sector depends on a number of factors unrelated to Positive Peace, such as climatic patterns and geographical features.

FIGURE 5.7

Changes in business value added by Positive Peace outcome, 2009–2020

Construction is the sector most responsive to improvements in Positive Peace, with the GVA in countries improving in the PPI growing at almost four per cent per year.

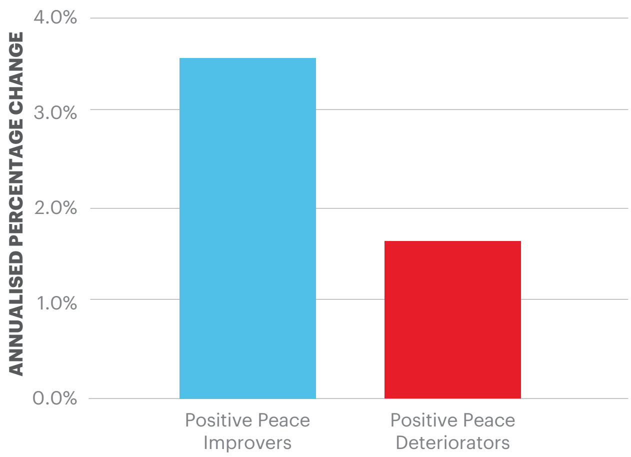


Source: IEP, World Bank

FIGURE 5.6

Changes in household consumption by Positive Peace, 2009–2020

Among countries where Positive Peace improved, household consumption rose between 2009 and 2020 at a rate almost twice as high as countries where the PPI deteriorated.



Source: IEP, World Bank

TRADE AND OPENNESS

Countries that consistently develop in Positive Peace are more attractive to foreign direct investment (FDI) because of:

- greater economic returns;
- improved governmental transparency and efficiency;
- enhanced rule of law, protection of private property and enforcement of contracts; and
- cheaper and less burdensome dispute, compensation and remediation procedures.

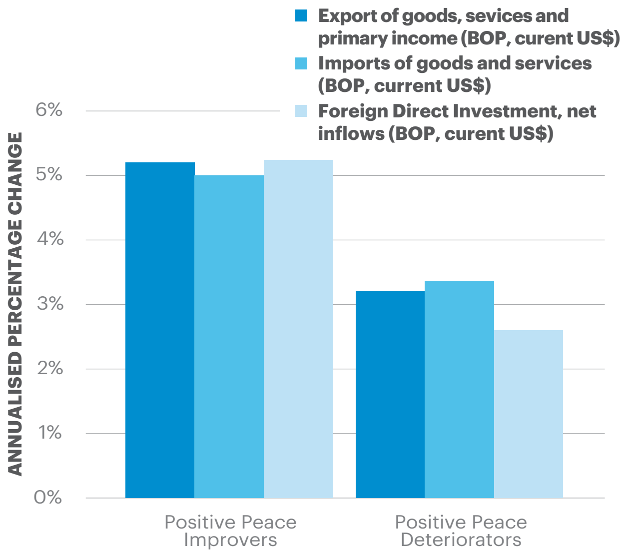
Foreign Direct Investment for countries that improved on the PPI rose at an annual rate of 5.2 per cent, contrasting with an increase of 2.6 per cent for countries in which Positive Peace retreated in the decade to 2019 (Figure 5.8). Similarly, trade growth, both imports and exports, is larger among countries with favourable performance in the PPI. The data used covered 2009 to 2019 to avoid the distortionary impact caused by the COVID-19 pandemic.

As discussed above, countries that progress in Positive Peace have more robust internal activity, which boosts demand for foreign goods and services. Accordingly, imports among Positive Peace improvers grew almost two percentage points per year faster than in other countries over the past decade. Positive Peace also benefits the export sector, as firms are more agile, less weighed-down by inefficient regulation, and not held back by socio-political disruptions. All in all, trade and openness to foreign investment are two critical channels through which societal resilience generates economic outperformance.

FIGURE 5.8

Changes in FDI and trade by Positive Peace outcome, 2009–2019

FDI flows towards countries that improved in Positive Peace grew strongly over the decade, while countries where Positive Peace declined became less attractive in global capital markets.



Source: IEP, World Bank

GOVERNANCE

There is a conceptual link between the quality of governance exercised by authorities and the level of peacefulness enjoyed by a society. Empirically also, the nexus between Positive Peace and governance measures compiled by the World Bank's Country Policy and Institutional Assessment (CPIA) is particularly strong.

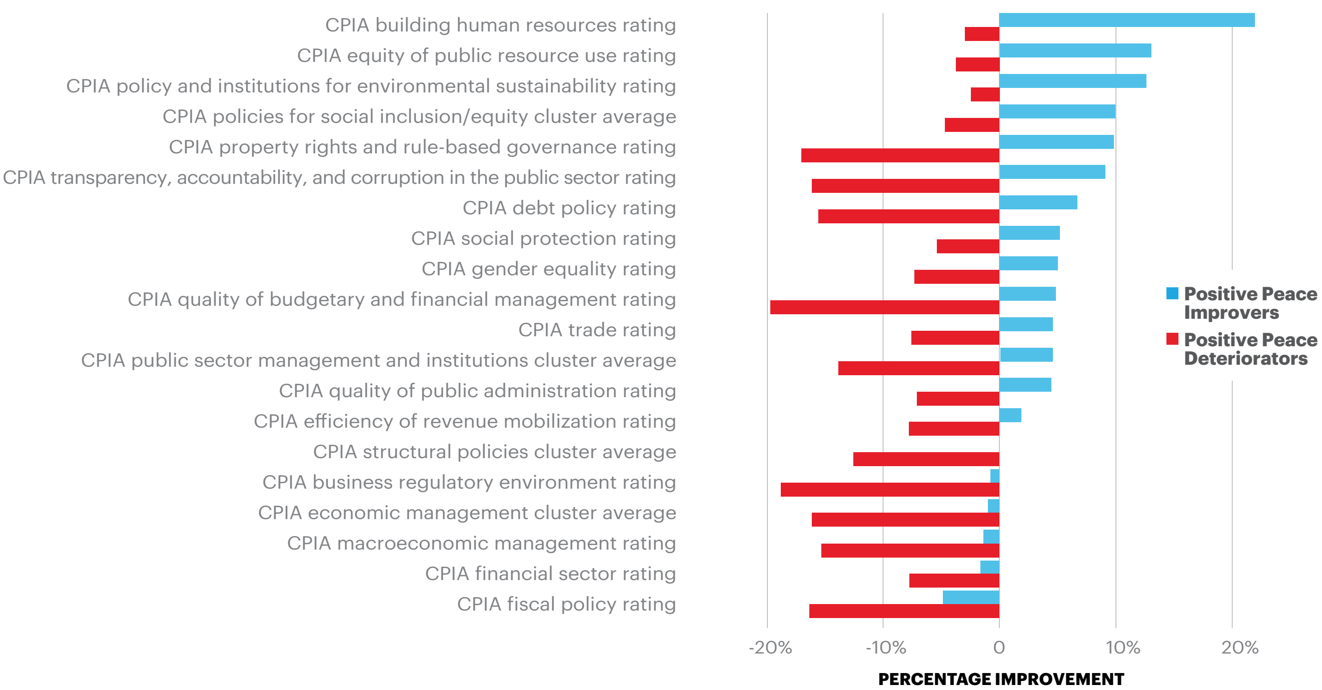
Countries that improved in the PPI also advanced their CPIA ratings over the past decade, especially in the areas of education, equity, quality of administration and business regulation (Figure 5.9). This is in stark contrast to countries where Positive Peace deteriorated over the past decade, which were downgraded in all CPIA criteria.

There were some CPIA indicators that deteriorated globally, including fiscal policy, financial sector and macroeconomic management. However, countries that improved in Positive Peace recorded smaller deteriorations in such indicators than other nations.

FIGURE 5.9

Governance ratings by Positive Peace outcome, 2009–2020

Countries that improve in Positive Peace tend to fare better in the CPIA assessment by the World Bank.



Source: IEP, World Bank

PREDICTING FUTURE CHANGES IN PEACE

One important benefit of the Positive Peace framework is the probabilistic prediction of groups of countries more likely to experience substantial falls in peace. This section describes the Positive Peace deficit model, a framework based on systems thinking that examines countries according to their relative levels of peace and Positive Peace.

Of the 35 countries with large Positive Peace deficits in 2009, 80 per cent recorded deteriorations in the GPI by 2022. This model has had eight iterations since the publication of the Positive Peace Report 2015, with the accuracy of the model increasing over that period.

THE POSITIVE PEACE DEFICIT AS A PREDICTOR OF VIOLENCE

As a gauge of societal resilience, Positive Peace assesses countries' capacity to obtain and sustain high levels of peace, as measured by the GPI. In turn, high levels of peace create a socio-economic dividend that fosters development and promotes resilience. This systemic virtuous cycle is the main mechanism through which societies thrive.

Most countries operating with high levels of peacefulness will also enjoy high levels of Positive Peace. Thus, countries that rank well in the GPI tend to rank well in the PPI also. Those with low levels of peace according to the GPI on average will also display low levels of societal resilience as measured by Positive Peace. For this reason, when countries are assessed in terms of the GPI rankings versus their PPI rankings at a given point in time, most countries will feature near the diagonal line (Figure 5.10).

However, this is not always the case. Some nations may operate with a higher level of peace but without the socio-economic development needed to sustain it. This manifests as a PPI rank that is materially inferior to the corresponding GPI rank. These nations are said to be in a Positive Peace deficit.

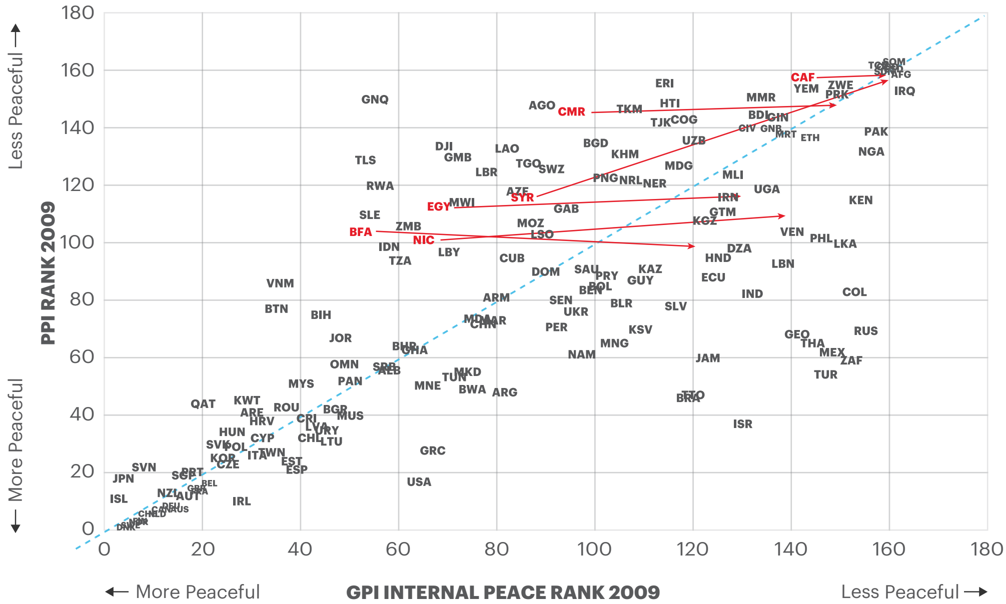
There are many reasons for a society to be in Positive Peace deficit. Some cultures tend to be more pacific and conciliatory and may develop peaceful societies even in the absence of high levels of economic prosperity, education and technology. Nations such as Bhutan and Malaysia are possible examples for this category. However, this type of deficit is rare.

In most cases, deficits are the result of a state of peace being artificially maintained by a non-democratic regime. History shows that such situations are unstable, as peace obtained through forceful means tends be volatile. Additionally, many of these countries have weak institutions and are susceptible to outside interference, such as in the cases of Libya, Syria and Yemen. Suppression by force without socio-economic development tends to smother the underlying grievances, without truly resolving them. Most of the countries with the largest Positive Peace deficits in 2009 deteriorated into higher levels of violence by 2020 (Figure 5.10).[2]

FIGURE 5.10

Positive Peace deficits and selected changes in GPI, 2009–2020

Some of the countries with Positive Peace deficits in 2009 recorded large deteriorations in peace subsequently. The red arrows point towards the location of selected countries by 2020.



Source: IEP

THE POSITIVE PEACE DEFICIT MODEL

Expanding on the previous section, countries can be grouped into three categories below.

- **Positive Peace Deficit**: when countries rank at least 20 places higher on the GPI than the PPI.
- **Positive Peace Surplus**: when countries rank at least 20 places lower on the GPI than the PPI.
- **Stable**: countries have a rank difference between the GPI and PPI of less than 20 places.

Of the 35 countries with Positive Peace deficits in 2009, 28 nations – or 80 per cent – had recorded deteriorations in the GPI Internal Peace score by 2022 (Table 5.1). Many of the most extreme examples of collapse into violence over the past decade – countries such as Syria, Libya, Burkina Faso, Nicaragua, Mozambique, Cameron, Egypt and others – were deficit countries one decade ago.

For countries that were stable or in surplus in 2009, the proportion that recorded deteriorations in peacefulness was far lower than for deficit countries (Figure 5.11). For comparison, around 53 per cent of all countries, regardless of their Positive Peace deficit status, recorded deteriorations in their GPI Internal Peace scores from 2009 to 2022.

On average, the countries that held a Positive Peace deficit in 2009 deteriorated by 11.6 per cent in their GPI scores from 2009 to 2022 (Figure 5.12). This compares with only marginal changes in the other categories, and with a 2.9 per cent average deterioration across all countries.

TABLE 5.1

Positive Peace deficits in 2009 and changes in the GPI from 2009 to 2022

Of the 35 nations in Positive Peace deficit in 2009, 28 – or 80 per cent – recorded deteriorations in peace in the subsequent decade. Negative changes are improvements.

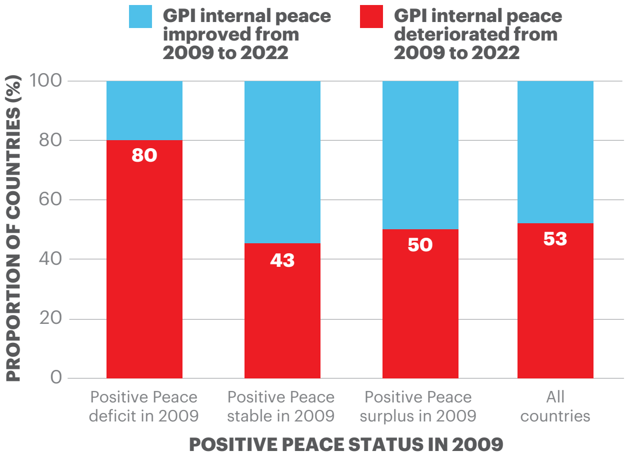
COUNTRY	PPI RANK 2009 (A)	GPI INTERNAL PEACE RANK 2009 (B)	POSITIVE PEACE DEFICIT 2009 (A)–(B)	CHANGE IN GPI INTERNAL PEACE 2009-2022 (%)	CHANGE IN GPI INTERNAL PEACE 2009-2022 (%)
Equatorial Guinea	150	55	95	3.1	Deterioration
Timor-Leste	129	53	76	4.9	Deterioration
Djibouti	134	69	65	19.3	Deterioration
Rwanda	120	56	64	6.1	Deterioration
Angola	148	89	59	4.2	Deterioration
The Gambia	130	72	58	-5.7	Improvement
Sierra Leone	110	54	56	3.4	Deterioration
Burkina Faso	104	52	52	63.0	Deterioration
Cameroon	146	95	51	36.0	Deterioration
Laos	133	82	51	-8.1	Improvement
Viet Nam	86	36	50	4.2	Deterioration
Liberia	125	78	47	7.5	Deterioration
Egypt	113	68	45	27.6	Deterioration
Zambia	106	62	44	6.8a	Deterioration
Bhutan	77	35	42	-12.3	Improvement
Eritrea	156	114	42	-0.5	Improvement
Togo	128	86	42	7.6	Deterioration
Malawi	114	73	41	2.3	Deterioration
Indonesia	99	59	40	0.4	Deterioration
Turkmenistan	147	107	40	0.9	Deterioration
Nicaragua	101	65	36	38.5	Deterioration
Bangladesh	135	100	35	1.4	Deterioration
Swaziland	126	91	35	6.7	Deterioration
Azerbaijan	118	84	34	16.2	Deterioration
Haiti	149	115	34	14.7	Deterioration
Tanzania	94	60	34	15.1	Deterioration
Bosnia and Herzegovina	75	44	31	4.0	Deterioration
Syria	116	85	31	61.2	Deterioration
Tajikistan	142	113	29	-3.4	Improvement
Libya	97	70	27	60.4	Deterioration
Republic of the Congo	143	118	25	-0.9	Improvement
Cambodia	131	106	25	-11.2	Improvement
Qatar	44	20	24	0.1	Deterioration
Papua New Guinea	123	102	21	3.2	Deterioration
Mozambique	107	87	20	27.7	Deterioration

Source: IEP

FIGURE 5.11

Positive Peace deficits and deteriorations in Peace, 2009–2022

Eighty per cent of countries in Positive Peace deficit in 2009 deteriorated into higher states of violence in the subsequent decade.

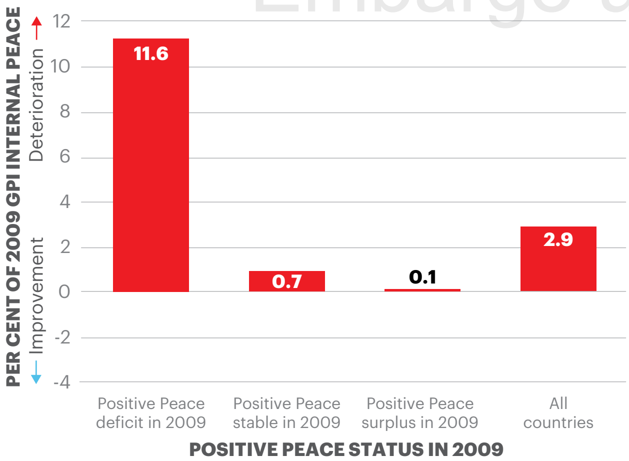


Source: IEP

FIGURE 5.12

Changes in GPI from 2009 to 2022 by Positive Peace status in 2009

Countries in deficit in 2009 recorded an average deterioration in their GPI scores of 11.6 per cent from 2009 to 2022. This compares with only marginal changes for the other categories.



Source: IEP

Taken together, the proportion of deteriorations among deficit countries and the size of such deteriorations show that the Positive Peace deficit model is an accurate probabilistic predictor of future deteriorations in peace.

These results were obtained with a materiality threshold of 20 rank places underpinning the definitions of deficits and surpluses. If this threshold is increased to a 52-place difference between the GPI and PPI, the model has an 87 per cent predictive rate. However, the number of countries deemed to be in deficit or surplus for analysis would decrease.

The Positive Peace deficit model could be seen as one tool, among others, that stakeholders and supranational agencies

TABLE 5.2

Countries in Positive Peace deficit in 2020

Countries in this list are more likely to experience increasing levels of violence over the next decade.

COUNTRY	PPI RANK 2020 (A)	GPI INTERNAL PEACE RANK 2020 (B)	POSITIVE PEACE DEFICIT 2020 (A)–(B)
Equatorial Guinea	150	51	99
Laos	124	49	75
Nepal	126	67	59
Sierra Leone	110	56	54
Liberia	129	78	51
Cambodia	116	66	50
Angola	136	87	49
Eritrea	156	107	49
Timor-Leste	111	63	48
Bhutan	65	22	43
Rwanda	115	72	43
Turkmenistan	140	98	42
Zambia	112	73	39
Djibouti	132	96	36
The Gambia	104	68	36
Azerbaijan	112	77	35
Bangladesh	134	99	35
Bosnia and Herzegovina	83	48	35
Guinea	141	106	35
Malawi	117	82	35
Swaziland	122	87	35
Uganda	138	103	35
Madagascar	123	89	34
Papua New Guinea	127	93	34
Guinea-Bissau	142	109	33
Tanzania	102	69	33
Haiti	148	117	31
Qatar	49	18	31
Tajikistan	143	113	30
Indonesia	87	60	27
Uzbekistan	100	73	27
Togo	119	94	25
Republic of the Congo	145	123	22
Jordan	83	62	21
Senegal	78	58	20
Viet Nam	70	50	20

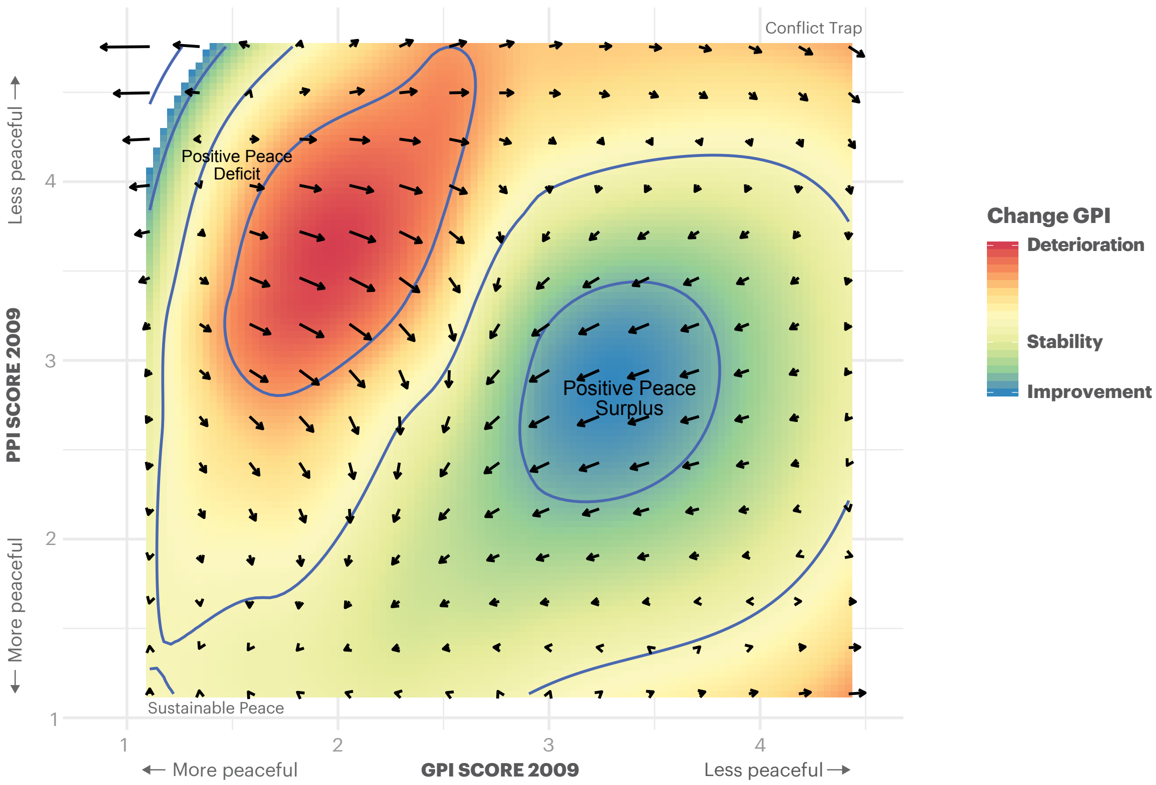
Source: IEP

> “
>
> Countries with a high Positive Peace deficit in 2009 recorded an average deterioration of 11.6 per cent in the GPI in the subsequent decade. This compares with very little change recorded for other countries.

FIGURE 5.13

IEP systems dynamics of GPI and PPI trajectories

Based on empirical evidence, Positive and negative peace change more rapidly depending on starting levels in the PPI and GPI.



Source: IEP

could use to anticipate and prepare for possible increases in violence in the future. Table 5.2 displays the 36 countries in Positive Peace deficit in 2020. It is possible that most of these countries could experience higher levels of violence over the next decade or so.

TRANSITION ZONES AND ATTRACTOR BASINS

This section expands the analysis of the Positive Peace deficit model using two concepts of the dynamics of societal systems: transition zones and attractor basins.

As discussed above, the countries with a Positive Peace deficit in 2009 tended to deteriorate in peace over the subsequent years. These countries were situated on the top-left panel of the GPI – PPI diagram, as shown in Figure 5.10 above. The areas in the diagram from which states tended to deteriorate in peace – that is, to fall in the GPI rankings – were marked in red, forming a new visualisation of the GPI-PPI diagram shown in Figure 5.13.

The areas in the diagram from which countries tended to improve in peace – that is, obtain higher GPI rankings over time – were painted in blue. Yellow shaded areas are those where the was little to no movement in the GPI rankings from 2009 to 2022. This exercise gives rise to the diagram in Figure 5.13 which highlights how a country tended to move in the GPI-PPI rankings from 2009 to 2022 depending on their starting point in 2009.

The top-right quadrant is shaded almost entirely in yellow. This shows a situation where countries have both low levels of peace and low levels of Positive Peace. This is where conflict and economic underdevelopment reinforce one another in a vicious cycle of long-lasting violence. This condition is termed 'Conflict Trap.' It is very hard for countries to move out of this situation.

The bottom-left quadrant is also one of little movement. Countries with high levels of peace and high levels of socio-economic development stay in this area, as their levels of societal resilience prevent countries from collapsing into violence. In this area, Positive Peace sustains peace. This area is called 'Sustainable Peace.' There has not been a substantial fall in peace in the 16 years that the GPI has been produced for any country near the top of the index.

Both the Sustainable Peace and the Conflict Trap areas are *attractor basins* – a concept in systems dynamics that refers to particular homeostasis states to which societal systems are attracted. These are areas where entities tend to move towards or away from, however, once an entity is in an attractor basin it is very hard to escape. More details on attractor basins can be found in the Positive Peace Report 2022.

The areas of Positive Peace deficit and surplus are transition zones. These are states that can cause societal systems to change at a faster pace.

6 APPENDICES

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

MILITARISATION

- **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 sub-component weighted indices were then calculated from the GPI group of indicators:

1. A measure of how internally peaceful a country is;

2. 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

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

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 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;
2. 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;
3. Indicator scores are checked by the EIU's Custom Research team (which has responsibility for the GPI) to ensure global comparability;
4. 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;
6. 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	2021

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	2020

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

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	Institute for Criminal Policy Research at Birkbeck, University of London, World Prison Brief
Measurement period	2021

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 2021 to March 2022

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 2021 to March 2022

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 2021 to March 2022

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 2021 to March 2022

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 2021 to March 2022

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	2020

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	2021

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 to another country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, missiles, ships, 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
0-7.233	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 2017 to March 2022

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	2018-2019

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 deaths	999–4,998 deaths	4,999–9,998 deaths	> 9,999 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	2020

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	2021

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	2021

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	2020

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.
2. 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	2021

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	2021

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) 2019
Measurement period	2021

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%
Data source	EIU
Measurement period	March 2021 to March 2020

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	2020

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

Indicator type	Quantitative
Indicator weight	5
Indicator weight (% of total index)	7.1%
Data source	UCDP Georeferenced Event Dataset
Measurement period	2021

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 deaths	999–4,998 deaths	4,999–9,998 deaths	> 9,999 deaths

APPENDIX C

GPI Domain Scores

TABLE C.1

Ongoing Domestic and International Conflict domain, most peaceful to least

COUNTRY	SCORE
Mauritius	1.000
Bulgaria	1.000
Botswana	1.000
Iceland	1.000
Uruguay	1.000
Singapore	1.000
New Zealand	1.008
Switzerland	1.011
Malaysia	1.015
Ireland	1.015
Canada	1.030
Czech Republic	1.034
Portugal	1.034
Italy	1.034
Netherlands	1.045
Germany	1.062
Austria	1.097
United Kingdom	1.113
Belgium	1.141
Croatia	1.201
Jamaica	1.201
Mongolia	1.201
Trinidad and Tobago	1.201
Namibia	1.201
Costa Rica	1.201
Argentina	1.201
Norway	1.235
Denmark	1.242
Spain	1.244
Qatar	1.258
Australia	1.266
France	1.305
Albania	1.403
Vietnam	1.403
Laos	1.403
Montenegro	1.403
North Macedonia	1.403
Slovakia	1.403
Dominican Republic	1.403
Bolivia	1.403
Chile	1.403
Panama	1.403
Poland	1.403
Paraguay	1.403
Oman	1.403
Timor-Leste	1.403
Slovenia	1.403
Japan	1.403
Papua New Guinea	1.418
Hungary	1.421
Zambia	1.424
Ecuador	1.426
Kuwait	1.431
El Salvador	1.436
Bhutan	1.436

COUNTRY	SCORE
The Gambia	1.436
Senegal	1.436
Nepal	1.436
Romania	1.436
Finland	1.436
Sweden	1.442
Liberia	1.462
Sierra Leone	1.472
Ghana	1.472
Peru	1.514
Jordan	1.542
United Arab Emirates	1.581
Cyprus	1.604
Honduras	1.604
Serbia	1.604
Guyana	1.604
Gabon	1.604
Eswatini	1.604
Equatorial Guinea	1.604
Turkmenistan	1.604
Taiwan	1.604
Guinea-Bissau	1.615
Guatemala	1.626
Madagascar	1.630
Latvia	1.634
Mauritania	1.638
Cambodia	1.638
Estonia	1.638
Lithuania	1.638
Indonesia	1.644
Sri Lanka	1.647
Republic of the Congo	1.653
Angola	1.666
Benin	1.666
Tunisia	1.691
Cote d' Ivoire	1.694
Eritrea	1.705
Rwanda	1.722
Malawi	1.739
Uganda	1.747
South Africa	1.782
Tanzania	1.800
Georgia	1.805
Kosovo	1.805
Cuba	1.805
Kazakhstan	1.805
Uzbekistan	1.805
Greece	1.805
Lesotho	1.805
South Korea	1.805
Togo	1.816
Bosnia and Herzegovina	1.835
Brazil	1.853
Djibouti	1.856
China	1.858

COUNTRY	SCORE
Morocco	1.891
Thailand	1.902
Bahrain	1.955
Armenia	1.990
United States of America	2.001
Bangladesh	2.004
Nicaragua	2.006
Moldova	2.006
Kyrgyz Republic	2.006
Venezuela	2.024
Zimbabwe	2.024
Tajikistan	2.035
Algeria	2.068
Haiti	2.077
Colombia	2.099
Israel	2.167
Belarus	2.208
Mozambique	2.215
Guinea	2.262
Kenya	2.345
Saudi Arabia	2.395
Egypt	2.426
Burundi	2.443
Philippines	2.463
Chad	2.552
Azerbaijan	2.579
North Korea	2.610
Palestine	2.612
Mexico	2.642
Myanmar	2.700
Lebanon	2.701
Nigeria	2.806
Niger	2.839
Mali	2.861
Central African Republic	2.874
Iran	2.923
Cameroon	2.967
India	2.982
Burkina Faso	3.023
Libya	3.160
South Sudan	3.169
Pakistan	3.172
Turkey	3.180
Iraq	3.207
Ukraine	3.285
Sudan	3.313
Democratic Republic of the Congo	3.413
Ethiopia	3.457
Somalia	3.481
Afghanistan	3.650
Russia	3.695
Yemen	3.708
Syria	3.923

TABLE C.2

Societal Safety and Security domain, most to least peaceful

COUNTRY	SCORE
Iceland	1.237
Norway	1.266
Japan	1.283
Denmark	1.295
Singapore	1.316
Slovenia	1.345
Finland	1.349
Switzerland	1.364
Qatar	1.442
Austria	1.452
Sweden	1.494
South Korea	1.499
Netherlands	1.525
Ireland	1.525
Hungary	1.528
New Zealand	1.530
Portugal	1.533
Croatia	1.564
Czech Republic	1.566
Bhutan	1.601
Germany	1.619
Taiwan	1.621
Canada	1.637
Australia	1.657
United Kingdom	1.679
Poland	1.699
United Arab Emirates	1.699
Estonia	1.703
Slovakia	1.723
Kuwait	1.762
Romania	1.771
Greece	1.773
Lithuania	1.775
Latvia	1.798
Belgium	1.806
Spain	1.827
France	1.867
Oman	1.892
Italy	1.927
North Macedonia	1.928
Bulgaria	1.929
Malaysia	1.973
Armenia	1.977
Ghana	2.026
Jordan	2.037
Bosnia and Herzegovina	2.044
Serbia	2.047
Vietnam	2.061
Laos	2.076
Cambodia	2.080
China	2.107
Indonesia	2.107
Saudi Arabia	2.113
Albania	2.120
Mauritius	2.132
The Gambia	2.142
Moldova	2.142
Malawi	2.144
Uzbekistan	2.151
Morocco	2.158
Sierra Leone	2.200
Equatorial Guinea	2.200
Costa Rica	2.229
Israel	2.237
Timor-Leste	2.237
Montenegro	2.243
Cyprus	2.251
Tajikistan	2.254
Kosovo	2.266
Kyrgyz Republic	2.282
Algeria	2.302
Rwanda	2.347
Chile	2.361
Zambia	2.368
India	2.373
Gabon	2.378
Senegal	2.388
Sri Lanka	2.396
Bahrain	2.405
Tunisia	2.408
United States of America	2.409
Georgia	2.413
Angola	2.413
Turkmenistan	2.434
Bangladesh	2.438
Botswana	2.441
Tanzania	2.443
Paraguay	2.449
Mongolia	2.459
Panama	2.474
Togo	2.475
Liberia	2.491
Kazakhstan	2.492
Nepal	2.493
Uruguay	2.500
Egypt	2.503
Bolivia	2.503
Ecuador	2.509
Belarus	2.526
Azerbaijan	2.528
Lesotho	2.528
Djibouti	2.561
Namibia	2.569
Benin	2.574
Eswatini	2.576
Guinea-Bissau	2.586
Guinea	2.587
Kenya	2.599
Madagascar	2.612
Cuba	2.614
Dominican Republic	2.614
Thailand	2.628
Republic of the Congo	2.650
Pakistan	2.653
Argentina	2.656
Papua New Guinea	2.660
Peru	2.669
Philippines	2.682
Trinidad and Tobago	2.690
Haiti	2.735
Lebanon	2.748
Cote d' Ivoire	2.764
Zimbabwe	2.777
Mauritania	2.782
Jamaica	2.791
Palestine	2.797
Mozambique	2.803
Guatemala	2.819
Iran	2.838
Guyana	2.895
Chad	2.903
Ethiopia	2.917
Russia	2.950
Niger	2.957
Nicaragua	2.966
Uganda	2.973
Burkina Faso	2.993
Turkey	3.000
Cameroon	3.014
Burundi	3.024
South Africa	3.024
El Salvador	3.062
Honduras	3.064
Libya	3.093
Nigeria	3.107
North Korea	3.113
Myanmar	3.116
Mexico	3.158
Sudan	3.193
Ukraine	3.210
Brazil	3.284
Eritrea	3.359
Somalia	3.455
Syria	3.532
Central African Republic	3.579
Mali	3.589
Colombia	3.596
Iraq	3.646
South Sudan	3.696
Democratic Republic of the Congo	3.747
Yemen	3.789
Venezuela	3.829
Afghanistan	4.127

TABLE C.3

Militarisation domain, most peaceful to least

COUNTRY	SCORE
Iceland	1.020
Slovenia	1.143
New Zealand	1.168
Hungary	1.184
Malaysia	1.205
Slovakia	1.233
Moldova	1.243
Portugal	1.257
Ireland	1.259
Czech Republic	1.263
Japan	1.308
Austria	1.331
Bhutan	1.336
Mongolia	1.348
Denmark	1.368
Mauritius	1.373
Madagascar	1.444
Canada	1.465
Latvia	1.479
Thailand	1.480
Indonesia	1.496
Panama	1.499
Zambia	1.508
Poland	1.515
Bosnia and Herzegovina	1.526
Rwanda	1.531
Tanzania	1.531
Cuba	1.533
Bangladesh	1.534
Guyana	1.551
Burundi	1.556
Croatia	1.565
Kosovo	1.575
Sierra Leone	1.579
Chile	1.585
Finland	1.598
Montenegro	1.602
Belgium	1.602
Cyprus	1.605
Estonia	1.607
Argentina	1.611
Costa Rica	1.614
Bulgaria	1.633
Taiwan	1.637
Equatorial Guinea	1.638
Albania	1.666
Uruguay	1.669
Kyrgyz Republic	1.671
Mozambique	1.677
The Gambia	1.687
Philippines	1.690
Romania	1.691
Tajikistan	1.696
Guatemala	1.698
Angola	1.706
Nepal	1.706
Eswatini	1.706
South Africa	1.711
Bahrain	1.717
Dominican Republic	1.720
Jamaica	1.721
Nicaragua	1.723
Malawi	1.723
Cote d' Ivoire	1.724
Ghana	1.726
Spain	1.733
Lithuania	1.735
Mexico	1.736
Haiti	1.740
Tunisia	1.740
Myanmar	1.744
Lesotho	1.748
Germany	1.750
Morocco	1.752
Namibia	1.755
Timor-Leste	1.764
Senegal	1.766
North Macedonia	1.771
Kazakhstan	1.781
Serbia	1.785
Georgia	1.790
Kenya	1.794
Liberia	1.804
Gabon	1.807
Ethiopia	1.809
Honduras	1.812
Botswana	1.812
Vietnam	1.827
Singapore	1.841
Switzerland	1.841
Sweden	1.844
Australia	1.848
Togo	1.849
Ecuador	1.866
Papua New Guinea	1.867
Mali	1.873
Cameroon	1.877
El Salvador	1.879
Democratic Republic of the Congo	1.881
Turkey	1.888
Belarus	1.896
Peru	1.900
Uganda	1.907
Eritrea	1.914
Sri Lanka	1.926
Cambodia	1.933
Bolivia	1.934
Laos	1.949
Niger	1.957
Jordan	1.964
Trinidad and Tobago	1.964
Brazil	1.965
Mauritania	1.969
Palestine	1.991
Venezuela	2.001
Paraguay	2.008
Italy	2.013
Egypt	2.014
China	2.022
Benin	2.022
Greece	2.036
Armenia	2.041
Algeria	2.041
Colombia	2.052
Uzbekistan	2.057
Nigeria	2.059
Guinea	2.069
Somalia	2.073
Zimbabwe	2.090
Azerbaijan	2.108
Qatar	2.119
Iran	2.123
Republic of the Congo	2.132
Ukraine	2.133
Djibouti	2.140
Kuwait	2.184
Norway	2.184
Burkina Faso	2.189
Chad	2.189
Netherlands	2.206
Guinea-Bissau	2.218
South Korea	2.224
Central African Republic	2.273
Syria	2.280
Iraq	2.298
Yemen	2.299
Sudan	2.311
Lebanon	2.317
South Sudan	2.328
Turkmenistan	2.336
Libya	2.433
United Kingdom	2.440
India	2.461
Afghanistan	2.472
Saudi Arabia	2.543
United Arab Emirates	2.570
Pakistan	2.581
Oman	2.651
France	2.773
United States of America	3.089
North Korea	3.120
Russia	3.221
Israel	3.813

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 RANK BY % OF GDP	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (MILLIONS, US$ 2021 PPP)	PER CAPITA IMPACT (2021, US$ PPP)	ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP	ECONOMIC COST OF VIOLENCE (MILLIONS, US$ 2021 PPP)
1	Syria	21,014.7	1,200.8	80%	19,211.2
2	South Sudan	1,609.2	113.5	41%	1,467.1
3	Central African Republic	2,220.3	451.3	37%	1,897.2
4	Somalia	6,225.3	402.1	33%	5,049.8
5	Afghanistan	34,199.4	878.5	30%	24,221.3
6	North Korea	9,602.9	372.5	27%	4,924.0
7	Colombia	273,766.6	5,362.8	26%	217,821.8
8	Yemen	13,449.7	404.1	23%	10,265.6
9	Sudan	102,790.0	2,259.2	21%	63,617.1
10	Cyprus	9,136.3	10,151.4	21%	7,865.9
11	Venezuela	15,945.2	578.0	20%	14,385.4
12	Ukraine	167,590.8	4,058.6	20%	123,832.7
13	Libya	26,108.0	3,890.9	19%	15,490.8
14	El Salvador	15,526.9	2,382.2	19%	11,566.4
15	Eritrea	1,395.6	387.6	17%	1,072.0
16	Mali	13,268.7	655.3	16%	8,571.4
17	Burkina Faso	11,072.6	514.5	15%	7,967.8
18	Palestinian Territories	7,023.5	1,345.0	15%	4,486.8
19	Azerbaijan	40,065.7	3,932.6	15%	26,202.4
20	South Africa	205,070.0	3,387.9	14%	135,080.0
21	Oman	45,481.1	9,947.7	13%	22,984.9
22	Iraq	96,860.9	2,352.4	13%	60,955.9
23	Honduras	10,537.7	1,041.6	13%	7,786.9
24	Lesotho	1,125.1	539.1	13%	865.5
25	Congo - Kinshasa	16,387.0	177.4	12%	14,380.8
26	Jamaica	5,168.4	1,886.3	12%	3,676.2
27	Georgia	9,614.5	2,590.1	12%	7,253.6
28	Bahrain	18,072.0	12,153.3	11%	9,457.6
29	Botswana	7,365.3	3,075.3	11%	4,751.2
30	Saudi Arabia	423,442.9	11,941.8	11%	215,551.2
31	Russia	938,726.5	6,423.1	11%	528,989.8
32	Mauritania	5,372.6	1,267.1	11%	3,082.7
33	Guyana	3,427.5	4,344.1	11%	2,219.1
34	Algeria	112,371.1	2,495.8	10%	58,117.3
35	Mexico	388,140.4	3,009.5	10%	294,738.5
36	Trinidad & Tobago	4,808.2	3,417.3	10%	3,579.1
37	United States	4,143,607.7	12,531.4	10%	2,294,571.4
38	Chad	4,572.9	270.3	10%	2,922.7
39	Kuwait	47,453.4	10,019.7	10%	24,478.0
40	Myanmar (Burma)	31,435.2	587.0	10%	22,400.8
41	Namibia	4,181.2	1,606.9	10%	2,602.0
42	Congo - Brazzaville	3,534.9	736.6	9%	2,328.8
43	Guatemala	21,568.5	1,176.0	9%	14,512.8
44	Nigeria	124,791.7	590.3	9%	101,710.5
45	Cameroon	11,139.1	409.2	9%	9,626.7

TABLE D.1

Economic cost of violence (continued)

ECONOMIC COST OF VIOLENCE RANK BY % OF GDP	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (MILLIONS, US$ 2021 PPP)	PER CAPITA IMPACT (2021, US$ PPP)	ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP	ECONOMIC COST OF VIOLENCE (MILLIONS, US$ 2021 PPP)
46	United Arab Emirates	124,650.8	13,231.2	8%	64,000.2
47	Armenia	6,750.6	2,279.1	8%	3,596.1
48	Niger	4,924.5	196.0	8%	2,950.9
49	Montenegro	2,157.6	3,468.8	8%	1,180.7
50	Israel	61,732.7	6,580.6	8%	34,470.1
51	Burundi	1,252.1	102.4	8%	829.7
52	Bhutan	1,275.7	1,694.1	8%	710.0
53	Brazil	406,424.1	1,911.6	8%	276,514.1
54	Pakistan	148,637.1	699.5	8%	80,303.0
55	Uzbekistan	41,243.1	1,197.3	8%	21,703.9
56	Uruguay	10,675.1	3,013.0	7%	6,631.7
57	Serbia	19,806.8	2,871.0	7%	11,104.3
58	Argentina	140,562.4	3,066.2	7%	81,342.8
59	Bosnia & Herzegovina	6,010.8	1,842.1	7%	4,075.2
60	Eswatini	1,254.2	1,101.1	7%	835.4
61	Zimbabwe	7,340.5	473.8	7%	5,288.8
62	Gambia	673.4	270.2	7%	416.3
63	Costa Rica	11,853.2	2,287.4	7%	7,665.3
64	Cuba	12,658.0	1,117.5	7%	7,305.1
65	Latvia	8,022.7	4,213.6	7%	4,490.8
66	United Kingdom	369,332.5	5,489.4	7%	239,138.2
67	Ethiopia	20,219.6	204.8	7%	16,055.8
68	Tunisia	15,613.3	1,299.1	7%	8,688.7
69	Timor-Leste	593.0	441.2	7%	321.2
70	Morocco	36,302.8	999.7	7%	19,913.7
71	Sri Lanka	31,484.4	1,428.6	7%	18,908.5
72	India	1,170,921.5	841.2	6%	645,842.9
73	Jordan	13,380.7	1,296.6	6%	7,091.8
74	Lebanon	10,024.2	1,468.7	6%	5,341.7
75	Turkey	295,548.9	3,492.8	6%	161,146.7
76	Liberia	867.1	180.2	6%	491.2
77	Mozambique	4,157.1	129.2	6%	2,836.0
78	Bulgaria	21,598.5	3,141.6	6%	11,753.9
79	Ecuador	20,750.5	1,168.6	6%	12,467.5
80	Panama	12,285.1	2,832.6	6%	7,797.3
81	Kyrgyzstan	3,779.4	568.0	6%	2,079.7
82	Lithuania	11,931.6	4,268.9	6%	7,176.1
83	Croatia	13,623.0	3,396.4	6%	7,690.7
84	Gabon	3,944.4	1,847.5	6%	2,372.4
85	New Zealand	25,508.6	4,980.2	6%	15,479.2
86	Albania	4,430.3	1,542.0	6%	2,463.5
87	Angola	25,743.5	805.4	6%	14,604.1
88	Hungary	37,428.2	3,832.1	6%	21,221.5
89	Uganda	11,132.1	262.2	6%	6,794.2
90	Romania	74,406.4	3,849.9	6%	40,146.0
91	Qatar	32,760.3	11,965.1	6%	16,950.8
92	South Korea	246,556.8	4,757.9	6%	145,129.2
93	Poland	142,430.9	3,764.0	5%	78,141.0
94	Chile	58,678.6	2,975.9	5%	34,216.1
95	Vietnam	112,724.4	1,146.5	5%	61,995.7
96	North Macedonia	3,949.1	1,908.7	5%	2,125.3
97	Greece	33,855.5	3,171.8	5%	17,646.6
98	Turkmenistan	10,642.8	1,772.9	5%	5,936.7
99	Togo	1,736.0	204.5	5%	1,084.5
100	Guinea-Bissau	350.4	188.9	5%	223.2
101	Canada	193,803.3	5,075.0	5%	113,299.3
102	Dominican Republic	18,572.2	1,762.1	5%	11,497.7
103	Estonia	5,351.0	4,023.3	5%	3,060.2
104	Bolivia	8,841.2	749.3	5%	5,275.9
105	Mauritius	2,439.4	1,925.3	5%	1,345.8
106	Nicaragua	3,048.9	465.9	5%	1,999.2
107	France	294,751.0	4,513.7	5%	180,205.9
108	Paraguay	8,167.2	1,110.7	5%	4,878.5
109	Côte d'Ivoire	12,387.0	447.8	5%	8,149.6
110	Belarus	17,548.7	1,876.9	5%	10,379.4
111	Peru	35,950.9	1,062.7	5%	21,811.3

TABLE D.1

Economic cost of violence (continued)

ECONOMIC COST OF VIOLENCE RANK BY % OF GDP	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (MILLIONS, US$ 2021 PPP)	PER CAPITA IMPACT (2021, US$ PPP)	ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP	ECONOMIC COST OF VIOLENCE (MILLIONS, US$ 2021 PPP)
112	Djibouti	500.4	499.4	5%	305.8
113	Portugal	34,830.1	3,384.2	5%	19,020.4
114	Senegal	5,249.4	305.1	5%	3,153.5
115	Tajikistan	3,270.9	338.7	5%	1,724.6
116	Australia	131,075.7	5,096.3	5%	78,640.3
117	Mongolia	3,293.3	965.2	5%	2,055.5
118	Benin	3,848.7	308.2	5%	2,277.5
119	Iran	485,147.4	5,708.9	5%	275,123.9
120	Belgium	46,604.7	4,037.8	5%	31,524.8
121	Slovakia	15,522.8	2,843.0	5%	8,615.5
122	Rwanda	1,823.6	140.7	4%	1,273.6
123	Czechia	39,484.1	3,679.8	4%	22,023.8
124	Singapore	51,245.6	8,968.4	4%	27,235.6
125	Sierra Leone	1,113.6	136.7	4%	651.9
126	Guinea	2,529.1	176.7	4%	1,642.9
127	Kenya	19,197.0	385.5	4%	11,050.4
128	Kazakhstan	35,508.1	1,856.5	4%	23,223.8
129	Moldova	2,334.5	902.4	4%	1,422.5
130	Thailand	97,054.4	1,387.5	4%	55,591.2
131	Zambia	4,670.8	240.1	4%	3,011.5
132	Nepal	8,210.3	281.0	4%	4,690.1
133	Egypt	102,034.6	991.6	4%	55,164.6
134	Haiti	2,774.0	233.0	4%	1,924.2
135	Cambodia	5,319.1	335.9	4%	2,900.3
136	Slovenia	6,211.9	2,952.4	4%	3,662.8
137	Laos	3,602.8	488.2	4%	2,291.7
138	China	1,951,603.2	1,376.2	4%	1,049,172.8
139	Germany	310,424.9	3,727.0	4%	185,886.0
140	Taiwan	49,498.1	2,104.6	4%	28,967.1
141	Italy	184,312.9	3,093.4	4%	101,320.7
142	Malaysia	63,632.1	1,907.4	4%	35,596.9
143	Sweden	36,375.5	3,427.4	4%	23,368.1
144	Norway	25,381.6	4,685.5	4%	14,781.3
145	Finland	16,662.8	3,012.6	3%	10,195.8
146	Ghana	10,491.7	335.4	3%	6,446.9
147	Spain	118,361.7	2,510.1	3%	65,555.2
148	Tanzania	8,978.9	150.3	3%	5,660.9
149	Netherlands	62,379.4	3,573.1	3%	35,705.6
150	Madagascar	2,135.9	75.5	3%	1,429.1
151	Denmark	19,679.5	3,369.8	3%	11,864.8
152	Philippines	48,471.2	438.8	3%	29,306.7
153	Malawi	1,449.1	67.5	3%	904.3
154	Equatorial Guinea	1,468.3	1,011.2	3%	923.8
155	Austria	26,064.3	2,913.5	3%	16,020.0
156	Japan	251,795.3	2,008.4	3%	152,481.6
157	Papua New Guinea	1,500.6	167.4	3%	1,080.5
158	Bangladesh	40,332.3	242.5	3%	23,379.8
159	Indonesia	156,397.8	574.5	2%	82,991.1
160	Ireland	19,646.5	3,896.6	2%	12,416.0
161	Switzerland	23,831.7	2,748.4	2%	14,652.7
162	Kosovo	352.5	196.3	2%	176.3
163	Iceland	604.3	1,633.1	2%	451.3

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Our research analyses peace and its economic value.

We develop global and national indices, calculate the economic impact of violence, analyse country level risk and have developed an empirical framework for Positive Peace that provides a roadmap to overcome adversity and conflict, helping to build and sustain lasting peace.

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