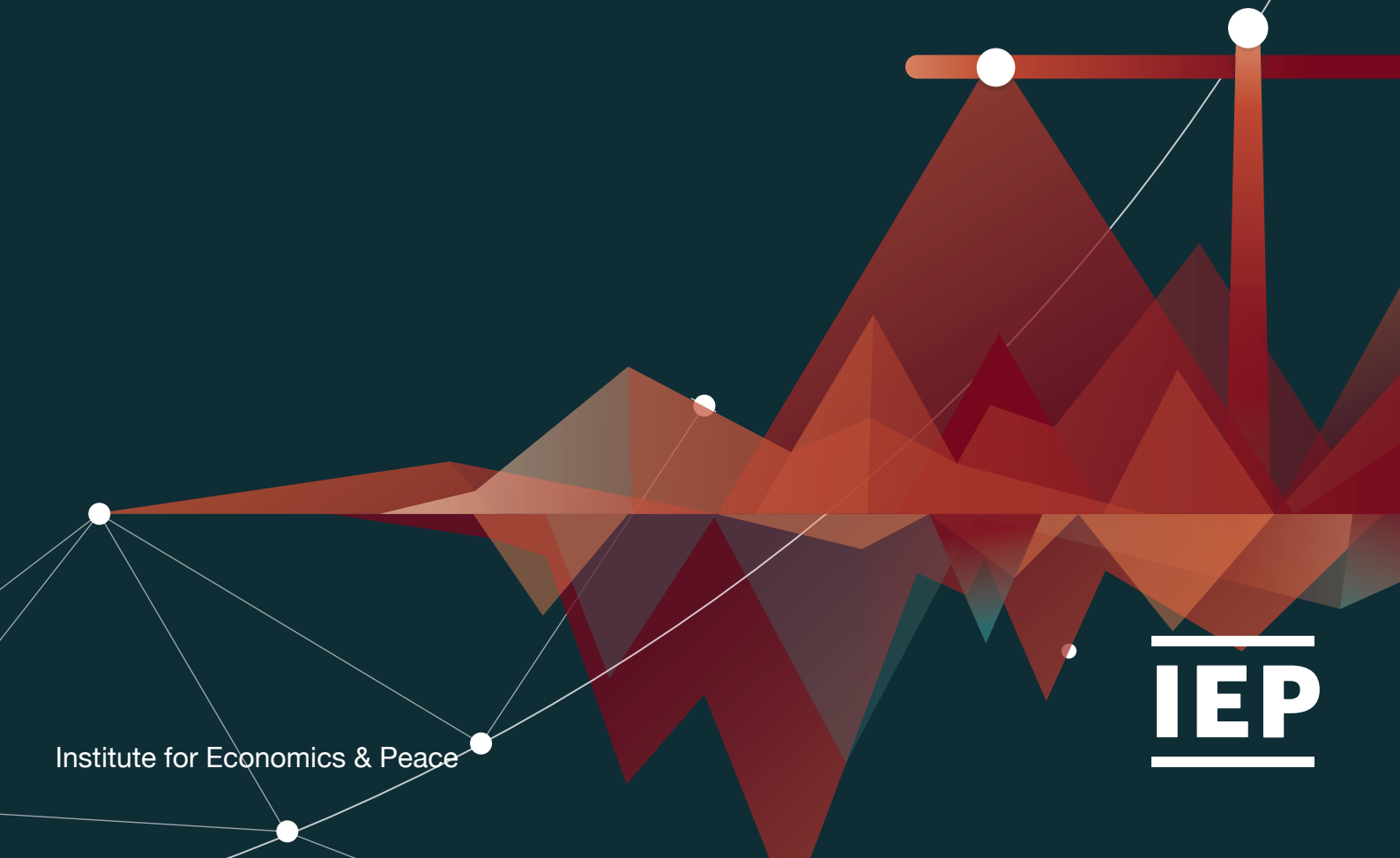
# ECONOMIC VALUE OF PEACE 2021

## MEASURING THE GLOBAL ECONOMIC IMPACT OF VIOLENCE AND CONFLICT



IEP

Institute for Economics & Peace



## 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 organisations on measuring and communicating the economic value of peace.

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**Please cite this report as:**
Institute for Economics & Peace. Economic Value of Peace 2021: Measuring the global economic impact of violence and conflict, Sydney, January 2021. Available from: http://visionofhumanity.org/resources (accessed Date Month Year).

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# Executive summary

**This report by the Institute for Economics & Peace (IEP) estimates the economic impact of violence and conflict on the global economy. In 2019, it was estimated to be $14.4 trillion in constant purchasing power parity (PPP) terms. This is equivalent to 10.5 per cent of the global gross domestic product (GDP) or $1,895 per person.**

The comprehensive methodology includes 18 indicators covering the direct and indirect costs of violence, and the expenditures to contain and prevent violence. The model also includes a multiplier for the direct costs to account for the additional economic activity resulting from a redirection of these costs to more productive pursuits.

The economic impact of violence provides an empirical basis to better understand the economic benefits resulting from improvements in peace. Estimates are provided for 163 countries and independent territories, covering over 99.5 per cent of the global population. It uses the best available data to calculate the overall impact. However, not all categories of violence have reliable data, therefore preventing their inclusion in the model. Some examples of costs excluded from the model are counter-terrorism and intelligence agency expenditures, insurance costs, lost business opportunities and family violence. As such, the estimates presented in this report are considered highly conservative.

In 2019, the economic impact of violence decreased by $64 billion from the previous year. This was the equivalent of a 0.4 per cent decrease and was largely driven by reductions in Armed Conflict. This fall predominantly occurred in the Middle East and North Africa region and was driven by fewer terror attacks, conflict deaths, and population displacement costs. This is a continued reversal of previous periods where between 2012 and 2017, the global economic impact of violence rose by 12.2 per cent to peak at $14.8 trillion. This is the second consecutive year of improvement.

Violence has adverse implications for the broader economy, both in the short and long term, as it hinders productivity and economic activity, destabilises institutions and reduces business confidence. These all disrupt the economy, resulting in adverse and ongoing negative effects well after the conflict subsides. These effects include reduced GDP growth, a less predictable economy, higher levels of unemployment, lower levels of foreign direct investment and higher interest and inflation.

The economic cost of violence for the ten most affected countries ranges from 23.5 to 59.1 per cent of their GDP. This is significantly larger than the global country average of 8.5 per cent of GDP. In comparison, the ten most peaceful countries' average economic cost amounts to 3.9 per cent of their GDP. These differences highlight the large economic benefits from maintaining higher levels of peace.

Since 2007, 85 countries have recorded decreases in their economic cost of violence compared to 78 that increased, highlighting that more countries have become less burdened by the economic impacts of violence over the longer term. For most countries that improved, there was significantly less expenditure on the military and internal security, as well as the reduced economic burden of homicides. Furthermore, the countries that deteriorated recorded an average deterioration of 3.9 percentage points of GDP, whereas the countries that improved, improved on average by 1.9 percentage points. This indicates that only a small number of countries had large improvements.

The difference was even greater for Positive Peace. The ten countries with the largest improvements in Positive Peace averaged 2.6 per cent higher GDP growth than the ten countries with the largest deteriorations. Additionally, if all countries improved peacefulness to the level of the top quartile of the GPI then the reduction in violence would accrue to $3.6 trillion in savings over the next decade.

Since 2007, the overall economic impact increased by $405 billion driven by increases in the military and internal security in some of the largest economies, including China and India. However, some other large economies reduced their military expenditure over the same period, including the United States and the United Kingdom.

In 2019, the economic impact of violence improved across four regions — MENA, South Asia, Asia-Pacific and Russia and Eurasia. MENA recorded the largest improvement from 2018 at 6.9 per cent, driven by the de-escalation of violent conflict in the region. The economic impact worsened in five regions in 2019, most notably, Central America and the Caribbean. The deterioration in Central America and the Caribbean was attributed to the rising homicide rate, which subsequently led to an 8.3 per cent increase in the region's economic impact. This was the only region to see an increase in its economic impact of homicide, other than South Asia and neighbouring South America.

The single largest component in the model was global military expenditure at $5.9 trillion PPP, representing 40.8 per cent of the total. Internal security spending was the second largest component, comprising over 34.3 per cent of the global economic impact of violence and totalling $4.9 trillion. Homicide is the third largest component in the model, at 7.4 per cent.

Violence not only has a direct impact on the economy, but it also reduces the positive benefits that peacefulness has on the macroeconomic performance of countries. Since 2000, countries that have improved in peacefulness have seen an average 1.4 percentage points higher GDP per capita growth when compared to countries that have become less peaceful as measured by the Global Peace Index (GPI). This differential is significant and represents a GDP per capita that is 30 per cent larger when compounded over a 20-year period. Furthermore, the average inflation and unemployment rate for the countries with the largest improvements on the GPI was substantially lower than those with the largest deteriorations.




Small improvements in peace can have substantial economic benefits. For example, a two per cent reduction in the global impact of violence is roughly equivalent to all overseas development aid in 2019. Whereas, a ten per cent reduction is equivalent to adding three new economies the size of Norway, Ireland and Belgium. Additionally, all Foreign Direct Investment in 2019 was also roughly equal to ten per cent of the economic impact of violence.

Democracies tend to fare better than authoritarian regimes with the average economic cost for democracies being four per cent of their GDP, while in authoritarian regimes it's 11 per cent. Additionally, since 2007, authoritarian regimes recorded the largest increase in their economic impact of violence, increasing by 27 per cent. Full democracies recorded the largest reduction at 15.9 per cent.

The economic model is broken down into three domains: (1) violence containment; (2) armed conflict-related costs; and (3) consequential costs of interpersonal and self-inflicted violence. 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 are economic losses that result from violence. For example, this may include the decreased productivity resulting from an injury, lost lifetime economic output of the victim of a murder, pain and trauma stemming from being a victim of violence and the yearly reduced economic growth resulting from a prolonged war or conflict. A 'multiplier effect' is also included to represent the lost opportunity cost of violence and is only applied to the direct costs. When peacefulness improves, money saved from containing violence can be redirected to more productive activities, yielding higher returns and increasing GDP.

Substantial economic improvements are linked to improvements in peace. Therefore, government policies should be directed to improving peacefulness, especially in a COVID-19 environment where economic activity has been subdued.




# THE ECONOMIC COST OF VIOLENCE

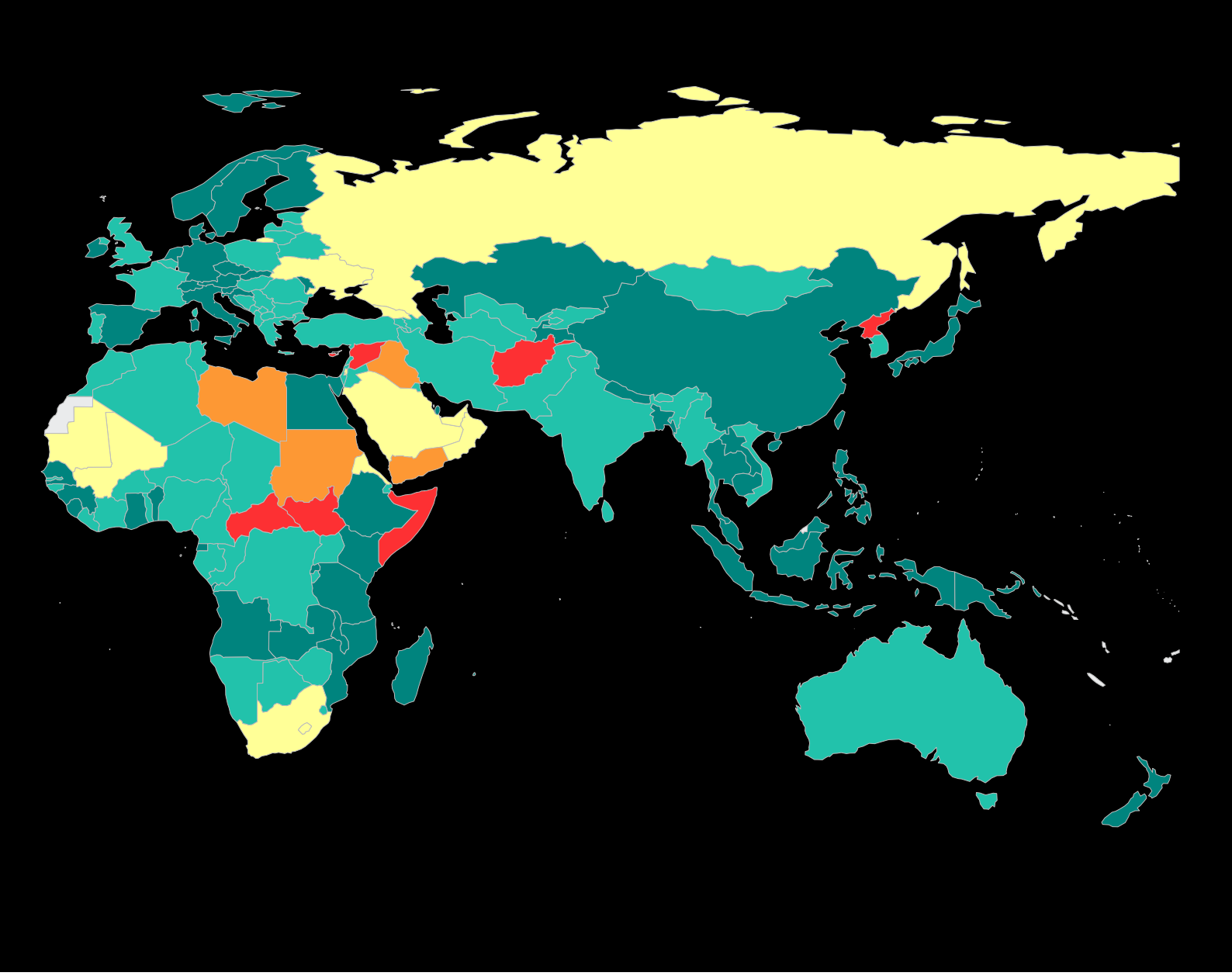
# Key Findings

## Section 1: Conceptual Background

- 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."
- Of the 1.4 million deaths globally due to violence, 89 per cent are due to interpersonal and self-inflicted violence. Furthermore, for every death, there are up to 40 times as many injuries that require medical attention, incur hospitalisation costs, and result in lost productivity from the victim.
- Globally, the consequences of violence amount to considerable direct and indirect costs that erode economic development, increase instability, increase inequality and erode human capital.

## Section 2: The Economic Impact of Violence

- The global economic impact of violence was $14.4 trillion PPP in 2019, equivalent to 10.5 per cent of global GDP or $1,895 per person.
- From 2007 to 2019, 85 countries decreased their economic cost of violence, whereas 78 increased.
- The global economic impact of violence improved for the second year in a row, decreasing by 0.4 per cent or $64 billion from 2018 to 2019. However, it is $1.2 trillion higher than in 2012.
- The improvement was largely due to the decrease in the impact of armed conflict, particularly in the Middle East and North Africa (MENA) region.
- In 2019, four regions improved — MENA, South Asia, Asia-Pacific and Russia and Eurasia. MENA recorded the largest improvement of 6.9 per cent, largely



driven by the reduction in the costs from armed conflict.

- In the ten countries with the highest economic cost of violence, the average cost was equivalent to 36.4 per cent of GDP. In the ten most peaceful countries, the average cost was 3.9 per cent of GDP.

## Section 3: Trends in the Economic Impact of Violence

- The economic impact of violence was $14.4 trillion in PPP. This is equivalent to 10.5 per cent of global GDP.
- A two per cent reduction in the impact of violence is roughly equivalent to all overseas development aid (ODA) in 2019 and a ten per cent reduction is the equivalent of adding three new economies the size of Norway, Ireland and Belgium.
- The economic impact of *Interpersonal and Self-inflicted Violence* amounted to $2.25 trillion in 2019. This is the equivalent to 1.6 per cent of global GDP.
- The economic impact of *Armed Conflict* on the global economy amounted to $519 billion in 2019.
- Since 2007, the *Armed Conflict* domain increased by 4.8 per cent and the *Violence Containment* domain increased by 4.5 per cent.
- *Interpersonal and Self-Inflicted Violence* was the only domain to record an improvement of 4.9 per cent since 2007.
- Since 2007, authoritarian regimes recorded the largest increase in their economic impact of violence increasing by 27 per cent. Full democracies recorded the largest reduction at 15.9 per cent.
- The economic impact of *Armed Conflict* in authoritarian regimes was approximately 50 per cent higher in 2019 than in 2007.

# Section 4: Economic Progress, Prosperity and Peace

- IEP research has shown that improvements in peace can lead to considerable economic improvement in GDP growth, inflation and employment.
- The average economic cost of violence was three times higher for the countries with the largest deteriorations in the GPI, equal to 22.1 per cent of their GDP, compared to 6.7 per cent for the countries with the largest improvements in 2019.
- Over the last 20 years, countries with the biggest improvements on the GPI had 1.4 per cent higher GDP growth per annum than the countries with the largest deteriorations.
- Over a 20-year period, this additional growth would compound to an additional 31 per cent of GDP.
- Countries deteriorating in Positive Peace recorded more volatile GDP growth than the index average.
- Over the last 20 years, the ten countries with the largest improvements in Positive Peace average 2.6 percentage points greater economic growth per capita annually than the ten countries with the largest deteriorations.
- If all countries improved their peacefulness to the average of the 40 most peaceful countries, the reduction in violence would accrue to $3.6 trillion in savings over the next decade.

# 1

# Conceptual Background

**Peace, or the lack thereof, has economic consequences across multiple categories. Not only does it have a social and political impact, but violence also imposes substantial economic costs on individuals, communities and nations. 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*."**

Of the 1.4 million deaths globally due to violence, 89 per cent are due to interpersonal and self-inflicted violence.[1] Furthermore, for every death, there are up to 40 times as many injuries that require medical attention, incur hospitalisation costs, and result in lost productivity from the victim. There are also potential costs to the perpetrator, such as incarceration. Globally, the consequences of violence amount to considerable direct and indirect costs that erode economic development, increase instability, increase inequality and erode human capital. The scope of this report does not include all types of violence, if it did, then the total impact would be considerably larger. The economic impact of violence is divided into three domains consisting of 18 indicators outlined in Box 3.1.

Interpersonal violence results in medical, policing and judicial costs immediately after the violent incident occurs, but it also has longer term implications for productivity and economic activity. Social unrest and collective violence destabilise governments and social institutions, as well as reduce business confidence.

Warfare destroys both private and public infrastructure. Not only are private property and businesses destroyed in war, but public assets such as electricity, water supply, telecommunications, schools and health facilities are affected as well. Beyond the human toll, war and terrorism, disrupt the economy resulting in adverse flow-on effects and losses of productivity for an extended period of time even after the war concludes.

For instance, the conflict in Syria has inflicted significant damage on the country's physical capital stock. Since the start of the civil war, seven per cent of the housing stock has been destroyed and 20 per cent has been partially damaged. From 2011 until the end of 2016, the cumulative losses in gross domestic product (GDP) have been estimated at US$226 billion, about four times the 2010 Syrian GDP.[2]

Moreover, the mere anticipation or expectation of future violence has deleterious economic impacts. Fear of falling victim to violence changes consumption and work-related decisions. It leads to increased transportation costs, reduced productivity and dampened consumption. Fear of victimisation can also lead to adverse mental health effects such as anxiety, anger and reduced mental wellbeing, all of which have productivity-related implications. In addition, the social cost of the fear of violence manifests itself in reduced trust in society and the erosion of social cohesion.

The impact of violence goes beyond the victim and perpetrator and has economic, social and psychological implications for the larger society. Society and governments spend to curtail violence, including expenditures such as public security, military spending, and programs that aim to reduce or prevent violence, such as judicial systems. These expenses impose large costs on the public system. As public finances are necessarily limited, increased public spending on violence needs to be funded by either increases in revenue through debt and higher taxes, or the reallocation of resources from other sectors. Given the political challenges associated with tax increases and financing through debt, the reallocation of resources is often more likely. The financing of violence containment through debt increases the economic impact of violence, both in the short term and long term, due to the interest on this debt.

Stiglitz and Blimes calculate that the cost of interest payments on borrowings to fund the war in Iraq will amount to US$400 billion over a period of 13 years for US taxpayers.[3] Such high levels of spending on violence containment may also lead to reductions in spending on high return activities such as education, business stimulation, health and public infrastructure. Funds allocated to violence containment could also be channelled into higher return activities within the economy that ensure long-term growth and prosperity.

Violence produces spill-over effects both within countries and across national borders. For example, population displacement has adverse impacts on the income, consumption, health and wellbeing of displaced people. Mass displacement also presents costs to the governments of origin, transition and destination countries and creates political ramifications for the refugee recipient countries.

# 2

# The Economic Impact of Violence

Across all countries, conflict, homicide, terrorism and other types of violence hinder human productivity and economic development. In addition to its human impact, violence imposes substantial economic costs on individuals, communities and nations. 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*."

In 2019, the economic impact of violence on the global economy amounted to $14.4 trillion in constant purchasing power parity (PPP) terms. This is equivalent to 10.5 per cent of the global GDP or $1,895 per person. The economic impact of violence improved for the second year in a row in 2019, decreasing by 0.4 per cent or $64 billion from the previous year.

The economic model comprises of 18 indicators, many containing multiple components, such as internal security expenditure, which consists of police services, law courts, prisons, and other national public safety expenditures.[1]

The total economic impact is broken down into three categories: direct costs, indirect costs, and a multiplier effect. The methodology at a glance at the end of this section provides a brief overview of the estimation approach to the economic impact of violence.

The direct costs associated with violence include the immediate consequences on the victims, perpetrators, and public systems including health, judicial and public safety. The indirect cost of

TABLE 2.1

**Composition of the global economic impact of violence, billions PPP, 2019**

Military expenditure accounts for the highest percentage of the economic impact of violence.

| INDICATOR | DIRECT COSTS | INDIRECT COSTS | THE MULTIPLIER EFFECT | TOTAL |
|---|---|---|---|---|
| Military expenditure | 2,942.3 | 0.0 | 2,942.3 | 5,884.6 |
| Internal security expenditure | 2,401.5 | 0.0 | 2,401.5 | 4,803.0 |
| Homicide | 91.7 | 877.6 | 91.7 | 1,061.0 |
| Suicide | 1.0 | 728.8 | 1.0 | 730.8 |
| Private security | 403.9 | 0.0 | 403.9 | 807.9 |
| Violent crime | 30.0 | 333.2 | 30.0 | 393.2 |
| Refugees and IDPs | 3.8 | 325.1 | 3.8 | 332.7 |
| GDP losses | 0.0 | 98.3 | 0.0 | 98.3 |
| Incarceration | 69.9 | 0.0 | 69.9 | 139.8 |
| Fear | 0.0 | 67.5 | 0.0 | 67.5 |
| Peacebuilding | 25.7 | 0.0 | 25.7 | 51.5 |
| Terrorism | 1.2 | 11.7 | 1.2 | 14.2 |
| Peacekeeping | 6.3 | 0.0 | 6.3 | 12.6 |
| Conflict deaths | 5.1 | 0.0 | 5.1 | 10.1 |
| Small arms | 4.6 | 0.0 | 4.6 | 9.2 |
| **Total** | **5,987.1** | **2,442.3** | **5,987.1** | **14,416.5** |

Source: IEP calculations

violence refers to longer-term costs such as lost productivity, 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, into more productive alternatives that would better improve the economy. For more details on the peace multiplier refer to Box B.1 on page 61. Table 2.1 presents a full breakdown of the costs included in the 2019 economic impact estimate.

In 2019, reductions in *Armed Conflict* underpinned the 0.4 per cent year-on-year decrease in the economic impact of violence. The fall in armed conflict in the MENA region resulted in positive flow-on effects not only for conflict deaths, but also for the costs associated with refugees and internally displaced persons (IDPs) and terrorism, all of which fell in 2019.

Figure 2.1 displays the breakdown of the total economic impact of violence by category. The single largest component was global military expenditure at $5.9 trillion, representing 40.8 per cent of the total. Globally, military expenditure increased by one per cent in 2019, the equivalent of $49.6 billion. However, this increase was primarily driven by increases from the United States, China, and India.

In 2019, more countries increased their military expenditure as a percentage of GDP, with 81 countries increasing, while 55 countries reduced spending. The increase in military expenditure was the largest increase in absolute terms of all the indicators.

Internal security expenditure was the second largest component, comprising of 34.3 per cent of the impact at $4.9 trillion. Internal security expenditure includes spending on the police and judicial systems, as well as the costs associated with incarceration. The data for internal security spending is obtained from the International Monetary Fund (IMF) government finance statistics database.[2] Expenditure on private security is the fourth largest category in the model and comprises 5.6 per cent of the total.

Homicide is the third largest component in the model, at 7.4 per cent. The economic impact of homicide decreased by 0.2 per cent in 2019 and was predominantly driven by improvements in many national homicide rates. Russia and the United States both had significant reductions, recording a $14.2 and $12.6 billion decline in their cost of homicide from 2018, respectively. However, the improvements in many of the countries were offset by the deterioration in Mexico's impact of homicide, which increased by $25.8 billion — the largest increase of any country.

The model also includes suicide, classified by the World Health Organisation as *self-inflicted violence resulting in death*. The economic impact of suicide amounted to $730.8 billion in 2019 and represented 5.1 per cent of the global total. The economic impact of suicide is higher than that of all of the armed conflict indicators combined.

The impact of *Armed Conflict* consists of five categories:

- internal and external conflict deaths
- GDP losses from conflict
- country contributions to peacebuilding and peacekeeping
- refugees and IDPs
- deaths and injuries from terrorism.

In 2019, the five categories of *Armed Conflict* listed above collectively decreased by 11.7 per cent or $68.6 billion from 2018. In absolute monetary terms, this was the largest decrease and was the result of all five categories improving from 2018. The impact of terrorism recorded the largest percentage improvement, falling by 52.8 per cent or $15.9 billion. Decreasing by $12.9 billion, Iraq had the largest decrease.

GDP losses from conflict and the economic impact of conflict deaths, decreased by 21.1 per cent and 38 per cent, respectively. The economic impact from refugees and IDPs also recorded a decline falling by 2.8 per cent from 2018, the equivalent of $9.4 billion.

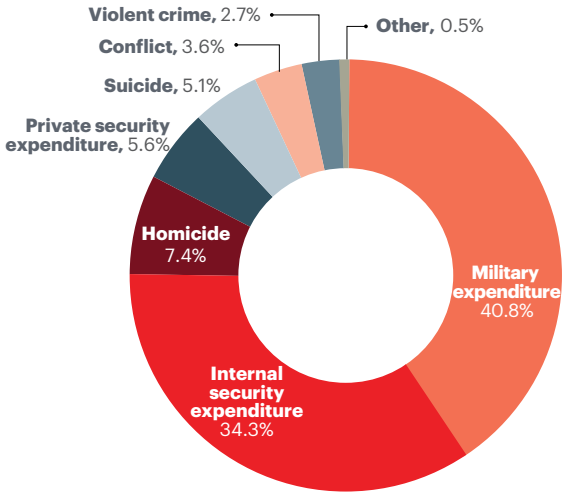
The economic impact of violent crime improved in 2019 marked by a 4.3 per cent decrease, the equivalent of $17.8 billion. Violent crime, consisting of violent assault and sexual assault, is 2.7 per cent of the total impact. India and Brazil had the largest increases in absolute monetary terms, whereas the UK, France and Germany had the largest decreases. Overall in 2019, 39 countries had a higher impact from violent crime while 123 countries improved.

The purchase of small arms and the economic impact from the fear of violence and insecurity are categorised as 'Other' in Figure 2.1. In 2019, these indicators accounted for only 0.5 per cent of the total.

FIGURE 2.1

## Breakdown of the global economic impact of violence, 2019

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




Source: IEP calculations

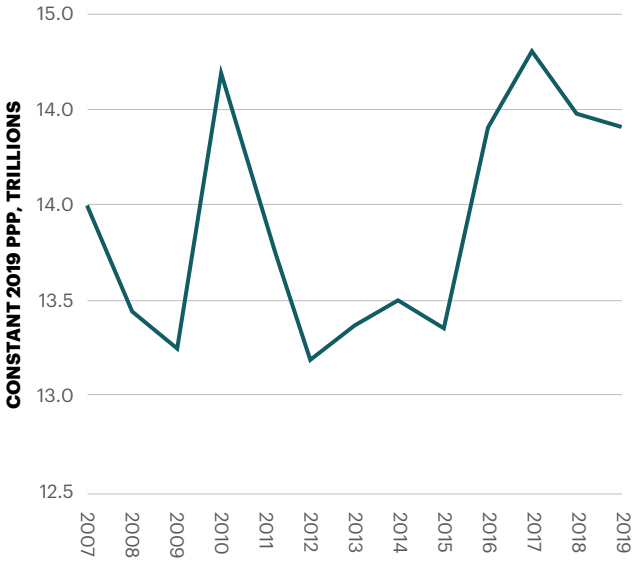
# Global Trends in the Economic Impact of Violence

Between 2012 and 2017, the economic impact of violence rose by 12.2 per cent and peaked at $14.8 trillion. This increase coincided with the start of the Syrian war and rising violence in Libya, Yemen and other parts of the MENA region. However, over the last two years, the economic impact has declined steadily, and in 2019, fell by 0.4 per cent. These decreases coincided with the defeat of Islamic State of Iraq and the Levant (ISIL) in Iraq and Syria, which has led to an improvement in the security situation in both countries over the past two years. Figure 2.2 illustrates the trend in the global economic impact of violence from 2007 to 2019. Table 2.3 presents the trend from 2015 to 2019 for each indicator. The trends in the indicators and domains are discussed in more detail in section three of this report. Table 2.2 presents the changes in the global economic impact between 2007 and 2019.

FIGURE 2.2

## Trend in the global economic impact of violence, 2007–2019

The de-escalation of conflicts, particularly in the MENA region, contributed to the 2.7 per cent decline in the global economic impact of violence from 2017.




Source: IEP calculations

TABLE 2.2

## Change in the economic impact of violence, billions PPP, 2007–2019

The economic impact of violence has decreased 405 billion since 2007.

| INDICATOR | 2007 | 2019 | CHANGE (BILLIONS) 2007-2019 | CHANGE (%) 2007-2019 |
|---|---|---|---|---|
| Military expenditure | 5,178.7 | 5,884.6 | 705.9 | 13.6% |
| Internal security expenditure | 4,783.3 | 4,803.0 | 19.7 | 0.4% |
| Homicide | 1,155.4 | 1,061.0 | -94.3 | -8.2% |
| Private security | 1,043.5 | 807.9 | -235.7 | -22.6% |
| Suicide | 657.9 | 730.8 | 72.9 | 11.1% |
| Violent crime | 487.9 | 393.2 | -94.7 | -19.4% |
| Refugees and IDPs | 206.2 | 332.7 | 126.6 | 61.4% |
| Incarceration | 127.5 | 139.8 | 12.4 | 9.7% |
| GDP losses | 182.3 | 98.3 | -84.0 | -46.1% |
| Fear | 67.5 | 67.5 | 0.1 | 0.1% |
| Peacebuilding | 62.7 | 51.5 | -11.2 | -17.9% |
| Terrorism | 23.0 | 14.2 | -8.8 | -38.2% |
| Peacekeeping | 9.7 | 12.6 | 2.9 | 30.1% |
| Conflict deaths | 11.7 | 10.1 | -1.5 | -13.2% |
| Small arms | 14.6 | 9.2 | -5.4 | -36.7% |
| **Total** | **14,011.6** | **14,416.5** | **404.9** | **2.9%** |

Source: IEP calculations

TABLE 2.3

## Change in the economic impact of violence, billions PPP, 2015–2019

The economic impact of terrorism decreased by 53 per cent over the last year.

| INDICATOR | 2015 | 2016 | 2017 | 2018 | 2019 | CHANGE (BILLIONS) 2018-2019 | CHANGE (%) 2018-2019 |
|---|---|---|---|---|---|---|---|
| Conflict deaths | 19.9 | 19.1 | 19.4 | 16.3 | 10.1 | -6.2 | -38% |
| Fear | 69.0 | 71.4 | 75.8 | 73.6 | 67.5 | -6.0 | -8% |
| GDP losses | 113.8 | 160.9 | 167.2 | 124.5 | 98.3 | -26.2 | -21% |
| Homicide | 945.8 | 1,030.7 | 1,120.2 | 1,063.0 | 1,061.0 | -1.9 | -0.2% |
| Incarceration | 128.9 | 136.4 | 141.8 | 148.8 | 139.8 | -8.9 | -6% |
| Internal security expenditure | 4,095.0 | 4,495.5 | 4,790.4 | 4,780.7 | 4,803.0 | 22.2 | 0.5% |
| Military expenditure | 5,700.4 | 6,003.5 | 5,914.2 | 5,835.0 | 5,884.6 | 49.6 | 1% |
| Peacebuilding | 46.5 | 45.9 | 46.6 | 49.4 | 51.5 | 2.1 | 4% |
| Peacekeeping | 19.2 | 18.1 | 26.8 | 25.6 | 12.6 | -13.0 | -51% |
| Private security | 768.9 | 869.0 | 881.4 | 829.8 | 807.9 | -21.9 | -3% |
| Refugees and IDPs | 400.5 | 411.7 | 395.2 | 342.1 | 332.7 | -9.4 | -3% |
| Small arms | 9.5 | 10.2 | 10.0 | 9.5 | 9.2 | -0.3 | -3% |
| Suicide | 640.3 | 701.0 | 748.5 | 741.2 | 730.8 | -10.4 | -1% |
| Terrorism | 48.7 | 46.3 | 58.6 | 30.1 | 14.2 | -15.9 | -53% |
| Violent crime | 358.9 | 391.0 | 415.6 | 411.0 | 393.2 | -17.8 | -4% |
| **Total** | **13,365.1** | **14,410.6** | **14,811.8** | **14,480.6** | **14,416.5** | **-64.1** | **-0.4%** |

Source: IEP calculations

# ECONOMIC IMPACT OF VIOLENCE BY COUNTRY AND REGION

The economic cost of violence for the ten most affected countries ranges from 23.5 to 59.1 per cent of their GDP. These countries have high levels of armed conflict, large numbers of IDPs, high levels of interpersonal violence or large militaries. Table 2.4 lists the ten most affected countries as a percentage of GDP.

Afghanistan and Syria rank as the least peaceful countries globally and suffer the highest economic cost of violence as measured against their GDP. High-intensity, conflict-affected countries, such as Syria, South Sudan, Afghanistan, Somalia and the Central African Republic, suffer higher costs from conflict deaths, terrorism and losses from refugees and IDPs. Similarly, Iraq and Sudan — countries affected by medium-intensity conflict — suffer similar conflict costs, in particular, losses from refugees and IDPs.

TABLE 2.4

**The ten countries with the highest economic cost of violence, percentage of GDP, 2019**

In Syria and Afghanistan, the economic cost of violence exceeded 50 per cent of GDP.

| COUNTRY | ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP | 2020 GPI RANK |
|---|---|---|
| Syria | 59.1% | 155 |
| Afghanistan | 50.3% | 163 |
| South Sudan | 46.3% | 161 |
| Central African Republic | 37.5% | 158 |
| Somalia | 35.3% | 156 |
| North Korea | 30.6% | 134 |
| Cyprus | 30.6% | 57 |
| Iraq | 26.3% | 162 |
| Venezuela | 24.1% | 160 |
| Sudan | 23.5% | 152 |

Source: IEP calculations

Venezuela is affected by high institutional and social fragility, and in terms of GDP, suffered one of the largest percentage costs from homicide globally, equivalent to ten per cent of its GDP. In addition, Venezuela incurred substantial losses from refugees and IDPs. In 2019, there were 3.6 million Venezuelans displaced abroad.[3]

The ten most peaceful countries incur a significantly lower cost from violence compared to the global average. The average economic cost of violence for the ten countries in Table 2.4 amounts to 36.4 per cent of GDP. In comparison, the average economic cost of the ten most peaceful countries amounts to 3.9 per cent of their GDP.[4] This is significantly smaller than the global country average of 8.5 per cent of GDP. Table 2.4 shows the economic cost of violence for the ten most peaceful countries as measured by the 2020 GPI.

TABLE 2.5

**The economic cost of violence in the ten most peaceful countries, percentage of GDP, 2019**

The average economic cost of violence in the ten most peaceful countries is nine times smaller compared to the most affected countries.

| COUNTRY | ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP | GPI Rank 2020 (1 = most peaceful) |
|---|---|---|
| Iceland | 2.8% | 1 |
| New Zealand | 5.0% | 2 |
| Portugal | 5.1% | 3 |
| Austria | 3.4% | 4 |
| Denmark | 3.4% | 5 |
| Canada | 3.2% | 6 |
| Singapore | 4.9% | 7 |
| Czech Republic | 4.4% | 8 |
| Japan | 3.4% | 9 |
| Switzerland | 3.5% | 10 |

Source: IEP calculations
Note: Most peaceful countries as ranked by the 2020 Global Peace Index

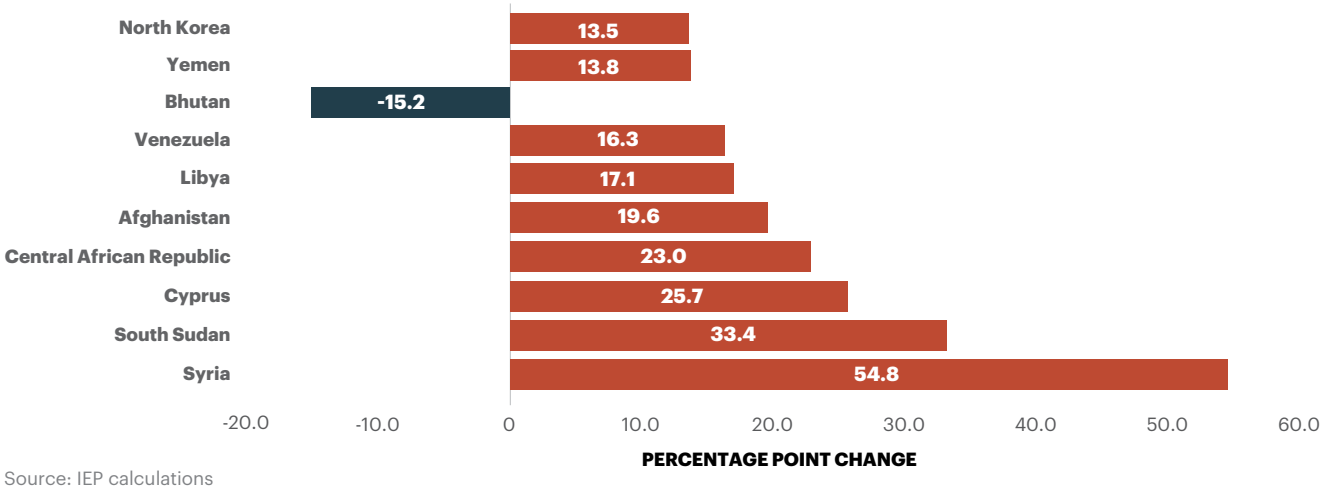
From 2007 to 2019, 78 countries increased their economic cost of violence, whereas 85 decreased. On average, the countries that had a deterioration recorded a deterioration of 3.9 percentage points. The countries that recorded an improvement, improved by 1.9 percentage points. This indicates that although more countries improved than deteriorated, the countries that increased, increased at a rate higher than those that improved. This is expected, due to the fragilities of maintaining peace, and that deteriorations in peacefulness, such as a war, can have long-lasting consequences that are still present years after the conflict has subsided.

**From 2007 to 2019, 85 countries decreased their economic cost of violence, whereas 78 increased.**

FIGURE 2.3

## The ten countries with the largest percentage point change in the economic cost of violence, 2007 to 2019

Syria had the largest increase in its economic cost of violence, increasing by 54.8 percentage points from 2007 to 2019.




Source: IEP calculations
Note: Measured as a percentage of GDP

Figure 2.3 displays the ten countries that have had the largest changes in their economic cost of violence from 2007. Since 2007, nine out of the ten countries with the largest change in their economic cost have recorded increases with the exception of Bhutan who improved. Syria recorded the largest percentage point increase. Conversely, Bhutan's economic cost of violence decreased by 15 percentage points from 23 per cent of GDP in 2007, to eight per cent in 2019, primarily driven by a reduction in the cost of Armed Conflict.

The economic impact of violence includes many indicators that are 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 IDPs, losses from conflict, suicide and internal security expenditure. Due to the difference in indicators, the regional economic impact of violence may not replicate the improvements or deteriorations in peacefulness as measured in the GPI.

Only two of the nine regions in the world improved in peacefulness in 2020 — North America and Russia and Eurasia. North America recorded improvements across all three domains, while Russia and Eurasia recorded improvements in the Ongoing Conflict and Safety and Security domains, but recorded a deterioration on the Militarisation domain. The North America region is comprised of only two countries, in which Canada improved, while the US deteriorated.

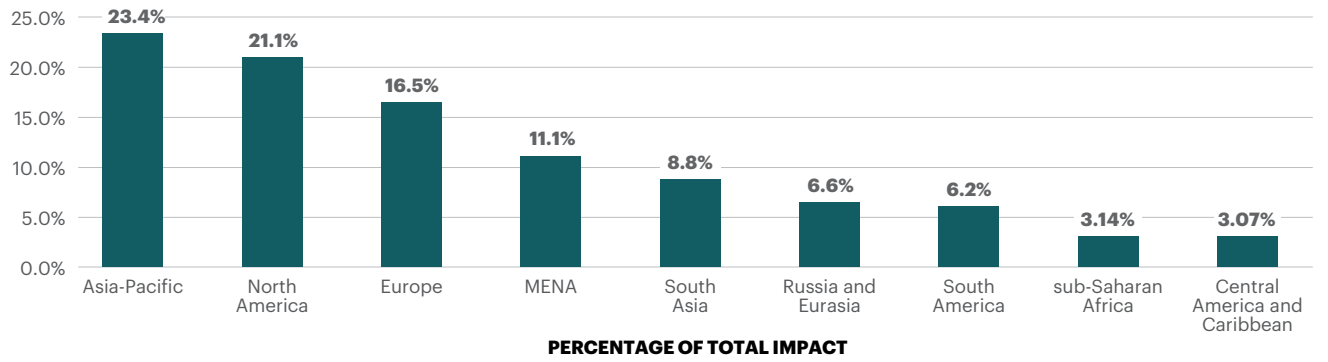
South America experienced the largest average deterioration in peacefulness and was the only region to record deteriorations across all three GPI domains: Safety and Security, Militarisation and Ongoing Conflict.

Similarly, the economic impact of violence varies in scale and composition among regions. Regionally, Asia-Pacific recorded the highest economic impact at $3.4 trillion, followed by North America and Europe at $3.0 and $2.4 trillion, respectively. These three regions have significantly high levels of expenditure on internal security and the military, which in 2019, made up roughly 80 per cent of each region's total. Figure 2.4 displays

FIGURE 2.4

## Percentage of the global economic impact by region, 2019

At 23.4 per cent, Asia-Pacific is the region with the highest percentage of the global economic impact.




Source: IEP calculations

each region's percentage impact of the global total in 2019.

In 2019, the economic impact of violence improved across four regions — MENA, South Asia, Asia-Pacific and Russia and Eurasia. MENA recorded the largest improvement from 2018 at 6.9 per cent, which was driven by a reduction in the costs from *Armed Conflict*. Figure 2.5 displays the total 2019 economic impact by region and the percentage change in the economic impact from 2018.

The economic impact deteriorated in five regions in 2019, most notably, Central America and the Caribbean. The deterioration in Central America and the Caribbean can be attributed to the rising homicide rate, which subsequently led to an 8.3 per cent increase in the region's economic impact.

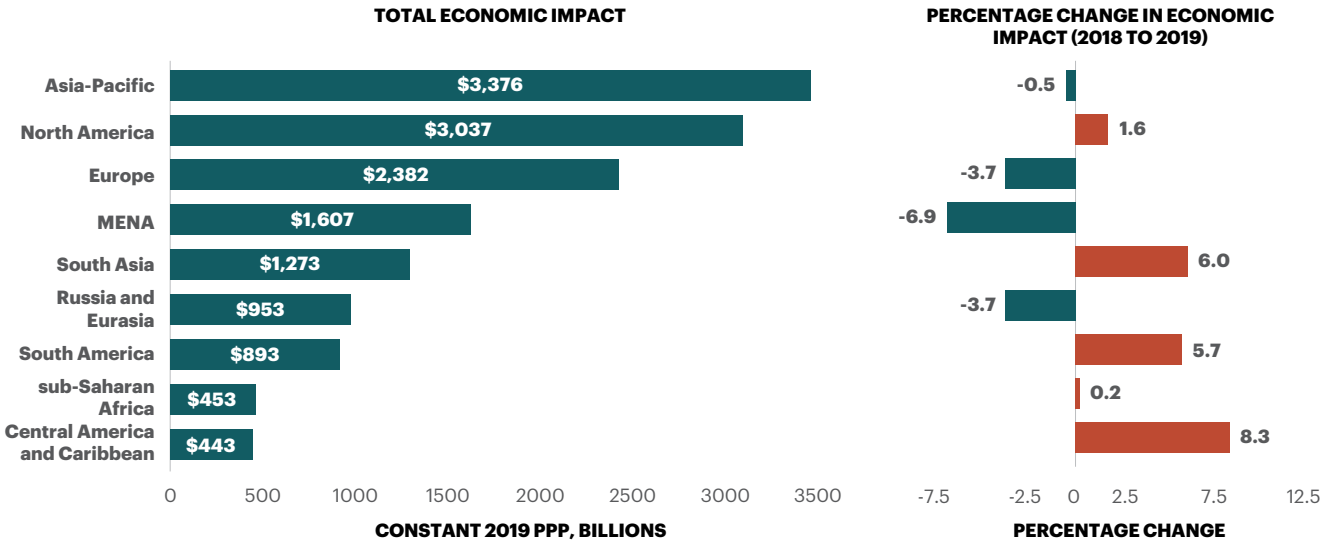
In 2019, five regions had a higher economic impact of violence compared to 2007. Over these 13 years, no region experienced an increase in its economic impact greater than Central America and the Caribbean, which rose by 45.7 per cent from 2007 levels. This was followed by Asia-Pacific, which recorded a 37.1 per cent increase from 2007.

Prior to 2016, North America was the region with the largest economic impact of violence. However, since 2016, Asia-Pacific has overtaken North America as the region with the highest economic impact primarily driven by the costs associated with conflict and terrorism. Figure 2.6 shows the trend in the economic impact of violence compared to the base year 2007.

FIGURE 2.5

## Total economic impact and percentage change by region, 2019

Five of the nine GPI regions suffered an increase in their economic impact of violence between 2018 and 2019.

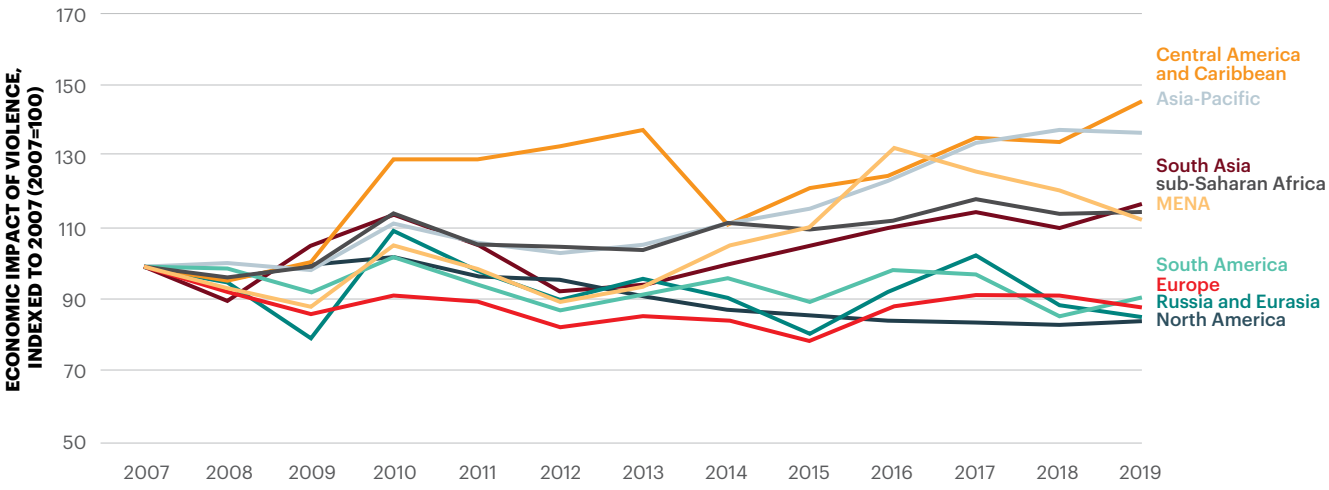



Source: IEP calculations

FIGURE 2.6

## The regional economic impact of violence indexed to 2007, 2007–2019

Between 2007 and 2019, Central America and the Caribbean recorded the largest increase in the economic impact of violence, followed by Asia-Pacific.




Source: IEP calculations

The composition of violence across the regions heavily differs. Some regions are predominantly affected by ongoing armed conflict such as MENA and sub-Saharan Africa. While other regions such as Central America and the Caribbean and South America suffer from higher levels of interpersonal violence. The greatest difference between regions is the impact of military expenditure. This represents 57.5 per cent of the economic impact in MENA, whereas in Central America and the Caribbean it accounts for just eight per cent of the region's total. This is followed by homicide which varied from 34.6 per cent in Central America and the Caribbean compared to the 2.2 per cent in Asia-Pacific. Table 2.5 displays the breakdown of the economic impact of violence by region.

TABLE 2.5

**Breakdown of the economic impact of violence by region, 2019, percentage of total regional impact**

On average, one-third of each region's economic impact of violence is military expenditure.

| INDICATOR | ASIA-PACIFIC | CENTRAL AMERICA AND CARIBBEAN | EUROPE | MENA | NORTH AMERICA | RUSSIA AND EURASIA | SOUTH AMERICA | SOUTH ASIA | SUB-SAHARAN AFRICA |
|---|---|---|---|---|---|---|---|---|---|
| Military expenditure | 42.6% | 8.0% | 34.3% | 57.5% | 44.2% | 40.5% | 23.5% | 50.9% | 18.2% |
| Internal security expenditure | 40.0% | 27.3% | 38.9% | 29.9% | 36.2% | 32.3% | 22.2% | 25.2% | 30.2% |
| Suicide | 6.5% | 2.0% | 5.8% | 1.0% | 5.1% | 7.2% | 2.3% | 6.9% | 3.5% |
| Private security expenditure | 5.6% | 9.9% | 9.4% | 1.0% | 3.3% | 7.8% | 6.8% | 6.1% | 4.6% |
| Homicide | 2.2% | 34.6% | 2.6% | 2.6% | 6.8% | 8.7% | 28.6% | 6.4% | 22.9% |
| Violent crime | 1.8% | 1.8% | 6.0% | 0.7% | 3.7% | 0.4% | 4.3% | 0.9% | 1.5% |
| Conflict | 0.8% | 15.5% | 2.3% | 7.0% | 0.2% | 2.8% | 11.3% | 3.1% | 18.2% |
| Other | 0.5% | 0.9% | 0.6% | 0.3% | 0.5% | 0.4% | 0.9% | 0.7% | 0.9% |
| **Total** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** | **100%** |

Source: IEP calculations

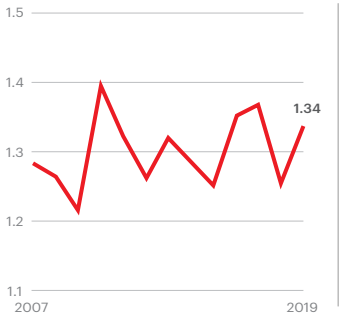
**In 2019, four regions improved — MENA, South Asia, Asia-Pacific and Russia and Eurasia. MENA recorded the largest improvement of 6.9 per cent, largely driven by the reduction in the costs from armed conflict.**

# Latin America and the Caribbean

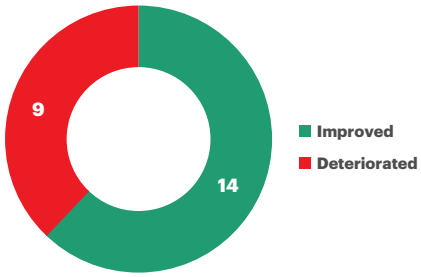
Economic Impact
**$1.34 Trillion**

**$2,073** Per Capita Impact
**9.0%** Average Country Cost, percentage of GDP

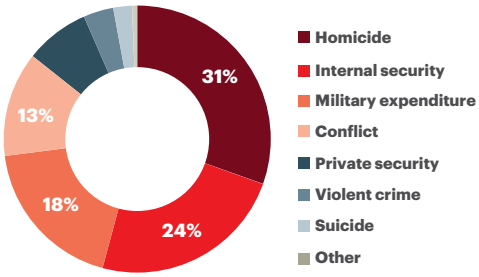
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

The South America region and the Central America and the Caribbean region illustrate similar trends and composition in the economic impact of violence. As such, they are discussed together in this section.

The 2020 GPI finds that Central America and the Caribbean is the fourth most peaceful region out of nine, while South America is now the fifth most peaceful region in the world. In the 2020 GPI, South America fell behind neighbouring Central America and the Caribbean for the first time since 2016. South America recorded the largest deterioration of any region on the 2020 GPI, with falls in peacefulness across all three GPI domains. Similarly, peacefulness in Central America and the Caribbean deteriorated in the 2020 GPI, with an increasing number of deaths from external conflict and deteriorating scores on the Political Terror scale.

The combined economic impact of violence of the two regions amounted to $1.34 trillion or nine per cent of the global total. The combined economic impact of the two regions has increased by 4.3 per cent since 2007, and 6.6 per cent from 2018. Consequently, the economic impact of violence equates to over $2,070 per person in the region.

The economic impact among countries in Latin America has changed substantially over the last decade. Mexico has increased significantly, up 69.3 per cent from 2007, followed by Honduras at 41.1 per cent. Mexico and Honduras have both recorded significant increases in *Armed Conflict*, military expenditure and homicides.

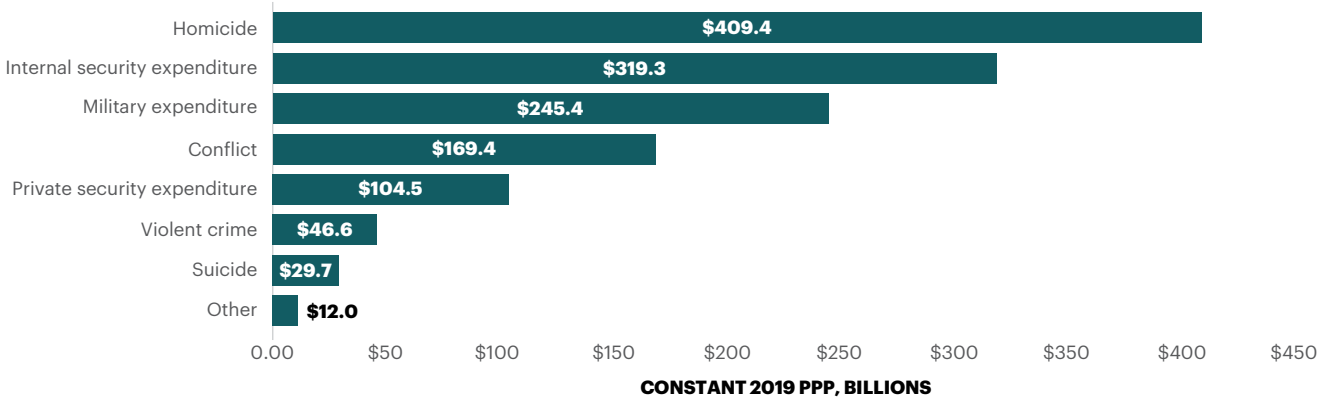
By contrast, Argentina and Haiti have had notable improvements in their economic impact, which have decreased by 40.6 and 39.3 per cent respectively since 2007. Decreases in homicides and internal security expenditure have driven Argentina's reduction, whereas decreases in *Armed Conflict* and internal and military expenditure have driven the improvement in Haiti.

Latin America and the Caribbean suffer from a higher level of interpersonal violence in the forms of violent crime and homicide rates relative to other regions. To put into perspective, almost one-third of the economic impact of violence in Latin America and the Caribbean is due to homicide — the highest among all regions. Figure 2.7 shows the composition of the impact of violence in Latin America and the Caribbean.

FIGURE 2.7

## Composition of the economic impact of violence in Latin America and the Caribbean, 2019

Homicide and violent crime account for one-third of Latin America and the Caribbean's economic impact in 2019.




Source: IEP calculations

The per capita impact of homicide and violent crime is equivalent to $708 per person in Latin America and the Caribbean.[5] The region is also home to eight of the ten countries with the highest economic cost of homicide as a percentage of GDP. Table 2.6 displays the ten most-affected countries in the region for homicide. This high level of violence in Latin America is largely due to organised crime activities, including drug trafficking organisations. Mexico's economic impact of homicide and violent crime has increased by 156 per cent since 2007, the largest increase in Latin America and the Caribbean. The homicide rate increased to 28.1 per 100,000 people, reaching the highest level since official records began in 1990.

The high homicide and violent crime rates also create fear of victimisation and lack of trust in the police among ordinary citizens. Among all regions, people in Latin America and the Caribbean were the least likely to feel secure in their communities as measured by the Law and Order Index where Latin America and the Caribbean ranks last.[6] Similarly, Latin America and the Caribbean ranked last in terms of public confidence in the police where only 44 per cent of adults have confidence in their local police compared to the global average of 68 per cent. Among the ten countries with the lowest confidence in their police force, five are located in Latin America and the Caribbean, including Venezuela and Mexico.

People in Latin America and the Caribbean are among the least likely to feel safe in their neighbourhoods globally. On average, more than half of the people in South America (56 per cent) and half in Central America and the Caribbean (50 per cent) report fearing violence, the highest rates in the world. Today, a greater percentage of the population fear violence than in 2006.[7]

TABLE 2.6

## The economic consequences of homicide in Latin America and the Caribbean, cost as a percentage of GDP and per capita impact PPP, 2019

Latin America is home to eight of the ten countries with the highest economic cost of homicide as a percentage of GDP.

| COUNTRY | PERCENTAGE OF GDP | PER CAPITA IMPACT |
|---|---|---|
| El Salvador | 11% | $989 |
| Jamaica | 10% | $1,000 |
| Venezuela | 10% | $256 |
| Honduras | 7% | $414 |
| Trinidad & Tobago | 5% | $1,769 |
| Brazil | 5% | $897 |
| Guatemala | 4% | $426 |
| Colombia | 4% | $691 |
| Mexico | 4% | $922 |
| Guyana | 3% | $252 |

Source: IEP calculations

# Middle East and North Africa

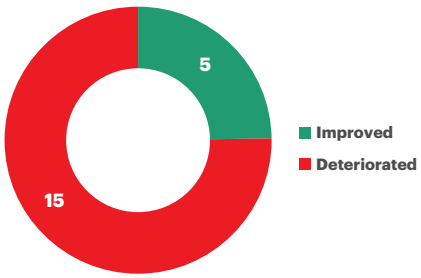
Economic Impact
**$1.61 Trillion**

**$3,269** Per Capita Impact
**13.7%** Average Country Cost, percentage of GDP

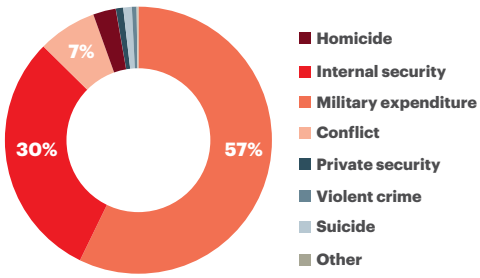
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

The Middle East and North Africa remains the world's least peaceful region as measured by the 2020 GPI. Of the ten least peaceful countries in the world, five are located in the this region. Only Qatar, Kuwait, and the United Arab Emirates (UAE) are ranked in the top 50 most peaceful countries.

The economic impact of violence in the region amounted to $1.6 trillion, the fourth highest globally. Increases in violence from the war in Iraq and the escalations of conflicts in Syria, Yemen and Libya led to the economic impact of violence increasing by 33 per cent between 2011 and 2016, where it peaked at $1.89 trillion. Despite some improvements in the last three years, the region's economic impact is 12.8 per cent higher than in 2007, the equivalent of $183 billion.

Of the 15 countries with the highest economic cost of violence as a percentage of GDP, six countries are located in MENA — Syria, Iraq, Sudan, Yemen, Libya and Palestine. Syria, the most affected country at 59 per cent of GDP compared to Qatar at 2.4 per cent have the greatest difference between any two countries within a region.

From 2007, 15 MENA countries have recorded an increase in their economic impact of violence, whereas five countries have decreased. Figure 2.8 shows the ten countries that recorded the largest change in their economic impact of violence since 2007. Not only in MENA, but also across all regions, Syria has had the greatest increase in its economic impact of violence. The escalation of conflict and the civil war has resulted in 400,000 deaths and 11 million displacements and consequently, Syria's economic impact of violence is 222 per cent higher in 2019 than in 2007. However, as the conflict and turmoil from the Syrian civil war has abated, Syria's economic impact has declined in the last four years. In 2019, Syria's economic impact of violence was $16.4 billion — a 50 per cent decrease from Syria's peak of $32.8 billion in 2015. Although the economic impact of violence has declined in recent years, Syria still remains the least peaceful country in the region and the country with the highest cost of violence as a percentage of GDP.

In 2019, the United Arab Emirates (UAE) and Libya recorded the second and third largest increase in their economic impact of violence since 2007.

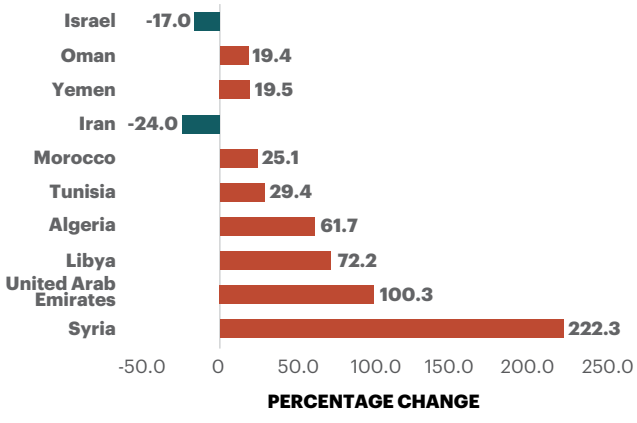
Libya experienced a sharp increase in violence following the fall of the Gaddafi regime, leading to the fragmentation of state institutions and the rise of local militias. Whereas the UAE heavily increased expenditure on the military and internal security leading to a doubling in its economic impact from 2007 levels. Iran, on the other hand, had the largest improvement in its economic impact, equivalent to a 24 per cent decline. Iran has significantly decreased its expenditure on internal security and the military since 2007.

MENA has the highest economic impact from *Armed Conflict* at 21.8 per cent of the global total, or $113.3 billion. Ongoing conflict, geopolitical tensions and widespread terrorism in the region have been the main drivers of the increasing cost of violence over the last decade. However, military expenditure and internal security still comprise the majority of the region's cost. In 2019, military expenditure and internal security consisted of 57.5 and 29.9 per cent of the region's economic impact, respectively. Terrorism and conflict still remain significant issues in the region and since 2007, 39 per cent of the fatalities from terrorism have occurred in MENA. Consequently, MENA has suffered the highest economic impact of terrorism globally since at least 2007.

FIGURE 2.8

## Largest percentage change in the economic impact of violence in MENA, 2007–2019

Five of the nine GPI regions has an increase in the economic impact of violence.




Source: IEP calculations

# South Asia

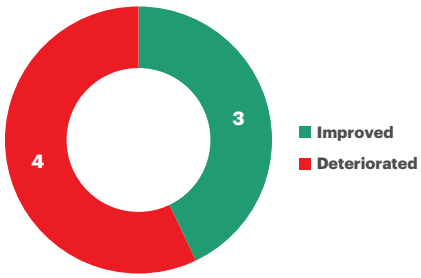
Economic Impact
**$1.27 Trillion**

**$704** Per Capita Impact
**12%** Average Country Cost, percentage of GDP

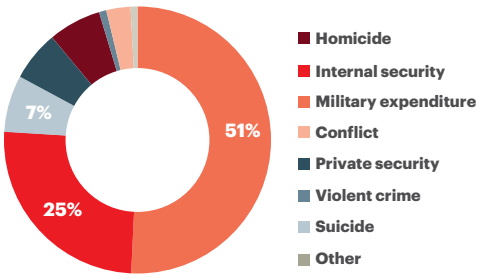
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

South Asia is the second least peaceful region after MENA and has one of the widest disparities between its most and least peaceful countries. In the 2020 GPI, South Asia deteriorated in peace owing to falls in peacefulness in Nepal, Sri Lanka, and Afghanistan. Afghanistan is once again the least peaceful country globally; a position it has held the last two years.

In 2019, the economic impact of violence rose six per cent to reach $1.27 trillion, the highest level ever recorded for the region. The economic impact of violence in South Asia has increased almost every year since 2013.[8]

Since 2007, four South Asian countries have recorded an increase in their economic impact of violence, whereas three countries have decreased. Equivalent to three-quarters of the region's total, the majority of South Asia's impact arises from expenditures on the military and internal security. Costs arising from conflict, such as conflict deaths and terrorism, population displacement and GDP losses, consist of 3.1 per cent of the region's impact of violence.

Within the region, Afghanistan has recorded the largest increase in its economic impact of violence since 2007, increasing by 124.4 per cent. Bangladesh follows Afghanistan at 58.4 per cent driven by an increase in refugees and IDPs. The increase in Afghanistan is driven by spending on both internal security and the military as the country builds its security forces with support from the international community. Since 2007, military expenditure in Afghanistan has increased six-fold and internal security expenditure has increased almost three-fold. Afghanistan has also experienced a constant increase in terrorism and battle deaths over the past decade as the security situation continues to deteriorate.

In contrast, Bhutan and Sri Lanka were the largest improvers in the region, recording a reduction of 23.6 and 38.7 per cent respectively in their economic impacts of violence. Figure 2.9 shows the changes in the economic impact of violence for South Asian countries since 2007.

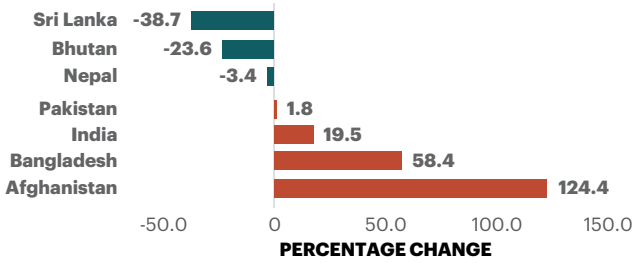
The economic impact of violence in South Asia is largely due to military and internal security expenditure and costs arising from *Armed Conflict* and terrorism. India accounts for 77.9 per cent of the region's total economic impact of violence, reflecting its size and role as a major power in the region. Therefore, regional changes in the economic impact of violence are generally dominated by changes in India's impact. The economic impact in India amounted to $991.2 billion in 2019, of which more than 75 per cent was military and internal security expenditure.

Table 2.7 displays the year-on-year change of South Asia countries from 2018 to 2019. Six countries recorded an increase in their economic impact of violence in 2019, whereas only one country improved — Sri Lanka.

FIGURE 2.9

### Largest percentage change in the economic impact of violence in South Asia, 2007–2019

Afghanistan recorded a 124 per cent increase in its economic impact since 2007.




Source: IEP calculations

TABLE 2.7

### Percentage change in the economic impact, South Asia, 2018–2019

In 2019, Sri Lanka was the only country to improve its economic impact in South Asia.

| COUNTRY | PERCENTAGE CHANGE (2018 TO 2019) |
|---|---|
| Afghanistan | 10.90% |
| Bangladesh | 4.30% |
| Bhutan | 6.80% |
| India | 7.00% |
| Nepal | 5.60% |
| Pakistan | 0.50% |
| Sri Lanka | -4.10% |

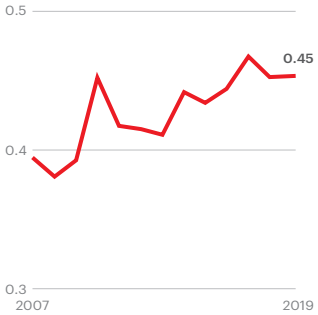
Source: IEP calculations

# Sub-Saharan Africa

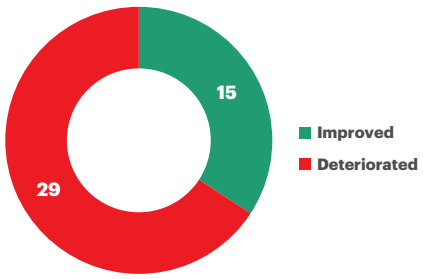
Economic Impact
**$453.1 Billion**

**$433** Per Capita Impact
**8.9%** Average Country Cost, percentage of GDP

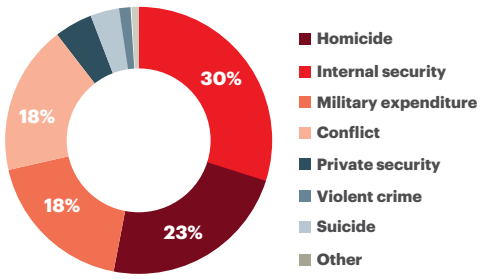
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

The economic impact of violence slightly increased in 2019 to total $453.1 billion, or $433 for each person in sub-Saharan Africa. This marks a 0.2 per cent increase from 2018 and a 14.7 per cent increase from 2007. Sub-Saharan Africa is ranked as the sixth most peaceful out of nine regions globally, as measured by the 2020 GPI. The region recorded a slight deterioration in peacefulness, with 15 countries in the region improving while 29 deteriorated.

The diverse nature of the region is reflected in a varying pattern in the impact of violence. Some countries are affected by higher levels of interpersonal violence, such as violent crime and homicide, while others suffer from the impact of *Armed Conflict*. As such, changes in the regional impact tend to mask individual country trends.

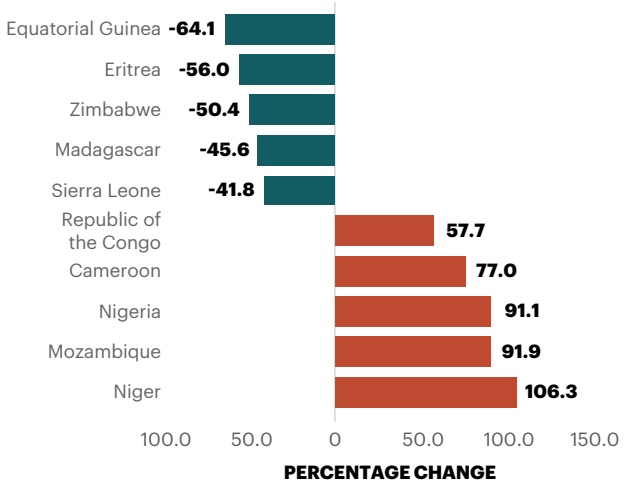
The impact of homicide, *Armed Conflict* and violent crime is 42.5 per cent of the region's total. At $82.7 billion, military expenditure accounts for 18.2 per cent of the region's total. Figure 2.10 shows changes in the economic impact from 2007 to 2019 for the ten countries that recorded the largest change in the region.

Within the region, the economic impact of *Armed Conflict* has increased by 155 per cent since 2007, the equivalent of $50 billion. Table 2.8 displays the change in indicators from 2007 levels. In 2019, Burkina Faso, Zimbabwe, Cameroon, Mali and the Central African Republic had the worst escalations in the region. Civil unrest occurred in Zimbabwe at the beginning of 2019 and 14 provinces in Burkina Faso are under a state of emergency due to a growing number of militant attacks, including those bordering Mali.[9] Promisingly, however, six-armed groups in the Central African Republic signed a peace agreement in April 2019, intending to put an end to more than six years of armed conflict in the country.

FIGURE 2.10

### Ten countries with largest change in sub-Saharan Africa region, 2007–2019

The economic impact of violence has more than doubled in Niger since 2007.




Source: IEP calculations

TABLE 2.8

### Change in the economic impact of violence in sub-Saharan Africa by indicator, billions PPP, 2007–2019

Sub-Saharan Africa's economic impact of armed conflict has more than doubled since 2007.

| INDICATOR | 2007 | 2019 | PERCENTAGE CHANGE (2007 TO 2019) |
|---|---|---|---|
| Internal security expenditure | 140.9 | 136.8 | -3.00% |
| Homicide | 93.8 | 103.6 | 10.40% |
| Military expenditure | 77.2 | 82.7 | 7.20% |
| Armed Conflict | 32.3 | 82.3 | 154.60% |
| Private security expenditure | 26.8 | 20.9 | -21.90% |
| Suicide | 12.7 | 16.1 | 26.20% |
| Violent crime | 8.3 | 6.6 | -20.50% |
| Other | 2.8 | 4.1 | 45.00% |

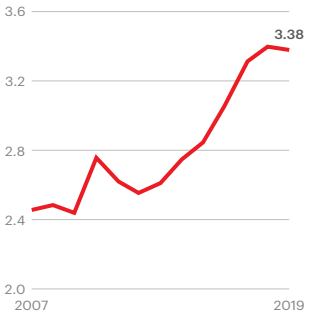
Source: IEP calculations
Note: Other includes small arms purchases and the economic impact of fear of violence

# Asia-Pacific

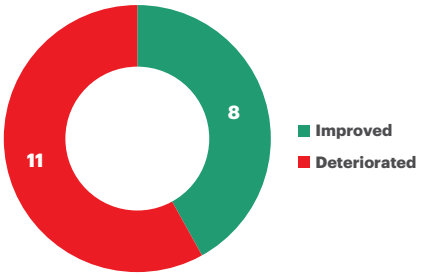
Economic Impact
**$3.38 Trillion**

**$1,443** Per Capita Impact
**5.8%** Average Country Cost, percentage of GDP

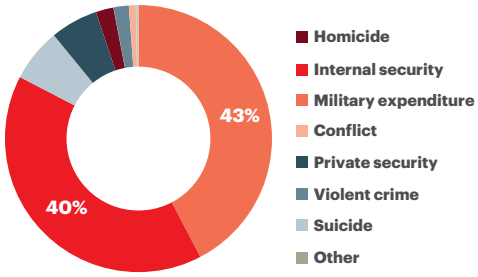
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

Asia-Pacific suffers from the largest economic impact of violence of all nine regions, amounting to $3.4 trillion in 2019. However, this figure decreased for the first time in seven years, falling by 0.5 per cent from 2018 to 2019. China accounts for 63 per cent of the regions total economic impact, followed by Japan at 9.7 per cent and South Korea at 5.6 per cent. Consequently, China and to a lesser extent, Japan and South Korea drive the region's economic impact.

Asia-Pacific is the third most peaceful region out of nine regions, behind Europe and North America. Furthermore, five countries in Asia-Pacific continue to rank in the top 25 of the GPI. New Zealand ranks first in the region and second overall in the 2020 GPI, despite a deterioration in its GPI score of 2.3 per cent. New Zealand suffered a significant deterioration because of the high profile terror attack on two mosques in Christchurch in March 2019, which resulted in 51 deaths.

In 2019, the majority of the region's impact was military and internal security expenditure at 83 per cent, followed by *Interpersonal and Self-Inflicted Violence* at 10 per cent. Although the region's military expenditure increased slightly, this was offset by a 52.3 per cent reduction in the economic impact of conflict which drove the region's improvement.

China's economic impact of military expenditure and internal security expenditure amounted to $1.8 trillion in 2019, an increase of two per cent from the previous year. This accounts for more than 50 per cent of the region's total economic impact of violence.

Myanmar and the Philippines recorded the largest improvements in the economic impact of violence in 2019, improving by 22 and 23 per cent, respectively. These improvements were driven by reductions in conflict costs in both countries. Despite the improvement in the Philippines, the country's economic impact of conflict increased from $1.6 billion in 2016 to $24.3 billion in 2018 before decreasing to $4.5 billion in 2019. The escalation in armed conflict costs from 2016 to 2018 followed the country's hard-line approach to its drug problem that has so far killed 12,000 people.[10] The Philippines also experienced a rise in terrorist violence, partly due to the emergence of ISIL-affiliated groups. In recent years, counterterrorism operations have been somewhat successful in reducing terrorist activity.[11] However, despite this reduction, the Philippines remains the only Southeast Asian country to be ranked in the ten countries most impacted by terrorism as measured in the Global Terrorism Index (GTI).

Cambodia's economic impact has increased by 98 per cent and Indonesia's has doubled from 2007 levels — the largest increases in the region. In both countries, these significant increases were driven by expenditures on the military and internal security, which increased by over 117 per cent in Cambodia and 155 per cent in Indonesia.

Figure 2.11 displays the economic cost of violence for countries in the Asia-Pacific, as a percentage of GDP. North Korea is the most affected country in the region with the economic cost of violence equal to 30.6 per cent of its GDP. North Korea has increasingly invested in its military and weapon development programs, doubling its military budget between 2007 and 2019.

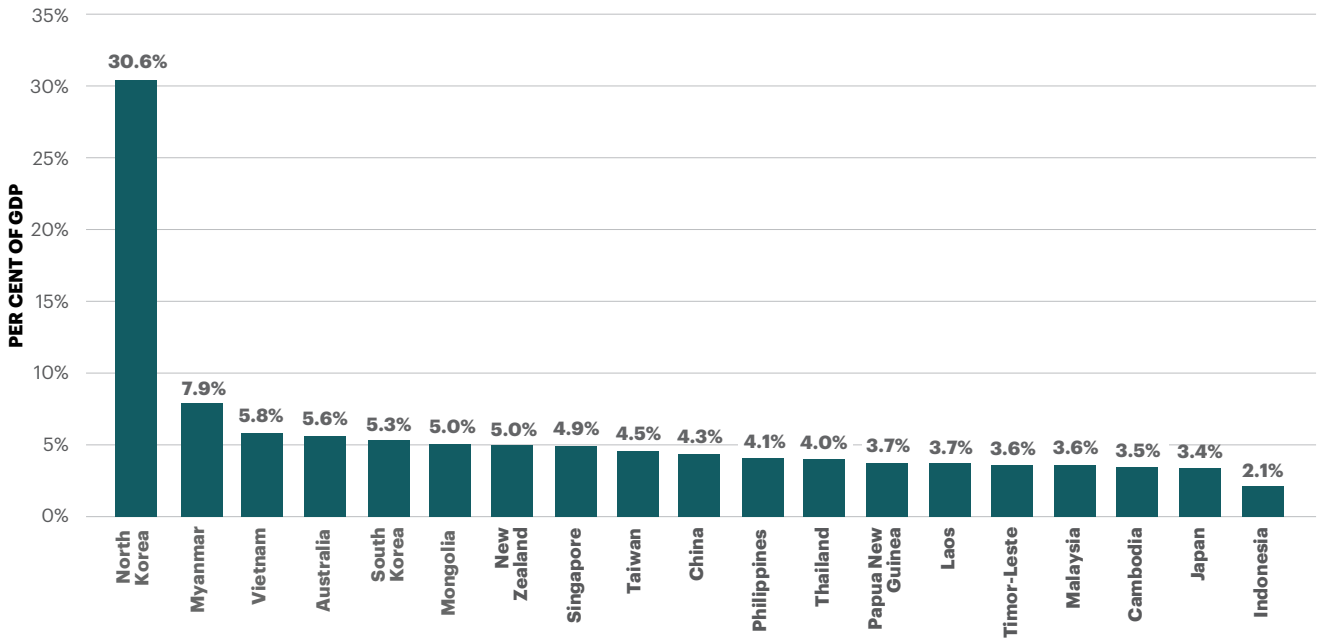
Conversely, Timor-Leste has reduced its economic burden from violence by 67 per cent since 2007 — the largest improver in the region. The country has reduced its military and internal security budgets as political and social stability returns in the aftermath of violence during the struggle for independence and post-independence chaos.

**Asia-Pacific suffers from the largest economic impact of violence of all nine regions, amounting to $3.4 trillion in 2019.**

FIGURE 2.11

## Economic cost of violence in the Asia-Pacific, 2019

The average country economic cost of violence in Asia-Pacific is 5.8 per cent of GDP.



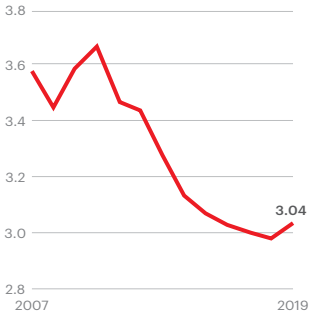

Source: IEP calculations

# North America

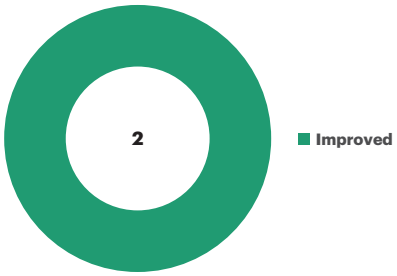
Economic Impact
**$3.04 Trillion**

**$8,349** Per Capita Impact
**5.5%** Average Country Cost, percentage of GDP

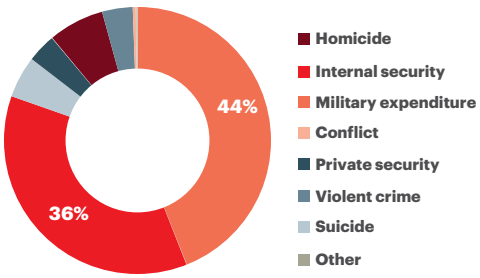
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

The North America region includes only two countries: Canada and the United States. The United States accounts for 97 per cent of the regional economic impact of violence, which amounted to $3.0 trillion in 2019. This the equivalent to $9,017.3 for each person in the US.

North America is the second most peaceful region globally despite registering a slight deterioration in its GPI score in 2020. In the same report, Canada is ranked sixth and United States 121st.

The economic impact of violence in the region increased by 1.6 per cent in 2019 from the previous year. This increase was driven by the United States, which recorded an overall increase of 1.7 per cent. Conversely, Canada's economic impact decreased by 1.4 per cent from 2018 to 2019. Overall, the region recorded an increase owing to a 2.9 per cent lift in the United States' military and internal security expenditure. Military and internal security expenditure accounts for 80.5 per cent of the region's total impact in 2019.

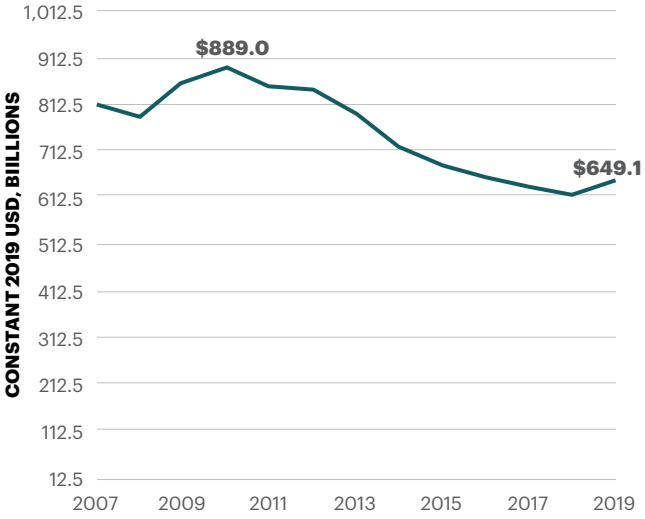
The economic impact of violence in Canada was $90.3 billion in 2019, which is a decrease of 6.7 per cent since 2007. This decrease was primarily driven by reductions in internal security expenditure and homicides.

Although US military expenditure has experienced a 20 per cent decline since 2007, it still remains the highest in the world. Figure 2.12 shows US military expenditure since 2007. In 2019, it was the largest element of the economic impact of violence in the region. In addition to recurrent yearly military expenditure, the United States also incurs sizable costs from the legacy of past conflicts. Two primary examples of this are the costs associated with the Department of Veterans Affairs and interest payments on military-related debt. When these expenditures are added to US military expenditure, military-related expenditure in the country reaches $649.1 billion for 2019.

The withdrawal of troops and winding back of involvement in Iraq and Afghanistan has led to a fall in the number of US conflict deaths over the past few years, although the US is still involved in some smaller overseas conflicts. The economic impact of deaths from conflict has decreased by 97.8 per cent since 2007.

FIGURE 2.12
**Trend in US military expenditure, 2007–2019**

Since 2007, the US has spent at least US$9.8 trillion on military expenditure and veterans affairs.




Source: SIPRI, IEP calculations

**Although US military expenditure has experienced a 20 per cent decline since 2007, it still remains the highest in the world.**

# Europe

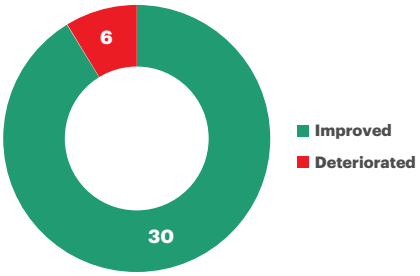
Economic Impact
**$2.38 Trillion**

**$3,813** Per Capita Impact
**6.2%** Average Country Cost, percentage of GDP

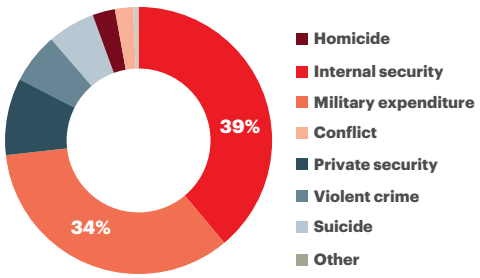
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

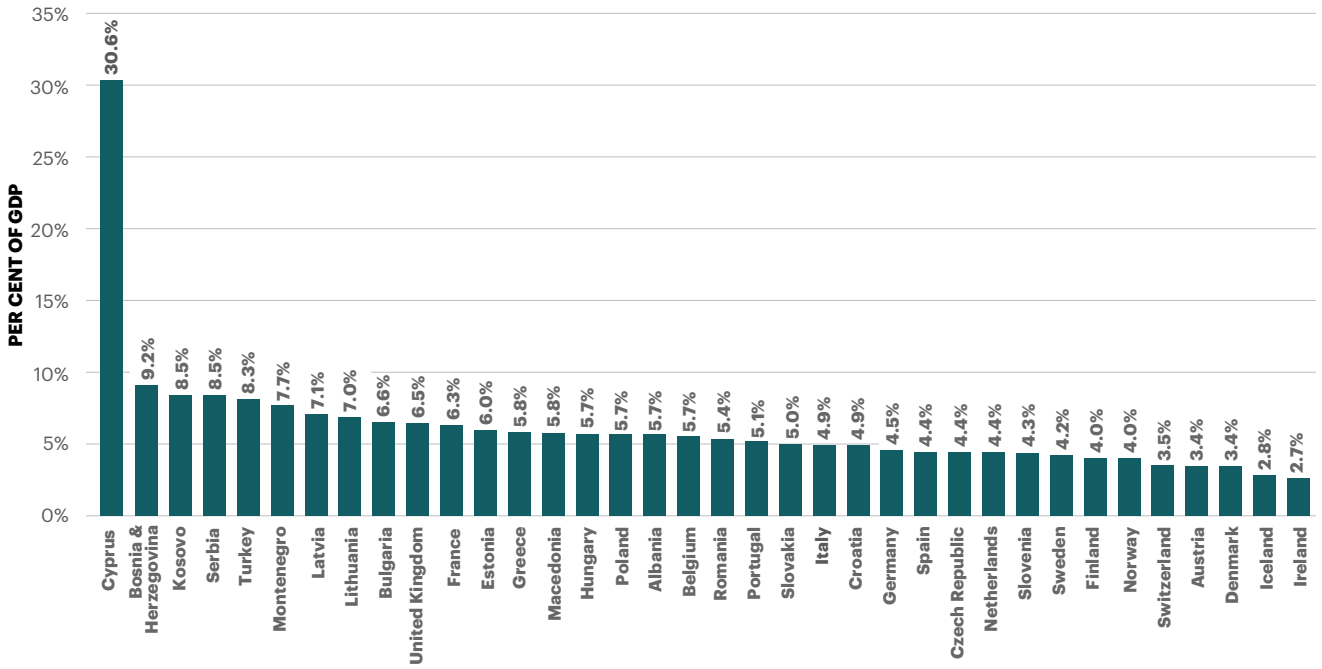
The economic impact of violence in Europe, the world's most peaceful region, amounted to $2.4 trillion in 2019, the third-highest level of impact after Asia-Pacific and North America. The largest proportion of the economic impact is related to spending on the military, internal security and private security, which consists of 82.6 per cent of the region's total impact. High levels of military, internal security and private security expenditure is a characteristic of the three most peaceful regions — Europe, North America and Asia-Pacific.

European countries account for 17 of the top 25 countries in the 2020 GPI, with Iceland ranked the most peaceful country globally. Turkey remains the least peaceful country in Europe and is the only European country to be ranked in the bottom 25 least peaceful countries. Turkey recorded a slight deterioration in peacefulness on the 2020 GPI, falling to 150th on the overall GPI rankings. Iceland and Ireland have the lowest economic cost of violence as a percentage of GDP, at 2.8 and 2.7 per cent respectively. Figure 2.13 displays the economic cost of violence in Europe in 2019.

FIGURE 2.13

## The economic cost of violence, 2019

Cyprus has the highest economic cost of violence as a percentage of GDP owing to a large number of the population being displaced.




Source: IEP calculations

The European economic impact of violence decreased by 3.7 per cent in 2019, the equivalent of $92.6 billion. This reduction is equivalent to $148 for each person in Europe.

Contrary to the four per cent regional rise in military expenditure in 2019, internal security expenditure decreased by $70 billion, the equivalent of 13.9 per cent. Macedonia decreased its internal security expenditure by 15.9 per cent — the most of any European country. At 9.7, 9.1 and 7.4 per cent respectively, the United Kingdom, France and Germany also had notable reductions in their internal security expenditure. In 2019, three European countries increased their military expenditure by more than 20 per cent: Latvia, Bosnia & Herzegovina and Bulgaria.

Since 2007, Cyprus, Turkey and Kosovo have recorded the largest increase in their economic impact of violence within the region. Cyprus has had the largest percentage increase with an almost two-fold increase. This increase has been driven by high numbers of refugees and IDPs, which accounts for 76.1 per cent of the country's total impact.

The economic impact of violence in Turkey has increased by 70.8 per cent or $127.6 billion since 2007. In 2019, Turkey increased year on year by 10.1 per cent — the largest change of any European country besides Macedonia — primarily driven by increases in securitisation expenditure. Since 2007, Turkey increased expenditure on securitisation by $42.5 billion, an increase of 66.6 per cent. However, Turkish involvement in the Syrian conflict, its campaign against Kurdish separatists at home and the terrorist attacks in the country have also contributed to its increasing impact of violence. Since 2007, Turkey's economic impact of *Armed Conflict* has increased five-fold. The refugee crisis in Europe, which has continued throughout 2019, had led to increasing tensions with Greece as Turkish authorities refused to stop refugees reaching the EU through its territories. Turkey recorded an almost four-fold increase in its incarceration rate, from 91 prisoners per 100,000 people in 2007, to 344 in 2019.

# Russia and Eurasia

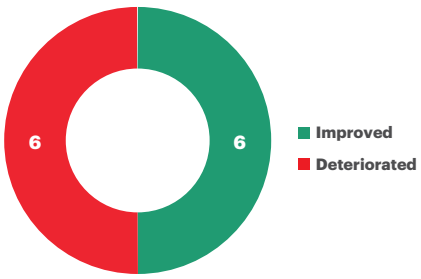
Economic Impact
**$952.8 Billion**

**$3,285** Per Capita Impact
**7.6%** Average Country Cost, percentage of GDP

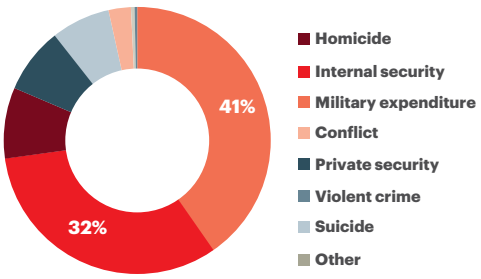
**Regional Economic Impact, PPP, Trillions**




**Change in Economic Impact, 2007–2019, Number of Countries**




**Composition of Regional Impact**




Source: IEP

Russia and Eurasia was one of only two regions to record an improvement in peacefulness in the 2020 GPI. Although Russia and Eurasia recorded an improvement, the region is still ranked seventh out of the nine regions, putting it among the three least peaceful globally. Russia and Eurasia have experienced improvements on both the Ongoing Conflict and Safety and Security domains, with notable improvements recorded on neighbouring countries relations, deaths from external conflict and the average homicide rate. As a result, the region's economic impact of violence decreased by 3.7 per cent or $37 billion from 2018. The region's economic impact totalled $952.8 billion in 2019. This is equivalent to $3,285 for each person living in Russia and Eurasia.

Military and internal security expenditure makes up the majority of the region's total impact at 73 per cent of the total. Combined, military and internal security expenditure are equal to $693.8 billion. The economic impact of self-inflicted violence has a significant toll in Russia and Eurasia at 7.2 per cent of the region's total impact. The economic impact of suicide as a percentage of its total is higher in Russia and Eurasia than in any other region.

Russia accounts for 74.4 per cent of the region's total economic impact of violence, reflecting its size and role as a major power in the region. Therefore, regional changes in the economic impact of violence are generally dominated by Russia. The economic impact in Russia amounted to 708.9 billion in 2019, of which more than 71 per cent is military and internal security expenditure.

Since 2007, at equal six countries have both improved and deteriorated. The largest increases occurred in countries where security expenditure increased most significantly since 2007. Uzbekistan's military expenditure increased more than six-fold from 2007 to 2019 —the largest increase within the region. Military expenditure also increased in Armenia by 98.5 per cent and in Turkmenistan by 59.4 per cent over the same period.

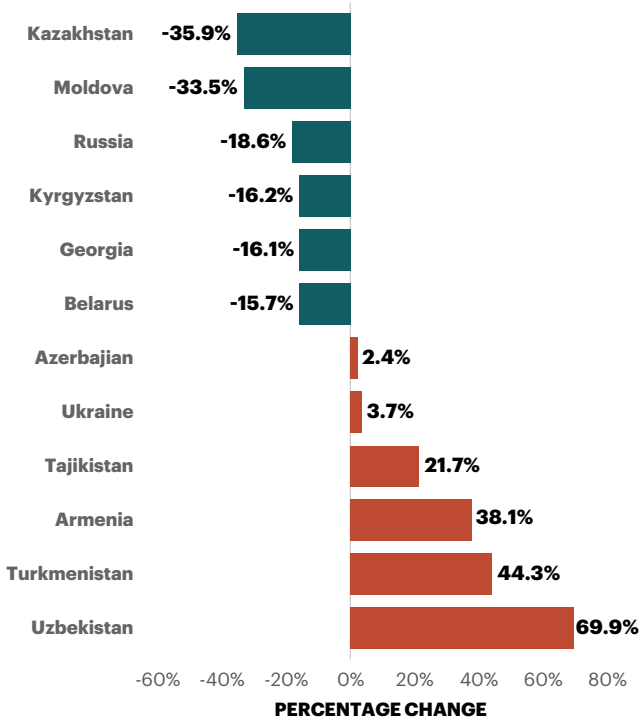
Consequently, the economic impact of violence increased in Uzbekistan, Armenia and Turkmenistan by 69.9, 38.1 and 44.3 per cent, respectively. These three countries recorded the largest increases among all the countries in the region. Figure 2.14 shows the change in the economic impact of violence in the region since 2007.

Kazakhstan and Moldova recorded the largest improvements in the region since 2007. Both countries had notable improvements in their national homicide rates, which is positively reflected in their economic impact of violence.

FIGURE 2.14

## Changes in the economic impact of violence by country, 2007–2019

Increases in military expenditure drove the deterioration in the economic impact of violence in the region.




Source: IEP calculations

# 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 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 are important for the most productive use of capital.

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

An important aspect of IEP's estimation is the international comparability of the country estimates, thereby allowing cost/benefit analysis of country interventions. The methodology uses constant purchasing power parity international dollars, which allows for the costs of various countries to be compared with one another.

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. The economic impact of violence includes 18 variables that are aggregated into three domains, as shown in Table 2.9.

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

- Domestic violence.
- Violence against children.
- The cost of crime to business.
- Flow on effects from terrorism, such as the losses from tourism and foreign investment.

The total economic impact of violence includes the following components:

1. **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.

2. **Indirect costs** accrue after the violent event and include indirect economic losses, physical and psychological trauma to the victim and lost productivity.

3. **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. Appendix B provides a detailed explanation of the peace multiplier used.

TABLE 2.9

## Variables included in the economic impact of violence, 2019

The methodology contains 18 variables across three domains.

| VIOLENCE CONTAINMENT | ARMED CONFLICT | INTERPERSONAL AND SELF-INFLICTED VIOLENCE |
|---|---|---|
| Military expenditure | Conflict deaths | Homicide |
| Internal security expenditure | Terrorism deaths and injuries | Violent assault |
| Security agency | Indirect costs of conflict (GDP losses due to conflict) | Sexual assault |
| Private security | Losses from status as refugees and IDPs | Fear of crime |
| Small arms imports | UN Peacekeeping | Suicide |
| Losses from incarceration | ODA peacebuilding expenditure | |
| | UNHCR expenditure | |

# 3

# Trends in the Economic Impact of Violence

## OVERVIEW OF THE ECONOMIC IMPACT OF VIOLENCE DOMAINS

In 2019, the economic impact of violence was $14.4 trillion in constant PPP. The equivalent of 10.5 per cent of the global GDP. In absolute terms, the economic impact of violence has increased by $405 billion since 2007. This represents an increase of 2.9 per cent. This increase is approximately 1.5 times larger than the total overseas development assistance and official aid received in 2018.[1]

The trend in the impact over time is shown in Figure 3.1. The model contains 18 indicators, divided into three domains, which are displayed in Box 3.1. These three domains are:

1. *Interpersonal and Self-Inflicted Violence*
2. *Armed Conflict*
3. *Violence Containment.*

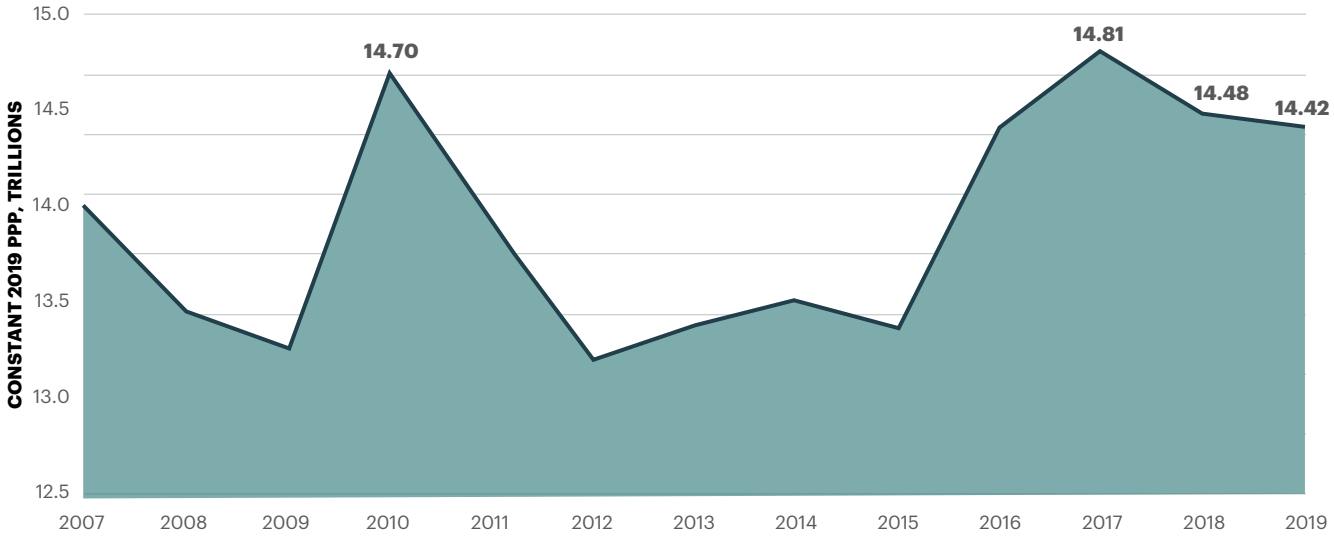
Figure 3.2 shows the trends in the three domains indexed to 2007. This illustrates that the increase in the economic impact since 2007 has been driven by two domains: *Armed Conflict* and *Violence Containment*, which increased by 4.8 per cent and 4.5 per cent, respectively. Conversely, *Interpersonal and Self-Inflicted Violence* decreased by 4.9 per cent over the period.

Of the three domains, *Armed Conflict* has been the most volatile and has recorded peaks in 2010 and 2016. At both times, the economic impact of *Armed Conflict* was more than 37 per cent higher than 2007 levels.

FIGURE 3.1

### Trend in the global economic impact of violence, 2007–2019

Conflict has greatly contributed to fluctuations in the model, peaking in 2017 during the height of Islamic State's impact.




Source: IEP calculations

BOX 3.1

## Economic cost of violence model: domains and indicators

The economic cost of violence model includes three domains, consisting of 18 indicators. These three domains are *Violence Containment*, *Armed Conflict*, and *Interpersonal and Self-Inflicted Violence*.

In this report the following indicators are contained in each domain:

| VIOLENCE CONTAINMENT | ARMED CONFLICT | INTERPERSONAL AND SELF INFLICTED VIOLENCE |
|---|---|---|
| Military expenditure | Conflict deaths | Homicide |
| Internal security expenditure | Terrorism deaths and injuries | Violent assault |
| Security agency | Indirect costs of conflict (GDP losses due to conflict) | Sexual assault |
| Private security | Losses from status as refugees and IDPs | Fear of crime |
| Small arms imports | UN Peacekeeping | Suicide |
| Incarceration Costs | ODA peacebuilding expenditure | |
| | UNHCR expenditure | |

Figure 3.3 shows the trend for each of the economic impact of violence across the four government types. While full democracies recorded a decrease in the economic impact of violence, the remaining four government types recorded increases since 2007. Driven by instability and conflict onset over the period, authoritarian regimes had the largest increase in their economic impact of violence, increasing by 27 per cent. Since 2007, the impact of *Armed Conflict* is approximately 50 per cent higher in Authoritarian Regimes.

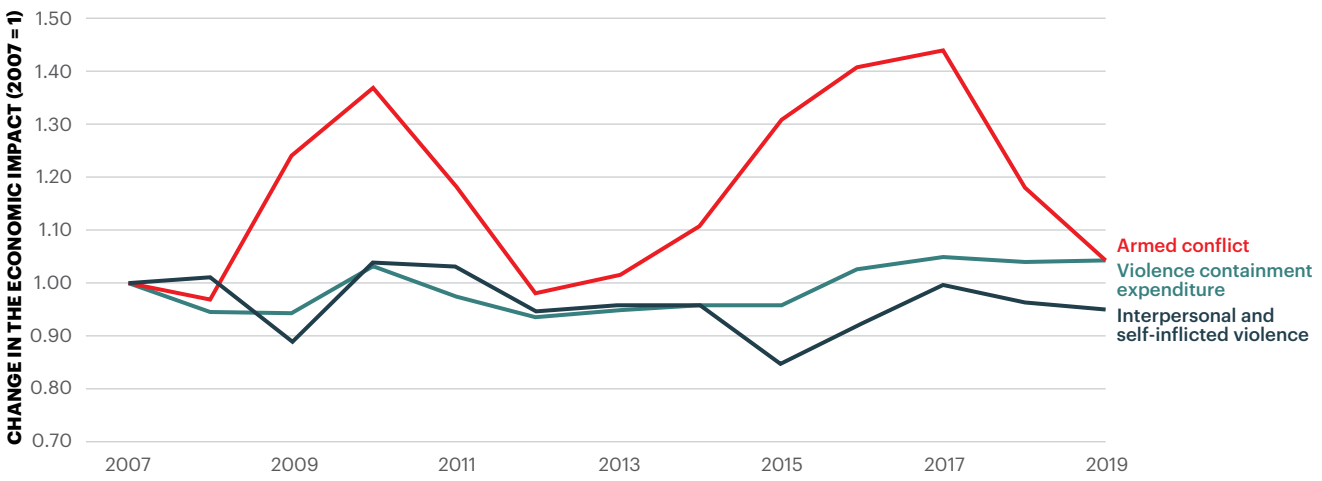
Conversely, full democracies recorded the largest improvement and now have an economic impact of violence that is 15.9 per cent lower than 2007 levels. This is largely driven by the reductions in expenditures on the military and private and internal security.

Figure 3.4 shows the percentage change in score for each indicator in IEP's economic impact of violence model from 2007 to 2019. Of the 15 indicators, seven deteriorated and eight improved. The impact of terrorism, small arms, private security expenditure and GDP losses from conflict all recorded significant improvements, which were all greater than 20 per cent. Refugees and IDPs recorded the largest deterioration of all the indicators at 61.4 per cent, as the total number of forcibly displaced people worldwide has increased from just under 42 million people in 2007 to over 79 million in 2019.

FIGURE 3.2

## Indexed trend in the economic impact by domain, 2007–2019

Interpersonal and Self-Inflicted Violence was the only domain to record an improvement since 2007.

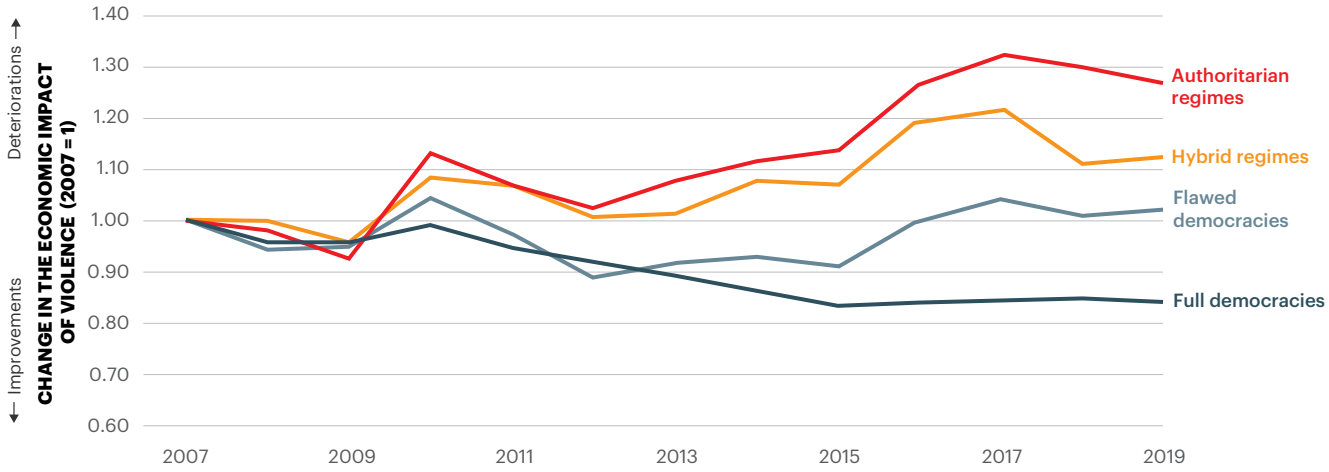



Source: IEP calculations

FIGURE 3.3

## Indexed trend in the economic impact of violence by government type, 2007–2019

Authoritarian regimes displayed the largest increase in the economic impact of violence.

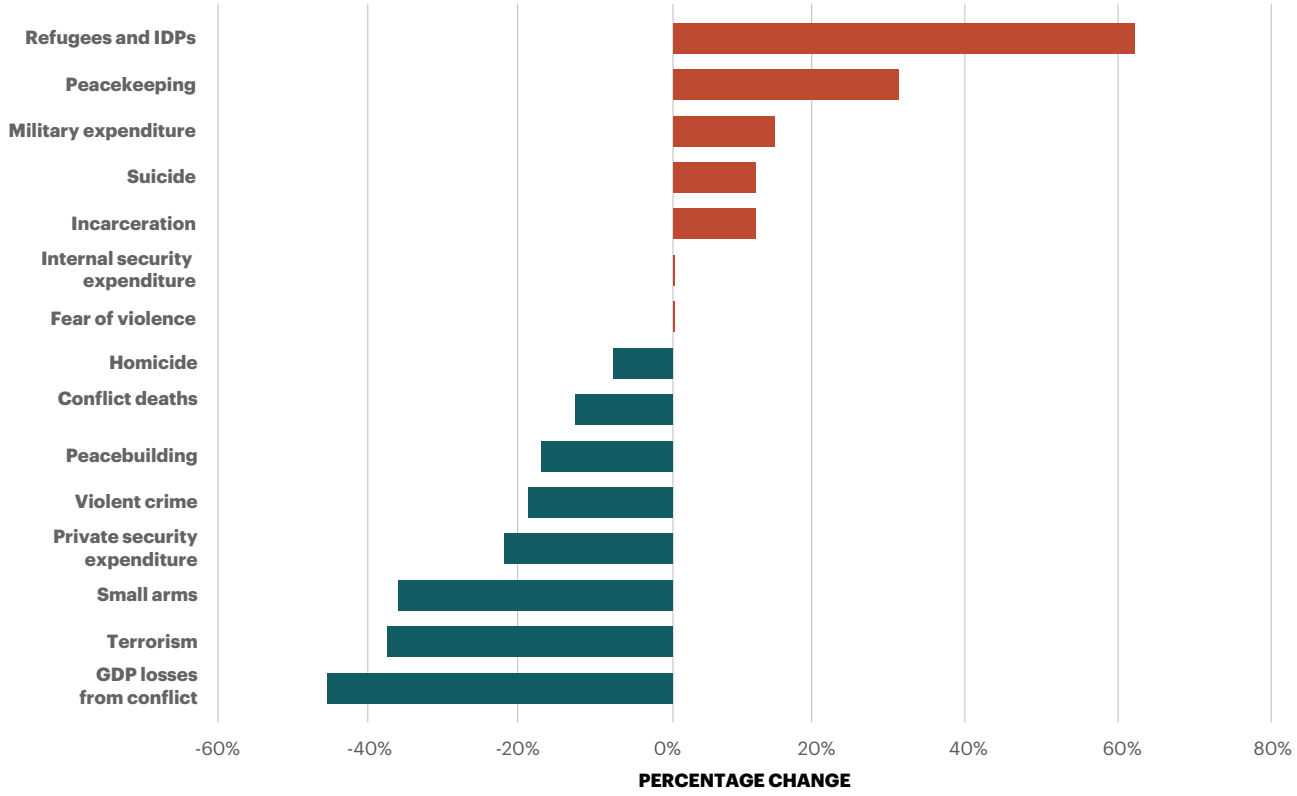



Source: IEP calculations

FIGURE 3.4

## Percentage change by indicator, 2007–2019

Since 2007, seven indicators have deteriorated, while eight have improved.



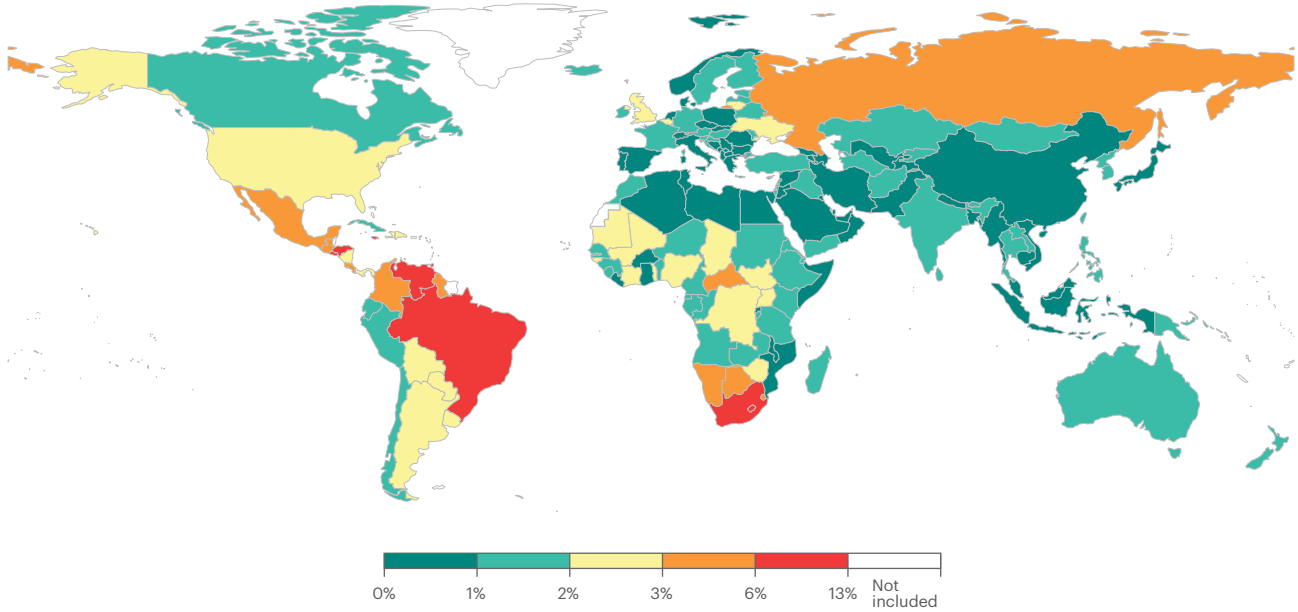

Source: IEP calculations

# GLOBAL TRENDS BY DOMAIN

FIGURE 3.5

## The economic cost of Interpersonal & Self-Inflicted Violence, percentage of GDP, 2019

On average, countries in Central America and the Caribbean and South America have the highest economic cost due to the high level of homicides and violent crime.




Source: IEP calculations

The economic impact of *Interpersonal and Self-Inflicted Violence* is the aggregate of homicide, violent and sexual assault, suicide and fear of violence. Figure 3.5 displays the global breakdown of the domain.

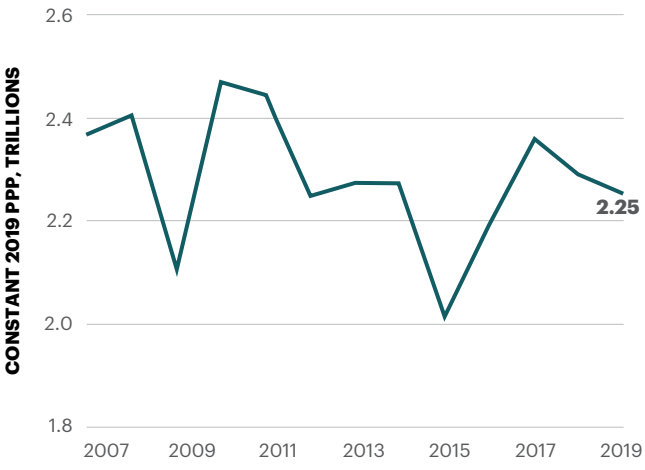
In 2019, the economic impact of *Interpersonal Violence and Self-inflicted Violence* on the global economy amounted to $2.25 trillion. This is equivalent to 1.6 per cent of global GDP, or $296 per person. Compared to the previous year, it improved by 1.6 per cent or $36.2 billion. Figure 3.6 displays the trend in the economic impact of *Interpersonal Violence and Self-inflicted Violence.*

Homicide accounts for approximately 47 per cent of the economic impact of the domain, followed by suicide at 32 per cent and assault at 12 per cent. Figure 3.7 provides a detailed breakdown of the economic impact of the domain.

FIGURE 3.6

## Trend in the global economic impact of Interpersonal & Self Inflicted Violence, 2007–2019

The economic impact of Interpersonal Violence and Self-inflicted Violence in 2019 improved by 4.9 per cent from 2007.

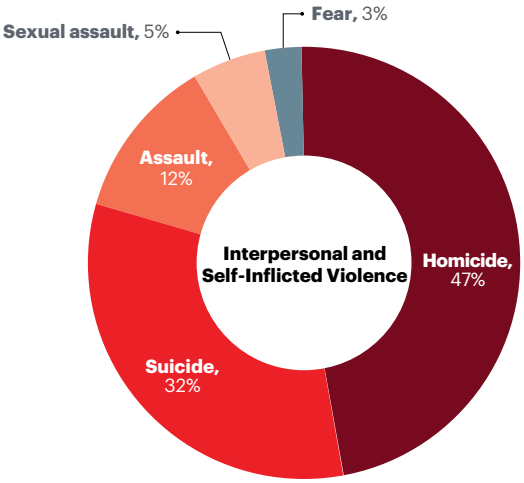



Source: IEP calculations

FIGURE 3.7

## Composition of the economic impact of Interpersonal Violence & Self-Inflicted Violence, 2019

Homicide comprises almost half of the global economic impact of Interpersonal Violence and Self-inflicted Violence.




Source: IEP calculations

In 2019, El Salvador had the highest economic cost from *Interpersonal Violence and Self-inflicted Violence* at 11.6 per cent of its GDP. This was followed by Jamaica at 10.3 and Venezuela at 10.1 per cent of GDP. El Salvador has had the highest cost between 2016 and 2019.

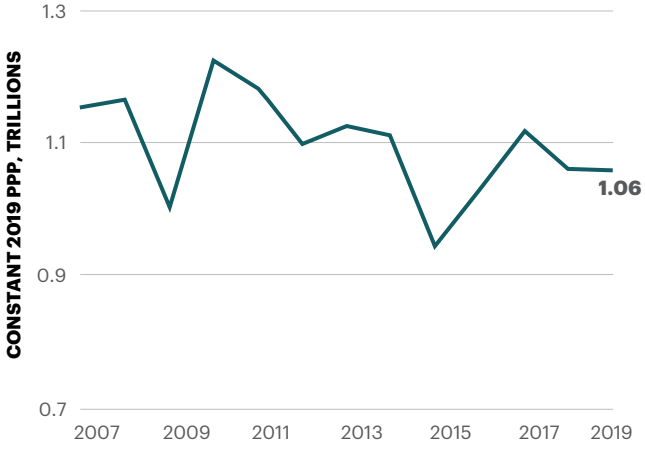
### Homicide

At 7.4 per cent, homicide is the third largest component of the global economic impact of violence with only military expenditure and the expenses associated with security being higher. Since 2007, the annual economic impact of homicide has, on average, been equivalent to $1.1 trillion globally. In 2019, the economic impact of homicide in 2019 was slightly below the 13-year average, at $1.06 trillion. Globally, the economic impact of homicide has declined over the last two years and is 0.2 per cent lower in 2019 compared to the previous year. Figure 3.8 displays the trend in the economic impact of homicide.

FIGURE 3.8

## Trend in the global economic impact of homicide, 2007–2019

The global economic impact of homicide peaked in 2010 at $1.23 trillion.




Source: IEP calculations

The economic impact associated with homicide is greater than the combined totals of both violent crime and *Armed Conflict*. Regionally, South America, Central America and the Caribbean and sub-Saharan Africa are the most affected. Eight out of the ten countries suffering the highest economic impact from homicide are located in South America and Central America and the Caribbean, and the other two are in sub-Saharan Africa. Table 3.1 displays these ten countries.

All ten countries in Table 3.1 have an economic cost of homicide greater than four per cent of GDP. This highlights the significant burden that high levels of interpersonal violence, in particular homicide, have on the economic wellbeing of these countries, with this trend primarily driven by high levels of organised crime.

TABLE 3.1

## Ten countries with the highest economic cost from homicide, percentage of GDP, 2019

Eight of the ten most affected countries from homicide in terms of GDP are located in Central America and the Caribbean and South America.

| COUNTRY | ECONOMIC COST OF HOMICIDE % OF GDP | GPI RANK | HOMICIDE RATE PER 100,000 PEOPLE |
|---|---|---|---|
| El Salvador | 10.5 | 113 | 61.8 |
| Jamaica | 9.7 | 80 | 57 |
| Venezuela | 9.6 | 149 | 56.3 |
| Honduras | 7.1 | 119 | 41.7 |
| Lesotho | 7.0 | 98 | 41.2 |
| South Africa | 6.1 | 123 | 35.9 |
| Trinidad and Tobago | 5.3 | 88 | 30.9 |
| Brazil | 5.2 | 126 | 30.5 |
| Guatemala | 4.4 | 115 | 26.1 |
| Colombia | 4.2 | 140 | 24.9 |

Source: IEP calculations

In the last decade, the homicide rate has fallen steadily in many countries with 118 countries having a lower homicide rate now than in 2010 and only 41 countries recording a higher homicide rate than in 2010. Guatemala had the largest improvement, improving from 42.2 homicides per 100,000 to 26.1. Despite this significant improvement, Guatemala still had the ninth highest homicide rate globally in 2019.

With over 35,000 homicides last year, Mexico's homicide rate has more than tripled from 7.9 homicides per 100,000 people in 1990 to 24.8 in 2019. This marks the largest increase of any country and Mexico's highest level of violence since official records began. Nationally, gun violence accounted for 69.3 per cent of Mexico's homicides in 2019. Over the last five years, homicides have risen dramatically, increasing by 86 per cent since 2015 and homicide is now the leading cause of death for 15 to 44-year-olds, and the fourth most common for children five to 14.

Table 3.2 displays the ten countries with the highest economic impact of homicide in 2019 in absolute monetary terms. The United States, Brazil and Mexico all have an economic impact of homicide exceeding $120 billion. In ten of the last 13 years, the United States has had the largest economic impact from homicide. In the other three years, the United States was surpassed only by Brazil.

In 2019, over 54 per cent of the global economic impact of homicide was incurred by four countries — United States, Brazil, Mexico and Russia — equal to $577.5 billion. These four countries have large populations alongside high homicides rates and/or a large per capita income. This consequently equates to a higher impact from homicides. For more information on how the economic impact is calculated, refer to Appendix B.

TABLE 3.2

### Ten countries with the highest economic impact of homicide, billions PPP, 2019

More than 50 per cent of the global economic impact of homicide is incurred by the top four countries in this table.

| COUNTRY | ECONOMIC IMPACT OF HOMICIDE |
|---|---|
| United States | $199.37 |
| Brazil | $189.05 |
| Mexico | $120.57 |
| Russia | $68.49 |
| India | $67.48 |
| South Africa | $51.45 |
| Colombia | $34.19 |
| China | $29.45 |
| Nigeria | $24.16 |
| Turkey | $17.87 |

Source: IEP calculations

## Suicide, Violent Crime and Fear of Crime

**Suicide**

Suicide, fear of victimisation and violent crime when combined are 8.3 per cent of the total economic impact of violence in 2019. This was $1.19 trillion in 2019, and down from the peak of $1.26 trillion in 2011. Figure 3.9 displays the trend in the global economic impact of suicide, fear and violent crime.

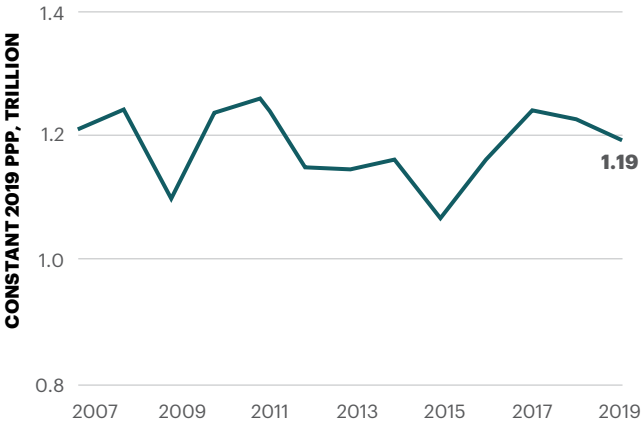
Suicide, classified as "self-inflicted violence resulting in death" by the World Health Organization is included in the model.[4] The economic impact of suicide amounted to $731 billion in 2019 and represented 5.2 per cent of the total global impact. Although the impact of suicide decreased by 1.4 per cent from 2018, it is still higher than the economic impact of *Armed Conflict*.

The United States, China and India have the highest economic impact of suicide all exceeding $81 billion. However, as a percentage of GDP, four of the ten most affected countries are

FIGURE 3.9

### Trend in the global economic impact of suicide, fear of crime, and violent crime, 2007–2019

The global economic impact of suicide, fear and violent crime peaked in 2011 at $1.26 trillion.




Source: IEP calculations

located in the Russia and Eurasian region — Russia, Belarus, Kazakhstan and Ukraine. In 2017, there were an estimated 793,000 suicide deaths worldwide.[5] This indicates an annual global rate of 10.5 per 100,000 people. Table 3.3 displays the ten countries with the highest rates of suicide, which all have a suicide rate more than double the global average.

TABLE 3.3

### Ten countries with the highest suicide rate, per 100,000 people, 2016

Eight of the ten most affected countries by suicide are either high income or upper middle income countries.

| COUNTRY | SUICIDE RATE |
|---|---|
| Lithuania | 31.9 |
| Russia | 31 |
| Guyana | 29.2 |
| South Korea | 26.9 |
| Belarus | 26.2 |
| Suriname | 22.8 |
| Kazakhstan | 22.5 |
| Ukraine | 22.4 |
| Lesotho | 21.2 |
| Latvia | 21.2 |

Source: WHO

**Violent crime**

The global economic impact of violent and sexual assault amounted to $393 billion in 2019. This is equivalent to 17.5 per cent of the total impact of *Interpersonal Violence and Self-inflicted Violence*. Violent crime in the economic impact model aggregates violent and sexual crimes. Since 2007, the economic impact of violent crime has declined 19 per cent. At 1.9 per cent of GDP, the United Kingdom is the country most affected by violent crime.

IEP uses data from the United Nations Office on Drugs and Crime, which reports police-recorded incidents of violent crime at the national level. Given that victims of violent crime are less likely to report the crime to police, IEP estimates of the cost of violent crime are conservative and are likely to underestimate the true implications of these crimes.

**Fear of Insecurity & Crime**

The economic impact associated with the indirect costs of fear of victimisation was $67.5 billion in 2019. Fear of falling victim to violence changes consumption and work-related decisions. It leads to increased transportation costs, reduced productivity and dampened consumption. Fear of victimisation can also lead to adverse mental health effects such as anxiety, anger and reduced mental wellbeing, all of which have productivity implications. In addition, the social cost of the fear of violence manifests itself in reduced trust in society and the erosion of social cohesion. Although this is extremely difficult to measure, IEP has adopted an imputation method, which is explained in the methodology.[6]

Afghanistan, Venezuela, South Africa and Brazil are the four countries with the highest economic cost, as a percentage of GDP, from fear of victimisation. Table 3.4 shows the ten countries with the highest percentage of the population fearing victimisation. Of these ten countries, nine are either located in Latin America and the Caribbean or sub-Saharan Africa — the two regions with the highest levels of violent crime and homicide. Afghanistan, located in South Asia, has the highest percentage of the population fearing victimisation. In 2020, Afghanistan was ranked as the least peaceful country and the country most affected by terrorism.

TABLE 3.4

## Ten countries with highest level of fear of crime and insecurity, 2018

Among the ten countries in which residents are least likely to say they feel safe walking alone at night, four are in Latin America and five in sub-Saharan Africa.

| COUNTRY | % OF PEOPLE WHO DO NOT FEEL SAFE WALKING ALONE AT NIGHT WHERE THEY LIVE |
|---|---|
| Afghanistan | 84% |
| Venezuela | 73% |
| South Africa | 68% |
| Brazil | 66% |
| Gabon | 63% |
| Botswana | 62% |
| Dominican Republic | 61% |
| Namibia | 60% |
| Argentina | 59% |
| Liberia | 59% |

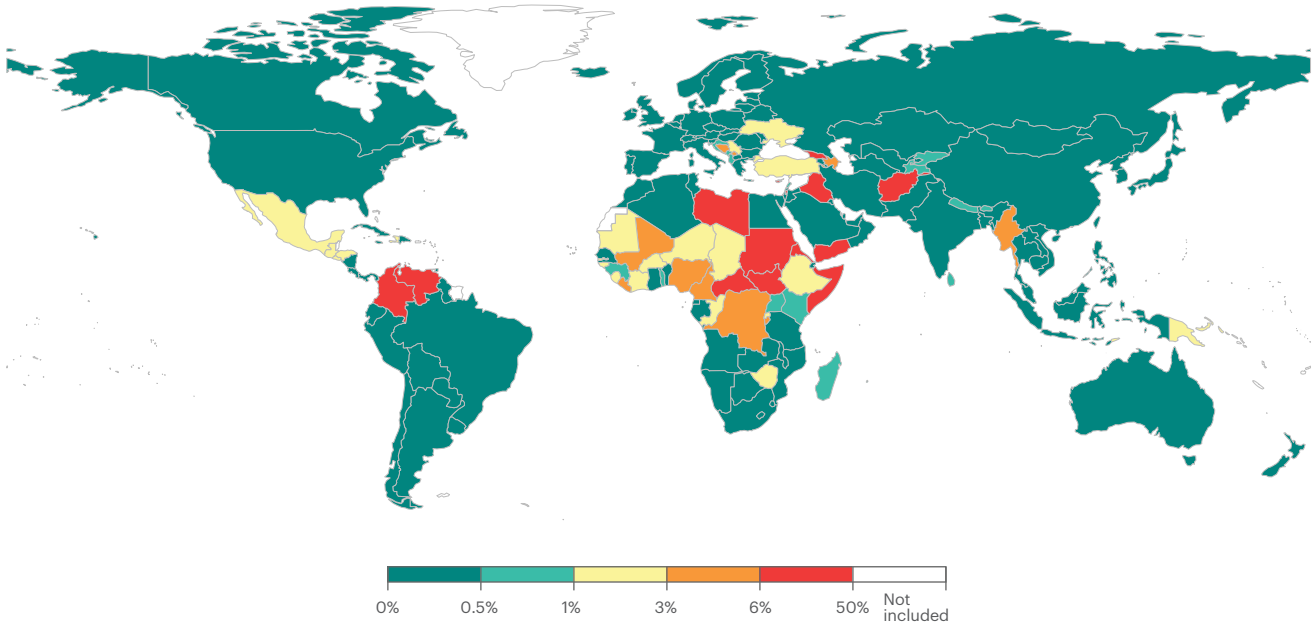
Source: Gallup World Poll 2018

# Armed conflict

FIGURE 3.10

## The economic cost of Armed Conflict, percentage of GDP, 2019

MENA and sub-Saharan Africa are the regions with the highest economic cost from Armed Conflict as a percentage of GDP.




Source: IEP calculations

The *Armed Conflict* domain includes the costs associated with instrumental violence inflicted by larger groups such as nation-states, militia groups and terrorist organisations in order to achieve political, economic or social objectives.[7] This collective violence extends beyond just individuals and affects the wider society, such as armed conflict within and between states, violent political repression, genocide and terrorism.[8] The domain also includes the costs associated with the consequences of armed conflict, such as UN peacekeeping and peacebuilding funding.

The economic impact of *Armed Conflict* on the global economy in 2019 amounted to $519 billion. From the previous year, it improved by 11.7 per cent or $69 million and was the second year of consecutive decline. Figure 3.10 displays the economic cost of *Armed Conflict* as a percentage of GDP. The higher costs of *Armed Conflict* are concentrated across three areas: sub-Saharan Africa, MENA and northern parts of Latin America.

Figure 3.11 displays the trend in the economic impact of *Armed Conflict*. All five categories improved from 2018, driven by a 52.8 per cent reduction in the economic impact of terrorism, the equivalent of $15.9 billion. GDP losses and the economic impact of conflict deaths decreased by 21.1 per cent and 38 per cent, respectively. The economic impact from refugees and IDPs also recorded a decline falling by 2.8 per cent from 2018, or $9.4 billion.

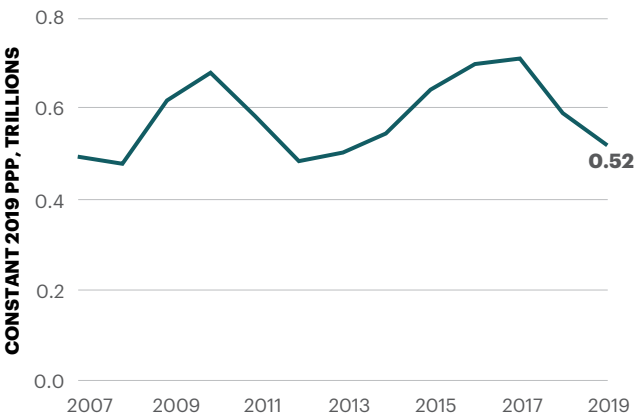
From 2012 to 2017, the economic impact of *Armed Conflict* rose by 47 per cent, from $486.5 billion to $713.9 billion. During this period, both terrorism and conflict deaths increased by 308 and 46.4 per cent, respectively. This period corresponds with the start of the Syrian war and rising violence in the aftermath of the Arab uprising in Libya, Yemen and other parts of the MENA region. The economic impact of the conflicts in Afghanistan and Iraq also increased between 2012 and 2017 due to the rise of ISIL and its global affiliates and the increasing strength of the Taliban in Afghanistan.

In 2019, three countries suffered exceptionally high costs of *Armed Conflict*: Syria, South Sudan and the Central African

FIGURE 3.11

## Trend in the global economic impact of Armed Conflict, 2007–2019

The impact of Armed Conflict recorded a steep rise after 2012, which coincided with the start of conflicts in Syria, Libya and Yemen.




Source: IEP calculations

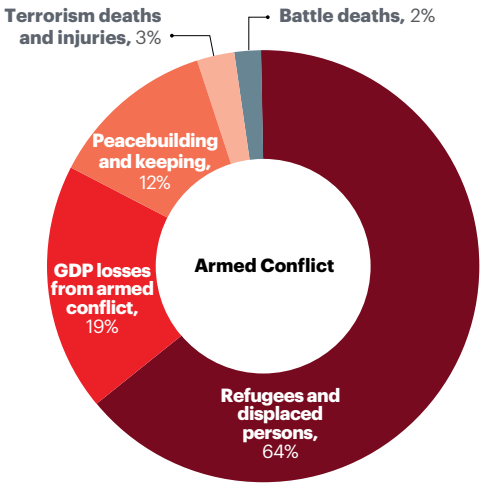
Republic. At 47.1 per cent of GDP, Syria experienced the largest economic cost of *Armed Conflict*. This was followed by South Sudan at 42 per cent and the Central African Republic at 31.9 per cent of GDP. Afghanistan's losses were 28 per cent of GDP.

Refugees and IDPs account for approximately 64 per cent of the economic impact of *Armed Conflict*, followed by the GDP losses at 19 per cent. Figure 3.12 provides a detailed breakdown of the indicators contained in the domain.

FIGURE 3.12

## Breakdown of the global economic impact of Armed Conflict, 2019

Forced displacement accounts for nearly two-thirds of the economic impact of Armed Conflict.




Source: IEP calculations

### Deaths and Injuries from Conflict and Terrorism

The economic impact of *Armed Conflict* includes both internal and external battle deaths. The economic impact of battle deaths was $10.1 billion in 2019, which decreased by 38 per cent from the previous year.

From 2007 to 2014, battle-related deaths rose by 355 per cent peaking at over 100,000 deaths, and reached the highest level recorded in 25 years. However, since 2014, the global number of battle deaths have fallen year on year, reflecting reductions of violence in Syria and Iraq.[9] However, over the same period, the number of conflict deaths have increased in Afghanistan, which in 2019, suffered the most battle deaths of any country.

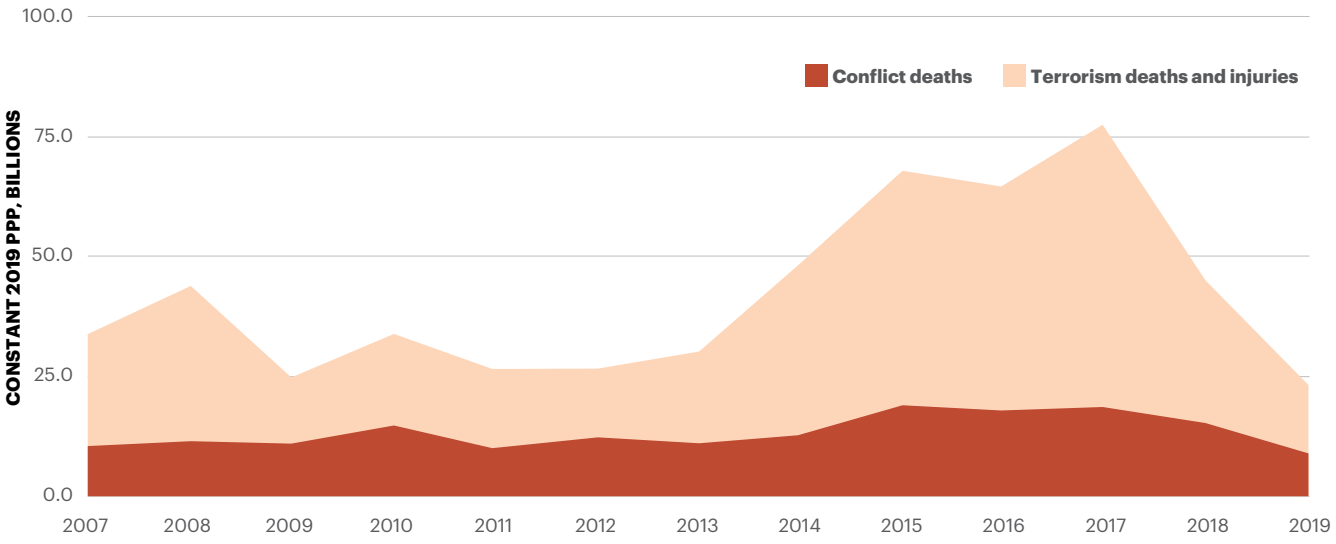
There is a strong correlation between battle deaths and the number of terrorist attacks. Of the ten countries most impacted by terrorism from 2002 to 2019, all were involved in an armed conflict. There were 236,422 deaths from terrorism between 2002 and 2019. Of these deaths, around 95 per cent occurred in countries involved in conflict. Terrorist attacks in conflict countries are three times as lethal as attacks outside of conflict, on average, and are more likely to target police and the military. This compares to terrorist attacks in non-conflict countries which are more likely to target tourists, businesses and the media.

Figure 3.13 displays the economic impact of battle deaths and terrorism deaths and injuries. Since 2017, the number of terrorism incidents and deaths has declined leading to a reduction in the economic impact of terrorism. The economic impact of terrorism decreased by 53 per cent in 2019 from the previous year to total $14.2 billion. The impact of terrorism peaked in 2017 at $58.6 billion.

FIGURE 3.13

## Trend in the economic impact of terrorism deaths and injuries, and conflict deaths, 2007–2019

The combined economic impact from battle deaths, and terrorism deaths and injuries peaked in 2017 at $78 billion.




Source: IEP calculations

Between 2002 and 2018, South Asia, MENA and sub-Saharan Africa accounted for 93 per cent of all deaths from terrorism. The largest number was recorded in MENA, which recorded more than 93,700 fatalities. South Asia recorded roughly 67,500 over the same period, with a further 45,000 occurring in sub-Saharan Africa.

Although the largest increase in deaths from terrorism occurred in sub-Saharan Africa in 2019, the greatest year-on-year increases in the economic impact of terrorism occurred in Central America and the Caribbean and South America, which recorded an increase of 69.8 and 61.5 per cent, respectively. In Central America and the Caribbean, this increase was due to a rise in the number of countries recording terrorist activity compared to the previous year, including Costa Rica, Honduras and Trinidad and Tobago. In South America, this increase was driven by a 17 per cent increase in attacks in Colombia.

The economic impact of terrorism includes the cost of deaths and injuries due to terrorism incidents. IEP's economic impact of violence model excludes property destruction and the larger macroeconomic impacts of terrorism and is, therefore, a highly conservative estimate.[10]

**Refugees and IDPs**

The economic impact of the refugees and IDPs reached $332.7 billion in 2019 and has increased by 61.4 per cent in the thirteen years from 2007 to 2019. IEP's model accounts for lost production, consumption and investment for the country of origin for displaced persons or refugees and includes the spending by UNHCR.

Conflicts and political instability, especially in MENA, sub-Saharan Africa and South Asia have created a refugee crisis unprecedented since World War II. There are now over 79 million people forcibly displaced.

Twenty-six million are refugees from conflict, with millions of additional people currently seeking asylum or in refugee-like situations. This represents a 71 per cent increase since 2008. The number of internally displaced people has risen at an even more dramatic rate, with a 75 per cent increase in the number of IDPs since 2008. Latest estimates suggest that almost 46 million people across the world are currently internally displaced.[11]

Figure 3.14 displays the trend in the number of forcibly displaced people worldwide.[12] The number of people forcefully displaced reached a historic high of 79.5 million in 2019 — this is equivalent to one per cent of the world's population.[13] The Syrian war, tensions in Venezuela and conflicts in South Sudan, Myanmar and Afghanistan have been the primary drivers for the numbers of displacements in 2019. These five countries accounted for 68 per cent of all refugees and displaced people in the world in 2019.[14]

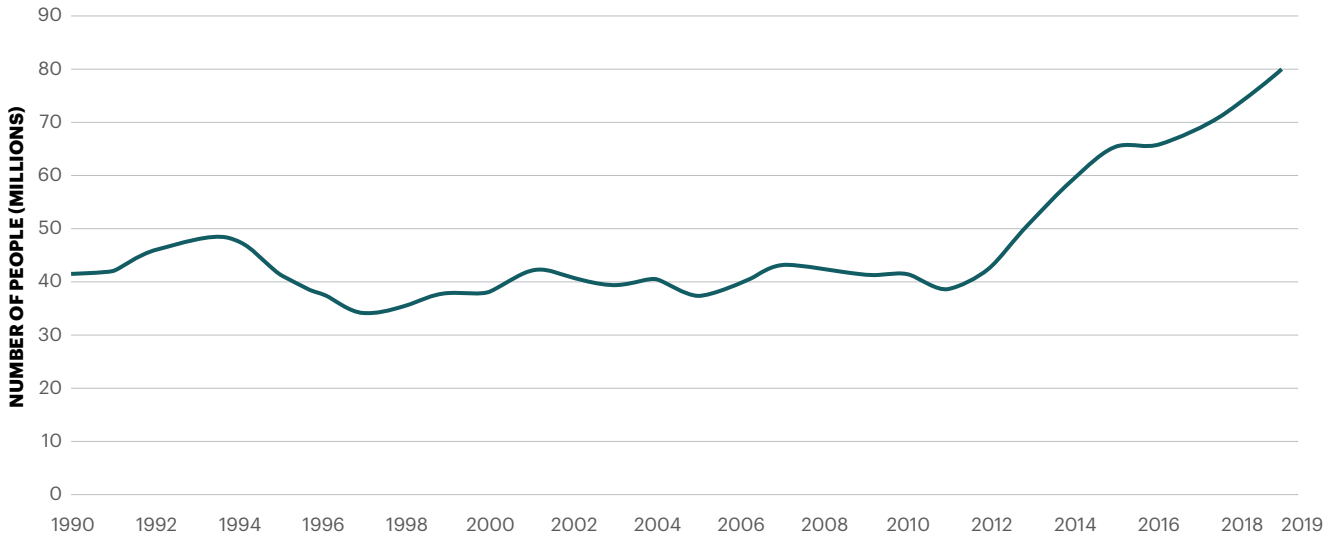
There are currently 15 countries where at least five per cent of the population are either refugees or internally displaced. Displacement is greatest in Syria, where the impact and aftermath of the Syrian civil war led to just under three-quarters of the entire population being either internally displaced or refugees. IEP estimates that the economic cost of the losses from refugee and IDP status in addition to the UNHCR funding is equivalent to 42 per cent of Syria's GDP. Other conflict affected countries, including South Sudan, Somalia and the Central African Republic, have greater than 20 per cent displacement. Table 3.5 displays the ten most affected countries in terms of the economic cost from the losses of refugees and IDP status as well as UNHCR funding.

In 2019, there were ten countries in which over a million people were displaced, with the highest total number of displaced people in Colombia and Syria. Invariably, a large burden of population displacement falls on neighbouring countries. For instance, Turkey, Colombia and Pakistan are hosting 3.6, 1.8 and

FIGURE 3.14

## Trend in the number of forcibly displaced people worldwide, 1990–2019

The number of people forcefully displaced reached a historic high of 79 million in 2019.




Source: UNHCR, IMDC, IEP calculations

1.4 million refugees respectively, while Germany was hosting 1.1 million refugees in 2019.[15]

TABLE 3.5

## Ten countries with the highest economic cost from refugees and IDPs, percentage of GDP, 2019

The average economic cost of refugees and IDPs as a percentage of GDP among the ten most affected country is 20.1 per cent.

| COUNTRY | ECONOMIC COST OF REFUGEES AND IDPs |
|---|---|
| Syria | 42.0% |
| South Sudan | 35.9% |
| Cyprus | 26.2% |
| Central African Republic | 25.5% |
| Somalia | 21.9% |
| Afghanistan | 14.1% |
| Venezuela | 12.8% |
| Colombia | 11.7% |
| Eritrea | 10.2% |
| Yemen | 9.1% |

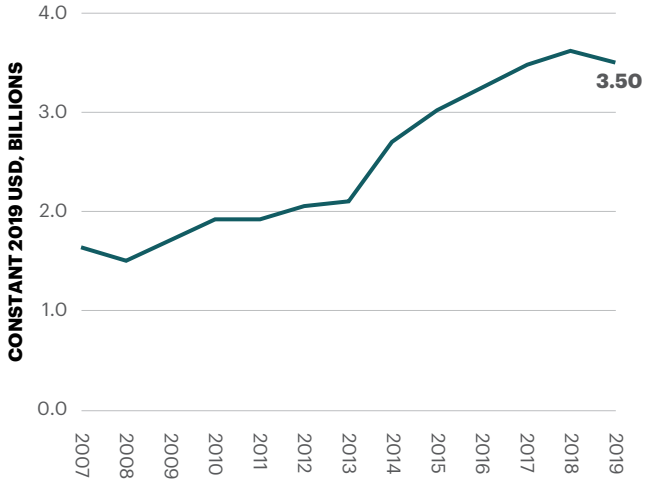
Source: IEP calculations

UNHCR's annual budget is allocated for providing assistance to the displaced, such as legal protection, administration, community services, public affairs and health as well as essential services such as shelter, health, water and sanitation, and food. UNHCR annual expenditure has more than doubled since 2007, from less than US$1.6 billion in 2007 to US$3.5 billion in 2019. Figure 3.15 shows UNHCR expenditure since 2007.

FIGURE 3.15

## Trend in UNHCR annual expenditure, 2007–2019

UNHCR expenditure has more than doubled since 2007 to total US$3.5 billion in 2019.




Source: IEP, UNHCR

**Peacebuilding & Peacekeeping Expenditure**

Peacekeeping operations and peacebuilding are extremely important in preventing and dealing with violent conflict. Peacekeeping expenditure includes member country contribution to UN peacekeeping missions. Peacekeeping expenditure also includes spending on military and civilian personnel and the operational cost of the missions. In 2019, $6.3 billion was spent on peacekeeping.

Peacekeeping expenditure includes all the costs to maintain the 13 UN peacekeeping missions that are currently active. It includes all payments to military and civilian personnel, operational costs to maintain peace and security, facilitate political processes, protect civilians, assist in the disarmament, demobilisation and reintegration of former combatants, support the organisation of elections, protect and promote human rights and assist in restoring the rule of law. These expenditures are borne by the international community and recorded each year by the UN Department of Peacekeeping Operations. Box 3.2 lists the different categories of peacebuilding expenditure.

Table 3.6 displays the ten countries with the largest contributions to peacekeeping since 2007. Since 2007, the United States has contributed 25 per cent of the total funding received globally.

TABLE 3.6

## Ten countries with the largest contributions to peacekeeping, billions PPP, 2007–2019

The United States has contributed more to peacekeeping than any other country since 2007.

| COUNTRY | PEACEKEEPING CONTRIBUTIONS |
|---|---|
| United States | 30.1 |
| Japan | 13.2 |
| China | 12.1 |
| Germany | 8.0 |
| France | 7.1 |
| United Kingdom | 6.9 |
| Russia | 5.9 |
| Italy | 5.0 |
| Spain | 3.6 |
| Canada | 2.9 |

Source: IEP calculations

Peacebuilding activities aim to reduce the risk of relapsing into violent conflict by strengthening national capacities and institutions for conflict management and facilitating the conditions for sustainable peace. Of the $25.7 billion directed towards peacebuilding in 2019, Afghanistan received 20.3 per cent. Table 3.7 displays the ten countries that have been the largest recipients of peacebuilding aid since 2007.

The expenditures include supporting the provision of basic safety and security and post-conflict institutional building for peace. This may involve disarmament, demobilisation and reintegration (DDR) programs, removal of land mines and civilian peacebuilding and mediation activities.

TABLE 3.7

## Ten countries that are the largest recipient of peacebuilding aid, 2007–2019

Afghanistan has been the largest recipient of peacebuilding funding since 2007.

| COUNTRY | PEACEKEEPING RECEIVED |
|---|---|
| Afghanistan | 87.4 |
| Iraq | 36.3 |
| Tanzania | 12.1 |
| Ukraine | 9.7 |
| Nigeria | 9.1 |
| Colombia | 9.1 |
| Democratic Republic of the Congo | 8.2 |
| Sudan | 8.1 |
| Myanmar | 7.6 |
| Uganda | 7.4 |

Source: IEP calculations

**The number of people forcefully displaced reached a historic high of 79.5 million in 2019 — this is equivalent to one per cent of the world's population.**

BOX 3.2

## Breakdown of peacebuilding expenditure

The following 17 categories are based on three peacebuilding priority areas identified as peacebuilding expenditure by the 2009 report of the Secretary-General on 'Peacebuilding in the immediate aftermath of conflict'.

**Priority area 1: Basic safety and security**

- Security system management and reform
- Reintegration and small arms and light weapons (SALW) control
- Removal of land mines and explosive remnants of war
- Child soldiers (prevention and demobilisation) Participation in international peacekeeping operations

**Priority rea 2: Inclusive political processes**

- Legal and judicial development
- Legislatures and political parties
- Anti-corruption organisations and institutions
- Democratic participation and civil society
- Media and free flow of information
- Human rights
- Women's equality organisations and institutions
- Civilian peacebuilding, conflict prevention and resolution

**Priority area 3: Core government functions**

- Public sector policy and administrative management
- Public finance management
- Decentralisation and support to subnational government

**Other**

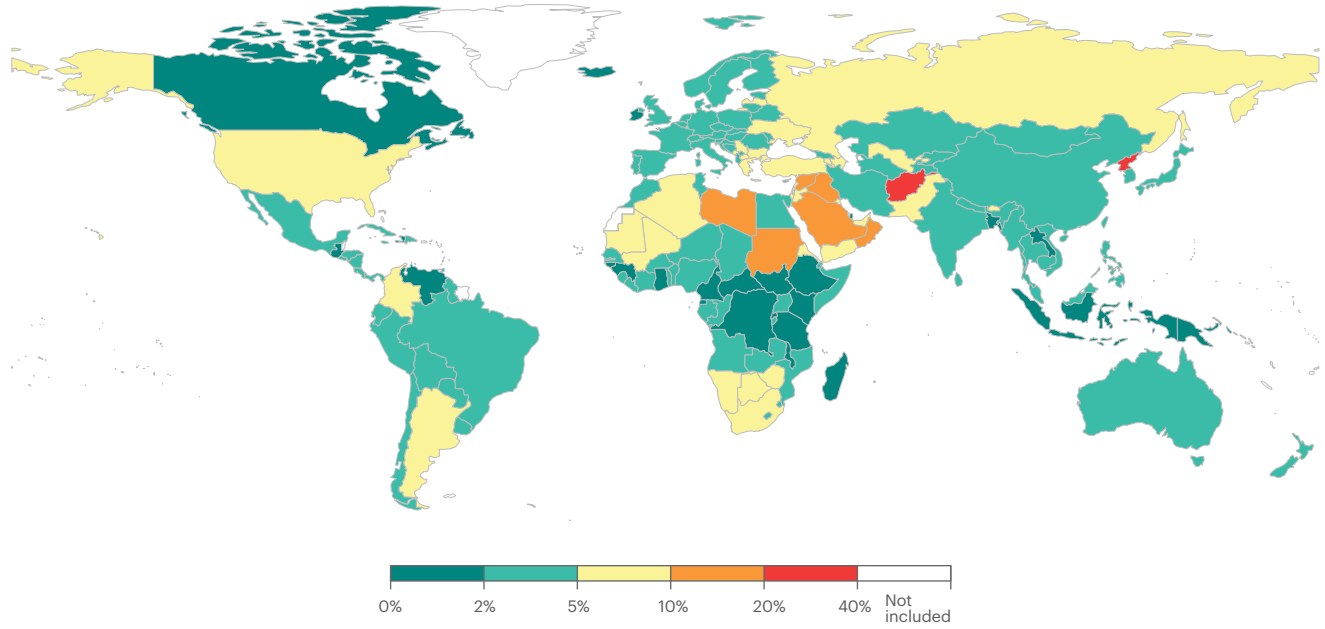
- Specific peace-related expenditures

# Violence containment

FIGURE 3.16

## The economic cost of violence containment, percentage of GDP, 2019

On average, countries in MENA have the highest economic cost of Violence Containment as a percentage of GDP.



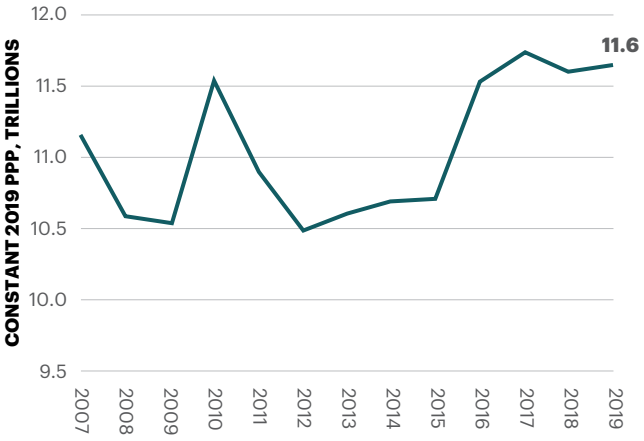

Source: IEP calculations

*Violence Containment* includes military, private security and internal security expenditure, the purchases of small arms as well as the losses from incarceration. Figure 3.16 displays the breakdown of *Violence Containment*. The economic impact of *Violence Containment* in 2019 amounted to $11.64 trillion. This is equivalent to 8.5 per cent of global GDP or $1,530 per person. *Violence Containment* is the largest component of the economic cost of violence model and in 2019 increased by 0.35 per cent or $40.7 billion. Figure 3.17 displays its trend since 2007.

FIGURE 3.17

## Trend in the global economic impact of Violence Containment, 2007–2019

In 2019, the economic impact of Violence Containment was slightly below the peak in 2016.



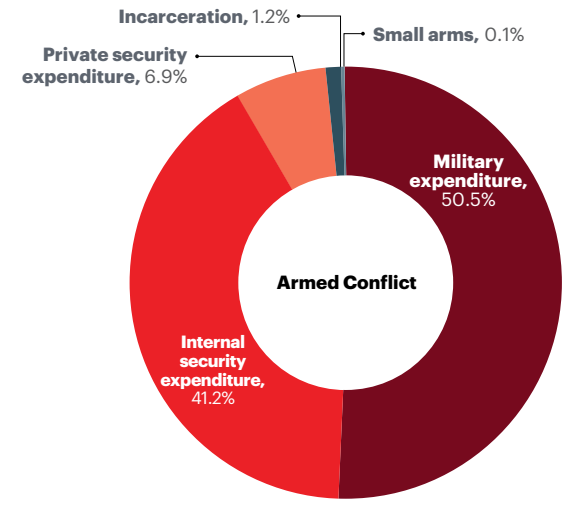

Source: IEP calculations

*Violence Containment* accounts for 81 per cent of the total impact in 2019 — the largest impact of the three domains. Figure 3.18 provides a detailed breakdown of the economic impact of *Violence Containment*. Military expenditure accounts for over 50 per cent of the domain, followed by internal security at 41.2 per cent.

FIGURE 3.18

## Composition of the economic impact of Violence Containment, 2019

Military expenditure is more than half of the global economic impact of Violence Containment.




Source: IEP calculations

Regionally, the per person expenditure on *Violence Containment* is highest in MENA, Europe and North America. Europe and North America, the two most peaceful regions, spend the most on *Violence Containment* per person. At $3,501 per person, North America far exceeds the per capita spend on *Violence Containment* expenditure than any other region.

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 13 times less on violence containment than MENA.

At over 15 per cent of GDP, North Korea, Afghanistan and Iraq had the highest cost of *Violence Containment*. Figure 3.19 shows per capita violence containment spending by region.[17]

Spending on *Violence Containment* is a direct response to levels of violence. While Violence Expenditure is influenced by many political, social and historical factors, each country has an "optimal" level of spending relative to its level of violence. For example, building more courts and jails than a country has criminals to occupy them is a sub-optimal allocation of resources. Not building enough could lead to increases in violence that hinder economic growth. Optimal levels balance these factors to minimise violence in a cost-effective way.

**Military Expenditure**

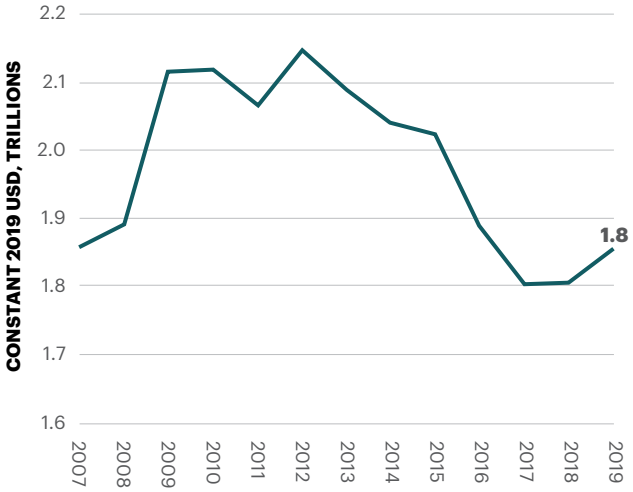
Military expenditure is the largest category in the economic impact of violence model, accounting for 40.8 per cent of the total. The economic impact of military expenditure slightly increased in 2019, increasing by 0.85 per cent from the previous year. For details on military expenditure see Section 2 of this report, which expresses military expenditure in PPP and includes the multiplier. The remainder of this section expresses military expenditure in $US and does not include the multiplier.

In a perfectly peaceful world, there would be no costs from violence and no need for prevention through military spending. In the absence of such a perfectly peaceful world military expenditure is necessary. Therefore, military expenditure beyond the optimal level is an inefficient use of resources and should be reallocated to more productive parts of the economy. Societies that have strong societal, political and economic conditions that maintain peace would require less spending on containing violence. Figure 3.20 displays the trend in the global expenditure on military expenditure in US dollars.

FIGURE 3.20

## Trend in global military expenditure, 2007–2019

Since the peak in 2012, military expenditure has declined 12.7 per cent.

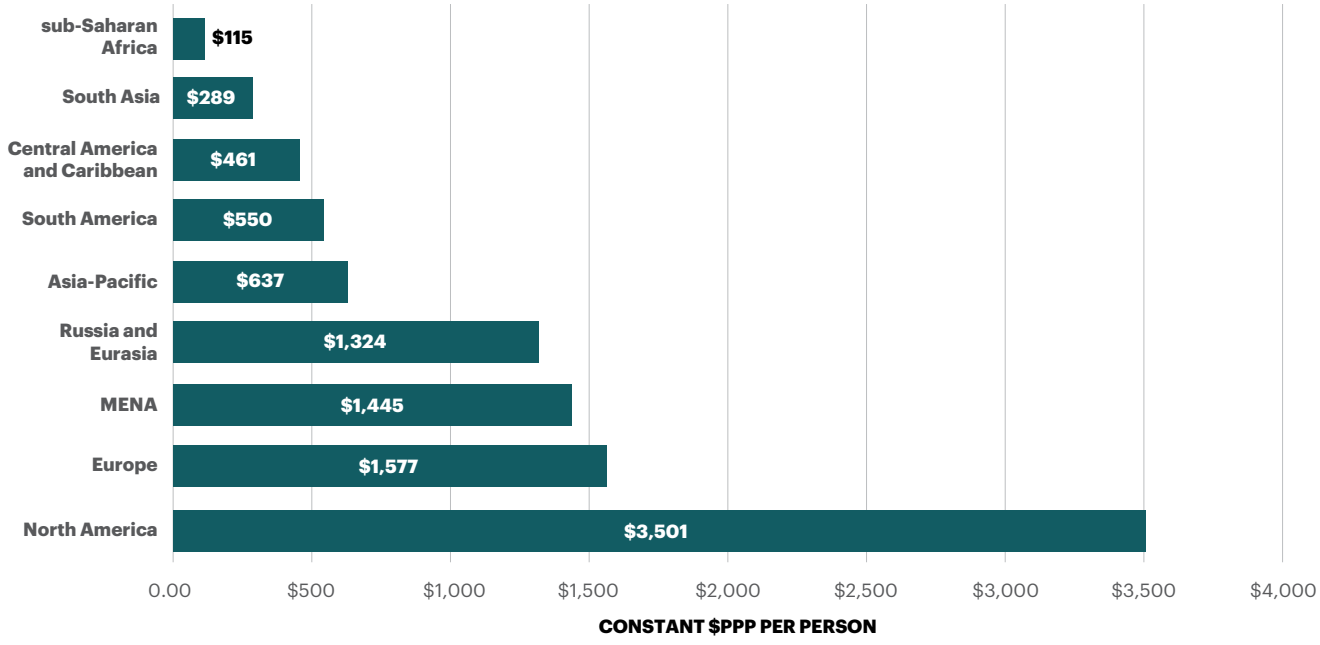



Source: SIPRI, IEP calculations

FIGURE 3.19

## Per capita violence containment spending by region, 2019

The per capita violence containment spending is more than 13 times higher in MENA than sub-Saharan Africa.




Source: IEP calculations

Globally, 2.2 per cent of GDP is spent on the military, which equates to approximately $249 per person.[18] Since 2007, seven regions have increased their military expenditure, whereas two regions have decreased in terms of US dollars. Most notably, South Asia and Asia-Pacific have increased by 80.5 and 65 per cent from 2007, respectively. North America and Europe were the only two regions to decrease expenditure with military expenditure 19.7 and 27.4 per cent lower in 2019 from 2007 levels, respectively.

The United States spends the most of any country annually on its military, accounting for 35.3 per cent of the global total. This is despite the US decreasing its military spending by 27 per cent since 2010.[19] However, at an annual rate of US$ 1,986 per person, the United States is outspent by the United Arab Emirates and Saudi Arabia.

In addition to military expenditure recorded by the Department of Defence, IEP also includes the United States' veterans' affairs spending and interest on military-related debt that amounted to US$ 270 billion in 2019. Table 3.8 highlights the ten countries with the highest military expenditure for 2019 as a total, per capita, and as a percentage of GDP.

China has the second-largest military expenditure globally, which has increased by 193.4 per cent from 2007. In 2007, China spent 1.5 per cent of GDP on its military, and by 2019 this had increased to 1.8 per cent of GDP. Chinese military expenditure as a percentage of GDP has stayed relatively constant since 2007, indicating the increase has grown in line with the country's strong economic growth. The UAE and Saudi Arabia both spend over $2,000 per citizen on their militaries — the most of any country.

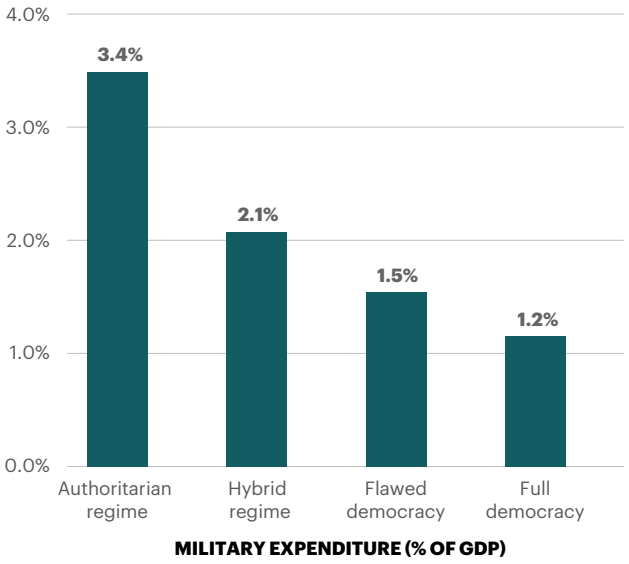
There is considerable variation in military expenditure by government type. Figure 3.21 displays the average country military expenditure as a percentage of GDP by government type in 2019. Since 2000, fully democratic countries spend the least on military as a percentage of GDP, equivalent to 1.4 per cent of GDP. Countries under authoritarian regimes on average spend the most on their military, averaging 3.7 per cent of GDP.

Since 2000, the average military expenditure as a percentage of GDP has fallen across all four government types. Both authoritarian regimes and flawed democracies have reduced their average expenditure by 0.5 percentage points since 2000. Full democracies follow this at 0.3 percentage points and hybrid regimes by 0.2 percentage points.

FIGURE 3.21

## Average military expenditure by government type, percentage of GDP, 2019

The average expenditure on the military in authoritarian government regimes exceeds all other government types.




Source: SIPRI, IEP calculations

TABLE 3.8

## Military expenditure: total, per capita, percentage of GDP, 2019

Although the United States spends the most on its military, the UAE and Saudi Arabia spend more per person.

| COUNTRY | MILITARY EXPENDITURE (TOTAL, $US BILLIONS) | COUNTRY | MILITARY EXPENDITURE (PER CAPITA, $US) | COUNTRY | MILITARY EXPENDITURE (% OF GDP) |
|---|---|---|---|---|---|
| United States | $649.1 | United Arab Emirates | $2,384.83 | North Korea* | 24.0% |
| China | $250.0 | Saudi Arabia | $2,013.29 | Libya | 11.4% |
| Saudi Arabia | $67.6 | United States | $1,986.33 | Syria | 11.1% |
| India | $66.5 | Israel | $1,886.56 | Afghanistan | 10.2% |
| France | $63.8 | Singapore | $1,871.75 | Iraq | 9.1% |
| Russia | $61.4 | Kuwait | $1,738.40 | Oman | 8.8% |
| United Kingdom | $50.0 | Oman | $1,389.25 | Saudi Arabia | 8.7% |
| Germany | $49.5 | Norway | $1,320.12 | Palestinian Territories | 8.2% |
| Japan | $46.6 | Australia | $1,078.30 | Yemen | 5.7% |
| South Korea | $43.1 | France | $978.02 | United Arab Emirates | 5.6% |

Source: SIPRI, IEP calculations
Note: *estimated

In 2019, on average, authoritarian regimes spent far more on their militaries at 3.4 per cent of GDP compared to the 1.2 per cent spent by full democracies. Not only do authoritarian regimes spend more on their military, but their populations also have lower confidence in the military. On average, 26.8 per cent of the population of authoritarian regimes do not have confidence in the military compared to 17.6 per cent of full democracies.[20]

Countries with very high scores in the GPI also spend far less on the military compared to countries with very low scores.[21] As a country's level of peacefulness declines, military expenditure tends to increase. Table 3.9 displays the average country military expenditure as a percentage of GDP by the level of peacefulness.

TABLE 3.9

## Average military expenditure by peace level, percentage of GDP, 2019

On average, very low peace countries spend significantly more on their military compared to other levels of peacefulness.

| PEACE LEVEL | MILITARY EXPENDITURE (% OF GDP) |
|---|---|
| Very High Peace | 1.20% |
| High Peace | 1.50% |
| Medium Peace | 1.80% |
| Low Peace | 2.60% |
| Very Low Peace | 6.20% |
| **Global Average** | **2.20%** |

Source: SIPRI, IEP calculations

**Internal Security Expenditure**

Internal security includes expenditures on the police, prison services and judicial system as well as the costs of incarceration.

In 2019, the economic impact of internal security spending accounted for over 34.5 per cent of the global total, at $4.9 trillion. It was the second-largest component of the model and increased slightly in 2019, increasing by 0.3 per cent. It is now at its highest level on record, after having fallen substantially between 2010 and 2015 it then increased by approximately $720 billion in the four years to 2019.

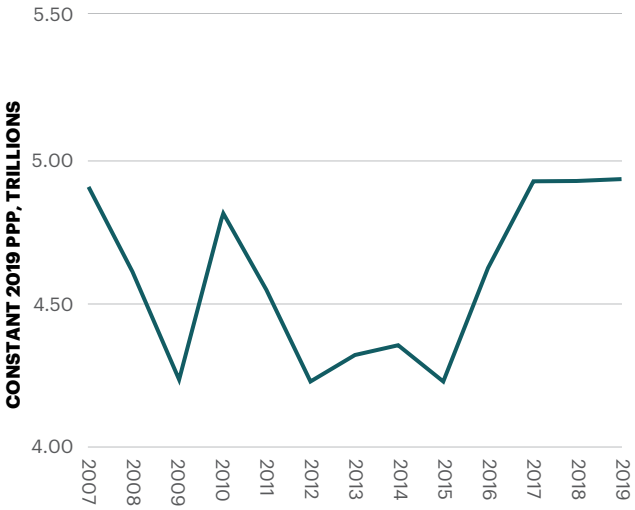
This resulted in the overall slight increase since 2007 of $32.1 billion or 0.65 per cent. Figure 3.22 displays the trend in internal security expenditure.

Table 3.10 displays the expenditure on internal security by countries as a percentage of GDP and by their level of peacefulness. Globally the average country spends 1.9 per cent of GDP on internal security. High peace and very high peace countries spend less than the global average, whereas very low peace countries exceed the global average. As peacefulness increases, the confidence in the police and judicial system significantly improves. In very low peace countries, on average, 52.9 per cent of the population do not have confidence in the judicial system compared to 29.2 per cent lacking confidence in the very high peace countries. In terms of the confidence in the police, on average, 42.8 per cent of the population do not have

FIGURE 3.22

## Trend in global economic impact of internal security expenditure, 2007–2019

Internal security expenditure was at record highs in 2019.




Source: IMF, IEP calculations

TABLE 3.10

## Average country spend on internal security by levels of peace, percentage of GDP, 2019

On average, countries spend 1.9 per cent of GDP on internal security.

| PEACE LEVEL | INTERNAL SECURITY EXPENDITURE (% OF GDP) |
|---|---|
| Very High Peace | 1.60% |
| High Peace | 1.90% |
| Medium Peace | 1.90% |
| Low Peace | 1.50% |
| Very Low Peace | 3.20% |
| **Global Average** | **1.90%** |

Source: IMF, IEP calculations

**As a country's level of peacefulness declines, military expenditure tends to increase.**

confidence compared to the average of 14 per cent in very high peace countries.

The economic impact of internal security has experienced a large decline in the past few years in high-income countries. The United States and the United Kingdom have reduced their impact by $164 and $62.9 billion respectively since 2007 — the largest decrease in PPP terms. Since 2007, the total economic impact of internal security in high-income countries has decreased by almost $386 billion, the equivalent of a 14 per cent decrease. In contrast, all other income classifications have increased spending. Most notably, since 2007 it more than doubled in five countries — Afghanistan, Indonesia, Myanmar, UAE and Mongolia. China has increased its economic impact of internal security expenditure by 88.3 per cent over the same period, the equivalent of $393 billion.

Table 3.11 displays the total economic impact of internal security by peace and income levels for 2007 and 2019. When examining the change by government type, both full democracies and flawed democracies have decreased from their 2007 levels, whereas authoritarian regimes have increased their spending by almost 25 per cent.

TABLE 3.11

## Economic impact of internal security by income levels and government type, constant 2019 PPP, billions, 2007 & 2019

High-income countries and full democracies have recorded the largest decrease in security expenditure since 2007.

| INCOME LEVEL | 2007 | 2019 | CHANGE (%) 2007-2019 | CHANGE (BILLIONS) 2007-2019 |
|---|---|---|---|---|
| High income | 2,766 | 2,380 | -13.94% | -385.5 |
| Upper middle income | 1,548 | 1,835 | 18.53% | 286.9 |
| Lower middle income | 542 | 675 | 24.61% | 133.4 |
| Low income | 39 | 42 | 7.00% | 2.8 |

| PEACE LEVEL | 2007 | 2019 | CHANGE (%) 2007-2019 | CHANGE (BILLIONS) 2007-2019 |
|---|---|---|---|---|
| Full democracy | 1,883 | 1,593 | -15.41% | -290.2 |
| Flawed democracy | 1,412 | 1,390 | -1.56% | -22 |
| Authoritarian regime | 1,271 | 1,575 | 23.87% | 303.5 |
| Hybrid regime | 344 | 385 | 11.85% | 40.8 |

Source: IMF, IEP calculations

# 4

# Economic Progress, Prosperity and Peace

## THE ECONOMIC LOSS FROM VIOLENCE

In 2019, the economic impact of violence was estimated to be $14.4 trillion. This equates to $5 for every person, for every day of the year. Given that 9.2 per cent of the world's population live below $1.90 per day, redirecting some of this economic resource could provide significant economic gains to society and reduce human suffering. The countries with the highest economic impacts from violence are also some of the poorest countries.

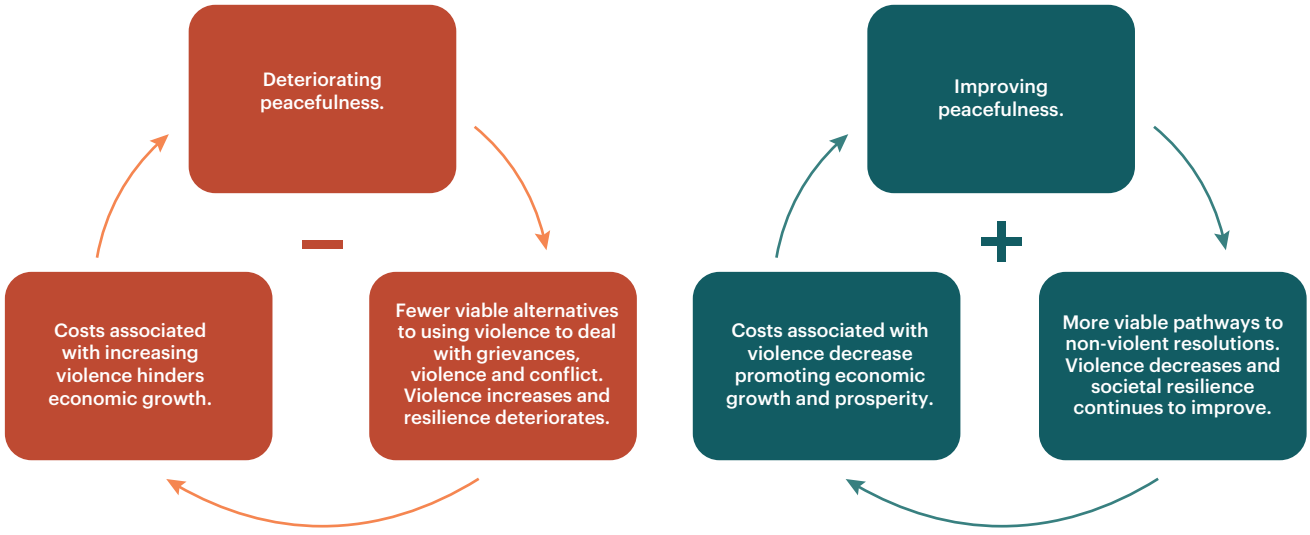
In addition to causing suffering, interpersonal violence, social unrest and collective violence hinders productivity and economic activity, destabilises institutions and reduces business confidence. Violence disrupts the economy, resulting in adverse and ongoing negative effects even after conflict subsides. These economic disruptions include reduced GDP growth, a less predictable economy, higher levels of unemployment, lower levels of foreign direct investment and higher interest rates and higher inflation. To illustrate, Text Box 4.1 highlights how violence has affected the Syrian economy throughout the conflict.

Reducing violence not only avoids the considerable direct costs, but it also allows for the reallocation of resources to more productive sectors such as health and education, which yield compounding benefits to society over time. In this way, violence and the economy can be considered a system, where improvements in one can lead to improvements in the other and vice-versa. For example, meaningful reductions in violence have considerable benefits, such as poverty reduction and economic growth. These, in turn, can reduce the grievances that give rise to violence. Conversely, increases in violence consume economic resources that could otherwise be used in more productive sectors. This situation increases the potential for grievances to occur and can lead to increases in violence. Figure 4.1 displays the vicious and virtuous cycles from changes in peacefulness.

FIGURE 4.1

**Vicious and virtuous cycle from changes in peacefulness**

Changes in peacefulness have flow-on effects for the economic impact of violence.



BOX 4.1

### The economic cost of conflict in Syria

Since 2011, the ongoing conflict in Syria has led to what the UNHCR describes as "the biggest humanitarian and refugee crisis of our time."[1] Syria provides an example of the grave consequences of conflict on a country's economy. By 2018, Syria's GDP had been reduced to less than 50 per cent of its 2010 level, driven by the consequences of conflict and political instability.[2]

The level of destruction has inflicted significant damage to the nation's physical capital. Since the start of the civil war, 17.5 per cent of the nation's housing has been destroyed and estimates put the conflict-inflicted damage of infrastructure at US$ 117.7 billion. This is approximately double Syria's GDP in 2010. This level of destruction will have implications on Syria's economic recovery and long-term economic growth.

A scenario analysis that compares the GDP Syria would have achieved in the absence of conflict indicates that the accumulated losses from the conflict are at US$ 324.5 billion. This reaches US$ 442.2 billion with the inclusion of infrastructure destruction.[3] Syria's GDP in 2019 was only US$ 19.5 billion.[4]

A combination of destroyed infrastructure and reduced production and trade embargoes resulted in a reduction in Syrian exports.[5] From 2010 to 2018, exports fell from $8.7 billion to $0.7 billion, a decrease of 92 per cent. The collapsed export trade resulted in Syria's trade deficit widening from -16.6 per cent of GDP to -34.6 per cent over the same period. In addition, Syria's currency depreciated 90 per cent and inflation reached 700 per cent.[6]

The example of Syria highlights how drastic falls in peacefulness have enormous consequences, not only for the loss of human life, but also for the wellbeing of the population and economy. From 2011 to 2018, Syria averaged a GDP growth of negative 12 per cent.[7] Syria must now overcome significant economic challenges, such as damage to infrastructure, negative economic growth, a widening trade deficit, loss of investment, external displacement and economic sanctions. Although unlikely, an optimistic post-conflict scenario indicates that Syria could average a growth rate up to 8.2 per cent for the next two decades assuming the conflict is resolved, peace maintained, reconstruction assistance received, refugees and displaced are repatriated and productivity improves.[8]

## IMPROVEMENTS IN THE GLOBAL PEACE INDEX ON ECONOMIC OUTCOMES

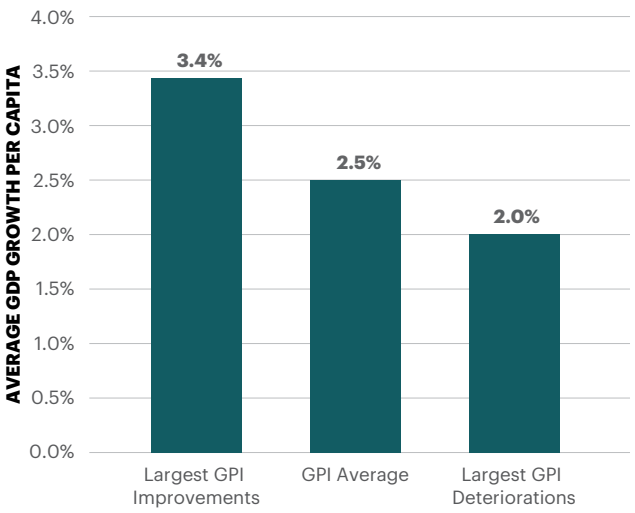
Violence has adverse short and long-term implications for the broader economy. In the GPI, the ten countries with the largest improvements in peace recorded an average of 6.7 per cent of their GDP dealing with violence and the containment of violence. In contrast, the countries with the largest deterioration had an average cost of 22.1 per cent of GDP. The significance of these figures is clearly evident when comparing the countries with the largest improvements and deteriorations on the GPI against the global average for GDP growth rates.

Figure 4.2 shows that since 2000, the average annual GDP growth rate per capita of the 163 countries in the GPI has been 2.5 per cent. Countries with the largest improvements in the GPI have outperformed the global average recording a GDP growth rate per capita of 3.4 per cent per annum since 2000. In contrast, the countries with the largest declines in peacefulness have underperformed the global average recording a growth rate of two per cent per annum. This is a significant difference. If a country were to achieve a GDP per capita growth rate of 3.4 per cent each year for 20 years as opposed to two per cent, its GDP per capita would be 31 per cent higher.[9] By comparison, a typical country within the Organisation for Economic Cooperation and Development spends 5.1 per cent of GDP on education, 6.5 per cent of GDP on public health and 15.2 per cent of GDP on social protection.[10] Further, as many conflict

FIGURE 4.2

### Average GDP growth per capita by change in GPI score, 2000–2019

On average, GDP growth per capita was much higher in the countries with the largest improvements on the GPI.

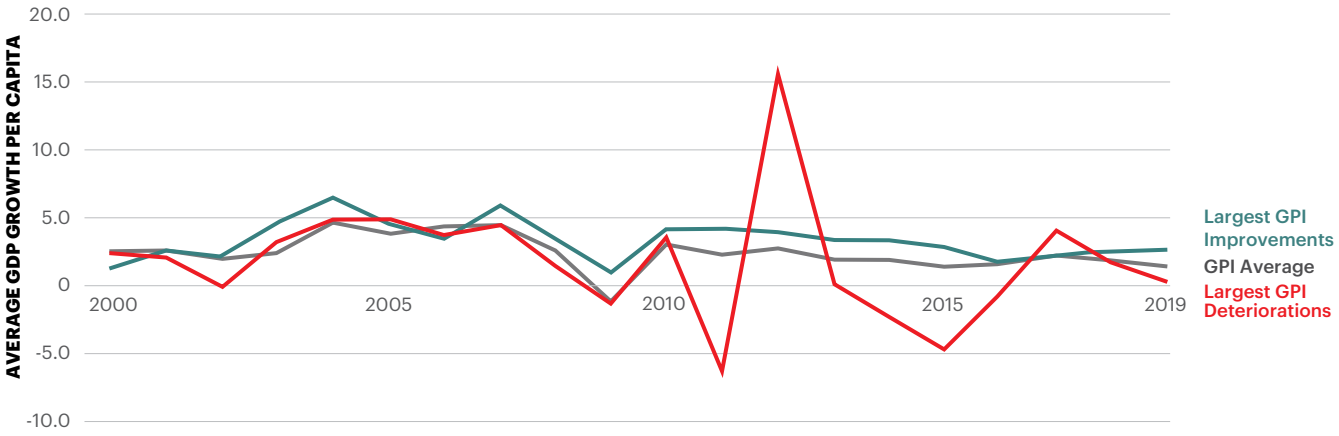



Source: IEP calculations, World Bank

FIGURE 4.3

## Average GDP growth per capita by change in GPI score, 2000–2019

On average, GDP growth per capita was much more volatile in the countries with the largest deteriorations in the GPI compared to the ten biggest improvements.




Source: IEP calculations, World Bank

countries have not had GDP figures updated since the onset of violence, IEP expects the actual differential to be much higher. Therefore, the actual long-term benefit of violence reduction is likely much greater than estimated with the available data.

The impact of violence can be seen in the short term as well as the long term. Figure 4.3 shows that the countries with the largest deteriorations in the GPI have also displayed a higher level of volatility in their year-on-year GDP growth. The average GDP growth in the countries with the largest deteriorations ranges from 16 per cent to negative six per cent, a range of 22 percentage points. In contrast, the range of the countries with the largest improvements range 5.5 percentage points.

Large swings in GDP growth rates can have adverse consequences for consumption and economic planning. When there are large contractions in growth, or negative growth, the reductions in output can lead to falls in wages, employment and overall wellbeing. Alternatively, growth beyond a country's sustainable rate can lead to high inflation, product shortages and bad investment decisions among other negative externalities. This creates very short boom, bust cycles.

Figure 4.4 displays annual inflation and unemployment rate by the changes in the GPI. Countries with the largest improvements averaged an unemployment and inflation rate substantially lower than those with the largest deteriorations.

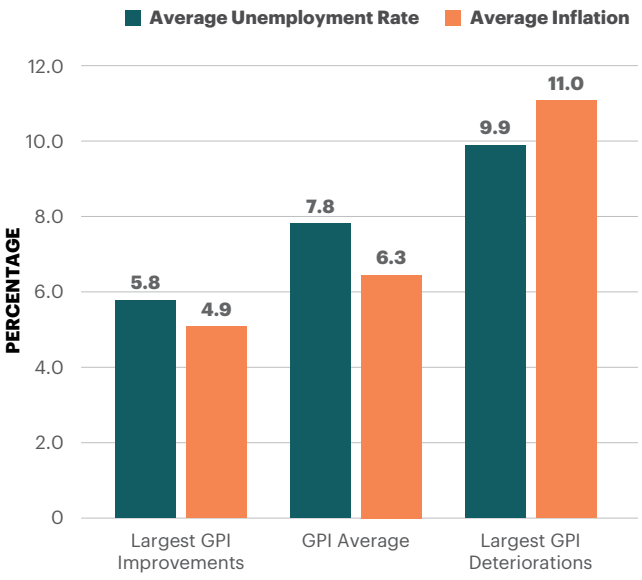
Since 2000, the average inflation and unemployment rate of the 163 countries in the GPI is 6.3 per cent and 7.8 per cent respectively. The ten countries that recorded that largest deteriorations in the GPI had an average inflation rate of 11 per cent and an unemployment rate of 9.9 per cent since 2000 — far exceeding the global average. The average inflation and unemployment rate for the countries with the largest improvements on the GPI is 4.9 and 5.8 per cent respectively.

Higher unemployment and inflation can have a serious impact on the levels of peace. Unemployment, particularly in youth populations, is associated with social instability[11]. Inflation can also be both a cause and a stressor for instability, violence and conflict. When a country's inflation rate is above the growth in wages and GDP, it can indicate that living standards may be decreasing. IEP has shown in its Ecological Threat Register (ETR) that increases in food prices, increases a country's fragility and can be an early trigger for domestic instability, including violent demonstrations and civil unrest.

FIGURE 4.4

## Average unemployment and inflation rate by change in GPI score, 2000–2019

On average, countries with the largest improvement in the GPI had lower inflation and unemployment rates.




Source: IEP calculations, World Bank

# IMPROVEMENTS IN POSITIVE PEACE ON ECONOMIC OUTCOMES

Positive Peace is a transformational concept. It is defined as the *attitudes, institutions and structures* that create and sustain peaceful societies. Empirically based, it shifts the focus away from the negative to the positive aspects that create the conditions for a society to flourish. Due to its systemic nature, improvements in Positive Peace are associated with many desirable outcomes for society including stronger economic outcomes, higher resilience, better measures of wellbeing, higher levels of inclusiveness and more sustainable environmental performance. Therefore, Positive Peace creates an optimum environment in which human potential can flourish.

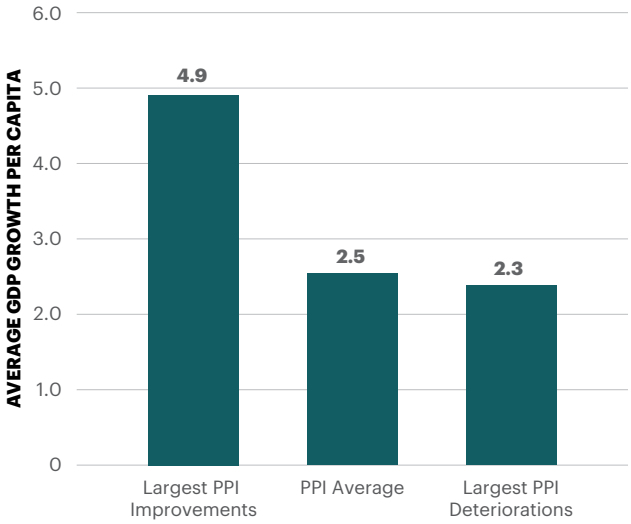
Positive Peace can be used as the basis for empirically measuring a country's resilience, or its ability to absorb and recover from shocks. It can also measure fragility and help predict the likelihood of conflict, violence, and instability. There is a close relationship between Positive Peace and violence as measured by the internal peace score of the GPI.

For this reason, the greater the improvements in Positive Peace, the greater the economic performance. The countries with the largest improvements in Positive Peace have averaged higher rates of economic growth per capita relative to the countries that recorded the largest deteriorations by more than 2.6 percentage points, as displayed in Figure 4.5. Box 4.2 and 4.3 further explain Positive Peace.

FIGURE 4.5

### Average GDP growth per capita by change in PPI score, 2000–2019

On average, GDP growth per capita was 2.6 per cent higher in the ten countries with the largest improvements in the PPI compared to the ten biggest deteriorations.




Source: IEP calculations, World Bank

BOX 4.2

### 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, better developmental outcomes and stronger resilience.

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).



BOX 4.3

## 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.

Positive Peace is strongly correlated with GDP. The higher the levels of Positive Peace in a country, the better economic outcomes the country will experience. Developments in a country's social attitudes and institutions tend to influence the decisions made by individual economic agents — consumers, workers, business owners, financiers — in a way that positively impacts macroeconomic indicators. The ten countries with the highest economic growth per capita in 2019 have all improved in Positive Peace since 2008. Furthermore, 31 of the 35 countries where GDP growth for 2019 was higher than five per cent recorded improvements in Positive Peace over the same period.

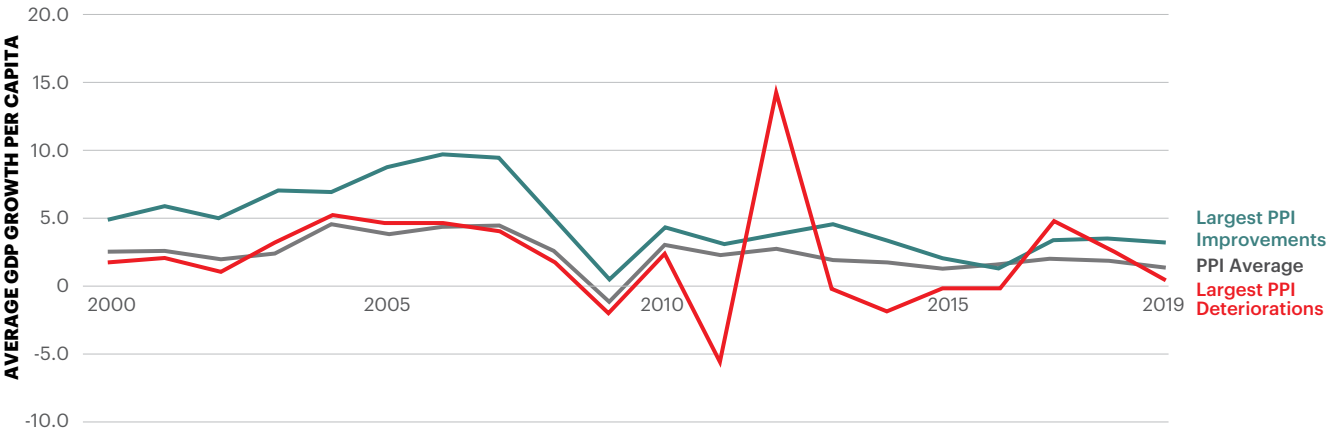
In the last 20 years, the countries with the largest improvements on the PPI have consistently outperformed the countries with the largest deteriorations on the PPI in GDP growth. To illustrate, Figure 4.6 displays the trend in the average GDP growth per capita since 2000. The countries with the largest deteriorations in Positive Peace have seen periods of negative growth in the last 20 years. By contrast, countries with the largest improvements have averaged consistent positive growth.

Furthermore, the countries with the largest deteriorations in the PPI have displayed a higher level of volatility in their GDP growth. Growth in the countries with the largest deteriorations ranges from 14.6 per cent to minus 5.5 per cent, a range of 20.1 percentage points, whereas the range of the top improvers is 9.3 percentage points.

FIGURE 4.6

**Average GDP growth per capita by change in PPI score, 2000–2019**

On average, the countries that improved in the PPI had consistently higher GDP growth per capita.




Source: IEP calculations, World Bank

# PEACE DIVIDEND

The economic impact of violence varies significantly by levels of peace. Figure 4.7 shows the economic cost of violence for the different levels of peacefulness. On average, the economic cost of violence in very high peace countries is 22 percentage points lower than in very low peace countries.

Since its inception, a similar trend appears for countries with the largest improvements versus deteriorations on the GPI. In 2019, the countries with the largest improvements on the GPI recorded an average economic cost of 6.7 per cent of GDP, whereas the countries with the largest deterioration recorded an economic cost of 22.1 per cent of GDP.

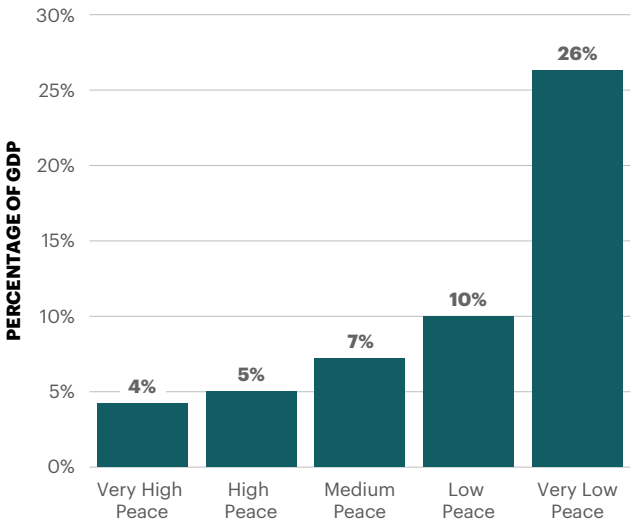
The economic cost of violence includes the direct and indirect cost of violent acts as well as the costs of violence containment through the judiciary, police and armed forces. Therefore, countries could reduce the economic burden by either reducing the levels of violence and associated costs, or reducing the budgets allocated to violence containment. Ideally, countries reduce the economic impact of violence by implementing policies that reduce violence, which may in turn allow for longer-term reductions in violence containment. Reducing the economic impact of violence merely by reducing the budgets allocated to violence containment alone in certain circumstances may result in a higher level of violence, leading to greater costs. Thus, this section estimates economic benefits accrued from reducing levels of violence, not solely reducing spending on violence containment.

The economic benefits accrued from reducing violence can be thought of as a *peace dividend*. With lower levels of violence, countries can reallocate resources from violence containment to other, more productive economic sectors, thereby providing

FIGURE 4.7

## The average economic cost of violence by GPI peacefulness, 2019

As peacefulness falls, the average economic cost of violence of a country increases.




Source: IEP calculations

secondary benefits to the peace dividend. To focus on the economic benefit from reducing violence, IEP's peace dividend calculation compares the costs associated with *Armed Conflict*, *Interpersonal Violence and Self-Inflicted Violence* by different levels of peacefulness. It excludes spending on *Violence Containment*.

To estimate the magnitude of the peace dividend, IEP has modelled two scenarios.

1. Baseline Scenario: all countries continue at their current levels of peace.
2. High Peace Scenario: all countries improve annually equal to the level of the most peaceful countries.

Figure 4.8 displays the economic impact of violence forecasted to 2030 based on the two scenarios listed above. The first scenario assumes that peacefulness continues at its current trend. If the economic impact of *Armed Conflict*, *Interpersonal Violence and Self-Inflicted Violence* continued on the current long-term trend, it would be $2.77 trillion in 2030. In this scenario, the aggregate economic impact of *Armed Conflict*, *Interpersonal Violence and Self-Inflicted Violence* improves by 0.03 per cent per annum globally. This is the baseline scenario.

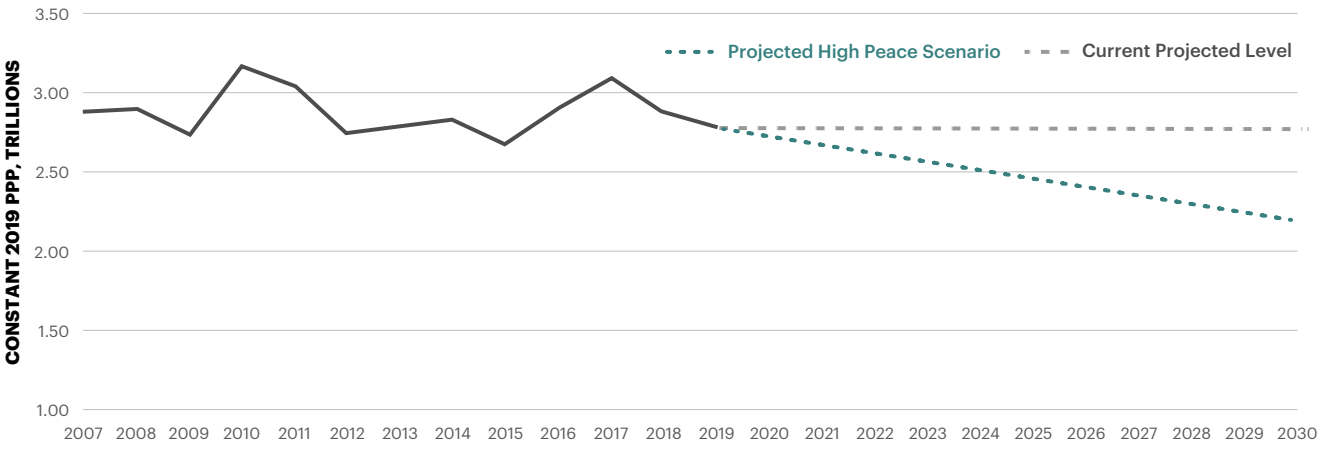
The second scenario is the path of high peacefulness; it demonstrates the benefits of a global shift where the annual change is equal to the average of the most peaceful countries. High peacefulness is described as the 40 countries at the top of the GPI. In this scenario, the economic impact of *Armed Conflict* and *Interpersonal Violence and Self-Inflicted Violence* improves by 2.1 per cent per annum in all countries.[12]

If all countries were to record improvements in their economic impact of violence equal to the improvements recorded by the most peaceful countries, substantial economic losses would be averted. The economic impact would shift from $2.8 trillion in 2019 to $2.2 trillion by 2030 accruing to a peace dividend of $3.6 trillion globally over the period.

FIGURE 4.8

## The peace dividend: high peace scenario vs. current trend

A peace dividend of $3.6 trillion over the next decade would accrue if all countries were to improve violence at the level of the most peaceful countries.




Source: IEP calculations
Note: Analysis uses the domains *Armed Conflict* and *Interpersonal Violence and Self-Inflicted Violence*.

# A

# Supplementary Tables

TABLE A.1

## Economic impact of violence by country, total in millions of 2019 PPP, per capita in 2019 PPP, and as percentage of GDP

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. The percentage of GDP results are calculated using the economic cost of violence.

| ECONOMIC COST OF VIOLENCE (Rank by % GDP) | COUNTRY | ECONOMIC IMPACT OF VIOLENCE (Millions, 2019 PPP) | ECONOMIC COST OF VIOLENCE (Millions, 2019 PPP) | PER CAPITA (2019, PPP) | COST AS PERCENTAGE OF GDP |
|---|---|---|---|---|---|
| 1 | Syria | $16,412.65 | $13,265.27 | $897.63 | 59% |
| 2 | Afghanistan | $56,135.72 | $35,349.75 | $1,543.33 | 50% |
| 3 | South Sudan | $2,789.66 | $2,474.28 | $215.93 | 46% |
| 4 | Central African Republic | $1,897.95 | $1,571.57 | $400.63 | 37% |
| 5 | Somalia | $2,238.73 | $1,750.90 | $147.46 | 35% |
| 6 | North Korea | $10,586.85 | $5,410.27 | $413.38 | 31% |
| 7 | Cyprus | $11,222.55 | $9,959.58 | $9,437.97 | 31% |
| 8 | Iraq | $284,125.58 | $176,356.03 | $7,222.35 | 26% |
| 9 | Venezuela | $20,874.72 | $19,098.06 | $644.66 | 24% |
| 10 | Sudan | $56,146.58 | $35,469.90 | $1,352.55 | 24% |
| 11 | Colombia | $213,246.59 | $167,507.06 | $4,311.09 | 23% |
| 12 | Yemen | $25,244.68 | $17,830.84 | $873.06 | 22% |
| 13 | Libya | $34,119.44 | $19,946.17 | $5,272.70 | 21% |
| 14 | Palestine | $4,282.15 | $2,710.74 | $847.49 | 19% |
| 15 | El Salvador | $13,165.78 | $9,774.50 | $2,053.44 | 18% |
| 16 | Eritrea | $1,267.84 | $958.38 | $244.38 | 18% |
| 17 | Mali | $10,509.46 | $6,554.16 | $550.01 | 14% |
| 18 | Georgia | $7,798.09 | $5,775.74 | $1,995.86 | 14% |
| 19 | Jamaica | $4,943.10 | $3,761.04 | $1,705.29 | 14% |
| 20 | Honduras | $8,428.07 | $6,483.32 | $894.97 | 13% |
| 21 | South Africa | $141,350.50 | $96,286.49 | $2,462.62 | 12% |
| 22 | Lesotho | $1,092.88 | $814.97 | $482.93 | 12% |
| 23 | Mauritania | $4,113.87 | $2,316.42 | $906.12 | 12% |
| 24 | Oman | $44,929.70 | $22,790.90 | $9,302.32 | 12% |
| 25 | Saudi Arabia | $416,092.87 | $211,764.57 | $12,400.57 | 11% |
| 26 | Ukraine | $83,229.31 | $51,288.61 | $1,891.18 | 11% |
| 27 | Russia | $708,927.31 | $413,561.04 | $4,924.31 | 10% |
| 28 | United Arab Emirates | $141,962.84 | $71,801.91 | $14,878.28 | 10% |
| 29 | Mexico | $350,030.79 | $261,380.30 | $2,676.91 | 10% |
| 30 | Botswana | $6,528.13 | $4,197.30 | $2,797.93 | 10% |
| 31 | Trinidad & Tobago | $5,961.76 | $4,147.49 | $4,343.41 | 10% |
| 32 | Algeria | $123,103.73 | $63,650.56 | $2,930.48 | 10% |
| 33 | Azerbaijan | $27,808.51 | $17,486.40 | $2,802.17 | 10% |
| 34 | Bahrain | $13,635.65 | $7,140.66 | $8,701.79 | 10% |
| 35 | Brazil | $436,997.11 | $313,482.32 | $2,072.37 | 9% |
| 36 | Bosnia & Herzegovina | $6,781.44 | $4,449.76 | $1,935.59 | 9% |
| 37 | Burundi | $1,328.84 | $896.33 | $118.47 | 9% |
| 38 | Republic of the Congo | $4,152.39 | $2,769.98 | $768.98 | 9% |
| 39 | Namibia | $3,774.06 | $2,317.30 | $1,458.41 | 9% |
| 40 | Zimbabwe | $2,692.43 | $1,557.22 | $159.19 | 9% |
| 41 | Kosovo | $1,208.40 | $680.94 | $629.35 | 9% |
| 42 | Serbia | $18,395.40 | $10,535.50 | $2,099.45 | 8% |
| 43 | Kuwait | $47,800.42 | $24,667.01 | $11,388.84 | 8% |
| 44 | Turkey | $308,008.75 | $183,868.20 | $3,760.02 | 8% |
| 45 | Niger | $3,506.78 | $1,955.81 | $157.17 | 8% |
| 46 | Myanmar | $27,662.23 | $18,171.51 | $513.64 | 8% |
| 47 | United States | $2,946,557.65 | $ 1,675,322.83 | $9,017.31 | 8% |
| 48 | Uzbekistan | $50,724.21 | $26,289.57 | $1,567.26 | 8% |

| ECONOMIC COST OF VIOLENCE (Rank by % GDP) | COUNTRY | ECONOMIC IMPACT OF VIOLENCE (Millions, 2019 PPP) | ECONOMIC COST OF VIOLENCE (Millions, 2019 PPP) | PER CAPITA (2019, PPP) | COST AS PERCENTAGE OF GDP |
|---|---|---|---|---|---|
| 49 | Armenia | $4,789.99 | $2,566.74 | $1,632.50 | 8% |
| 50 | Guyana | $801.12 | $553.85 | $1,024.16 | 8% |
| 51 | Montenegro | $1,830.50 | $982.47 | $2,909.16 | 8% |
| 52 | Lebanon | $13,129.88 | $7,149.44 | $2,154.73 | 8% |
| 53 | Nigeria | $132,599.08 | $101,305.07 | $676.96 | 8% |
| 54 | Bhutan | $1,193.14 | $681.20 | $1,460.30 | 8% |
| 55 | Pakistan | $151,681.67 | $81,468.69 | $755.33 | 8% |
| 56 | Guatemala | $14,394.89 | $11,499.24 | $834.71 | 8% |
| 57 | Israel | $50,509.25 | $28,087.53 | $5,975.42 | 8% |
| 58 | Swaziland | $1,395.26 | $900.13 | $1,002.79 | 8% |
| 59 | Democratic Republic of the Congo | $7,331.54 | $5,844.26 | $87.28 | 7% |
| 60 | Chad | $3,501.47 | $2,136.16 | $228.06 | 7% |
| 61 | Argentina | $96,334.93 | $55,844.22 | $2,155.68 | 7% |
| 62 | Latvia | $7,361.77 | $4,211.91 | $3,814.51 | 7% |
| 63 | Lithuania | $11,717.49 | $6,949.28 | $4,073.56 | 7% |
| 64 | Liberia | $782.70 | $423.71 | $161.26 | 7% |
| 65 | Bulgaria | $19,352.57 | $10,388.85 | $2,750.18 | 7% |
| 66 | Burkina Faso | $4,907.52 | $2,650.77 | $248.46 | 7% |
| 67 | Uruguay | $8,751.80 | $5,344.64 | $2,522.46 | 7% |
| 68 | United Kingdom | $313,479.84 | $190,871.38 | $4,708.78 | 6% |
| 69 | Gambia | $679.27 | $416.77 | $313.93 | 6% |
| 70 | Côte d'Ivoire | $9,585.70 | $6,914.09 | $384.88 | 6% |
| 71 | France | $321,493.96 | $187,450.53 | $4,928.37 | 6% |
| 72 | Costa Rica | $8,349.63 | $5,588.25 | $1,685.71 | 6% |
| 73 | Sri Lanka | $29,553.94 | $17,318.37 | $1,410.69 | 6% |
| 74 | Estonia | $5,081.33 | $2,861.53 | $3,888.41 | 6% |
| 75 | Greece | $34,911.60 | $18,155.85 | $3,133.29 | 6% |
| 76 | Vietnam | $80,446.87 | $44,187.37 | $833.72 | 6% |
| 77 | Macedonia | $3,701.57 | $1,975.14 | $1,775.29 | 6% |
| 78 | Belarus | $19,271.35 | $11,457.05 | $2,038.84 | 6% |
| 79 | Hungary | $32,563.53 | $18,767.06 | $3,360.93 | 6% |
| 80 | Poland | $120,506.18 | $65,635.66 | $3,162.49 | 6% |
| 81 | Cameroon | $6,905.13 | $5,441.67 | $279.81 | 6% |
| 82 | Albania | $3,991.78 | $2,229.73 | $1,360.36 | 6% |
| 83 | Belgium | $50,046.06 | $31,717.35 | $4,352.39 | 6% |
| 84 | Djibouti | $584.26 | $337.60 | $601.46 | 6% |
| 85 | Bolivia | $8,811.67 | $5,305.54 | $785.66 | 6% |
| 86 | Australia | $120,299.19 | $69,782.56 | $4,856.21 | 6% |
| 87 | Morocco | $32,339.79 | $17,898.83 | $893.57 | 6% |
| 88 | Turkmenistan | $13,256.20 | $7,265.10 | $2,265.45 | 6% |
| 89 | Gabon | $3,594.52 | $2,122.32 | $1,738.53 | 6% |
| 90 | Cuba | $9,484.43 | $5,595.15 | $825.52 | 6% |
| 91 | Tunisia | $14,529.30 | $7,774.85 | $1,246.17 | 6% |
| 92 | Jordan | $10,505.41 | $5,461.58 | $1,060.75 | 6% |
| 93 | Ecuador | $19,025.30 | $10,946.95 | $1,128.20 | 5% |
| 94 | Guinea-Bissau | $288.86 | $177.17 | $151.45 | 5% |
| 95 | Peru | $43,176.72 | $26,056.38 | $1,326.40 | 5% |
| 96 | Dominican Republic | $16,674.65 | $10,656.31 | $1,532.17 | 5% |
| 97 | Romania | $55,768.05 | $30,108.03 | $2,848.12 | 5% |
| 98 | Togo | $1,239.56 | $764.71 | $155.12 | 5% |
| 99 | South Korea | $187,370.85 | $110,480.46 | $3,662.13 | 5% |
| 100 | Uganda | $7,681.48 | $5,035.29 | $173.51 | 5% |
| 101 | Haiti | $1,474.71 | $977.67 | $132.70 | 5% |
| 102 | Kyrgyzstan | $2,283.01 | $1,288.31 | $372.25 | 5% |
| 103 | Portugal | $31,581.79 | $17,228.36 | $3,068.82 | 5% |
| 104 | Iran | $160,182.21 | $86,817.66 | $1,953.16 | 5% |
| 105 | India | $991,185.91 | $573,462.89 | $732.01 | 5% |
| 106 | Mongolia | $3,810.73 | $2,304.33 | $1,220.70 | 5% |
| 107 | Slovakia | $16,776.40 | $9,235.01 | $3,078.34 | 5% |
| 108 | Senegal | $4,890.26 | $2,954.72 | $300.12 | 5% |
| 109 | New Zealand | $16,205.11 | $9,914.08 | $3,411.89 | 5% |
| 110 | Italy | $220,855.30 | $119,267.26 | $3,724.94 | 5% |
| 111 | Chile | $38,728.73 | $23,004.92 | $2,128.28 | 5% |
| 112 | Angola | $15,077.26 | $8,486.85 | $489.93 | 5% |
| 113 | Ethiopia | $15,446.74 | $11,758.90 | $143.64 | 5% |
| 114 | Singapore | $52,488.75 | $27,901.72 | $9,062.44 | 5% |
| 115 | Croatia | $9,162.17 | $5,481.80 | $2,199.92 | 5% |
| 116 | Moldova | $2,200.17 | $1,282.72 | $544.45 | 5% |
| 117 | Nicaragua | $2,440.67 | $1,651.76 | $388.35 | 5% |
| 118 | Rwanda | $2,081.74 | $1,436.45 | $166.52 | 5% |

| ECONOMIC COST OF VIOLENCE (Rank by % GDP) | COUNTRY | ECONOMIC IMPACT OF VIOLENCE (Millions, 2019 PPP) | ECONOMIC COST OF VIOLENCE (Millions, 2019 PPP) | PER CAPITA (2019, PPP) | COST AS PERCENTAGE OF GDP |
|---|---|---|---|---|---|
| 119 | Tajikistan | $3,068.01 | $1,623.63 | $336.88 | 5% |
| 120 | Sierra Leone | $1,035.40 | $601.54 | $134.12 | 5% |
| 121 | Nepal | $7,449.90 | $4,113.87 | $251.48 | 5% |
| 122 | Taiwan | $47,092.79 | $26,652.63 | $1,987.53 | 5% |
| 123 | Paraguay | $6,570.85 | $4,312.30 | $952.72 | 5% |
| 124 | Germany | $332,930.57 | $192,604.74 | $4,045.65 | 4% |
| 125 | Panama | $7,553.87 | $5,010.01 | $1,814.69 | 4% |
| 126 | Spain | $150,433.17 | $81,228.04 | $3,242.27 | 4% |
| 127 | Benin | $2,798.64 | $1,707.59 | $243.66 | 4% |
| 128 | Czech Republic | $33,923.73 | $18,650.13 | $3,192.75 | 4% |
| 129 | Netherlands | $74,871.09 | $41,787.58 | $4,382.41 | 4% |
| 130 | China | $2,118,883.85 | $1,145,139.88 | $1,497.40 | 4% |
| 131 | Guinea | $2,572.57 | $1,647.61 | $197.09 | 4% |
| 132 | Slovenia | $5,927.81 | $3,400.23 | $2,848.18 | 4% |
| 133 | Sweden | $35,726.91 | $21,715.77 | $3,578.88 | 4% |
| 134 | Philippines | $65,793.96 | $42,227.63 | $617.71 | 4% |
| 135 | Thailand | $93,548.99 | $55,748.78 | $1,352.19 | 4% |
| 136 | Finland | $17,904.74 | $10,441.87 | $3,230.44 | 4% |
| 137 | Kazakhstan | $29,467.14 | $19,253.58 | $1,601.14 | 4% |
| 138 | Norway | $23,624.41 | $13,277.60 | $4,413.00 | 4% |
| 139 | Mozambique | $3,041.80 | $1,733.78 | $99.64 | 4% |
| 140 | Egypt | $102,509.03 | $56,414.94 | $1,031.53 | 4% |
| 141 | Zambia | $4,106.31 | $2,452.36 | $233.19 | 4% |
| 142 | Papua New Guinea | $2,124.90 | $1,392.43 | $252.41 | 4% |
| 143 | Laos | $3,190.68 | $2,076.43 | $458.35 | 4% |
| 144 | Timor-Leste | $691.05 | $399.24 | $521.90 | 4% |
| 145 | Malaysia | $65,893.63 | $36,739.44 | $2,056.45 | 4% |
| 146 | Switzerland | $35,526.44 | $20,646.18 | $4,158.04 | 4% |
| 147 | Cambodia | $4,778.57 | $2,682.34 | $294.14 | 3% |
| 148 | Tanzania | $10,728.97 | $6,571.86 | $181.57 | 3% |
| 149 | Austria | $27,942.39 | $16,445.56 | $3,192.75 | 3% |
| 150 | Mauritius | $1,807.21 | $1,034.66 | $1,424.89 | 3% |
| 151 | Japan | $328,978.40 | $190,841.82 | $2,586.61 | 3% |
| 152 | Kenya | $10,800.58 | $6,794.03 | $211.98 | 3% |
| 153 | Denmark | $18,336.62 | $10,682.34 | $3,186.56 | 3% |
| 154 | Canada | $90,257.40 | $57,508.28 | $2,442.44 | 3% |
| 155 | Madagascar | $2,157.93 | $1,418.08 | $82.17 | 3% |
| 156 | Equatorial Guinea | $1,348.69 | $835.82 | $1,026.49 | 3% |
| 157 | Iceland | $815.80 | $522.11 | $2,415.17 | 3% |
| 158 | Ireland | $17,896.06 | $10,977.72 | $3,725.44 | 3% |
| 159 | Bangladesh | $35,644.92 | $21,651.01 | $214.25 | 3% |
| 160 | Ghana | $5,955.97 | $3,494.72 | $202.15 | 2% |
| 161 | Qatar | $15,470.39 | $8,411.60 | $5,740.73 | 2% |
| 162 | Indonesia | $146,160.73 | $78,185.99 | $547.84 | 2% |
| 163 | Malawi | $919.01 | $529.29 | $47.95 | 2% |

Source: IEP calculations

TABLE A.2

## Trend in the economic impact of violence by country, billions PPP, 2007–2019

| COUNTRY | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Afghanistan | $25.02 | $24.10 | $47.48 | $53.22 | $73.66 | $78.60 | $68.87 | $67.90 | $66.20 | $62.85 | $57.96 | $50.60 | $56.14 |
| Albania | $4.34 | $4.04 | $3.93 | $3.91 | $3.97 | $3.95 | $4.08 | $3.88 | $3.73 | $4.19 | $4.12 | $4.37 | $3.99 |
| Algeria | $76.14 | $77.43 | $74.69 | $95.06 | $97.69 | $104.10 | $105.13 | $108.48 | $96.11 | $133.78 | $137.73 | $129.27 | $123.10 |
| Angola | $22.18 | $21.06 | $22.72 | $28.45 | $25.29 | $20.87 | $20.57 | $26.25 | $27.45 | $21.72 | $20.59 | $17.13 | $15.08 |
| Argentina | $162.29 | $151.50 | $124.80 | $138.91 | $125.79 | $109.27 | $108.52 | $114.11 | $122.14 | $104.26 | $105.47 | $86.64 | $96.33 |
| Armenia | $3.47 | $3.58 | $3.34 | $3.62 | $3.52 | $3.34 | $3.41 | $3.69 | $3.67 | $4.13 | $4.13 | $4.13 | $4.79 |
| Australia | $117.05 | $118.90 | $99.14 | $138.05 | $123.55 | $113.40 | $101.80 | $100.68 | $102.47 | $109.45 | $133.95 | $128.65 | $120.30 |
| Austria | $30.99 | $29.93 | $27.43 | $27.79 | $28.35 | $25.87 | $28.31 | $27.71 | $24.77 | $27.95 | $29.10 | $30.31 | $27.94 |
| Azerbaijan | $27.16 | $28.13 | $29.11 | $34.15 | $30.66 | $34.59 | $35.55 | $36.93 | $35.97 | $40.63 | $34.72 | $30.06 | $27.81 |
| Bahrain | $15.14 | $14.54 | $13.99 | $16.70 | $14.96 | $14.82 | $15.36 | $16.03 | $17.02 | $18.61 | $18.60 | $17.29 | $13.64 |
| Bangladesh | $22.50 | $23.37 | $24.80 | $25.67 | $26.32 | $27.09 | $29.15 | $29.39 | $30.59 | $32.99 | $33.44 | $34.17 | $35.64 |
| Belarus | $22.86 | $24.64 | $17.61 | $19.88 | $18.76 | $17.55 | $19.80 | $19.31 | $15.49 | $14.95 | $17.50 | $18.26 | $19.27 |
| Belgium | $58.92 | $55.54 | $53.65 | $55.04 | $56.73 | $50.64 | $54.82 | $53.52 | $47.11 | $52.88 | $54.11 | $54.23 | $50.05 |
| Benin | $2.52 | $2.45 | $2.30 | $2.31 | $2.38 | $2.21 | $2.36 | $2.40 | $2.33 | $2.82 | $2.78 | $3.02 | $2.80 |
| Bhutan | $1.56 | $1.48 | $1.62 | $1.64 | $1.45 | $1.33 | $1.25 | $1.24 | $1.20 | $1.25 | $1.22 | $1.12 | $1.19 |
| Bolivia | $7.19 | $7.63 | $7.85 | $8.39 | $7.96 | $8.54 | $9.05 | $9.07 | $8.73 | $8.97 | $8.84 | $8.64 | $8.81 |
| Bosnia & Herzegovina | $8.77 | $7.90 | $7.68 | $7.47 | $7.16 | $6.55 | $6.22 | $5.98 | $5.97 | $6.48 | $6.48 | $6.51 | $6.78 |
| Botswana | $5.41 | $5.46 | $5.85 | $6.18 | $5.58 | $5.11 | $4.89 | $5.95 | $5.56 | $6.54 | $7.04 | $6.59 | $6.53 |
| Brazil | $430.48 | $429.12 | $390.54 | $456.43 | $442.74 | $373.38 | $412.23 | $428.84 | $365.49 | $446.56 | $455.26 | $395.28 | $437.00 |
| Bulgaria | $23.11 | $23.19 | $19.81 | $19.46 | $19.14 | $15.93 | $16.71 | $17.81 | $17.04 | $19.30 | $19.06 | $19.64 | $19.35 |
| Burkina Faso | $3.32 | $3.44 | $3.30 | $3.47 | $3.25 | $2.98 | $3.22 | $3.33 | $3.42 | $4.20 | $4.01 | $4.13 | $4.91 |
| Burundi | $2.21 | $2.39 | $2.11 | $1.88 | $1.99 | $1.86 | $1.55 | $1.63 | $1.60 | $1.50 | $1.33 | $1.24 | $1.33 |
| Cambodia | $2.41 | $2.28 | $2.11 | $2.53 | $2.67 | $2.75 | $2.88 | $3.12 | $3.38 | $3.75 | $3.96 | $4.37 | $4.78 |
| Cameroon | $3.90 | $3.97 | $3.90 | $3.56 | $4.14 | $3.53 | $3.73 | $3.72 | $5.79 | $7.12 | $5.20 | $5.37 | $6.91 |
| Canada | $96.71 | $94.11 | $92.62 | $102.96 | $89.20 | $85.78 | $81.86 | $78.67 | $76.56 | $85.71 | $88.98 | $91.52 | $90.26 |
| Central African Republic | $1.21 | $0.94 | $0.95 | $1.03 | $1.19 | $1.07 | $1.38 | $1.28 | $1.36 | $1.36 | $1.42 | $1.82 | $1.90 |
| Chad | $4.75 | $4.64 | $5.29 | $6.64 | $5.57 | $4.93 | $5.38 | $5.59 | $4.09 | $4.19 | $4.68 | $4.43 | $3.50 |
| Chile | $38.94 | $37.24 | $37.88 | $36.91 | $37.09 | $39.18 | $38.24 | $36.18 | $37.64 | $38.57 | $37.68 | $38.11 | $38.73 |
| China | $1,234.05 | $1,266.32 | $1,262.47 | $1,457.88 | $1,451.87 | $1,433.50 | $1,525.88 | $1,611.57 | $1,718.41 | $1,808.30 | $2,000.40 | $2,098.81 | $2,118.88 |
| Colombia | $184.84 | $174.02 | $194.48 | $203.65 | $173.32 | $175.53 | $196.69 | $211.45 | $217.31 | $242.68 | $244.54 | $223.78 | $213.25 |
| Republic of the Congo | $2.63 | $2.80 | $2.45 | $3.38 | $2.98 | $2.63 | $3.02 | $3.34 | $4.81 | $7.09 | $6.11 | $5.41 | $4.15 |
| Democratic Republic of the Congo | $7.15 | $6.00 | $7.32 | $7.94 | $6.58 | $7.19 | $9.01 | $9.27 | $9.74 | $7.77 | $10.77 | $12.20 | $7.33 |
| Costa Rica | $7.21 | $7.27 | $6.88 | $8.46 | $7.80 | $7.71 | $7.66 | $7.13 | $7.83 | $7.91 | $8.08 | $8.30 | $8.35 |
| Côte d'Ivoire | $9.23 | $9.06 | $8.24 | $8.88 | $7.83 | $9.23 | $6.85 | $7.59 | $7.98 | $9.42 | $9.45 | $8.29 | $9.59 |
| Croatia | $13.61 | $13.12 | $12.72 | $11.79 | $10.71 | $10.33 | $9.98 | $9.70 | $8.83 | $9.56 | $9.29 | $9.54 | $9.16 |
| Cuba | $13.68 | $12.87 | $13.12 | $12.45 | $11.59 | $11.24 | $11.10 | $10.83 | $10.74 | $10.53 | $10.18 | $9.67 | $9.48 |
| Cyprus | $3.77 | $3.51 | $16.31 | $15.70 | $14.99 | $14.30 | $10.41 | $9.98 | $9.28 | $11.80 | $12.32 | $10.78 | $11.22 |
| Czech Republic | $43.52 | $41.80 | $33.24 | $36.62 | $34.70 | $28.95 | $29.79 | $29.33 | $28.42 | $33.27 | $34.15 | $35.20 | $33.92 |
| Denmark | $20.78 | $19.25 | $18.93 | $18.73 | $19.19 | $18.54 | $18.35 | $17.80 | $16.01 | $18.00 | $18.40 | $18.75 | $18.34 |
| Djibouti | $0.63 | $0.53 | $0.56 | $0.54 | $0.46 | $0.53 | $0.54 | $0.55 | $0.57 | $0.58 | $0.57 | $0.57 | $0.58 |
| Dominican Republic | $16.82 | $15.49 | $15.37 | $16.88 | $16.39 | $16.44 | $16.70 | $16.91 | $16.94 | $17.32 | $17.65 | $17.36 | $16.67 |
| Ecuador | $23.32 | $25.78 | $24.38 | $26.68 | $25.67 | $27.00 | $26.09 | $25.26 | $23.97 | $22.14 | $20.34 | $19.19 | $19.03 |
| Egypt | $96.12 | $88.97 | $87.45 | $87.47 | $79.15 | $82.66 | $79.02 | $87.30 | $96.31 | $93.16 | $71.50 | $89.63 | $102.51 |
| El Salvador | $11.26 | $11.24 | $10.59 | $10.83 | $13.05 | $12.05 | $12.07 | $9.37 | $9.78 | $12.30 | $16.81 | $15.04 | $13.17 |
| Equatorial Guinea | $3.75 | $3.72 | $3.29 | $4.62 | $3.69 | $2.89 | $2.72 | $2.51 | $2.00 | $2.32 | $1.91 | $1.59 | $1.35 |
| Eritrea | $2.88 | $2.49 | $2.64 | $2.02 | $1.87 | $1.48 | $1.16 | $1.19 | $1.04 | $1.12 | $1.09 | $1.13 | $1.27 |
| Estonia | $5.76 | $5.34 | $5.00 | $4.79 | $4.61 | $4.38 | $4.83 | $4.68 | $4.35 | $4.78 | $5.21 | $5.39 | $5.08 |
| Ethiopia | $10.04 | $10.27 | $9.71 | $7.77 | $8.88 | $10.08 | $8.84 | $9.47 | $10.32 | $10.73 | $10.78 | $11.84 | $15.45 |
| Finland | $25.90 | $24.61 | $23.20 | $21.66 | $22.16 | $19.88 | $20.73 | $19.69 | $17.19 | $19.06 | $18.82 | $18.74 | $17.90 |
| France | $351.32 | $330.81 | $316.43 | $335.71 | $331.70 | $305.58 | $316.21 | $318.04 | $294.26 | $327.89 | $337.56 | $342.65 | $321.49 |
| Gabon | $3.53 | $3.35 | $2.63 | $3.68 | $3.57 | $2.83 | $3.25 | $3.44 | $2.99 | $3.69 | $3.92 | $4.03 | $3.59 |
| Gambia | $0.54 | $0.47 | $0.52 | $0.56 | $0.45 | $0.47 | $0.53 | $0.48 | $0.61 | $0.57 | $0.55 | $0.85 | $0.68 |
| Georgia | $9.30 | $14.24 | $12.41 | $10.08 | $9.49 | $8.76 | $7.74 | $7.29 | $6.93 | $7.18 | $7.11 | $7.77 | $7.80 |
| Germany | $402.78 | $375.86 | $313.51 | $327.71 | $335.00 | $306.93 | $329.19 | $324.85 | $295.49 | $333.21 | $342.89 | $354.78 | $332.93 |
| Ghana | $5.22 | $5.05 | $4.92 | $5.96 | $5.60 | $5.97 | $7.02 | $4.67 | $5.52 | $5.93 | $5.55 | $5.84 | $5.96 |
| Greece | $53.88 | $49.02 | $50.93 | $51.29 | $41.11 | $33.85 | $34.26 | $34.24 | $33.47 | $36.48 | $37.14 | $37.19 | $34.91 |
| Guatemala | $15.37 | $16.90 | $15.53 | $17.55 | $17.88 | $15.64 | $15.41 | $15.61 | $17.23 | $16.60 | $16.02 | $14.47 | $14.39 |
| Guinea | $2.72 | $2.05 | $1.93 | $1.91 | $1.87 | $2.44 | $2.00 | $2.23 | $2.23 | $2.34 | $2.43 | $2.34 | $2.57 |
| Guinea-Bissau | $0.33 | $0.31 | $0.40 | $0.36 | $0.42 | $0.30 | $0.33 | $0.30 | $0.32 | $0.32 | $0.27 | $0.26 | $0.29 |
| Guyana | $0.90 | $0.89 | $0.88 | $0.93 | $0.84 | $0.86 | $0.77 | $0.83 | $0.95 | $0.86 | $0.83 | $0.87 | $0.80 |
| Haiti | $2.43 | $1.87 | $1.97 | $2.28 | $2.65 | $2.20 | $2.88 | $2.11 | $1.91 | $2.03 | $2.00 | $1.84 | $1.47 |
| Honduras | $5.97 | $5.97 | $6.71 | $7.18 | $8.55 | $9.04 | $9.33 | $10.30 | $10.48 | $10.30 | $9.49 | $9.43 | $8.43 |
| Hungary | $33.09 | $29.33 | $25.07 | $27.37 | $26.20 | $24.36 | $27.07 | $26.52 | $23.47 | $27.71 | $31.34 | $32.90 | $32.56 |
| Iceland | $0.95 | $0.65 | $0.61 | $0.81 | $0.69 | $0.64 | $0.77 | $0.75 | $0.72 | $0.94 | $0.91 | $0.89 | $0.82 |
| India | $829.17 | $707.11 | $853.06 | $927.69 | $845.54 | $709.81 | $738.87 | $793.84 | $828.10 | $893.08 | $943.33 | $926.25 | $991.19 |
| Indonesia | $61.84 | $64.51 | $59.41 | $77.41 | $61.97 | $67.29 | $74.60 | $92.35 | $88.66 | $112.01 | $160.60 | $141.56 | $146.16 |

| COUNTRY | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iran | $210.83 | $166.47 | $152.60 | $170.72 | $162.06 | $122.58 | $120.95 | $127.23 | $121.73 | $142.89 | $163.29 | $168.15 | $160.18 |
| Iraq | $269.83 | $234.55 | $223.53 | $280.31 | $305.03 | $217.40 | $227.89 | $283.29 | $279.75 | $339.92 | $360.79 | $316.24 | $284.13 |
| Ireland | $20.11 | $18.87 | $17.49 | $17.22 | $17.92 | $15.84 | $15.27 | $15.56 | $16.42 | $17.22 | $17.88 | $18.85 | $17.90 |
| Israel | $60.88 | $57.50 | $52.12 | $55.11 | $51.08 | $51.45 | $54.08 | $55.13 | $54.68 | $55.92 | $51.62 | $50.23 | $50.51 |
| Italy | $300.12 | $274.37 | $257.97 | $266.64 | $260.82 | $236.44 | $241.88 | $232.39 | $203.51 | $226.56 | $238.29 | $239.89 | $220.86 |
| Jamaica | $6.33 | $5.44 | $5.47 | $6.01 | $5.57 | $4.87 | $3.97 | $3.94 | $4.22 | $3.77 | $4.28 | $4.40 | $4.94 |
| Japan | $403.31 | $415.12 | $391.24 | $390.16 | $359.76 | $348.00 | $307.29 | $337.40 | $332.95 | $376.68 | $333.32 | $329.06 | $328.98 |
| Jordan | $10.03 | $12.38 | $13.01 | $13.88 | $11.86 | $11.37 | $10.24 | $9.56 | $9.86 | $9.99 | $10.38 | $10.76 | $10.51 |
| Kazakhstan | $45.97 | $49.66 | $37.45 | $46.87 | $45.99 | $37.99 | $43.75 | $37.68 | $33.30 | $29.39 | $33.20 | $29.89 | $29.47 |
| Kenya | $9.09 | $10.19 | $9.54 | $9.30 | $9.71 | $10.45 | $11.18 | $11.24 | $10.35 | $10.88 | $10.32 | $10.42 | $10.80 |
| Kosovo | $0.66 | $0.71 | $0.71 | $2.36 | $1.53 | $1.65 | $1.50 | $1.60 | $1.46 | $1.19 | $1.15 | $1.21 | $1.21 |
| Kuwait | $43.11 | $46.07 | $33.53 | $41.55 | $40.30 | $39.30 | $38.68 | $37.17 | $35.91 | $50.15 | $57.46 | $53.13 | $47.80 |
| Kyrgyzstan | $2.72 | $2.52 | $2.16 | $2.37 | $2.70 | $2.72 | $2.85 | $2.23 | $2.32 | $2.58 | $2.59 | $2.40 | $2.28 |
| Laos | $3.68 | $3.48 | $3.24 | $3.41 | $3.17 | $2.91 | $2.95 | $2.92 | $2.99 | $3.13 | $3.04 | $3.11 | $3.19 |
| Latvia | $9.01 | $7.60 | $5.63 | $5.09 | $5.45 | $4.82 | $4.99 | $5.13 | $4.69 | $5.60 | $6.49 | $7.30 | $7.36 |
| Lebanon | $14.57 | $13.52 | $21.21 | $20.54 | $14.23 | $14.04 | $13.05 | $13.21 | $14.68 | $13.88 | $14.51 | $13.34 | $13.13 |
| Lesotho | $0.97 | $1.13 | $1.23 | $1.33 | $1.24 | $1.02 | $1.00 | $1.04 | $0.92 | $1.08 | $1.24 | $1.12 | $1.09 |
| Liberia | $1.25 | $5.96 | $1.04 | $1.10 | $1.25 | $1.08 | $0.89 | $0.75 | $0.88 | $0.78 | $0.74 | $0.79 | $0.78 |
| Libya | $19.82 | $16.93 | $15.52 | $25.10 | $16.97 | $29.29 | $22.11 | $35.69 | $37.79 | $47.62 | $48.44 | $43.44 | $34.12 |
| Lithuania | $12.80 | $11.62 | $9.31 | $9.54 | $10.34 | $9.43 | $10.18 | $9.88 | $9.17 | $10.73 | $11.46 | $12.11 | $11.72 |
| Macedonia | $4.88 | $4.46 | $4.31 | $4.52 | $4.19 | $4.01 | $3.80 | $3.92 | $3.90 | $4.45 | $4.31 | $4.16 | $3.70 |
| Madagascar | $3.97 | $3.07 | $2.97 | $2.27 | $1.99 | $1.80 | $1.82 | $1.90 | $1.90 | $2.21 | $1.84 | $2.10 | $2.16 |
| Malawi | $0.63 | $0.82 | $0.85 | $0.91 | $0.69 | $0.63 | $0.75 | $1.01 | $0.88 | $0.77 | $0.89 | $0.89 | $0.92 |
| Malaysia | $73.18 | $70.24 | $64.48 | $70.26 | $57.69 | $57.10 | $56.96 | $61.83 | $62.95 | $72.75 | $73.80 | $70.16 | $65.89 |
| Mali | $7.72 | $6.80 | $6.64 | $6.77 | $6.59 | $5.49 | $6.62 | $6.94 | $6.68 | $9.00 | $8.66 | $9.26 | $10.51 |
| Mauritania | $4.20 | $4.08 | $3.61 | $3.84 | $3.41 | $3.15 | $3.31 | $3.34 | $3.60 | $3.97 | $4.06 | $4.19 | $4.11 |
| Mauritius | $1.42 | $1.41 | $1.09 | $1.56 | $1.60 | $1.57 | $1.57 | $1.95 | $1.64 | $1.19 | $1.89 | $1.98 | $1.81 |
| Mexico | $206.71 | $197.62 | $216.22 | $293.64 | $291.35 | $306.88 | $322.96 | $245.93 | $272.67 | $282.39 | $310.36 | $311.97 | $350.03 |
| Moldova | $3.31 | $4.65 | $2.96 | $2.50 | $1.94 | $1.95 | $2.01 | $2.00 | $1.78 | $2.14 | $2.43 | $2.44 | $2.20 |
| Mongolia | $2.69 | $2.99 | $2.17 | $2.97 | $2.78 | $2.69 | $2.90 | $2.97 | $3.35 | $3.38 | $3.55 | $3.77 | $3.81 |
| Montenegro | $2.95 | $2.25 | $1.97 | $1.88 | $1.81 | $1.68 | $1.68 | $1.60 | $1.55 | $1.81 | $1.88 | $1.89 | $1.83 |
| Morocco | $25.86 | $24.73 | $26.26 | $26.99 | $27.08 | $27.26 | $30.19 | $32.12 | $32.10 | $31.57 | $32.13 | $31.84 | $32.34 |
| Mozambique | $1.58 | $1.58 | $1.54 | $1.73 | $2.03 | $1.87 | $1.88 | $2.08 | $2.22 | $2.27 | $3.14 | $3.05 | $3.04 |
| Myanmar | $34.10 | $32.02 | $33.27 | $32.86 | $30.31 | $31.15 | $32.32 | $33.51 | $28.52 | $29.13 | $29.40 | $35.61 | $27.66 |
| Namibia | $3.25 | $3.10 | $3.60 | $3.77 | $3.54 | $3.43 | $3.29 | $3.67 | $4.45 | $5.00 | $4.82 | $4.09 | $3.77 |
| Nepal | $7.71 | $7.41 | $7.31 | $7.93 | $6.80 | $6.56 | $6.37 | $6.96 | $7.37 | $6.85 | $7.43 | $7.06 | $7.45 |
| Netherlands | $97.15 | $94.62 | $85.95 | $88.27 | $85.71 | $77.20 | $76.19 | $75.68 | $65.71 | $74.85 | $75.97 | $76.81 | $74.87 |
| New Zealand | $16.74 | $14.42 | $13.96 | $16.77 | $15.52 | $14.90 | $14.26 | $15.15 | $14.36 | $15.89 | $17.23 | $16.12 | $16.21 |
| Nicaragua | $2.75 | $2.89 | $2.66 | $2.54 | $2.66 | $2.66 | $2.74 | $2.79 | $2.76 | $2.76 | $2.69 | $2.45 | $2.44 |
| Niger | $1.70 | $1.71 | $1.52 | $1.38 | $1.70 | $1.52 | $2.15 | $1.83 | $2.22 | $2.96 | $3.06 | $3.62 | $3.51 |
| Nigeria | $69.39 | $70.21 | $68.13 | $91.34 | $94.36 | $113.50 | $112.15 | $125.54 | $116.15 | $114.14 | $117.78 | $123.13 | $132.60 |
| North Korea | $7.26 | $8.24 | $10.67 | $11.21 | $10.45 | $10.53 | $10.63 | $9.80 | $11.79 | $11.60 | $11.19 | $10.83 | $10.59 |
| Norway | $24.99 | $24.06 | $21.87 | $24.81 | $24.12 | $24.23 | $24.62 | $23.35 | $21.76 | $22.38 | $23.57 | $24.35 | $23.62 |
| Oman | $37.63 | $37.11 | $28.49 | $36.26 | $30.62 | $33.14 | $51.38 | $49.71 | $48.13 | $54.70 | $60.95 | $49.82 | $44.93 |
| Pakistan | $149.04 | $164.22 | $157.93 | $165.18 | $162.21 | $149.38 | $152.42 | $160.16 | $177.26 | $172.56 | $171.95 | $150.98 | $151.68 |
| Palestine | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $5.35 | $4.24 | $4.17 | $4.34 | $4.28 |
| Panama | $6.59 | $5.87 | $6.48 | $6.72 | $7.42 | $8.64 | $8.43 | $8.74 | $8.90 | $8.53 | $7.92 | $7.44 | $7.55 |
| Papua New Guinea | $1.60 | $1.71 | $1.42 | $1.76 | $1.68 | $1.52 | $1.52 | $1.60 | $1.66 | $1.86 | $1.95 | $1.94 | $2.12 |
| Paraguay | $7.95 | $7.23 | $5.90 | $6.77 | $6.82 | $5.72 | $6.03 | $5.97 | $5.72 | $6.44 | $6.64 | $6.54 | $6.57 |
| Peru | $34.61 | $35.52 | $37.54 | $40.34 | $36.99 | $36.61 | $37.73 | $41.73 | $40.66 | $45.24 | $44.06 | $41.87 | $43.18 |
| Philippines | $44.00 | $42.51 | $41.88 | $58.88 | $46.85 | $46.45 | $46.00 | $48.21 | $49.91 | $54.35 | $64.75 | $85.75 | $65.79 |
| Poland | $107.94 | $111.13 | $90.78 | $110.93 | $113.38 | $105.16 | $112.54 | $111.39 | $105.70 | $122.76 | $125.22 | $125.99 | $120.51 |
| Portugal | $46.33 | $41.04 | $39.13 | $38.84 | $38.11 | $33.30 | $33.70 | $36.32 | $31.59 | $34.62 | $34.29 | $33.13 | $31.58 |
| Qatar | $15.53 | $17.21 | $18.01 | $23.61 | $22.00 | $18.92 | $18.22 | $18.15 | $18.52 | $24.35 | $26.33 | $24.13 | $15.47 |
| Romania | $53.91 | $48.20 | $40.98 | $41.80 | $45.73 | $40.72 | $45.65 | $44.10 | $40.67 | $49.21 | $50.40 | $55.56 | $55.77 |
| Russia | $870.60 | $813.85 | $682.02 | $978.45 | $872.03 | $803.37 | $855.79 | $804.53 | $684.15 | $804.11 | $911.05 | $764.04 | $708.93 |
| Rwanda | $1.62 | $1.47 | $1.78 | $1.60 | $1.49 | $1.81 | $1.41 | $1.51 | $1.55 | $2.15 | $2.51 | $1.93 | $2.08 |
| Saudi Arabia | $368.74 | $372.16 | $333.50 | $409.51 | $356.38 | $327.57 | $350.62 | $403.09 | $484.16 | $617.24 | $484.44 | $478.30 | $416.09 |
| Senegal | $4.00 | $3.85 | $3.85 | $3.87 | $3.78 | $3.65 | $3.66 | $3.83 | $3.90 | $4.59 | $5.03 | $5.00 | $4.89 |
| Serbia | $28.19 | $26.36 | $26.00 | $24.87 | $25.20 | $23.02 | $23.44 | $19.02 | $20.41 | $22.01 | $21.21 | $18.06 | $18.40 |
| Sierra Leone | $1.78 | $1.65 | $1.41 | $1.52 | $1.36 | $1.32 | $1.44 | $1.05 | $1.18 | $0.86 | $1.13 | $1.22 | $1.04 |
| Singapore | $45.44 | $42.41 | $44.81 | $46.14 | $43.21 | $42.10 | $43.10 | $44.07 | $46.71 | $48.91 | $50.38 | $51.98 | $52.49 |
| Slovakia | $15.71 | $15.44 | $15.01 | $16.97 | $16.75 | $14.84 | $15.72 | $15.39 | $14.43 | $17.38 | $17.48 | $17.24 | $16.78 |
| Slovenia | $8.38 | $7.58 | $7.07 | $6.88 | $6.96 | $5.89 | $6.02 | $5.91 | $5.03 | $5.60 | $6.21 | $6.26 | $5.93 |
| Somalia | $1.57 | $1.77 | $2.21 | $2.47 | $2.23 | $2.61 | $2.34 | $1.76 | $2.00 | $1.92 | $1.81 | $1.65 | $2.24 |

| COUNTRY | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South Africa | $158.08 | $145.97 | $163.24 | $184.78 | $155.04 | $136.54 | $135.71 | $144.08 | $138.18 | $143.45 | $167.57 | $148.97 | $141.35 |
| South Korea | $203.00 | $185.44 | $198.21 | $224.49 | $206.20 | $179.33 | $184.46 | $182.88 | $178.84 | $189.60 | $193.71 | $191.02 | $187.37 |
| South Sudan | $ - | $ - | $ - | $5.04 | $4.82 | $7.26 | $6.29 | $7.98 | $11.46 | $8.85 | $2.85 | $3.17 | $2.79 |
| Spain | $197.81 | $190.92 | $178.06 | $170.67 | $168.25 | $149.69 | $155.86 | $149.43 | $141.42 | $156.33 | $154.48 | $159.36 | $150.43 |
| Sri Lanka | $48.20 | $52.55 | $53.15 | $56.45 | $34.41 | $34.64 | $30.39 | $29.31 | $31.66 | $33.14 | $31.32 | $30.83 | $29.55 |
| Sudan | $51.82 | $51.03 | $64.35 | $67.96 | $53.19 | $56.81 | $51.23 | $51.90 | $49.30 | $45.83 | $47.26 | $39.18 | $56.15 |
| Swaziland | $1.18 | $1.09 | $1.35 | $1.48 | $1.29 | $1.28 | $1.23 | $1.32 | $1.32 | $1.39 | $1.53 | $1.44 | $1.40 |
| Sweden | $50.01 | $48.43 | $42.74 | $39.53 | $39.42 | $34.72 | $37.46 | $35.97 | $33.45 | $37.10 | $37.25 | $37.17 | $35.73 |
| Switzerland | $36.84 | $37.66 | $33.98 | $34.59 | $35.26 | $31.46 | $33.37 | $35.15 | $33.50 | $34.93 | $35.69 | $36.29 | $35.53 |
| Syria | $5.09 | $5.28 | $7.12 | $8.20 | $7.85 | $9.41 | $29.63 | $32.27 | $32.83 | $27.47 | $22.62 | $18.79 | $16.41 |
| Taiwan | $51.38 | $49.50 | $50.57 | $51.89 | $49.58 | $50.86 | $51.19 | $49.81 | $48.45 | $48.09 | $47.41 | $47.93 | $47.09 |
| Tajikistan | $2.52 | $2.16 | $1.72 | $1.88 | $1.74 | $1.96 | $1.77 | $1.84 | $1.88 | $2.52 | $2.70 | $2.82 | $3.07 |
| Tanzania | $7.82 | $7.86 | $6.96 | $8.04 | $8.66 | $8.27 | $8.58 | $8.78 | $8.87 | $10.05 | $9.40 | $10.59 | $10.73 |
| Thailand | $85.53 | $87.34 | $85.96 | $96.76 | $85.28 | $84.97 | $86.09 | $84.56 | $85.91 | $92.62 | $96.04 | $93.93 | $93.55 |
| Timor-Leste | $2.12 | $2.18 | $1.23 | $1.29 | $1.20 | $0.86 | $0.83 | $0.69 | $0.58 | $0.76 | $0.89 | $0.85 | $0.69 |
| Togo | $0.96 | $1.07 | $1.28 | $1.05 | $0.92 | $1.00 | $1.11 | $0.93 | $1.02 | $1.05 | $1.11 | $1.34 | $1.24 |
| Trinidad & Tobago | $8.89 | $8.75 | $6.30 | $10.18 | $9.03 | $7.46 | $6.70 | $6.85 | $6.51 | $6.61 | $6.87 | $6.42 | $5.96 |
| Tunisia | $11.23 | $10.97 | $10.38 | $10.80 | $10.53 | $10.84 | $11.88 | $12.09 | $12.55 | $14.27 | $14.31 | $14.17 | $14.53 |
| Turkey | $180.36 | $171.05 | $186.97 | $219.46 | $210.25 | $218.76 | $227.29 | $215.84 | $231.80 | $306.39 | $327.71 | $279.66 | $308.01 |
| Turkmenistan | $9.19 | $6.29 | $6.23 | $6.11 | $6.97 | $8.13 | $7.68 | $8.38 | $8.44 | $11.23 | $12.15 | $13.13 | $13.26 |
| Uganda | $10.06 | $8.76 | $7.94 | $6.92 | $8.08 | $8.82 | $6.51 | $6.29 | $5.39 | $5.81 | $7.00 | $7.05 | $7.68 |
| Ukraine | $80.28 | $79.65 | $59.64 | $68.94 | $65.79 | $57.67 | $56.96 | $57.90 | $75.50 | $89.81 | $86.16 | $73.50 | $83.23 |
| United Arab Emirates | $70.88 | $70.20 | $67.64 | $91.03 | $93.61 | $89.78 | $88.59 | $108.58 | $101.91 | $140.38 | $151.11 | $152.28 | $141.96 |
| United Kingdom | $408.38 | $349.12 | $340.41 | $375.66 | $361.20 | $333.91 | $331.47 | $345.74 | $315.12 | $310.16 | $320.40 | $337.16 | $313.48 |
| United States | $3,473.96 | $3,356.36 | $3,496.68 | $3,561.82 | $3,383.27 | $3,353.33 | $3,200.42 | $3,062.31 | $2,998.38 | $2,948.02 | $2,924.34 | $2,897.03 | $2,946.56 |
| Uruguay | $9.57 | $9.08 | $8.61 | $9.19 | $8.46 | $7.82 | $8.16 | $8.16 | $8.28 | $8.68 | $9.19 | $8.96 | $8.75 |
| Uzbekistan | $29.86 | $27.18 | $33.37 | $43.04 | $34.46 | $27.59 | $30.97 | $31.40 | $31.44 | $28.03 | $27.23 | $41.35 | $50.72 |
| Venezuela | $77.12 | $94.42 | $73.21 | $75.14 | $63.63 | $74.81 | $57.17 | $62.79 | $49.70 | $44.93 | $23.06 | $14.96 | $20.87 |
| Vietnam | $72.57 | $72.71 | $67.20 | $68.94 | $67.89 | $63.89 | $64.54 | $65.88 | $69.89 | $75.55 | $78.98 | $78.75 | $80.45 |
| Yemen | $21.13 | $23.11 | $20.59 | $26.71 | $21.60 | $21.35 | $23.23 | $19.86 | $30.03 | $24.21 | $21.11 | $22.46 | $25.24 |
| Zambia | $3.07 | $3.30 | $3.04 | $3.68 | $3.48 | $3.37 | $3.64 | $3.65 | $3.94 | $4.62 | $4.53 | $3.97 | $4.11 |
| Zimbabwe | $5.43 | $4.53 | $7.16 | $5.08 | $4.40 | $5.25 | $4.63 | $4.19 | $4.05 | $3.93 | $3.68 | $3.33 | $2.69 |

Source: IEP calculations

B

# Methodology

There have been many studies that look at the cost of violence to society, IEP takes a holistic approach to counting the costs of violence. This methodology looks at both the costs of containing violence and of dealing with its consequences, in both the short and long term, where violence is directed against people or property. The sum total of these costs is labelled the **total economic impact of violence**.

There are four main approaches to measuring the economic cost of violence: bottom-up cost method, contingent valuation, hedonic pricing, and economic modelling of losses to the general economy or economic growth.[1] The bottom-up cost method uses an accounting approach to aggregate incidents of violence and spending on responding to and containing violence. IEP uses this approach to aggregate the costs arising from incidents of violence and expenditure on containing violence.

The main benefits of the accounting method are that costs can be disaggregated by category. For example, the cost of violence can be disaggregated to public and private spending. It could also be separated to direct and indirect costs depending on how the incident of violence impacts the victim, perpetrator and government. Further, the cost of violence can be broken down by whether it accrues in the short or long term. The flexibility of the accounting methods also allows sufficient flexibility for inclusion and exclusion of variables based on availability of reliable data.

The total global economic impact of violence is defined as expenditure related to "*containing, preventing and dealing with the consequences of violence*". IEP's model includes both direct and indirect costs of the violence as well as a peace multiplier. The multiplier effect calculates the additional economic activity that would have been accrued if the direct costs of violence had been avoided. Examples of direct costs include medical costs for victims of violent crime, capital destruction from violent conflict and costs associated with the security and judicial systems. Indirect costs include lost wages or productivity from crime due to physical and emotional trauma. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of violent crime alter their behaviour.[2]

Importantly, the model can compare the economic impact of violence across countries. Therefore, the methodology presents the final numbers in 2019 constant purchasing power parity (PPP) international dollars, which makes the cost comparable between countries and over time.

## TYPOLOGY OF THE COST OF VIOLENCE

IEP estimates the economic impact of violence using a comprehensive aggregation of costs related to violence, conflict and violence containment spending. The Global Peace Index is used as the initial point of reference for developing the costing model by matching unit costs of different types of violence with the GPI indicators, where possible. The 2020 version of the economic impact of violence includes 18 variables across three domains.

TABLE B.1

### Variables included in the economic impact of violence model, 2020

The cost of violence containment model includes both costs aimed at preventing violence and the consequential costs of violence.

| VIOLENCE CONTAINMENT | ARMED CONFLICT | INTERPERSONAL AND SELF-INFLICTED VIOLENCE |
|---|---|---|
| Military expenditure | Conflict deaths | Homicide |
| Internal security expenditure | Terrorism deaths and injuries | Violent assault |
| Security agency | Indirect costs of conflict (GDP losses due to conflict) | Sexual assault |
| Private security | Losses from status as refugees and IDPs | Fear of crime |
| Small arms imports | UN Peacekeeping | Suicide |
| Incarceration Costs | ODA peacebuilding expenditure | |
| | UNHCR expenditure | |

BOX B.1

## The Multiplier Effect

The 'multiplier effect' is a commonly used economic concept used to describe 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. For this reason, a dollar of expenditure can create more than a dollar of economic activity. This mutually reinforcing economic cycle is captured by the multiplier effect.

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, the society 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, can 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.

The model outputs a conservative estimate of the global impact of violence, as it only includes variables of violence for which reliable data could be obtained. The following indicators are not counted in the economic impact of violence:

- **domestic violence**
- **the cost of crime to business**
- **the cost of intelligence agencies.**

The 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 expenditure such as the cost of policing.

- **Indirect costs** accrue after the violent event and include indirect economic losses, physical and physiological trauma to the victim as well as the lost productivity.

- **The multiplier** represents the flow-on effects of direct costs, such as additional economic benefits that would come from investment in business development or education instead of containing or dealing with violence. Text Box B.1 provides a details explanation of the peace multiplier used.

### ESTIMATION METHODS

A combination of approaches is used to estimate the economic cost violence at the country level. The economic costing of violence involves three main approaches:

1. Financial information detailing expenditure on items associated with violence or violence containment are included. The expenditures come in two forms, either as actual expenditure, that is a total figure or as a percentage of GDP of a country. When the figure is given as a percentage of GDP, the IMF's GDP calculation for the country is used to derive a total figure. This is conducted by multiplying the percentage of GDP by the GDP total to get the actual expenditure.

2. A unit cost approach was used to cost variables for which detailed expenditure was not available. The unit costs were obtained from a literature review and appropriately adjusted for all countries included. The study uses unit costs from McCollister, French, and Fang (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).[3]

3. Where both expenditure and incidence data were missing for an item, it was either calculated using an appropriate proxy or excluded from the study.

### SCALING UNIT COSTS

Unit costs were used to estimate the cost of incidents of violence such as homicide, violent and sexual crimes. However, unit costs are not available for most of the countries that are included in the costing model. Therefore, to estimate the cost of violence for these countries, the unit costs are adjusted using the ratio of GDP per capita in PPP terms. For example, a country with a

GDP per capita PPP that was 26 per cent of US GDP per capita would have a homicide unit cost equal to 26 per cent of the US homicide unit cost..

## CONVERTING COSTS TO CONSTANT AND PURCHASING POWER PARITY

In order to be able to directly compare the cost of violence between countries, all costs are converted to constant purchasing power parity terms. This process requires two phases. The first phase converts the costs from current to constant using the consumer price index (CPI). CPI data is sourced from the World Bank's world development indicators. In the second phase, the costs are converted to PPP using a PPP conversion factor. An important aspect of the model is the ability to compare the economic impact and cost of violence across countries.

## INDICATORS OF VIOLENCE CONTAINMENT COST

### Military expenditure

Data from the Economist Intelligence Unit (EIU), the International Institute for Strategic Studies (IISS) and the Stockholm International Peace Research Institute (SIPRI) was used to provide the level of *military expenditure* as per cent of GDP. This was then combined with GDP data from the International Monetary Fund (IMF) and converted to PPP international dollars using a PPP converter obtained from World Development Indicators database. The *military expenditure* estimate for the United States military includes additional categories related to Veteran Affairs, the maintenance cost of its nuclear arsenal, and interest payments on military related debt.

### Internal security expenditure

Internal security expenditure was taken from the OECD, IMF and the United Nations. The data on public order and safety includes spending on police services, law courts, prisons, fire services and public safety R&D. For countries without data, estimates were based on the number of police personnel multiplied by an adjusted unit cost. Police officer statistics were obtained from the UNODC Survey of Crime Trends and Operations of Criminal Justice Systems.

### UN peacekeeping

Country contributions to peacekeeping missions were included as UN peacekeeping expenditure. The data on contribution was sourced from UN Committee on Contributions.

### Peacebuilding

IEP with assistance from the UN Peacebuilding Support Office (UN-PBSO) undertook a stocktaking exercise to ascertain the amount of ODA spent on programs related to peacebuilding. The data for peacebuilding expenditure was obtained from the OECD Development Assistance Committee (DAC) Creditor Reporting System (CRS).

### Homicide

Data on homicide comes from the United Nations Survey of Crime Trend and Operations of Criminal justice system (CTS). Where country data was unavailable, estimates taken from the GPI were used. The adjusted unit cost from McCollister et al. (2010) is applied to the total number of homicides for each country to obtain the final cost.

### Violent and sexual assault

Data on violent and sexual assaults is obtained from UNODC. The adjusted unit cost from McCollister et al. (2010) is applied to both violent assault and sexual assault to calculate the total cost.

### Fear of crime

The data for fear of crime comes from the Gallup World Poll, which surveys the proportion of the population who expresses fear of being a victim of crime in their own neighbourhood. This is then multiplied by adjusted costs from Dolan & Peasgood (2006) to obtain the final cost.

### Incarceration

The *incarceration rate* originates from the World Prison Brief, compiled by the International Centre for Prison Studies at the University of Essex. The judicial costs and the direct cost of prisons are included in internal security expenditure. The lost annual wages due to being in prison can be viewed as the opportunity cost of being a prisoner. As a result, the cost of incarceration is the lost wages, which are priced at the minimum wage for the period of incarceration adjusted by the labour force participation rate for incarcerated individuals. This unit cost is then adjusted based on purchasing power parity income per capita compared to United States income per capita. The lost wages are considered to be the direct costs of incarceration.

### Battle deaths

The unit cost for battle deaths is the same as for homicides. The data for battle deaths from internal conflict is sourced from the Uppsala Conflict Data Program Armed Conflict dataset. Battle deaths from external conflict are obtained from the IISS Armed Conflict Database (ACD).

### Terrorism

The cost of terrorism-related deaths is calculated in the same way as homicides. The impact of injuries is calculated using the unit cost from McCollister et al (2010). Data for deaths and injuries due to terrorism is taken from the Global Terrorism Database, maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland.[4]

### Indirect cost of conflict

The indirect cost of conflict is calculated for countries that have experienced an active conflict during the years of the study and only for years for which the country had the conflict. The assumption is an attempt to capture the loss of formal economic activity including capital flight. This paper follows the same GDP loses as derived by Collier (1999) of two per cent for each year of conflict. Collier's study is selected because the sample size of the countries used in the study is large enough to allow for capturing sufficient variation across different contexts. It is possible that there might be some double counting between the battle deaths and terrorism deaths. The data sources used may overlap, especially in the context of armed conflict. A number of steps have been taken to mitigate the risk of double counting costs. Firstly, GDP losses are calculated using battle deaths only, which avoids the potential to double count deaths attributed to terrorism. Secondly, when estimating the cost of battle deaths, only direct costs are included.

### Small arms imports

Accounts for the total imports value of small arms, with data taken from the Small Arms Survey.

### Population displacement

The United Nations High Commissioner for Refugees annual expenditure is assumed as the direct cost of refugees and internally displaced persons (IDPs). In addition, it is assumed that the indirect cost of *refugees and IDPs* to the economy of the origin country is equivalent to the lost production and consumption for each displaced person who was part of the labour market. However, IEP costing model does not capture some of the adverse implications of forced displacement such as asset losses, expenditure by the displaced people as well as the physical and psychological distress that is inflicted on the displaced population. Therefore, the total indirect cost is a conservative estimate.

Data on the number of *refugees and IDPs* is sourced from UNHCR and the Internal Displacement Monitoring Centre (IDMC). Data on UNHCR contribution is also sourced from UNHCR.

# Endnotes

## SECTION 1: The Conceptual Background


1 10 facts about violence prevention. (2017). World Health Organisation. Retrieved December 20, 2020, from https://www.who.int/features/factfiles/violence/en/

2 The Economic and Social Consequences of the Conflict in Syria. (2017). World Bank Group. Retrieved December 20, 2020, from https://www.worldbank.org/en/country/syria/publication/the-toll-of-war-the-economic-and-social-consequences-of-the-conflict-in-syria

3 Stiglitz, J. (2008). The $3 Trillion War. New Perspectives Quarterly, 25, 2008, 61-64.


## SECTION 2: The Economic Impact of Violence in 2019


1 Very few countries disaggregate all the public order and safety expenditure — the methodology provides additional details.

2 Data is limited by public order and safety expenditure with many countries not publishing more disaggregated data. With a greater transparency in how public safety and order funding is allocated, in particular, the funding to incarceration, judicial systems and the police would allow for a deeper analysis into the dynamics of government expenditure on containment.

3 Figures at a Glance. (2020). UNHCR. Retrieved October 20, 2020 from https://www.unhcr.org/en-au/figures-at-a-glance.html

4 This is the average economic cost of violence of the most peaceful countries of the GPI.

5 Total impact of homicide and violent crime of the region divided by the population.

6 2019 Global Law and Order Report. (2019). Gallup World Poll. Retrieved October 22, 2020 from https://www.gallup.com/analytics/267869/gallup-global-law-order-report-2019.aspx

7 Gallup World Poll data.

8 With the exception of 2018 where it decreased 3.7 per cent.

9 Global Peace Index 2019. (2019). Sydney, Australia: Institute for Economics and Peace. Retrieved October 22, 2020, from http://visionofhumanity.org/app/uploads/2019/06/GPI-2019-web003.pdf

10 Report of the Office of the High Commissioner for Human Rights on the implementation of the UNGASS joint commitment to effectively addressing and countering the world drug problem with regard to human rights. (2018). Human Rights Watch. Retrieved October 22, 2020, from https://www.hrw.org/news/2018/01/18/philippines-dutertes-drug-war-claims-12000-lives

11 The Philippines: Extremism & Counter-Extremism. (2020). Counter Extremism Project. Retrieved October 22, 2020, from https://www.counterextremism.com/countries/philippines


## SECTION 3: Trends in the Economic Impact of Violence


**1.** ODA and development aid is calculated as 0.19 per cent of global GDP. GDP here is measured in constant 2019 USD for 2018. The increase in the economic impact is calculated as 0.3 per cent of total GDP. GDP here is measured in constant 2019 PPP. Indicator sourced from the World Bank "Net official development assistance and official aid received (current US$)".

**2.** Overall 18 indicators are included in the economic impact of violence model. For simplicity, some of the smaller indicators have been aggregated for this analysis and Figure XX. Violent crime consists of both sexual and violent assault crimes, terrorism consists of both injuries and deaths from terrorism, refugees and IDPs includes UNHCR funding as well as the losses from displacements, and conflict deaths includes external and internal conflict deaths.

**3.** Figures at a Glance. (2020). UNHCR. Retrieved October 20, 2020 from https://www.unhcr.org/en-au/figures-at-a-glance.html

**4.** E. Krug, L. Dahlberg, J. Mercy, A. Zwi and R. Lozano, (2002). World Report on Violence and Health, World Health Organisation. Retrieved October 20, 2020, from https://www.who.int/ violence_injury_prevention/violence/world_report/en/

**5.** Mental health. (2020). World Health Organisation. Retrieved November 4, 2020, from https://www.who.int/gho/mental_health/suicide_rates/en/index1.html

**6.** Brauer, J., and Marlin, J.t. (2009). Nonkilling Economics: Calculating the size of peace gross world product, p. 125-148.

**7.** Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The World Report on Violence and Health. The lancet, 360(9339), 1083-1088.

**8.** Iqbal, M., Bardwell, H. and Hammond, D. (2019). Estimating the Global Economic Cost of Violence: Methodology Improvement and Estimate Updates. Defence and Peace Economics, pp.1-24.

**9.** Number of Deaths data. (2019) UCDP - Uppsala Conflict Data Program. Retrieved November 04, 2020, from https://ucdp.uu.se/year/2019

**10.** Such costs are accounted for in the GDP losses indicator. As a result, estimates of terrorism as calculated by this report are likely to be conservative.

**11.** Figures at a Glance. (2020). UNHCR. Retrieved October 20, 2020 from https://www.unhcr.org/en-au/figures-at-a-glance.html

**12.** Calculation contains the Internal Displacement Monitoring Centre's (IMDC) data on IDPs and UNHCR's data on refugees, asylum seekers and Venezuelans displaced abroad.

**13.** Figures at a Glance. (2020). UNHCR. Retrieved October 26, 2020 from https://www.unhcr.org/en-au/figures-at-a-glance.html

**14.** Global Trends Forced Displacement in 2019. (2020) UNHCR. Retrieved October 26, 2020 from https://www.unhcr.org/globaltrends2019/

**15.** Ibid

**16.** Peace Operations Fact Sheet. (2020). United Nations. Retrieved October 26, 2020 from https://peacekeeping.un.org/sites/default/files/pk_factsheet_3_20_english.pdf

**17.** This analysis includes only the expenditures by the private and the public. The indicators included are the internal, private, small arms and military expenditure. Therefore, the losses from incarceration are not included.

**18.** Military expenditure equivalent to $2.94 trillion PPP is divided by the estimated $136 trillion PPP global GDP.

**19.** Figure in USD from SIPRI

**20.** Gallup World Poll 2018

**21.** As measured by the 2020 Global Peace Index. Retrieved from https://www.visionofhumanity.org/wp-content/uploads/2020/10/GPI_2020_web.pdf


## SECTION 4: Economic Progress, Prosperity and Peace


**1.** Syria Emergency. (2020). UNHCR. Retrieved December 14, 2020, from https://www.unhcr.org/en-au/syria-emergency.html

**2.** The Toll of War: The Economic and Social Consequences of the Conflict in Syria. (2017). World Bank Group. Retrieved December 20, 2020, from https://www.worldbank.org/en/country/syria/publication/the-toll-of-war-the-economic-and-social-consequences-of-the-conflict-in-syria

**3.** Syria at War: Eight Years On. (2020). UN ESCWA. Retrieved December 15, 2020, from https://publications.unescwa.org/projects/saw/sdgs/pdf/en/Syria-at-War-Report-Executive-Summary-English.pdf

**4.** UNCTADstat, (2020). General Profile: Syrian Arab Republic, Retrieved December 15, 2020, from http://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/760/index.html

**5.** Moret, E. (2015). Humanitarian impacts of economic sanctions on Iran and Syria. European Security 24, no. 1 (2015): 120-140.

**6.** Syria at War: Eight Years On. (2020). UN ESCWA. Retrieved December 15, 2020, from https://publications.unescwa.org/projects/saw/sdgs/pdf/en/Syria-at-War-Report-Executive-Summary-English.pdf

**7.** Growth after War in Syria. (2019). World Bank Group. Retrieved December 20, 2020, from http://documents1.worldbank.org/curated/en/424551565105634645/pdf/Growth-after-War-in-Syria.pdf

**8.** Ibid

**9.** In 2000, the average GDP per capita PPP was $11,080. A growth rate of 3.4 per cent per annum would result in GDP per capita increasing to $21,625 in 2020 whereas a growth rate of two per cent per annum would result in a GDP per capita of $16,465.

**10.** Latest year available as of 12/11/2020

**11.** Employment in Conflict and Post-Conflict Situations. (2015). UNDP. Retrieved December 15, 2020, from http://hdr.undp.org/sites/default/files/stewart_hdr_2015_final.pdf

**12.** The high peace scenario includes all 40 countries with the highest peace rankings on the 2020 GPI. The baseline scenario includes all 163 countries in the 2020 GPI.

## APPENDIX: Methodology

**1.** Iqbal, M., Bardwell, H. and Hammond, D. (2019). Estimating the Global Economic Cost of Violence: Methodology Improvement and Estimate Updates. Defence and Peace Economics, pp.1-24.

**2.** Brauer, J., and Marlin, J.t. (2009). Nonkilling Economics: Calculating the size of peace gross world product, p. 125-148.

**3.** Dolan, P., and Peasgood, T. (2006). Estimating the Economic and Social Costs of the Fear of Crime. The British Journal of Criminology, 47, 121-132.

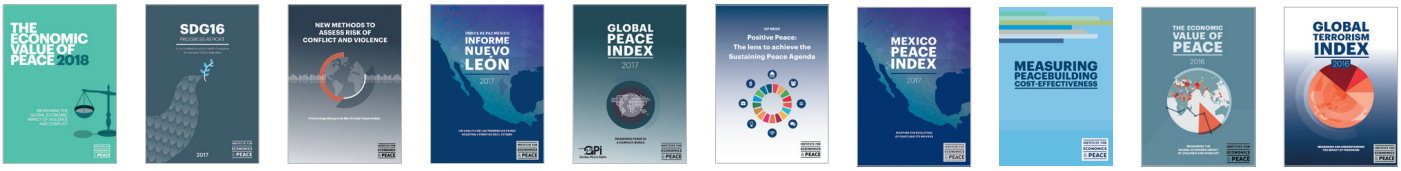
**4.** The cost and impact of terrorism differs from the Global Terrorism Index's economic impact due to difference in indicators and calculation methods.

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JANUARY 2021 / IEP REPORT 76

ISBN 978-0-646-81977-8