GLOBAL PEACE INDEX 2018

MEASURING PEACE IN A COMPLEX WORLD

INSTITUTE FOR ECONOMICS & PEACE

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 and Brussels. It works with a wide range of partners internationally and collaborates with intergovernmental organisations on measuring and communicating the economic value of peace.

For more information visit www.economicsandpeace.org

Please cite this report as:
Institute for Economics & Peace. Global Peace Index 2018: Measuring Peace in a Complex World, Sydney, June 2018. Available from: http://visionofhumanity.org/reports (accessed Date Month Year).

Contents

EXECUTIVE SUMMARY

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

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

In addition to presenting the findings from the 2018 GPI, this year's report includes analysis of trends in Positive Peace: the attitudes, institutions, and structures that create and sustain peaceful societies. It looks at changes in indicators of Positive Peace that immediately precede deteriorations or improvements in peacefulness, which provides a framework for predictive analysis. The report also assesses the ways in which high levels of peace positively influence major macroeconomic indicators.

The results of the 2018 GPI find that the global level of peace has deteriorated by 0.27 per cent in the last year, marking the fourth successive year of deteriorations. Ninety-two countries deteriorated, while 71 countries improved. The 2018 GPI reveals a world in which the tensions, conflicts, and crises that emerged in the past decade remain unresolved, especially in the Middle East, resulting in this gradual, sustained fall in peacefulness.

Underlying the fall in peacefulness, six of the nine regions in the world deteriorated in the last year. The four most peaceful regions – Europe, North America, Asia-Pacific, and South America – all recorded deteriorations, with the largest overall deterioration occurring in South America, owing to falls in the *Safety and Security* domain, mainly due to increases in the *incarceration rate* and *impact of terrorism*.

Iceland remains the most peaceful country in the world, a position it has held since 2008. It is joined at the top of the index by New Zealand, Austria, Portugal, and Denmark. Syria remains the least peaceful country in the world, a position it has held for the past five years. Afghanistan, South Sudan, Iraq, and Somalia comprise the remaining least peaceful countries.

Europe, the world's most peaceful region, recorded a deterioration for the third straight year. It deteriorated across all three GPI domains and eleven indicators, most notably on the *intensity of internal conflict* and *relations with neighbouring countries*. For the first time in the history of the index, a Western European country experienced one of the five largest deteriorations, with Spain falling 10 places in the rankings to 30th, owing to internal political tensions and an increase in the impact of terrorism.

South Asia experienced the largest regional improvement in peacefulness, with Bhutan, Sri Lanka, India, and Nepal all improving. Four of the five largest improvements in peacefulness occurred in sub-Saharan Africa, despite the region having a slight deterioration in its overall peacefulness. The single largest country improvement occurred in the Gambia, where improvements in *political instability*, *perceptions of criminality*, and *relations with neighbouring countries* saw it improve 35 places in the rankings, moving up to 76th. The election of the new president Adama Barrow lay behind the improvements in political stability and the Gambia's relations with neighbouring countries.

The Middle East and North Africa (MENA) region recorded an improvement in peacefulness for only the third time in the last eleven years. Despite the improvement, it remains the world's least peaceful region, a position it has held since 2015. Qatar experienced the single largest deterioration in peacefulness, as the political and economic boycott placed on it by the UAE, Saudi Arabia, Egypt, and Bahrain led to deteriorations in *relations with neighbouring countries* and *political instability*.

The ten-year trend in peacefulness finds that global peacefulness has deteriorated by 2.38 per cent since 2008, with 85 GPI countries recording a deterioration, while 75 improved. The index has deteriorated for eight of the last eleven years, with the last improvement in peacefulness occurring in 2014. In Europe, the world's most peaceful region, 61 per cent of countries have deteriorated since 2008. Not one Nordic country is more peaceful now than in 2008.

Global peacefulness has deteriorated across two of the three GPI domains over the past decade, with *Ongoing Conflict* deteriorating by six per cent and *Safety and Security* deteriorating by three per cent. Terrorism and

internal conflict have been the biggest contributors to the global deterioration in peacefulness over the decade. One hundred countries experienced increased terrorist activity, with only 38 improving, and total conflict deaths increased by 264 per cent between 2006 and 2016. However, contrary to public perception, the *militarisation* domain recorded a 3.2 per cent improvement since 2008. The number of *armed services personnel per 100,000 people* has fallen in 119 countries, and *military expenditure as a percentage of GDP* fell in 102 countries with only 59 countries increasing their spending.

Trends over the last century show that the deterioration in peacefulness in the last decade runs contrary to the longer term trend.

The economic impact of violence on the global economy in 2017 was $14.76 trillion in purchasing power parity (PPP) terms. This figure is equivalent to 12.4 per cent of the world's economic activity (gross world product) or $1,988 for every person. The economic impact of violence increased by two per cent during 2017 due to a rise in the economic impact of conflict and increases in internal security spending, with the largest increases being in China, Russia and South Africa . Since 2012, the economic impact of violence has increased by 16 per cent, corresponding with the start of the Syrian war and rising violence in the aftermath of the Arab Spring.

The report finds that peacefulness has a considerable impact on macroeconomic performance. In the last 70 years, per capita growth has been three times higher in highly peaceful countries when compared to countries with low levels of peace. The difference is even stronger when looking at changes in peacefulness, with the report finding that per capita GDP growth has been seven times higher over the last decade in countries that improved in peacefulness versus those that deteriorated.

Peacefulness is also correlated with strong performance on a number of macroeconomic variables. Interest rates are lower and more stable in highly peaceful countries, as is the rate of inflation. Foreign direct investment is more than twice as high in highly peaceful countries. In total, if the least peaceful countries had grown at the same rate as highly peaceful countries, the global economy would be almost 14 trillion dollars larger.

The report's Positive Peace research analyses the trends in Positive Peace over the last decade, finding that changes in Positive Peace precede shifts in GPI scores. These same factors also lead to many other positive outcomes that societies consider important. Therefore, Positive Peace describes an optimum environment for human potential to flourish. Positive Peace is not only associated with higher levels of peace, it is also associated with stronger macroeconomic performance, as the factors that sustain highly peaceful societies also provide a framework for robust economic development:

- Non-OECD countries that improved in Positive Peace averaged 1.45 per cent higher GDP growth per annum from 2005 to 2016 than those that deteriorated in Positive Peace.
- Improvements in Positive Peace are also linked to domestic currency appreciation, with currencies on average appreciating by 1.4 per cent when their Positive Peace improves, compared to a 0.4 per cent depreciation when Positive Peace deteriorates.
- Credit ratings are also more likely to fall when countries experience deteriorations in Positive Peace, falling on average by 4.5 points on a 0 to 22 scale, while countries improving in Positive Peace are more likely to see their credit ratings improve or stay the same.
- Countries that are high in Positive Peace have less volatile economic performance.
- Measures of economic efficiency are also strongly correlated with Positive Peace across six of the eight Positive Peace Pillars.

Globally, Positive Peace improved by 1.85 per cent from 2005 to 2016. However, improvements in Positive Peace stalled from 2013 onwards. There have been a number of worrying trends in the past few years, with the *Acceptance of the Rights of Others* Pillar deteriorating across every region of the world from 2013 to 2016. The trend was particularly pronounced in Europe and North America, where this Pillar has been deteriorating since 2005. The greatest deterioration in Positive Peace occurred in the Middle East and North Africa, which deteriorated across almost every Pillar of Positive Peace.

The report finds that, on average, for a country's GPI score to improve there must be improvements across a broad range of Positive Peace indicators and Pillars. However, a deterioration in peacefulness can be triggered by a fall in just a handful of key Positive Peace indicators. A deterioration in the *Low Levels of Corruption*, *Well-Functioning Government*, and *Acceptance of the Rights of Others* Pillars are the most likely triggers for a fall in the GPI score. From 2005 to 2016 101 countries scores deteriorated in *Low Levels of Corruption*. In general, there is a strong association between movements in Positive Peace and their GPI score, with 70 per cent of countries recording large improvements in the GPI also having sustained improvements in Positive Peace beforehand.

KEY FINDINGS

SECTION 1: RESULTS

- The average level of global peacefulness has declined for the fourth consecutive year, falling by 0.27 per cent in 2017. Nintey-two countries deteriorated, while only 71 improved.
- The Middle East and North Africa (MENA) remained the world's least peaceful region. It is home to four of the ten least peaceful countries in the world, with no country from the region ranked higher than 40th on the GPI.
- Europe, which has been the world's most peaceful region since the inception of the index, deteriorated in peacefulness for the third straight year, due to increased *political instability*, *impact of terrorism* and *perceptions of criminality*.
- Peacefulness deteriorated across all three GPI domains over the past year, with the largest deterioration occurring in the *Ongoing Conflict* domain.
- In Europe, the independence referendum held by the regional government of Catalonia in Spain resulted in heightened political tensions, which resulted in Spain falling ten places in the rankings. Fourteen European countries now have an intensity of internal conflict score higher than one.
- The *Safety and Security* domain had the second largest deterioration of the three GPI domains in 2017, although more countries improved (83) than deteriorated (78).
- *Military expenditure as percentage of GDP* continued its decade long decline, with 88 countries recording an improvement compared to 44 that had a deterioration. The average country military expenditure has fallen slightly since 2008, from 2.28 per cent of GDP to 2.22 per cent in 2018, with 102 countries spending less on the military as a percentage of GDP over the decade.

SECTION 2: TRENDS IN PEACE

- The average level of global peacefulness has deteriorated by 2.38 per cent since 2008. Over that period, 85 countries deteriorated, while 75 improved.
- The average level of country peacefulness has deteriorated for eight of the past ten years.
- The gap between the least and most peaceful countries continues to grow. Since 2008, the 25 least peaceful countries declined on average by 12.7 per cent, while the 25 most peaceful countries improved by 0.9 per cent on average.
- Of the three GPI domains, two recorded a deterioration over the last decade, while one improved. *Ongoing Conflict* deteriorated by 5.9 per cent and *Safety and Security* deteriorated by 2.9 per cent. However, *Militarisation* improved by 3.2 per cent.
- In Europe, the world's most peaceful region, 61 per cent of countries have deteriorated since 2008. Not one Nordic country is more peaceful now than in 2008.
- The indicator with the largest deterioration was *terrorism impact*, with 62 per cent of countries recording increased levels of terrorist activity and 35 per cent experiencing a large deterioration.
- 2014 marked a 25 year high in battle deaths. However, battle deaths in the last 25 years account for only 3 per cent of the battle deaths in the last 100 years, or 7 per cent if World War II is excluded.
- Refugees made up almost 1 per cent of the global population in 2017 for the first time in modern history, at a rate 12 times higher than that in 1951.

SECTION 3: ECONOMIC IMPACT OF VIOLENCE

- The global economic impact of violence was $14.76 trillion PPP in 2017, equivalent to 12.4 per cent of global GDP, or $1,988 per person.
- The economic impact of violence has increased by 16 per cent since 2012, corresponding with the start of the Syrian war and rising violence in the aftermath of the Arab Spring.
- Syria, Afghanistan and Iraq incurred the largest economic cost of violence as a percentage of their GDP at 68, 63 and 51 per cent of GDP, respectively.
- In the last 70 years, per capita GDP growth has been three times higher in highly peaceful countries.
- Over the last decade, countries with the largest improvements in peace recorded seven times higher per capita GDP growth than those that deteriorated the most.
- The global economy would be US$13.87 trillion larger than its current level if low peace countries achieved GDP growth equivalent to highly peaceful countries.
- If the least peaceful countries were to grow at a rate equivalent to that of the most peaceful countries, per capita GDP could be up to US$527 per capita higher by 2030.

SECTION 4: POSITIVE PEACE

- Positive Peace improved two per cent on average between 2005 and 2013, but has stagnated in the last three years.
- Despite improvements in most other Pillars, Acceptance of the Rights of Others has been deteriorating in Europe and North America since 2005.
- The region that experienced the most significant deteriorations across the highest number of Pillars was the Middle East and North Africa (MENA), followed by South America.
- A large number of Positive Peace indicators need to improve before Negative Peace will improve. However, only a few key indicators of Positive Peace need to deteriorate in order to trigger increases in violence.
- Low Levels of Corruption, Acceptance of the Rights of Others and Well-Functioning Government are the key Pillars that deteriorate prior to the largest deteriorations in internal peace.
- Non-OECD countries that improved in Positive Peace on average had 1.45 percentage points higher annual GDP growth between 2005 and 2016 compared to non-OECD countries that deteriorated in Positive Peace.
- Improvements in Positive Peace are linked to strong domestic currencies. A one per cent increase in Positive Peace is associated with a 0.9 per cent appreciation of the domestic currency among non-OECD countries.

1

RESULTS

Highlights

The average level of global peacefulness has declined for the fourth consecutive year, falling by 0.27 per cent in 2017. The results of the 2018 Global Peace Index (GPI) find that 92 countries deteriorated, while only 71 improved.

Since 2008, the average country score has deteriorated by 2.38 per cent. Over this period of time there were only two years in which global peace improved. The fall in peacefulness over the decade was caused by a wide range of factors, including increased terrorist activity, the intensification of conflicts in the Middle East, rising regional tensions in Eastern Europe and northeast Asia, and increasing numbers of refugees and heightened political tensions in Europe and the US. Offsetting this deterioration and contrary to public perception, there were improvements in many of the measures of militarisation, with a consistent reduction in *military expenditure as a percentage of GDP* for the majority of countries, as well as a fall in the *armed services personnel rate* across most countries in the world.

> “
> All three GPI domains deteriorated over the past year, with the largest deterioration occurring in the *Ongoing Conflict* domain

The Middle East and North Africa (MENA) region remained the world's least peaceful area. It is home to four of the ten least peaceful countries in the world, with no country from the region ranked higher than 40th on the GPI. However, despite ongoing armed conflict and instability in the region, it did become marginally more peaceful over the last year. The bulk of the improvement occurred on the safety and security domain, particularly in *terrorism impact* and the number of refugees fleeing conflict. South Asia, which is the second least peaceful region, also had a small increase in peacefulness. The four most peaceful regions in the world (Europe, North America, Asia-Pacific, and South America) all deteriorated.

Europe, which has been the world's most peaceful region since the inception of the index, deteriorated in peacefulness for the third straight year, largely due to *political instability* due to the rise of alternative political parties and anti-EU sentiment, increased *terrorism impact*, and increased *perceptions of criminality*. Four of the five countries that had the largest improvements in peacefulness are in sub-Saharan Africa, despite the region experiencing a slight deterioration in its overall peacefulness in 2017.

The GPI measures more than just the presence or absence of war. It captures the absence of violence or the fear of violence across three domains: *Safety and Security*, *Ongoing Conflict*, and *Militarisation*. Peacefulness deteriorated across all three of these domains over the past year, with the largest deterioration occurring in the *Ongoing Conflict* domain. This echoes the longer-term trend, which has seen the average *Ongoing Conflict* score deteriorate by 5.9 per cent in the last decade, largely as a result of conflict in the Middle East and North Africa. Of the 23 GPI indicators, nine recorded a deterioration, eight improved, and five registered no change from the previous year.

The ongoing conflict domain had the largest deterioration of the three GPI domains, with the *intensity of internal conflict* indicator experiencing the most significant deterioration. In Europe, tensions surrounding the independence referendum held by the regional government of Catalonia in Spain resulted in heightened political tensions, which resulted in Spain falling ten places in the rankings. Fourteen European countries now have an *intensity of internal conflict* score higher than 1. A score of 2 on this indicator signifies the existence of latent disputes in society, with significant differences over definable matters of national importance. In the Middle East and North Africa, pressure placed upon Qatar by Egypt, Saudi Arabia, the UAE, and Bahrain has increased the potential for instability and led to Qatar having the largest deterioration in the 2018 GPI, dropping 26 places to 56th in the index. Elsewhere in the region, the intensity of conflict declined somewhat, after years of unrelenting internal pressure, owing mainly to improvements in Iraq. In sub-Saharan Africa, the *intensity of internal conflict* increased in the Democratic Republic of the Congo (DRC), Togo, and Lesotho, with the DRC in particular experiencing a significant increase in violence and rebel activity throughout the country. Over the past decade, 42 countries have experienced a deterioration in their *intensity of internal conflict*, twice the number of countries that have improved.

The *Safety and Security* domain had the second largest deterioration of the three GPI domains in 2017, although more countries improved (83) than deteriorated (78). The most notable movement in this domain occurred on the *Political Terror Scale* indicator, with 42 countries deteriorating compared to 29 that improved. This runs against the longer ten-year trend, which had seen a moderate improvement in this indicator. This is the highest number of countries that

have deteriorated on this indicator year-on-year since the inception of the index. The only two regions that registered an improvement on the *Political Terror Scale* indicator were the MENA region and South Asia, both of which were coming off a very low base. They are also the two least peaceful regions on the GPI. There was also a significant deterioration on the *perceptions of criminality* indicator, most notably in Europe, where both Sweden and Denmark saw their scores fall. Sweden experienced more than 300 shootings in 2017, with reports of attacks on emergency personnel, hospital staff, and police officers. In Denmark, public perceptions of violence have increased, with over three quarters of those surveyed by the Justice Ministry reporting that they felt that violent crime has increased within the past five years. Denmark is now the only Scandinavian country ranked in the top ten on the GPI.

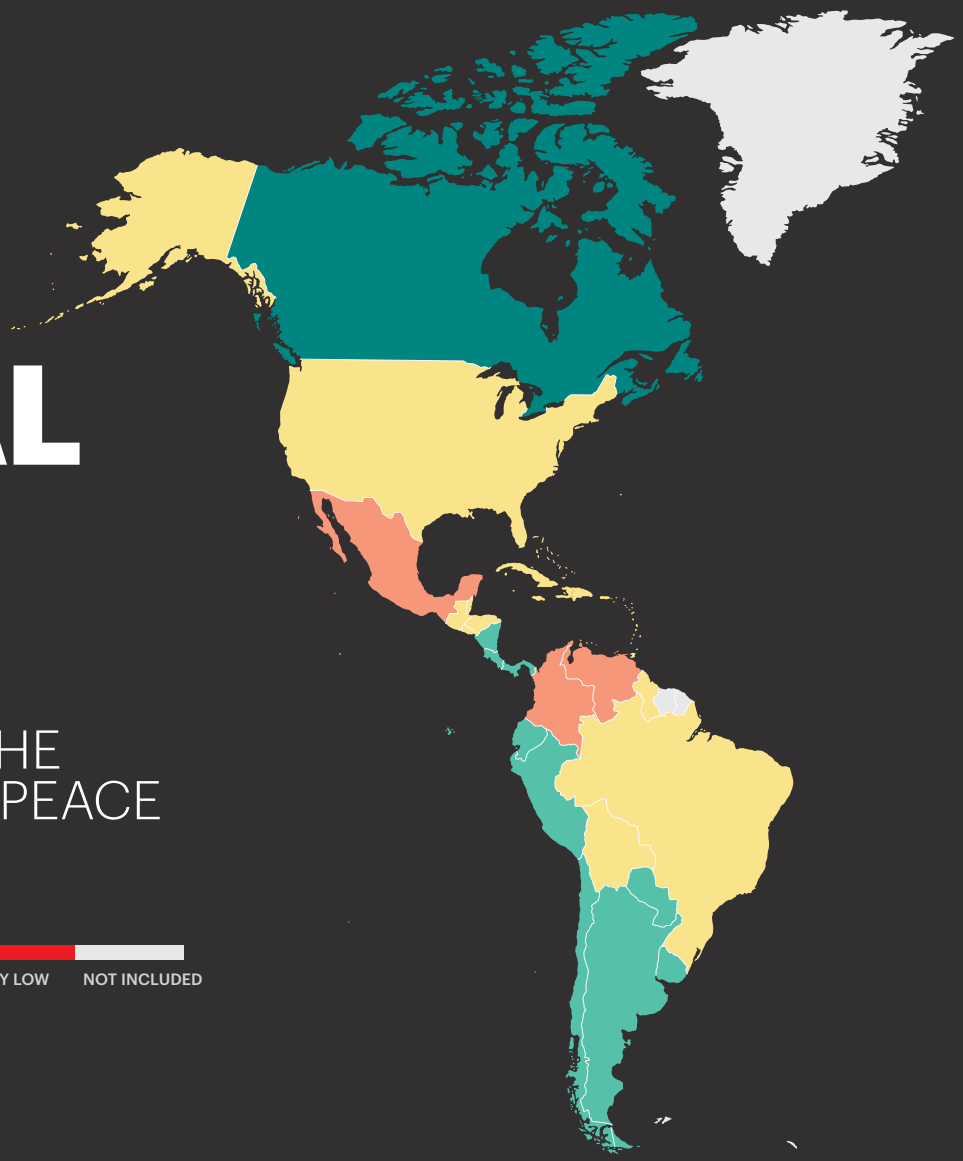
Although the *Militarisation* indicator deteriorated on average over the past year, the longer-term trend shows an improvement over the last decade. In the last year, the deterioration was mainly caused by fewer countries paying their UN peacekeeping levies. However, this indicator can vary substantially from one year to the next with the ten-year trend showing that more countries are up to date with their payments. The average score on both the *weapons imports* and *weapons exports* indicators improved slightly, with 80 countries reducing their weapons imports per capita when compared to the previous year. The *weapons exports* indicator continues to reflect the unequal geographic distribution of the global arms industry, with only 35 per cent of countries having any *weapons exports* over the past five years. Of the eleven countries with the highest levels of per capita *weapons exports*, eight are in Europe with the remaining countries being the US, Russia, and Israel. *Military expenditure as percentage of GDP* continued its decade long decline, with 88 countries recording an improvement compared to 44 that had a deterioration. The average country military expenditure has fallen slightly since 2008, from 2.28 per cent of GDP to 2.22 per cent in 2018, with 102 countries spending less on the military as a percentage of GDP over the decade. Although there was a slight deterioration in the average *armed services personnel rate* in 2018, far more countries improved (118) than deteriorated (33). The long-term trend in armed services personnel mirrors the military expenditure trend, with the average number of armed service personnel per 100,000 people falling from 458 in 2008, to 396 in 2018.

> “
> The 2018 GPI reveals a world in which the tensions, conflicts, and crises that emerged in the past decade remain unresolved

In summary, the 2018 GPI reveals a world in which the tensions, conflicts, and crises that emerged in the past decade remain unresolved, resulting in this gradual, sustained fall in peacefulness. Although in some instances long-running conflicts have begun to decline or at least plateau, the underlying causes of many of these conflicts have not been addressed, and the potential for violence to flare up remains very real. There have also been new tensions arising, such as the increased militarisation and political tensions in northeast Asia. Additionally, measures of Positive Peace have slightly deteriorated over the last three years. Positive Peace is a strong leading indicator of future peacefulness, with large deteriorations in Positive Peace being statistically linked to later falls in peace. Unless these underlying causes are addressed in a systemic fashion, and the attitudes, institutions and structures that build and sustain peaceful societies are supported, it seems likely that the overall deterioration in peacefulness seen over the last decade will continue.

2018 GLOBAL PEACE INDEX

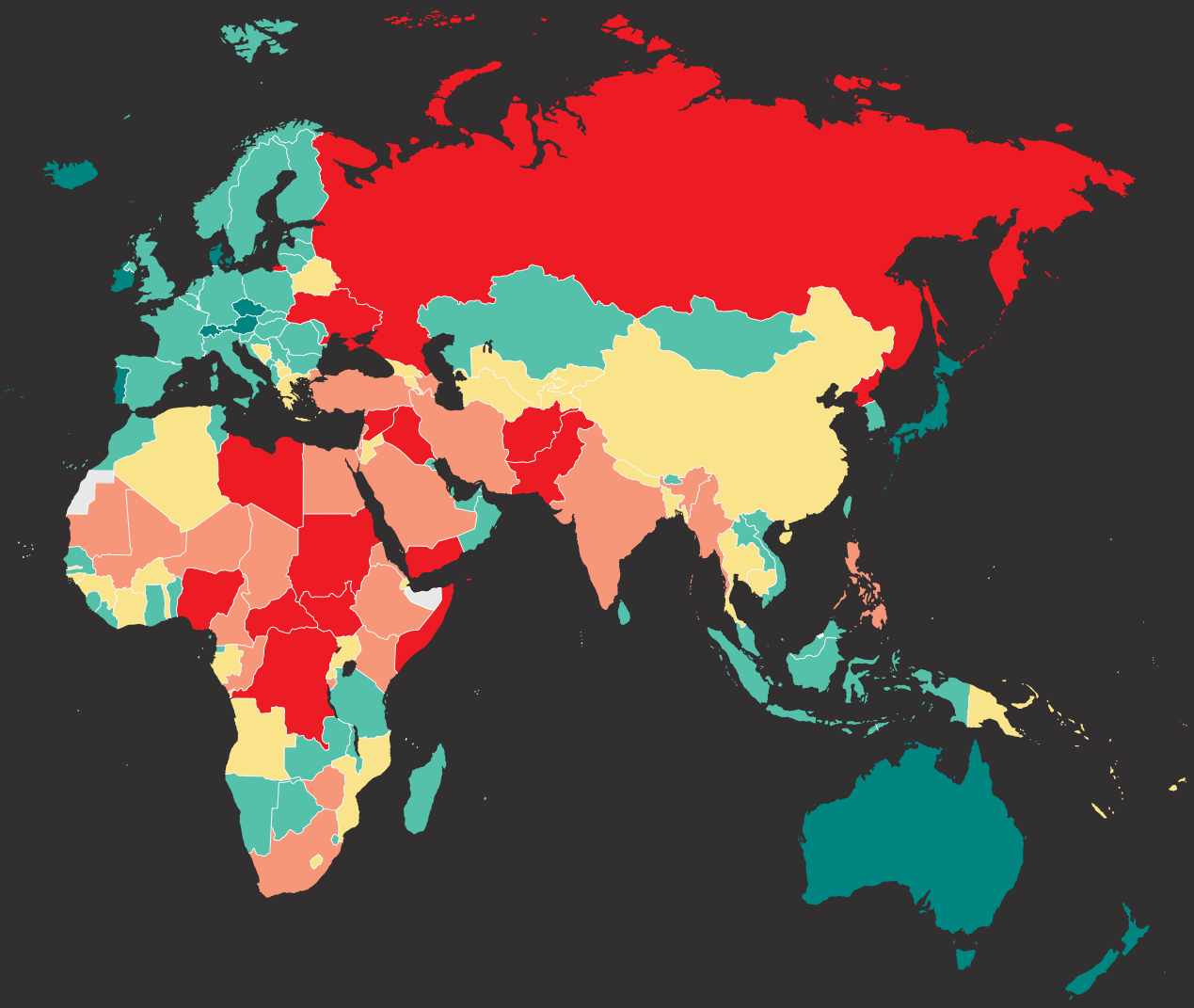
A SNAPSHOT OF THE GLOBAL STATE OF PEACE



THE STATE OF PEACE

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

RANK	COUNTRY	SCORE	CHANGE
1	Iceland	1.096	⟷
2	New Zealand	1.192	⟷
3	Austria	1.274	↑ 1
4	Portugal	1.318	↓ 1
5	Denmark	1.353	⟷
6	Canada	1.372	⟷
7	Czech Republic	1.381	⟷
8	Singapore	1.382	↑ 3
9	Japan	1.391	↓ 1
10	Ireland	1.393	↑ 2
11	Slovenia	1.396	↓ 1
12	Switzerland	1.407	↓ 3
13	Australia	1.435	⟷
14	Sweden	1.502	⟷
15	Finland	1.506	↑ 3
16	Norway	1.519	⟷
17	Germany	1.531	⟷
17	Hungary	1.531	↓ 2
19	Bhutan	1.545	↑ 5
20	Mauritius	1.548	↓ 1
21	Belgium	1.56	⟷
22	Slovakia	1.568	↑ 3
23	Netherlands	1.574	↓ 1
24	Romania	1.596	↑ 3
25	Malaysia	1.619	↑ 4
26	Bulgaria	1.635	↑ 2
27	Croatia	1.639	↑ 4
28	Chile	1.649	↓ 5
29	Botswana	1.659	↓ 4
30	Spain	1.678	↓ 10
31	Latvia	1.689	↑ 1
32	Poland	1.727	↑ 1
33	Estonia	1.732	↑ 3
34	Taiwan	1.736	↑ 3
35	Sierra Leone	1.74	↑ 5
36	Lithuania	1.749	↑ 2
37	Uruguay	1.761	↓ 2
38	Italy	1.766	↑ 1
38	Madagascar	1.766	↑ 4
40	Costa Rica	1.767	↓ 6
41	Ghana	1.772	↑ 6
42	Kuwait	1.799	↑ 5
43	Namibia	1.806	↑ 7
44	Malawi	1.811	↑ 8
45	UAE	1.82	↑ 12
46	Laos	1.821	↓ 2
46	Mongolia	1.821	↓ 1
48	Zambia	1.822	↓ 7
49	South Korea	1.823	↓ 6
50	Panama	1.826	↓ 4
51	Tanzania	1.837	↓ 2
52	Albania	1.849	↑ 7
52	Senegal	1.849	↑ 9
54	Serbia	1.851	↑ 1
55	Indonesia	1.853	↓ 2
56	Qatar	1.869	↓ 26
57	United Kingdom	1.876	↓ 6
58	Montenegro	1.893	↑ 5
59	Timor-Leste	1.895	↓ 5
60	Vietnam	1.905	⟷
61	France	1.909	↓ 5
62	Cyprus	1.913	↑ 3
63	Liberia	1.931	↑ 27
64	Moldova	1.939	⟷
65	Equatorial Guinea	1.946	↓ 7
66	Argentina	1.947	↑ 8
67	Sri Lanka	1.954	↑ 5
68	Nicaragua	1.96	↑ 7
69	Benin	1.973	↑ 12
70	Kazakhstan	1.974	↓ 2
71	Morocco	1.979	↑ 4
72	Swaziland	1.98	↓ 2
73	Oman	1.984	↓ 11
74	Peru	1.986	↓ 1
75	Ecuador	1.987	↓ 8
76	The Gambia	1.989	↑ 35
77	Paraguay	1.997	↓ 8
78	Tunisia	1.998	↓ 7
79	Greece	2.02	⟷
80	Burkina Faso	2.029	↑ 14
81	Cuba	2.037	↑ 8
82	Guyana	2.043	⟷
83	Angola	2.048	↑ 9
84	Nepal	2.053	↑ 4



IMPROVEMENTS

71

countries were more peaceful in 2018 than 2017

DETERIORATIONS

92

countries were less peaceful in 2018 than in 2017

OVERALL AVERAGE CHANGE (%)

0.27

The global GPI average deteriorated 0.27 per cent from 2017 to 2018

RANK	COUNTRY	SCORE	CHANGE
84	Trinidad & Tobago	2.053	↑ 11
86	Mozambique	2.056	↓ 6
87	Macedonia (FYR)	2.058	↑ 16
88	Haiti	2.064	↓ 1
89	Bosnia & Herzegovina	2.065	↓ 3
90	Jamaica	2.068	↑ 3
91	Dominican Republic	2.073	↑ 9
92	Kosovo	2.078	↓ 15
93	Bangladesh	2.084	↓ 10
94	Bolivia	2.092	↓ 9
95	Gabon	2.099	↓ 12
96	Cambodia	2.101	↓ 18
96	Guinea	2.101	↓ 1
98	Jordan	2.104	↑ 4
98	Togo	2.104	↓ 32
100	Papua New Guinea	2.109	↓ 3
101	Belarus	2.112	↓ 2
102	Georgia	2.13	↓ 4
103	Rwanda	2.14	↑ 1
104	Lesotho	2.144	↓ 13
104	Uzbekistan	2.144	↓ 3
106	Brazil	2.16	↑ 1
107	Uganda	2.168	↔
108	Kyrgyz Republic	2.181	↑ 4
109	Algeria	2.182	↓ 3
110	Cote d' Ivoire	2.207	↑ 9
111	Guatemala	2.214	↑ 3
112	China	2.243	↑ 3
113	Thailand	2.259	↑ 7
114	Tajikistan	2.266	↑ 3
115	Djibouti	2.269	↓ 5
116	El Salvador	2.275	↑ 1
116	Guinea-Bissau	2.275	↑ 5
118	Honduras	2.282	↓↓ 10
119	Turkmenistan	2.283	↓↓ 3
120	Armenia	2.287	↓↓ 7
121	USA	2.3	↓↑ 1
122	Myanmar	2.302	↓ 15
123	Kenya	2.354	↑ 3
124	Zimbabwe	2.326	↓↓ 1
125	South Africa	2.328	↓↓ 1
126	Rep of the Congo	2.343	↑ 2
127	Mauritania	2.355	↔
128	Niger	2.359	↓↓ 2
129	Saudi Arabia	2.417	↑ 1
130	Bahrain	2.437	↑ 2
131	Iran	2.439	↓↓ 2
132	Azerbaijan	2.454	↑ 2
133	Cameroon	2.484	↓↓ 2
134	Burundi	2.488	↑ 5
135	Chad	2.498	↑ 3
136	India	2.504	↑ 1
137	Philippines	2.512	↓ 1
138	Eritrea	2.522	↓ 3
139	Ethiopia	2.524	↓ 6
140	Mexico	2.583	↑ 2
141	Palestine	2.621	↑ 3
142	Egypt	2.632	↓ 2
143	Venezuela	2.642	↓ 2
144	Mali	2.686	↓ 1
145	Colombia	2.729	↑ 1
146	Israel	2.764	↓ 1
147	Lebanon	2.778	↔
148	Nigeria	2.873	↑ 1
149	Turkey	2.898	↓ 1
150	North Korea	2.95	↔
151	Pakistan	3.079	↑ 1
152	Ukraine	3.113	↑ 2
153	Sudan	3.155	↑ 2
154	Russia	3.16	↓ 1
155	Central African Rep	3.236	↑ 1
156	Dem. Rep Congo	3.251	↓ 5
157	Libya	3.262	↑ 1
158	Yemen	3.305	↓ 1
159	Somalia	3.367	↔
160	Iraq	3.425	↑ 1
161	South Sudan	3.508	↓ 1
162	Afghanistan	3.585	↔
163	Syria	3.6	↔

Results

The 2018 GPI revealed that global peacefulness declined for the fourth straight year, with the average level of country peacefulness deteriorating by 0.27 per cent last year, as a result of growing authoritarianism, unresolved conflicts in the Middle East and North Africa, and increased political instability across the world.

Deteriorations in peacefulness occurred in all three GPI domains, with the largest deterioration occurring in the *Ongoing Conflict* domain. In total, peacefulness deteriorated in 92 countries, with 71 countries recording an improvement. Figure 1.2 shows the change in the average levels of peacefulness for the overall score and each domain, as well as the percentage of countries that improved or deteriorated.

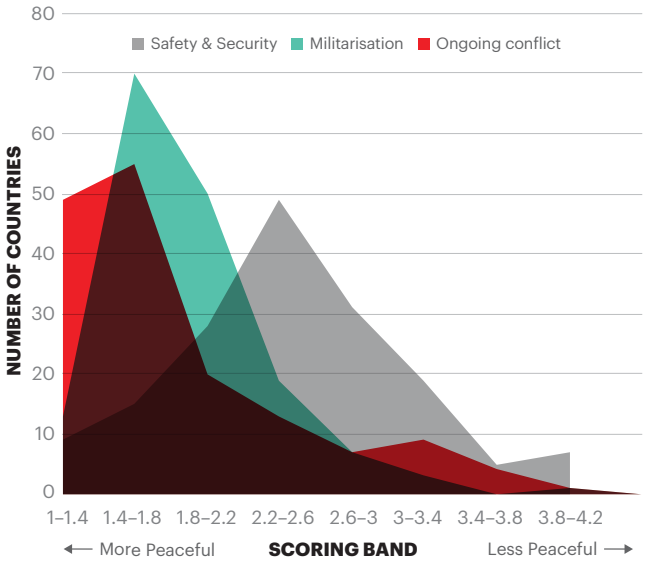
Despite the larger deteriorations on the *Militarisation and Ongoing Conflict* domains, most countries covered by the GPI do not have high levels of militarisation or extensive involvement in *ongoing conflicts*, as shown in figure 1.1. Only 14 countries have a score worse than 3 on the *ongoing conflict* domain, and only 30 countries recorded any deaths from internal conflict in the 2015 to 2016 period.

The distribution of scores is similar for the *Militarisation* domain, with just four countries (the US, North Korea, Russia, and Israel) having scores higher than 3. Only eleven countries spent more than five per cent of their GDP on *military expenditure* in 2017, and eight of these countries are in the Middle East and North Africa. In order of highest to lowest, as a percentage of GDP, these are: North Korea (24), Oman (12.08), Saudi Arabia (11.3), Libya (10.47), Afghanistan (10.29), Iraq (10), Palestine (8.2), Republic of the Congo (6.17), Syria (6.07), Algeria (5.71), and Israel (5.33). Only 33 countries have an *armed forces personnel rate* of more than 500 per 100,000 people.

FIGURE 1.1

Distribution of scores by domain, 2018 GPI

The majority of countries are not highly militarised and not heavily involved in conflict.

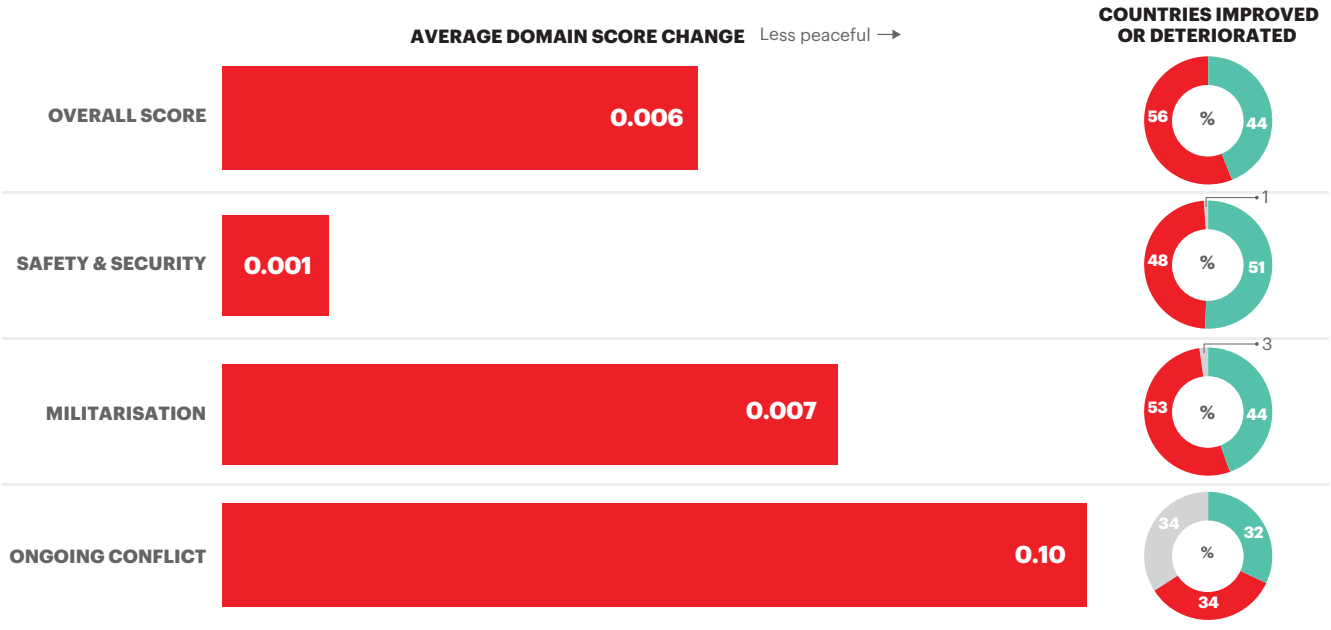


Source: IEP

FIGURE 1.2

Changes in GPI domain scores and % improved or deteriorated, 2017 to 2018

All three GPI domains recorded deteriorations from 2017 to 2018.



Source: IEP

FIVE MOST & LEAST PEACEFUL COUNTRIES BY DOMAIN

TABLE 1.1

Safety and Security domain

Rank	Country	2018 Score	Score change	Rank change
1	Iceland	1.168	-0.001	⟷
2	Norway	1.254	0.007	↑1
3	Denmark	1.289	0.058	↓1
4	Singapore	1.296	0.01	↑1
5	New Zealand	1.312	0.012	↑2

Rank	Country	2018 Score	Score change	Rank change
163	Afghanistan	4.225	0.045	↓1
162	Iraq	4.14	-0.087	↑1
161	South Sudan	4.085	-0.007	⟷
160	Somalia	4.024	0.073	↓1
159	Central African Republic	3.969	-0.007	↑1

TABLE 1.2

Ongoing Conflict domain

Rank	Country	2018 Score	Score change	Rank change
1	Botswana	1	0	⟷
2	Brazil	1	-0.015	↑3
3	Chile	1	0	↓1
4	Mauritius	1	0	↓1
5	Uruguay	1	0	↓1

Rank	Country	2018 Score	Score change	Rank change
163	Syria	3.828	0	⟷
162	Afghanistan	3.623	0.021	⟷
161	South Sudan	3.546	0	⟷
160	Pakistan	3.533	0.047	↓1
159	Ukraine	3.494	0.002	↑1

TABLE 1.3

Militarisation domain

Rank	Country	2018 Score	Score change	Rank change
1	Iceland	1.048	0.039	⟷
2	Hungary	1.144	0.011	⟷
3	New Zealand	1.199	-0.097	↑4
4	Slovenia	1.257	0.072	↓1
5	Moldova	1.306	0.019	↑1

Rank	Country	2018 Score	Score change	Rank change
163	Israel	3.91	-0.002	⟷
162	Russia	3.307	0.026	⟷
161	North Korea	3.175	-0.056	⟷
160	United States of America	3.049	0.004	↓1
159	Syria	2.861	-0.223	↑1

Regional Overview

The ranking of regions was unchanged from 2017, with Europe as the most peaceful region and the Middle East and North Africa as the least peaceful. Three of the world's nine regions became more peaceful and six declined, as shown in figure 1.3.

Although Europe, North America, Asia-Pacific and South America retained their positions as the world's four most peaceful regions, all of them declined in peacefulness. The two least peaceful regions, South Asia and Middle East and North Africa, improved marginally, mostly reflecting improvements in the *Safety and Security* domain, particularly in *terrorism impact* and the number of refugees fleeing conflict. This is mainly a reflection of the declining geographic influence of ISIL and Boko Haram, although the dynamics in South Asia, particularly in Afghanistan and Pakistan, are more complex.

The largest percentage improvements in peacefulness were in Central America and the Caribbean (0.14%) and the Middle East and North Africa (0.12%). The largest declines in peacefulness were in Asia-Pacific and South America (both 0.67%).

There were few clear patterns in the data. No region managed to improve on all three main domains of peacefulness – *Ongoing Conflict*, *Safety and Security*, and *Militarisation* – but the scores of both Europe and Russia and Eurasia fell on all three. Notably, these regions suffered deteriorations in both *political terror* and *internal conflicts*.

Overall, the data indicates that in an increasingly interconnected world, geography has a significant impact on peace. The peacefulness of regions and sub-regions tend to rise and fall together, implying that attempts to resolve conflicts need to take a regional rather than a narrow national view.

The clustering of violence can be seen in Central America and the Caribbean where the three least peaceful countries – Mexico, Honduras and El Salvador –are in the north and the most peaceful – Costa Rica, Panama and Nicaragua – in the south. The process is also dynamic: six of the seven largest improvements in sub-Saharan Africa are all in West Africa.

ASIA-PACIFIC

The Asia-Pacific region retained its place as the third most peaceful region in the world despite a slight fall in its overall peacefulness. There were notable improvements in both *internal and external conflicts fought* and *relations with neighbouring countries*, but *violent crime, terrorism impact, political instability* and *political terror* all deteriorated across the region.

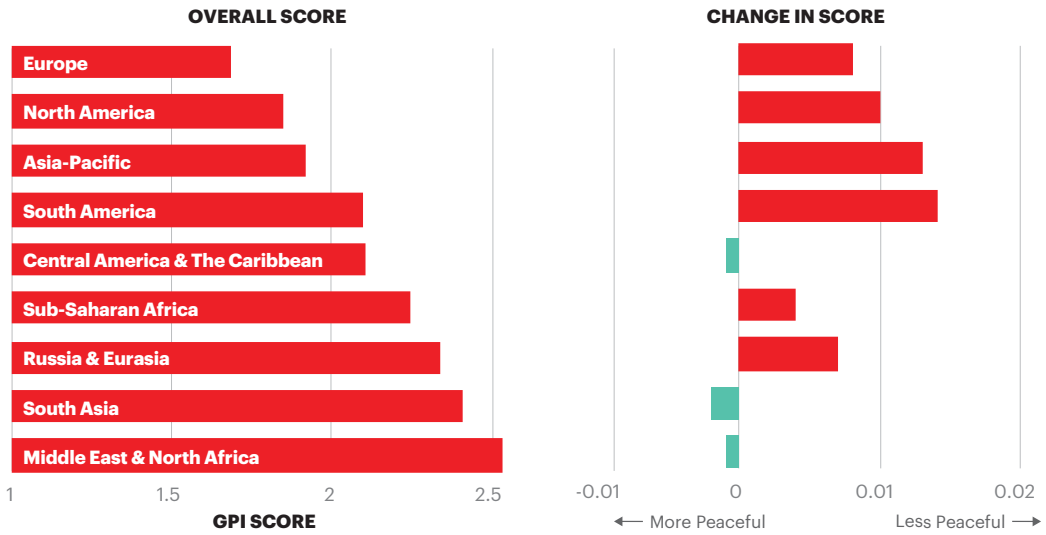
Five countries of 19 in the region were in the top 50 in the world, and six in the bottom 50. However, as in Europe, there seems to be a convergence, with some of the least peaceful nations improving their score, and some of the most peaceful deteriorating. This runs against the decade long trend where the gap between the most peaceful and least peaceful nations widened.

South Korea, Australia, Japan and Taiwan, all of which score relatively strongly on peacefulness, saw their scores deteriorate over the past year, while countries like North Korea, the Philippines, Thailand, China and Vietnam showed very slight improvements.

FIGURE 1.3

Regions by overall peacefulness, 2018 and change in peacefulness, 2017 - 2018

The four most peaceful regions all experienced deteriorations in peacefulness.



Source: IEP

> The peacefulness of regions and sub-regions tend to rise and fall together, implying that attempts to resolve conflicts need to take a regional rather than a narrow national view

TABLE 1.4

Asia-Pacific

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	New Zealand	1.192	-0.022	2
2	Singapore	1.382	-0.018	8
3	Japan	1.391	0.014	9
4	Australia	1.435	0.024	13
5	Malaysia	1.619	-0.028	25
6	Taiwan	1.736	0.008	34
7	Laos	1.821	0.022	46
7	Mongolia	1.821	0.02	46
9	South Korea	1.823	0.03	49
10	Indonesia	1.853	0.008	55
11	Timor-Leste	1.895	0.023	59
12	Vietnam	1.905	-0.005	60
13	Cambodia	2.101	0.09	96
14	Papua New Guinea	2.109	0.014	100
15	China	2.243	-0.008	112
16	Thailand	2.259	-0.01	113
17	Myanmar	2.302	0.119	122
18	Philippines	2.512	-0.012	137
19	North Korea	2.95	-0.014	150
REGIONAL AVERAGE		1.913	0.013	

There were some clear exceptions to this trend. Myanmar and Cambodia suffered the largest deteriorations in peace in the region, the former because of the ongoing operations against the Rohingya, and the latter because of Prime Minister Hun Sen's attempts to suppress the opposition in advance of this year's elections.

As China exerts itself, both militarily and politically in the region, neighbouring countries are also increasing their military capacities. Australia, Malaysia, Indonesia, Taiwan, the Philippines, Japan, Papua New Guinea and Thailand all recorded increased weapons imports in the last year. South Korea recorded a reduction, but the data this year does not capture the deployment of American materiel, in particular the Terminal High-Altitude Area Defense system designed to counter North Korean ballistic missiles.

The improvements in *internal* and *external conflicts fought* and *relations with neighbouring countries* reflected a calming of tensions in the South China Sea after President Duterte of the Philippines reached an understanding with China, and the rapprochement between Beijing and South Korea under new President Moon Jae-in.

A five per cent increase in the region's *political terror* score tracks the development of more authoritarian regimes. Only three countries – Indonesia, Thailand and Timor-Leste – managed to improve their score, while five fell. The Philippines suffered particularly badly as President Duterte continued his assault on alleged drug dealers and from the five-month battle between government forces and Islamic militants who took over the city of Marawi, resulting in almost 1,200 militants, government forces and civilians killed. . Despite representing only 5 per cent of the total index, there is a strong correlation (R=0.854) between *political terror* scores and overall GPI scores in the Asia-Pacific.

CENTRAL AMERICA & THE CARIBBEAN

The biggest challenge to peace in Central America and the Caribbean is crime and corruption. For the last eight years, the region has had the worst scores in the index for *homicide rate, violent crime*, and *perceptions of criminality*. Despite these challenges, it remains the fourth most peaceful region in the world.

In Central America, there is a gradient of peace running from the most peaceful – Costa Rica and Panama – in the south to the least peaceful – Mexico and Honduras – further north.

The threats to peace are deeply entrenched. Central to the region's problems is that of organised crime, from transnational narco-trafficking in Mexico and parts of the Caribbean to predatory street gangs in countries like Nicaragua, Honduras and Jamaica that have managed to corrupt the forces of law and order and the body politic. No country in the region has improved its score on *perceptions of criminality* over the past 10 years, and only three countries – Costa Rica, Haiti, and Trinidad and Tobago – have managed to improve their *violent crime* scores.

However, there were some improvements last year. The region's overall score on violent crime improved due to falls in Trinidad and Tobago. Similarly, there were improvements in the regional scores on both *internal* and *external conflicts fought*, further underlining that the region's problems are neither principally about political tensions or international conflicts.

The countries with the largest deteriorations were Costa Rica and Honduras. Costa Rica remains the most peaceful country in the region, but increases in the *incarceration rate* and *Political Terror Score* reflect divisions that have emerged since the end of bipartisan politics four years ago, which have caused it to fall six places in the global rankings.

Honduras had the largest deterioration in the region, dragged down by a significant deterioration in its scores for *political instability*, *terrorism impact* and *Political Terror Scale*. Allegations of fraud surrounding last November's elections sparked protests in which more than 30 people were killed and exacerbated divisions in a country that was already struggling with local gangs and drug trafficking.

TABLE 1.5

Central America & The Caribbean

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Costa Rica	1.767	0.058	40
2	Panama	1.826	0.02	50
3	Nicaragua	1.96	-0.042	68
4	Cuba	2.037	-0.019	81
5	Trinidad and Tobago	2.053	-0.036	84
6	Haiti	2.064	0.014	88
7	Jamaica	2.068	-0.004	90
7	Dominican Republic	2.073	-0.037	91
9	Guatemala	2.214	-0.029	111
10	El Salvador	2.275	0.019	116
11	Honduras	2.282	0.089	118
12	Mexico	2.583	-0.05	140
REGIONAL AVERAGE		2.1	-0.001	

EUROPE

Europe declined in peace last year across all three main domains – *Ongoing Conflict*, *Safety and Security* and *Militarisation* – albeit by less than half of one per cent overall. Improvements in *political instability*, *terrorism impact*, violent crime, and external conflicts were more than offset by deteriorations in the region's scores for *political terror*, *perceptions of criminality*, *relations with neighbouring countries*, and *intensity of internal conflict*.

Despite this deterioration, Europe was the most peaceful region in the GPI for the tenth successive year. In 2018, Europe claimed 20 of the top 30 rankings in the GPI, and with 25 of the 36 European nations in the top 50.

The broad trend has seen a convergence in peace between the top and bottom scoring countries. The most peaceful countries in the region, most of them in Western Europe, have declined in peacefulness, while those with weak scores, many of them in Eastern Europe, recorded the most notable increases in peacefulness.

Seven of the eight largest improvements were in Eastern Europe: Macedonia (FYR), Montenegro, Slovakia, Albania, Croatia and Romania. All except Romania recorded improvements in *Safety and Security*; and all except Montenegro experienced a decline in external conflict. Most of these countries shared improvements in both levels of *political terror* and *external conflicts fought*. In contrast, political divisions eroded the peacefulness of Western Europe, notably in relation to rising nationalism. Spain, the United Kingdom, Portugal, Denmark, Switzerland, France, Italy and Germany all declined in peacefulness over the year.

> “Seven of the eight largest improvements were in Eastern Europe, while political divisions eroded the peacefulness of Western Europe

The simultaneous strengthening of *political stability* and deteriorations in *political terror* in Europe is potentially worrying. In countries like Poland and Turkey, divisive but increasingly entrenched governments have improved *political stability* even as *political terror* has increased, possibly indicating that their opposition is losing faith in the democratic process. Spain, which was roiled by the Catalan independence vote, was among the world's five biggest deteriorations, the first time a major western economy has earned this dubious distinction.

There are exceptions to these broad trends. Turkey has suffered from the conflict in neighbouring Syria. This, alongside the increasingly hard-line approach of President Recep Erdogan has seen a significant deterioration in its *political terror* score. In the wake of Ankara opening a new front against Kurdish forces in Syria, its score for *relations with neighbouring countries* also deteriorated. Elsewhere, Hungary and Poland, both of which are run by nationalist governments, deteriorated partially as a result of an increase in their *political terror* scores (with an increased indicating a worsening score).

The deterioration in the overall ratings of Sweden and Denmark, historically two of the world's most peaceful nations, was in part the result of greater violence by criminal gangs, particularly the use of grenades in attacks, resulting in steep rises in their scores for *perceptions of criminality*.

TABLE 1.6

Europe

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Iceland	1.096	0.005	1
2	Austria	1.274	-0.022	3
3	Portugal	1.318	0.039	4
4	Denmark	1.353	0.032	5
5	Czech Republic	1.381	0.009	7
6	Ireland	1.393	-0.012	10
7	Slovenia	1.396	0.014	11
8	Switzerland	1.407	0.028	12
9	Sweden	1.502	0.006	14
10	Finland	1.506	-0.022	15
11	Norway	1.519	0.014	16
12	Germany	1.531	0.016	17
12	Hungary	1.531	0.029	17
14	Belgium	1.56	-0.004	21
15	Slovakia	1.568	-0.05	22
16	Netherlands	1.574	0.007	23
17	Romania	1.596	-0.025	24
18	Bulgaria	1.635	-0.001	26
19	Croatia	1.639	-0.035	27
20	Spain	1.678	0.127	30
21	Latvia	1.689	0.002	31
22	Poland	1.727	0.039	32
23	Estonia	1.732	0.014	33
24	Lithuania	1.749	0.007	36
25	Italy	1.766	0.022	38
26	Albania	1.849	-0.049	52
27	Serbia	1.851	-0.023	54
28	United Kingdom	1.876	0.052	57
29	Montenegro	1.893	-0.05	58
30	France	1.909	0.023	61
31	Cyprus	1.913	-0.036	62
32	Greece	2.02	0.003	79
33	Macedonia (FYR)	2.058	-0.071	87
34	Bosnia and Herzegovina	2.065	0.016	89
35	Kosovo	2.078	0.071	92
36	Turkey	2.898	0.109	149
REGIONAL AVERAGE		**1.681**	**0.008**	

MIDDLE EAST & NORTH AFRICA

The Middle East and North Africa remained the world's least peaceful region in 2018, despite a slight improvement in its overall score. The scores in both Iraq and Syria improved: although the conflict is no less bitter, the diminishing geographic reach of ISIL and other rebel groups means that overall levels of violence have diminished.

However, these improvements have been offset by increased hostility on the Arabian Peninsula. The deepening animosity between Sunni and Shia nations and groups has played out in Yemen. The economic and diplomatic embargoes placed on Qatar by its neighbours Saudi Arabia, U.A.E. and Bahrain resulted in the country having the region's biggest deterioration.

Regionally, the strongest improvements were in the *Safety and Security* domain, including in indicators such as *refugees and internally displaced people* (IDPs), *political terror*, *terrorism impact* and violent crime. By the beginning of 2018, ISIL had lost more than 90 per cent of the territory it controlled at its peak in 2015, including almost all its holdings in Iraq and all but a few increasingly beleaguered outposts in central Syria. The conflict is far from over, and the Syrian government and its Russian and Iranian allies have re-focused on other rebel groups, since the ability of ISIL to wreak havoc has been curbed.

Iraq was the region's most significant improver, although it still ranks 160th out of 163 countries. There were improvements in *refugees and IDPs*, *political instability*, *terrorism impact*, *intensity of internal conflict* – which is now at a 10-year low - and *internal conflicts fought*; however, this was slightly offset by an increase in *violent demonstrations*. Syria, the region's third largest improver, had improvements in *political instability* and *terrorism impact*, but remains the world's least peaceful country.

Four of the five largest deteriorations in the Middle East – Qatar, Iran, Oman, and Saudi Arabia – are a reflection of the deepening rivalry between predominantly Sunni Muslim Saudi Arabia and its allies and Shia Iran and its allies. This animosity has long been a factor in Syria, but the ascent of Saudi Crown Prince Mohammed bin Sultan, combined with the policies of the Republican administration in the United States and higher risk tolerance in Tehran, seem to have escalated the problem. These tensions are playing out in deteriorations in the regional scores for *political stability*, *neighbouring countries relations*, and internal and *external conflicts fought*, the last of which deteriorated by 13 per cent over the year.

TABLE 1.7

Middle East & North Africa

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Kuwait	1.799	-0.009	42
2	United Arab Emirates	1.82	-0.071	45
3	Qatar	1.869	0.206	56
4	Morocco	1.979	-0.023	71
5	Oman	1.984	0.052	73
6	Tunisia	1.998	0.018	78
7	Jordan	2.104	-0.016	98
7	Algeria	2.182	0.002	109
9	Saudi Arabia	2.417	0.037	129
10	Bahrain	2.437	0.002	130
11	Iran	2.439	0.074	131
12	Palestine	2.621	-0.081	141
13	Egypt	2.632	0.039	142
14	Israel	2.764	0.011	146
15	Lebanon	2.778	-0.003	147
16	Sudan	3.155	-0.044	153
17	Libya	3.262	-0.058	157
18	Yemen	3.305	-0.006	158
19	Iraq	3.425	-0.094	160
20	Syria	3.6	-0.061	163
REGIONAL AVERAGE		2.529	-0.001	

NORTH AMERICA

North America retained its second-place regional ranking for the tenth year running, and although the ranking of Canada (6) remained unchanged, and the United States (121) rose one place, their overall scores deteriorated over the year.

United States has declined for two consecutive years and is now at the worst level of any time since 2012. Last year, its score deteriorated on all three main domains, leading to a decline in its overall score for the second year running. In *Safety and Security*, an improvement in the *impact of terrorism* was offset by a deterioration in *political instability*, the latter a reflection of the increasingly partisan nature of American politics. The improvement in its scores on *military expenditure* and *armed services personnel rate* are expected to reverse next year as the most recent Pentagon budget increase feeds through into the data.

For a number of years, the United States has scored the maximum (worst) possible score on a number of domains, including *incarceration*, *external conflicts fought*, *weapons exports*, and *nuclear and heavy weapons*, masking any ongoing deteriorations in these areas.

Last year's decline masks some notable improvements over time: over the past ten years, there has been a 35 per cent improvement in *deaths from external conflict* as Washington has curtailed operations in Iraq and Afghanistan. Further, last year's *military expenditure* was 25 per cent below its peak in 2010; and there has been a gradual fall in the *homicide rate* over the last decade, which is now seven per cent below its 2008 levels.

Canada suffered a deterioration in its *terrorism impact* rating after the Quebec City mosque shooting in January, in which six worshippers were killed and 19 injured, and an attack in Edmonton in October when an attacker ran down four pedestrians and stabbed a police officer.

TABLE 1.8

North America

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Canada	1.372	0.01	6
2	United States of America	2.3	0.01	121
REGIONAL AVERAGE		1.836	0.01	

RUSSIA & EURASIA

Russia and Eurasia remained in seventh place despite a slight deterioration in the region's overall score. Three countries – Ukraine, the Kyrgyz Republic and Moldova – improved their scores and nine deteriorated.

There were improvements in the indicators for *military expenditure*, *weapons exports*, *violent demonstrations* and *political instability*, but deteriorations in *violent crime*, *terrorism impact*, and *political terror*, the latter suggesting that the region might became more politically stable at the cost of greater suppression of opposition.

There was little geographical rationale to the pattern of risers and fallers, but most of the fallers have some degree of dependence on revenue from natural resources, particularly oil and gas. These included Armenia (copper), Russia, Georgia (oil and gas transit), Turkmenistan and Kazakhstan, all of which have suffered from the prolonged depression in the price of primary commodities. These problems have been exacerbated by the region's high levels of economic dependence on Russia, where the challenges of low commodity prices have been exacerbated by western sanctions.

The biggest improvement was in the Ukraine, which gained two places although it remains ranked 152 out of 163 countries in terms of peacefulness. Despite the formalisation of the trade blockade against Donbas in March 2017, which led to an increase in the country's score for *internal conflicts fought*, and growing *political instability* ahead of the 2019 elections, improvements in its scores for *terrorism impact*, *refugees and IDPs* and *external conflicts fought*, gave it an improved overall score.

The Kyrgyz Republic's gains were driven by the abatement of tensions with Uzbekistan, with which it has had a long-running border dispute, and the reduced number of *violent demonstrations* against the government.

The region's biggest deterioration was Armenia, which lost seven places in the global rankings. A relative cooling of its tensions with Azerbaijan after the violent clashes in Nagorno-Karabakh in 2016 led to an improvement in its score for *external conflicts fought*, but was marked down for the increased *likelihood of violent demonstrations* by opponents of the government, a risk that has increased by price hikes in early 2018.

Russia had the second largest deterioration in the region. There were improvements in *violent demonstrations* and *political instability*. Despite western sanctions, President Vladimir Putin continues to command strong support within the country. The country deteriorated on the indicators for *terrorism impact*, *violent crime* and *political terror*. Given Moscow's continuing involvement in Syria and the possibility of clashes with western forces as the battle moves into a post-ISIL phase, Russia's score on *external conflicts fought* has also increased.

TABLE 1.9

Russia & Eurasia

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Moldova	1.939	-0.005	64
2	Kazakhstan	1.974	0.02	70
3	Belarus	2.112	0.006	101
4	Georgia	2.13	0.034	102
5	Uzbekistan	2.144	0.027	104
6	Kyrgyz Republic	2.181	-0.055	108
7	Tajikistan	2.266	0.01	114
7	Turkmenistan	2.283	0.028	119
9	Armenia	2.287	0.046	120
10	Azerbaijan	2.454	0.002	132
11	Ukraine	3.113	-0.066	152
12	Russia	3.16	0.038	154
REGIONAL AVERAGE		2.337	0.007	

SOUTH AMERICA

South America was the fourth most peaceful region for the second year running despite a slight deterioration in its overall score. Improvements in the domains of *Safety and Security* and *Ongoing Conflict* were offset by increasing militarisation.

The biggest challenge facing South America is lawlessness. As a region, South America performs slightly better than Central America and the Caribbean and slightly worse than sub-Saharan Africa on *perceptions of criminality*. No country in the region scores less than 3 out of a possible 5 on the scale, and seven out of nine score 4 or 5, with 5 being the worst possible score.

South America also has the highest *homicide rate* of any region except Central America and the Caribbean. Corruption and criminality have become deeply destabilising in South America, as is being seen in Brazil's Lava Jato (Car Wash) scandal, or the bribes paid by construction giant Odebrecht, which has implicated politicians in seven South American nations.

Although the region improved its scores on *violent demonstrations* and *political instability*, it deteriorated in *intensity of internal conflict*, pulled down by the continuing problems in Venezuela.

South America provides another illustration that good policy can overcome geography. Both Chile (28) and Uruguay (36) are in the top 50 nations for overall peacefulness, despite their proximity to Brazil (106).

The most significant riser in the region was Argentina, where the economic reforms of President Mauricio Macri seem to be paying dividends. Although there is still some way to go, there has been a significant drop in *violent demonstrations*, and the victory of his Cambiemos party in last October's elections has bought greater *political stability* after years of turmoil, along with improved relations with its neighbours.

Argentina was followed by Brazil and Colombia. Despite a wave of corruption scandals, signs of a recovery from Brazil's three-year recession have lifted the mood in the country. This coincides with a sharp improvement in its *political terror* score, following the end of the mass anti-corruption protests in 2016 that removed President Dilma Rousseff from power. However, the level of *political instability* remains elevated, and allegations of corruption against people close to current President Michel Temer are mounting.

Colombia lost one place in the global rankings despite an improvement in its overall score. The peace agreement with FARC (Revolutionary Armed Forces of Colombia—People's Army)

appears to be holding: despite growing disillusion on both sides, the country recorded improvements across a broad range of indicators in the *Safety and Security* domain, including *violent demonstrations*, the *Political Terror Scale*, *political instability* and the *incarceration rate*. However, severe challenges remain, with Colombia scoring 4 out of a possible 5 on *perceptions of criminality*, *access to small arms* and *violent crime*, and 5 on the *homicide rate* and *refugees and IDPs*.

TABLE 1.10

South America

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Chile	1.649	0.046	28
2	Uruguay	1.761	0.05	37
3	Argentina	1.947	-0.052	66
4	Peru	1.986	-0.005	74
5	Ecuador	1.987	0.035	75
6	Paraguay	1.997	0.035	77
7	Guyana	2.043	0.014	82
7	Bolivia	2.092	0.054	94
9	Brazil	2.16	-0.035	106
10	Venezuela	2.642	0.034	143
11	Colombia	2.729	-0.025	145
REGIONAL AVERAGE		2.09	0.014	

SOUTH ASIA

South Asia retained its eighth place in the global rankings despite a slight improvement in its overall score. The inequality of peace in the region continued to widen over the year, with the least peaceful nations – Afghanistan and Pakistan – continuing their decline, while the most peaceful – Bhutan and Sri Lanka – continued to improve.

The regional scores on the domains of *Safety and Security* and *Militarisation* improved, but *Ongoing Conflict*, particularly internal and *external conflicts fought* and *neighbouring countries relations*, deteriorated. However, given the wide disparity between the peace performance of the nations of South Asia, the aggregate data tell an incomplete picture. Bhutan, famous for trying to maximise Gross National Happiness rather than Gross Domestic Product, was once again the most peaceful nation in the region and was the most significant regional riser last year. Strengthening scores on the *Political Terror Scale*, *refugees and IDPs* and *terrorism impact* were only partially offset by a deterioration in *external conflicts fought* after a border dispute with China flared in the Doklam Pass. The three-month standoff also involved India, which sent troops to the area.

Sri Lanka was again the second most peaceful nation in South Asia, and the second largest riser in the region last year. Although the scores for *terrorism impact*, the *incarceration rate* and *military expenditure* improved, there are some worrying signs for the future. The scores for both *refugees and IDPs* and *political instability* deteriorated, a reflection of waning confidence that President Maithripala Sirisena can deliver the reforms his government promised. There are also signs that communal tension is once again on the rise: the government declared a state of emergency in March 2018 to prevent *violent demonstrations* by radical Buddhist elements of the Sinhalese majority against the country's Muslim minority in the city of Kandy from spreading nationwide.

India, the region's most populous country, recorded a slightly improved overall score. Government efforts to tackle violent crime have paid off with an improved score, and falling levels of *military expenditure*, particularly on weapons imports, resulted in a slight improvement in its *Militarisation* score. However, the concentration of power in the office of Prime Minister Narendra Modi led to a deterioration in India's score for *political instability*, and the country's scores on the *Political Terror Scale* and *internal conflicts fought*, at 4 and 4.7 respectively, remain elevated.

> “
> Inequality of peace in the region continued to widen over the year, with the least peaceful nations continuing their decline, while the most peaceful – Bhutan and Sri Lanka – continued to improve.

At the other end of the scale, the overall scores of Afghanistan and Pakistan continued to deteriorate, in Afghanistan's case for the fifth year running. There is an improvement in Afghanistan's *terrorism impact* score, reflecting a 9 per cent decrease in the number of civilian casualties in 2017. However, that may be due to the fact that the Taliban now control more of the country than at any time since 2001 and are resorting to terrorist tactics less frequently, rather than any improvement in the chances for long-term peace.

Pakistan's *violent crime* and *terrorism impact* scores improved – the latter for the fifth year running – reflecting the government's success in curbing the violent activities of both criminals and militant groups, gains that also flowed through into an improvement on *refugees and IDPs*. These gains were offset by rises in *military expenditure*, the *incarceration rate* and *violent demonstrations*. Mass demonstrations, many of which turned violent, are becoming the default mechanism for political and pressure groups to attempt to effect political change.

Bangladesh had the largest deterioration in the region. Improvements in *political stability* and *terrorism impact* failed to offset a rapid fall in *external conflicts fought*, and *neighbouring countries relations*, which were adversely affected by the influx of 700,000 Rohingya refugees from neighbouring Myanmar.

TABLE 1.11

South Asia

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Bhutan	1.545	-0.059	19
2	Sri Lanka	1.954	-0.029	67
3	Nepal	2.053	-0.001	84
4	Bangladesh	2.084	0.048	93
5	India	2.504	-0.025	136
6	Pakistan	3.079	0.018	151
7	Afghanistan	3.585	0.037	162
REGIONAL AVERAGE		2.401	-0.002	

SUB-SAHARAN AFRICA

Sub-Saharan Africa's regional ranking remained unchanged at number six, despite a slight deterioration in its overall score. The largest regional improvements were in *terrorism impact*, *perceptions of criminality*, violent crime, *neighbouring countries relations*, and *militarisation*, but those were offset by deteriorations in *violent demonstrations*, *refugees and IDPs* and *political terror*.

Nonetheless, there were some notable intra-regional variations in the data. Six of the top seven improvers were in West Africa, including the Gambia, which scored the world's largest improvement after Yahya Jammeh was voted out of power at the end of 2016.

Of the 14 West African nations, the overall scores of only two – Niger and Nigeria – deteriorated last year. There were substantial sub-regional improvements in the domain of *Safety and Security*, including Liberia by eight per cent, the Gambia by 5.9 per cent, and Ghana by 5.5 per cent.

The most notable West African exceptions were Togo and Cameroon. In Togo, which had the region's second largest deterioration, tens of thousands of people took to the streets to demand the resignation of President Faure Gnassingbé, whose family have ruled the country for 50 years. Cameroon, with the region's third largest deterioration, has seen Anglophone secessionists launch a number of attacks on government security forces during the year.

The Lake Chad basin region continues to have problems with Boko Haram and a humanitarian crisis brought on by prolonged drought. The United Nations estimates that almost 11 million people need humanitarian assistance in the Lake Chad Basin. Boko Haram's geographic reach shrank in 2017, leading to a reduction in the *impact of terrorism* in the groups' principal areas of operations in Nigeria, Niger, Cameroon and Chad, although they still remain a threat. The group seems to have switched tactics from relying on armed assaults to suicide bombings.

In eastern Africa, there seems little sign of an end to the four-year old civil war in South Sudan, and the emergence of a new faction in the country under President Salva Kiir's former military chief Paul Malong. This is likely to prolong the breakdown in peacefulness of the world's youngest country.

Ethiopia fell six places to 139 after Amhara protesters targeted Tigrayan business interests and foreign investors, leading to deteriorations in its scores for *violent demonstrations* and *political terror*. Neighbouring Kenya, in contrast, gained three places as a result of a reduced number of attacks by militants allied to Somalia's al-Shabaab movement and fewer refugees coming over its north-eastern border.

The largest deterioration in the region was recorded by the Democratic Republic of the Congo (DRC), where President Joseph Kabila's refusal to step down at the end of his second and final term at the end of 2016 has led to increasing violence, particularly in the country's eastern provinces. The DRC now has more than five million people internally displaced and violence is expected to continue to escalate ahead of elections scheduled for December 2018, despite the presence of 15,000 UN peacekeepers.

TABLE 1.12

Sub-Saharan Africa

Regional Rank	Country	Overall Score	Score change	Overall Rank
1	Mauritius	1.548	-0.001	20
2	Botswana	1.659	0.041	29
3	Sierra Leone	1.74	-0.017	35
4	Madagascar	1.766	-0.026	38
5	Ghana	1.772	-0.036	41
6	Namibia	1.806	-0.015	43
7	Malawi	1.811	-0.014	44
8	Zambia	1.822	0.035	48
9	Tanzania	1.837	0.018	51
10	Senegal	1.849	-0.078	52
11	Liberia	1.931	-0.129	63
12	Equatorial Guinea	1.946	0.051	65
13	Benin	1.973	-0.049	69
14	Swaziland	1.98	0.014	72
15	The Gambia	1.989	-0.228	76
16	Burkina Faso	2.029	-0.044	80
17	Angola	2.048	-0.02	83
18	Mozambique	2.056	0.037	86
19	Gabon	2.099	0.063	95
20	Guinea	2.101	0.012	96
21	Togo	2.104	0.154	98
22	Rwanda	2.14	0.002	103
23	Lesotho	2.144	0.079	104
24	Uganda	2.168	-0.013	107
25	Cote d' Ivoire	2.207	-0.055	110
26	Djibouti	2.269	0.066	115
27	Guinea-Bissau	2.275	0.001	116
28	Kenya	2.315	-0.039	123
29	Zimbabwe	2.326	0.029	124
30	South Africa	2.328	-0.001	125
31	Republic of the Congo	2.343	-0.021	126
32	Mauritania	2.355	-0.004	127
33	Niger	2.359	0.013	128
34	Cameroon	2.484	0.089	133
35	Burundi	2.488	-0.087	134
36	Chad	2.498	-0.04	135
37	Eritrea	2.522	0.046	138
38	Ethiopia	2.524	0.073	139
39	Mali	2.686	-0.008	144
40	Nigeria	2.873	0.008	148
41	Central African Republic	3.236	0.027	155
42	DRC	3.251	0.192	156
43	Somalia	3.367	0.008	159
44	South Sudan	3.508	0.06	161
REGIONAL AVERAGE		**2.239**	**0.004**	

Improvements & Deteriorations

In the 2018 GPI, 92 countries deteriorated while 71 countries improved, with the global average deteriorating by 0.27 per cent. This is the highest number of countries to deteriorate in peacefulness in a single year since the 2010 GPI, and there have only been two years since 2008 in which more countries deteriorated.

Of the five countries with the largest improvements in peace, four are from sub-Saharan Africa, including the Gambia and Liberia, which had the largest overall improvements in peacefulness. At least one country from sub-Saharan Africa has been amongst the five largest improvers every year since the inception of the index. Generally, countries which have been in conflict will have large improvements once these conflicts cease.

There were improvements across a number of indicators, but the indicator with the largest improvement was the *armed services personnel rate*, with 117 countries improving. Similarly, 88 countries improved their *military expenditure* scores. This is the continuation of a decade long trend that has seen military spending and the armed forces rate fall across the vast majority of countries included in the GPI. The 2018 GPI also saw an improvement in the *terrorism impact* indicator for 85 countries, compared to 50 that had a deterioration. However, this fall, although substantial, comes after the number of deaths from terrorism reached record highs in 2014 with over 32,775 deaths. Since then, the number of fatalities has fallen by 21.7 per cent to 25,673 in 2016.

The largest deteriorations in peace were spread around the world, with countries from four different regions represented amongst the five largest falls. The single largest deterioration in peacefulness occurred in Qatar, which dropped 26 places in the rankings. Spain was also amongst the largest deteriorations in peacefulness, marking the fourth straight year that a country from Europe had one of the five largest falls in peace. Deteriorations in peacefulness were spread across all three GPI domains, with the largest average deteriorations occurring in the *Political Terror Scale* and *external conflicts fought* indicators.

FIVE LARGEST IMPROVEMENTS IN PEACE

The Gambia — Rank: 76

CHANGE IN SCORE 2017–18: **-0.228**

CHANGE IN RANK 2017–18: **↗35**

The Gambia recorded the largest improvement in peace with a score change of -0.228, moving it up 35 places in the rankings, from 111th in 2017 to 76th. It improved across all three GPI domains, with the largest improvement occurring in the *Ongoing Conflict* domain.

The most notable improvement in peacefulness occurred for the *neighbouring countries relations* indicator, which improved from a score of 4 to 2. The election of the new president Adama Barrow in April 2017 has greatly improved relationships between the Gambia and its neighbouring countries, most notably Senegal, where political relations between the previous president Yahya Jammeh and Senegalese president Macky Sall had been strained since the 2012 Senegalese elections. The result of 2017 presidential election in the Gambia has also led to an improvement in the *political instability* indicator, with the restoration of checks and balances and the decentralization of power that had been tightly concentrated for the past 22 years. The promise to establish a truth and reconciliation commission to investigate abuses that occurred under the previous regime has also led to an improvement in the *perceptions of criminality* indicator, which moved from a score of four to three. These changes now mean that the Gambia is ranked, for the first time, amongst the 15 most peaceful countries in sub-Saharan Africa.

However, despite these significant improvements in peacefulness, there is still some cause for concern. The *intensity of internal conflict* remains high, and the *homicide rate* of 9.07 per 100,000 people places it in the bottom quartile of all countries on that indicator.

Liberia — Rank: 63

CHANGE IN SCORE 2017–18: **-0.129**

CHANGE IN RANK 2017–18: **↗27**

Liberia had the second largest overall improvement in peace of any country, moving up 27 places in the rankings after a score change of -0.129. The bulk of this improvement occurred on the *Safety and Security* and *Militarisation* domains, while the *Ongoing Conflict* domain had a slight deterioration.

A fall in the *likelihood of violent demonstrations* was the primary driver of improved peacefulness in Liberia. The peaceful conclusion of the 2017 general elections has lowered the risk of *violent demonstrations*, although the security situation is fragile and will remain so for many years to come. Liberia also had an improvement on the *political terror* scale indicator, moving from a score of 3 to 2, which suggests that the previous extensive level of political imprisonment and violence has now become much less common. The *terrorism impact*, *refugees and IDPs*, and *incarceration rate* indicators all improved slightly, with Liberia's *incarceration rate* of 44 per 100,000 people placing it among the 15 lowest of any country in the GPI.

Regionally, Liberia now scores just behind the ten most peaceful countries in sub-Saharan Africa, which is a significant improvement from a decade ago, when it was the 23rd most peaceful country in the region.

Iraq — Rank: 160

CHANGE IN SCORE 2017–18: **-0.094**

CHANGE IN RANK 2017–18: **↗1**

Peacefulness improved in Iraq for the second year in a row, and its improvement of 0.094 meant that it had the third largest improvement in peacefulness of any country. Nonetheless, Iraq remains one of the least peaceful countries in the world, and is still ranked amongst the five least peaceful countries on the GPI.

The improvement in peacefulness in Iraq occurred on both the *Safety and Security* and *Ongoing Conflict* domains. The percentage of *refugees and IDPs* as a percentage of the population fell from 12.2 to 9.7 per cent, with a concurrent small improvement in the *terrorism impact* indicator. The political situation began to show tentative signs of stabilisation as well, with improvements in both the *political instability* and *intensity of internal conflict* indicators. Although violence and insecurity remain prevalent, the territorial defeat of ISIL has ended the previous state of civil war, while brief fighting between federal government forces and the Kurdish Peshmerga also subsided. Furthermore, the actions of the Iraqi supreme court in overturning government attempts to amend the constitution have demonstrated a certain level of judicial independence, and the impeachment of several ministers by the parliament for corruption suggests an improvement in government accountability.

Despite these improvements, the situation in Iraq remains fragile. It is the second least peaceful country on the *Safety and Security* domain. The small deterioration in the *likelihood of violent demonstrations*, based on the likelihood of future conflict with the Kurdish community, suggests that a sustained increase in peacefulness may yet be a while off.

> “
> Peacefulness improved in Iraq for the second year in a row

Burundi — Rank: 134

CHANGE IN SCORE 2017–18: **-0.087**

CHANGE IN RANK 2017–18: **↗5**

Burundi had the fourth largest overall improvement in peacefulness, rising five places in the rankings from 139th to 134th. It improved on the *Militarisation* and *Safety and Security* domains, however, it did see a very small deterioration in *Ongoing Conflict*.

The two largest drivers of the improvement in peacefulness occurred in *Safety and Security*, with both *perceptions of criminality* and *access to small arms* improving by a score of 1. The change in *perceptions of criminality* reflects an improved security situation in the country, which has been recognised by regional organisations that are now willing to hold conferences in Burundi, whereas they had previously considered it too unsafe to travel there. That said, an insurgency is still active, and the government has only managed to restore a semblance of security by clamping down hard on the opposition and curtailing civil liberties. The improvement in *access to small arms* is the result of a fall in the rate of illegal firearm possession, aided by the improved security situation and a government crackdown on illicit avenues for obtaining guns.

Despite these improvements, there was an increase in the number of *refugees and IDPs* as a percentage of the population, from 3.9 per cent to 4.7 per cent. Burundi remains one of the ten least peaceful countries in sub-Saharan Africa, with 2018 being the first time since 2014 that it improved in the GPI.

Senegal — Rank: 52

CHANGE IN SCORE 2017–18: **-0.078**

CHANGE IN RANK 2017–18: **↗9**

Senegal recorded the fifth largest improvement in peacefulness on the 2018 GPI, and is one of four sub-Saharan African countries to be included amongst the most significant improvers in peacefulness. Its score change of -0.08 was enough to move it nine places in the rankings, from 62 to 53. It is the tenth most peaceful country overall in the sub-Saharan Africa region, and has seen improvements in peacefulness for eight of the last ten years.

Senegal improved in five of the 23 GPI indicators. There was a slight improvement in the number of *refugees and IDPs* as a percentage of the population, as well as a small reduction in the *armed forces personnel rate*. The *terrorism impact* indicator showed significant improvement as well. However, the single greatest improvement occurred on the *neighbouring countries relations* indicator, which changed on the back of improved relations with the Gambia and Mauritania. Relations between Senegal and the Gambia have historically been particularly strained but with the election of a new Gambian president, Adama Barrow, their relations have greatly improved. Co-operation with Mauritania on the development of the gas deposits that straddle their maritime border is positive for peace.

FIVE LARGEST DETERIORATIONS IN PEACE

Qatar — Rank: 56

CHANGE IN SCORE 2017–18: **0.206**

CHANGE IN RANK 2017–18: **↘26**

Qatar experienced the single largest deterioration in peacefulness of any country on the 2018 GPI. Its overall score fell 0.206, leading it to fall 26 places in the rankings, from 30th to 56th. Qatar's score deteriorated across all three GPI domains, with the largest deterioration occurring on the *Ongoing Conflict* domain. Qatar is no longer the most peaceful country in the Middle East and North Africa region, although it is still ranked in the top three.

Increasing tensions with neighbouring countries was the greatest contributor to Qatar's decline in peacefulness, with the *neighbouring countries relations* indicator moving from a score of 2 to 3. Qatar came under a political and economic boycott by four Arab states (Egypt, Saudi Arabia, UAE and Bahrain) on June 5th 2017. Qatar's boycotters accuse it of promoting policies that are destabilising for the region. The emirate denies those charges. This in turn led to a deterioration in the *intensity of internal conflict*, as the Qatari government became sensitive to internal criticism in relation to the boycott. The boycott has also led to a deterioration in *political instability* and an increase in the *likelihood of violent demonstrations*, possibly resulting from a curtailing of welfare programs owing to constrained public finances resulting from the boycott.

Democratic Rep. of Congo — Rank: 156

CHANGE IN SCORE 2017–18: **0.192**

CHANGE IN RANK 2017–18: **↘5**

A deterioration in overall peacefulness has seen the Democratic Republic of the Congo fall five places on the 2018 GPI. It is now ranked amongst the ten least peaceful countries in the world. It is now less peaceful than it has been at any point in the last decade, and is the third least peaceful country in the sub-Saharan Africa region, behind only Somalia and South Sudan.

> “The DRC is now less peaceful than it has been at any point in the last decade

The decrease in peacefulness has occurred across a number of indicators. The number of *refugees and IDPs* as a percentage of the population has increased from 2.77 to 5.32 per cent. The risk of civil war has increased, leading to a deterioration in the *intensity of internal conflict*. Violence and rebel activity have drastically risen throughout the country, and especially in the provinces of Kasaï, Kasaï-Central, Kasaï-Oriental, Haut-Uele,

Haut-Lomami, Ituri, North Kivu, South Kivu, Maniema and Tanganyika. A concurrent deterioration in the *perceptions of criminality* has also occurred owing to the increasing trend of crime, general violence, and activity by armed groups since the end of 2016. Civilians are struggling to obtain basic necessities, such as food, in several parts of the country and security forces are performing arbitrary arrests and detentions.

Togo — Rank: 98

CHANGE IN SCORE 2017–18: **0.154**

CHANGE IN RANK 2017–18: **↘32**

Togo experienced the third largest deterioration in score, and the single largest fall in rank, falling 32 places. It is now ranked 98th on the GPI, its lowest ever rank. Togo's deterioration in peacefulness was driven by a fall in its score in the *Ongoing Conflict* domain, as a result of increasing tensions both within the country and also with its neighbours.

The *intensity of internal conflict* has increased in Togo from a score of 2, to 3 out of 5. Political turbulence has increased since August 2017. Massive protests are taking place regularly with demands for electoral reforms and the end of the Gnassingbé's regime. This has led to a deterioration in the overall security level, particularly in urban areas where opposition to the president is the strongest, resulting in violence between the security forces and the opposition fighters. This has also led to a concurrent deterioration in the *violent demonstrations* indicator, as well as a deterioration in *political instability*. Externally, the *neighbouring countries relations* indicator has also deteriorated from a 2 to a 3 as internal instability has attracted a response from other countries in the region. The serious tensions and the violent crackdowns from security forces on protesters have prompted regional leaders to harden the tone towards the government. The Economic Community of West African States (ECOWAS) has urged Togo to have an inclusive dialogue to put an end to the crisis and implement political reforms respecting the constitutional order and democratic institutions.

Spain — Rank: 30

CHANGE IN SCORE 2017–18: **0.127**

CHANGE IN RANK 2017–18: **↘10**

Spain recorded the fourth highest overall deterioration in peacefulness of any country, and the largest in the European region. It has dropped out of the 20 most peaceful countries, falling to 30th in the rankings, and is now ranked amongst the bottom half of the European region.

The deterioration in peacefulness in Spain has been driven by two trends: firstly, an increase in the *terrorism impact* indicator and secondly, a deterioration in the political environment owing to unrest over possible secession by the Catalonia region. 2017 saw a number of high profile terrorist attacks in Spain, most notably the August attack on the La Rambla pedestrian mall in Barcelona, which killed 14 people and injured over a hundred more. Several other smaller attacks occurred in the following days.

The *intensity of internal conflict* and *likelihood of violent demonstrations* both deteriorated as the result of unrest in Catalonia. The illegal independence referendum held by the Catalan regional government on October 1st 2017, and the regional parliament's subsequent unilateral declaration of independence, have deeply polarised opinion in the region and in Spain more broadly on the issue of regional nationalism. The same is also true of the heavy-handed response of the national government, which used force in some instances in its attempt to stop the referendum. The government also applied Article 155 of the Spanish constitution to temporarily suspend home rule in Catalonia and call an early regional election. Regional nationalist sentiment, on the one hand, and patriotic Spanish sentiment among Catalan unionists and Spaniards in other regions, are becoming more deeply entrenched. A high degree of polarisation appears likely to continue for the foreseeable future.

Myanmar — Rank: 122

CHANGE IN SCORE 2017–18: **0.119**

CHANGE IN RANK 2017–18: **↘15**

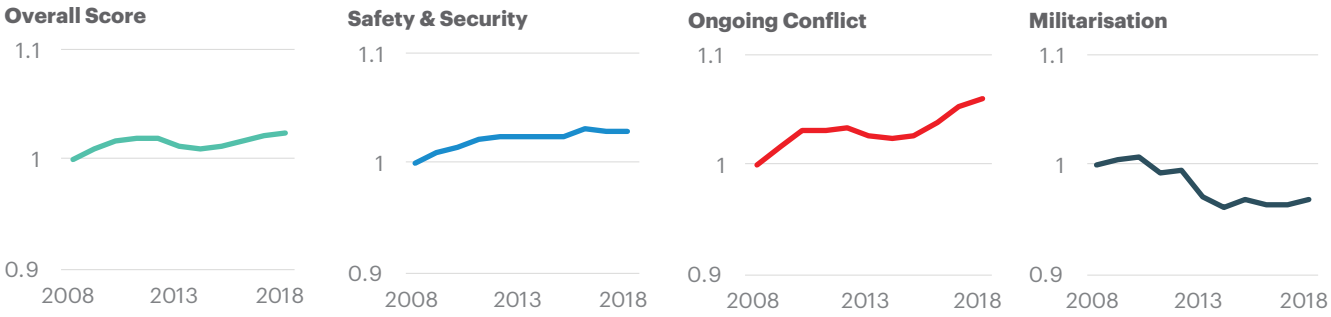
Myanmar fell 15 places in the rankings and is now ranked 122nd on the GPI, its lowest ever ranking. The majority of Myanmar's deterioration occurred in the *Safety and Security* domain, which deteriorated by 0.33 points. Six of the 11 *Safety and Security* indicators experienced a deterioration, and none recorded an improvement.

The largest overall deteriorations occurred on the *Political Terror Scale*, *perceptions of criminality*, and *political instability* indicators. Tensions between the minority Rohingya Muslim community in Rakhine State and the majority Rakhine Buddhists escalated significantly in the wake of the attacks led by the Arakan Rohingya Salvation Army, an ethnic Rohingya insurgent group, in August 2017 against 16 police stations. The Rohingya community have long been perceived by many in Myanmar as illegal immigrants from Bangladesh. There is a growing risk that the long-running mistrust between the minority Muslim communities and the majority Buddhist communities in Rakhine spreads to other parts of Myanmar, affecting the day-to-day safety of individuals from both groups. Conflict between the two groups have also resulted in increased *political instability*, as tensions between Myanmar and the West have increased since the army's heavy-handed crackdown against suspected Muslim insurgents. This has resulted in a humanitarian crisis in the country's shared border with Bangladesh. More than 600,000 Rohingya Muslims have fled the country, leading to a deterioration in the *refugees and IDPs* indicator.

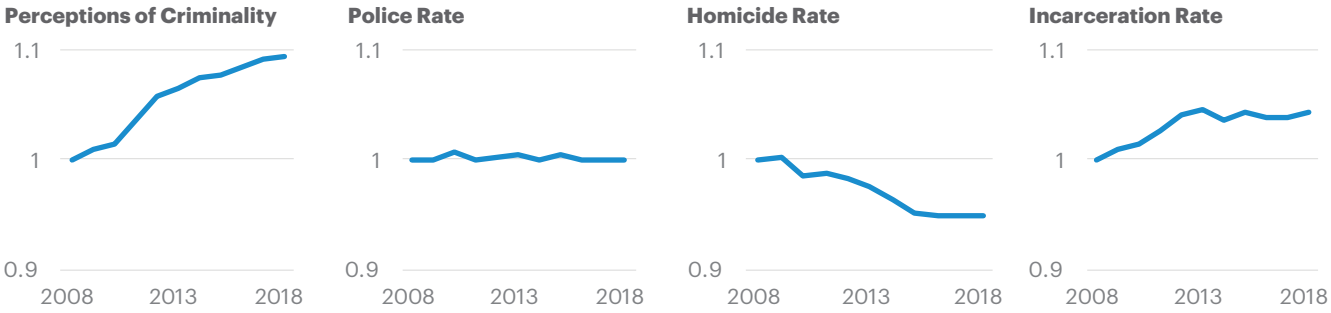
2 TRENDS

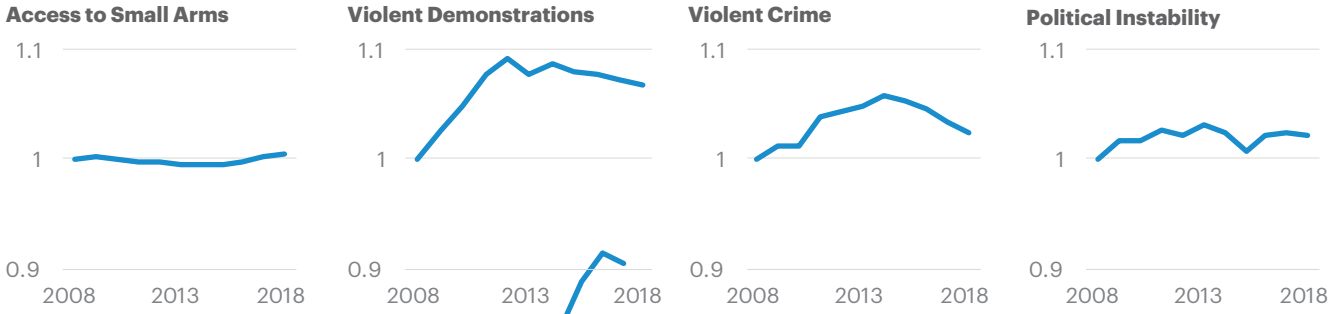
Trends in the Global Peace Index

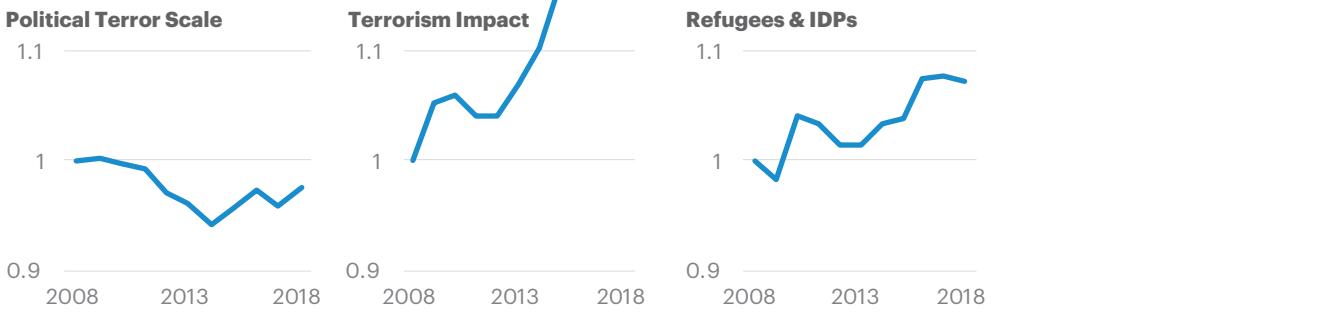
Domains



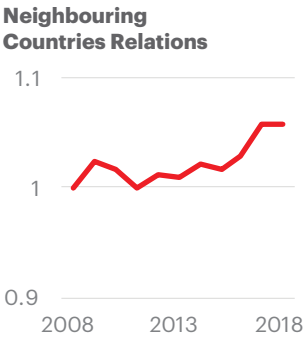
Safety & Security



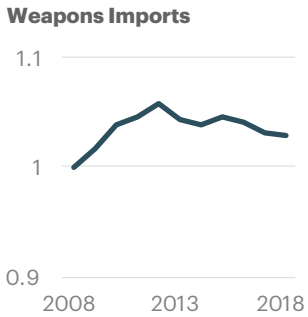


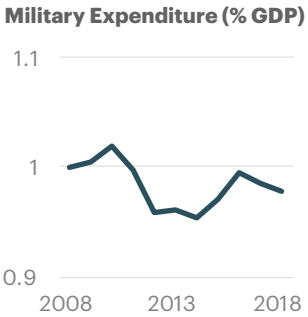


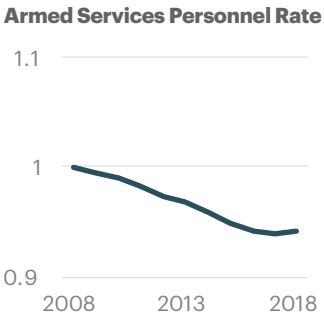
Ongoing conflict

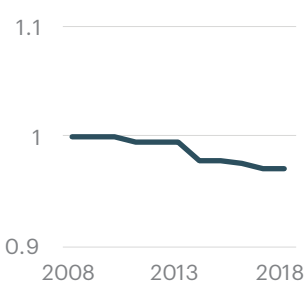


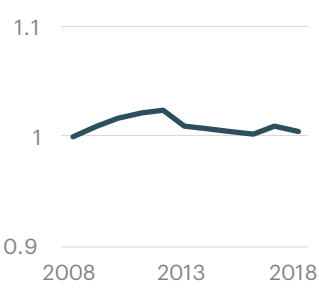
Militarisation











Ten year trends in the Global Peace Index

The world is considerably less peaceful now than it was in 2008, with the average level of country peacefulness deteriorating by 2.38 per cent over the last decade.

Peacefulness has declined year-on-year for eight of the last ten years. Since 2008, 85 countries have become less peaceful, compared to 75 that have improved. Figure 2.1 highlights the overall trend in peacefulness from 2008 to 2018, as well as the year-on-year percentage change in score.

Most of the deterioration in peacefulness occurred in MENA. If this region was excluded from the analysis, the average level of peace would only have deteriorated by 0.77 per cent. Even within MENA, the deterioration in the last decade was concentrated in a handful of countries, most notably Syria, Libya, Yemen, Egypt, and Bahrain. However, although there has been relatively little variation in peacefulness outside of MENA, there are some concerning trends in the more peaceful regions of the world.

> “The more peaceful a country was in 2008, the less likely it was to have deteriorated in peacefulness over the last decade

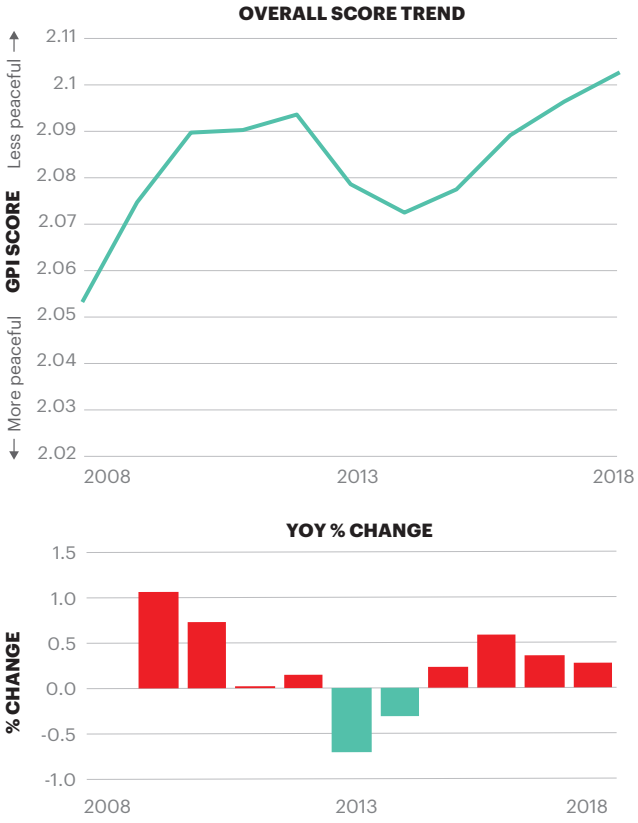
In Europe, the region that has consistently ranked as the most peaceful since the inception of the index, the number of countries where peacefulness deteriorated was close to double the amount where it improved last year. Most strikingly, no Nordic or Western European country is more peaceful in the 2018 GPI than the 2008 GPI, in large part due to deteriorations on the *terrorism impact* indicator. However, the magnitude of change in these countries is relatively small.

In general, the more peaceful a country was in 2008, the less likely it was to have deteriorated in peacefulness over the last decade. Figure 2.2 shows the relationship between the GPI overall score in 2008 and that of 2018. Libya was the only country ranked in the top half of the index in 2008 to experience a significant deterioration in peacefulness over the past decade. However, there is a small cluster of countries ranked around the midpoint of the index in 2008 that experienced the most dramatic deteriorations

FIGURE 2.1

GPI overall trend & year on year percentage change, 2008-2018

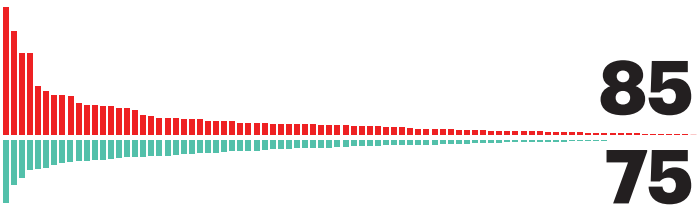
Peacefulness has declined year on year for eight of the last ten years.



Source: IEP

KEY FINDINGS

DETERIORATED & IMPROVED COUNTRIES SINCE 2008



DETERIORATIONS IN PEACE ARE LARGER THAN IMPROVEMENTS.

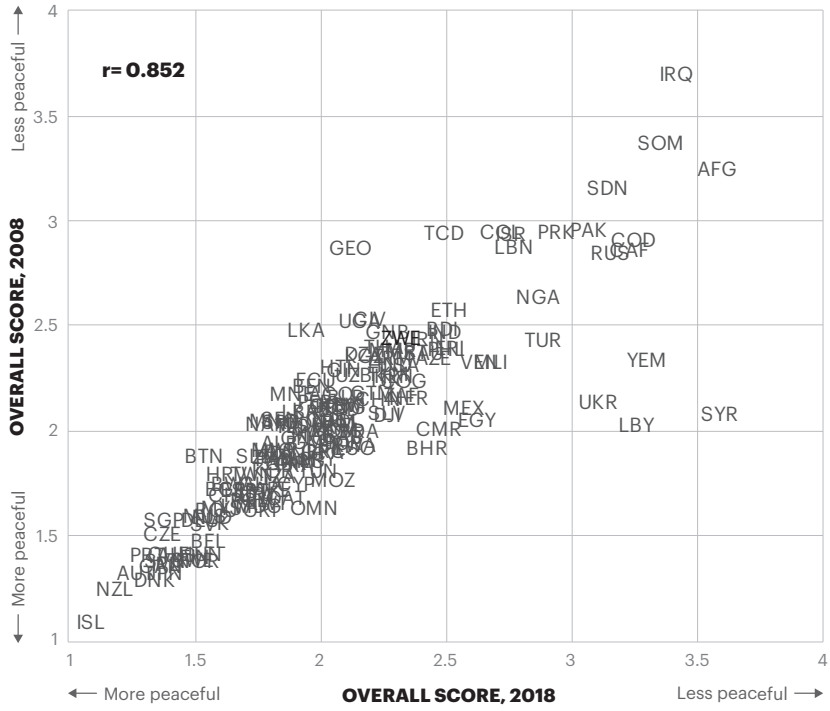
12.7% The 25 least peaceful countries declined by 12.7 per cent on average over the last decade.

0.9% The 25 most peaceful improved by an average 0.9 per cent over the last decade.

FIGURE 2.2

GPI 2018 vs GPI 2008

Most countries had little change in peacefulness between 2008 and 2018.



Source: IEP

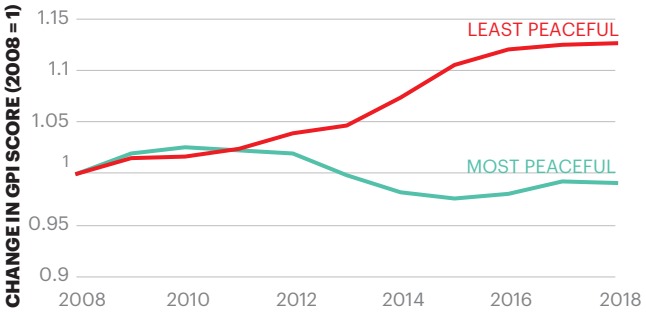
in peacefulness: Syria, Ukraine, Mexico, and Egypt. Georgia was the only country with low levels of peacefulness in 2008 that had dramatically improved by 2018.

The growing inequality in peacefulness between the most and least peaceful countries is highlighted in figure 2.3, which shows the change in score for the 25 most and 25 least peaceful countries from 2008 to 2018. While there has been some fluctuation in the level of peacefulness of the world's most peaceful countries, the change has been minimal, with a very slight 0.9 per cent improvement in peacefulness. However, the ten largest improvers come from a wide range of regions and with no discernible pattern in the indicators, highlighting the fact that improvements in peace are usually broadly based while large deteriorations in peace are usually led by a few indicators. The largest improvements occurred in Singapore and the Czech Republic. By contrast, the world's least peaceful countries have experienced a clear and sustained deterioration in peacefulness over the last decade, with the average level of peacefulness deteriorating 12.7 per cent.

FIGURE 2.3

Trend in peace: 25 most & 25 least peaceful countries, 2008-2018

The 25 least peaceful countries deteriorated in peacefulness by an average of 12.7 per cent while the most peaceful improved by 0.9 per cent.



Source: IEP

KEY FINDINGS

PEACE DETERIORATION

2.38% ↗

The average level of global peacefulness has deteriorated by 2.38 per cent since 2008.

DETERIORATION IN EUROPE

61% ↗

Percentage of European countries that have deteriorated in peacefulness since 2008.

IMPROVEMENTS IN OVERALL PEACEFULNESS

<25% ↘

Only two countries improved in overall peacefulness by more than 25% from 2008 to 2018.

GPI domain trends

While the world has become less peaceful over the last decade, there have been some notable improvements in peace. Despite public perceptions to the contrary, the average country score on the *Militarisation* domain improved by 3.17 per cent, driven largely by reductions in military spending and the size of the armed forces in many countries.

This was true for all regions except MENA and South America. US military spending as percentage of GDP has fallen by 0.83 percentage points since 2008. The *Safety and Security* domain deteriorated by 2.97 per cent, and the *Ongoing Conflict* domain also deteriorated, falling by 5.94 per cent, as shown in figure 2.4.

The change in the three GPI domains has varied not only by region but also by government type. Figure 2.5 shows the indexed trend for each of the three domains across the four government types identified by the EIU's Democracy Index. The greatest difference between government types occurs on the *Ongoing Conflict* domain. The vast majority of the increase in active armed conflict over the past decade has taken place in authoritarian regimes, located for the most part in MENA and sub-Saharan Africa. The last two years have also seen a notable deterioration in the *Ongoing Conflict* score for full democracies. This is mainly because of their involvement in a number of internationalised internal conflicts in the Middle East, most prominently the Syrian civil war. Trends across the other two domains are more stable, with all four government types having deteriorated on the *Safety and Security* domain, and conversely all four improving on the *Militarisation* domain.

Figure 2.6 shows the number of countries that improved and deteriorated in their overall score as well as for each domain and indicator, and whether the change was large or small. A change in score of more than 25 per cent between 2008 to 2018 was considered large.

> “Although breakdowns in peacefulness can occur quickly, rebuilding peace in post-conflict countries can take many years or even decades.

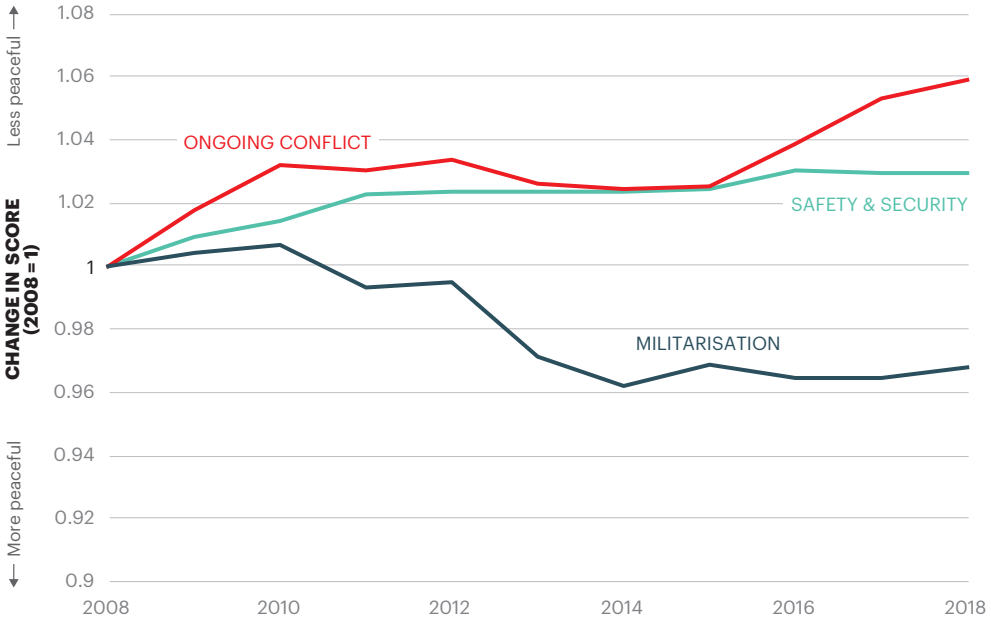
Only one country had a large increase in peacefulness, compared to six that had a large deterioration over the same time period. This indicates that although large falls can occur quickly, rebuilding peace in post-conflict countries can take many years or even decades.

The *Ongoing Conflict* domain registered the most countries with large shifts in peacefulness. Six countries had a large

FIGURE 2.4

Indexed trend in peacefulness by domain, 2008 to 2018

Militarisation was the only domain to record an improvement in average peacefulness.



MILITARY EXPENDITURE

3.17% ↘

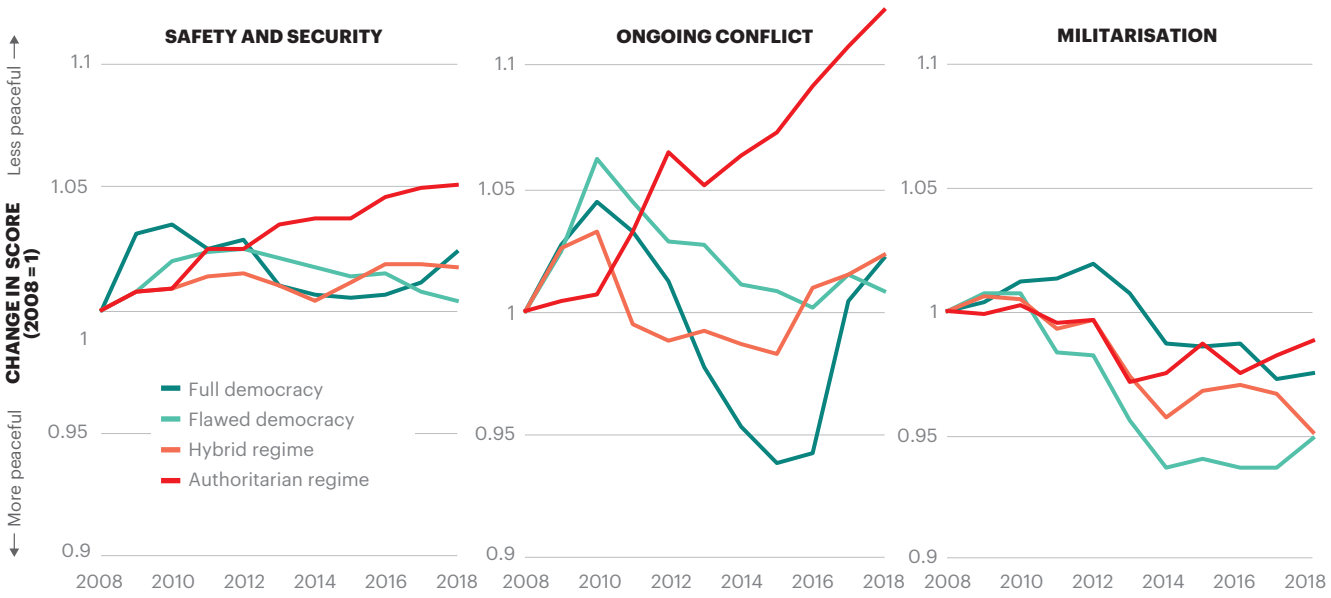
The average country score on the *Militarisation* domain improved by 3.17 per cent, driven largely by reductions in military spending and the size of the armed forces in many countries.

Source: IEP

FIGURE 2.5

Indexed trend in peacefulness by domain & government type, 2008 to 2018

The average level of ongoing conflict in authoritarian regimes increased by over ten per cent.



Source: IEP

> The *Ongoing Conflict* domain registered the most countries with large shifts in peacefulness. Deteriorations in this domain usually have negative spill-over effects to other domains, which are hard to rectify quickly.

improvement, while 23 suffered from large deteriorations. Deteriorations in this domain usually have negative spill-over effects to other domains, which are hard to rectify quickly. *Militarisation* was the only domain where the number of large improvers outweighed the large deteriorations, with two countries improving by more than 25 per cent, and just one deteriorating by more than 25 per cent.

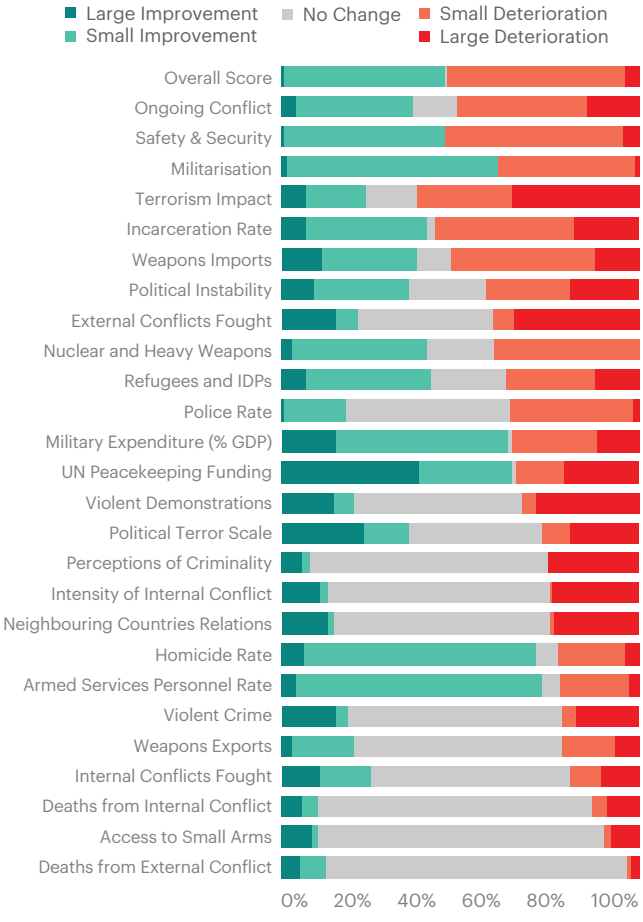
At the indicator level, *terrorism impact* deteriorated across the greatest number of countries, with 62 per cent of countries having a higher impact from terrorism in 2018 than in 2008, and 35 per cent of all countries experienced a large deterioration on the *terrorism impact* indicator. Roughly half of the world also deteriorated on the *incarceration rate*, *weapons imports*, and *political instability* indicators, at 57 per cent of countries respectively.

Improvements in peacefulness were most widespread on the *armed services personnel rate*, *homicide rate*, and *military expenditure (% of GDP)* indicators. 73 per cent of countries have a lower *armed forces personnel rate* in 2018 compared to 2008. This is also true of the *homicide rate* and *military expenditure (% of GDP)* with 71 per cent and 63 per cent of countries improving on these indicators respectively.

FIGURE 2.6

Count of improvements & deteriorations by indicator, 2008-2018

Only two countries had a large improvement in overall peacefulness from 2008 to 2018.

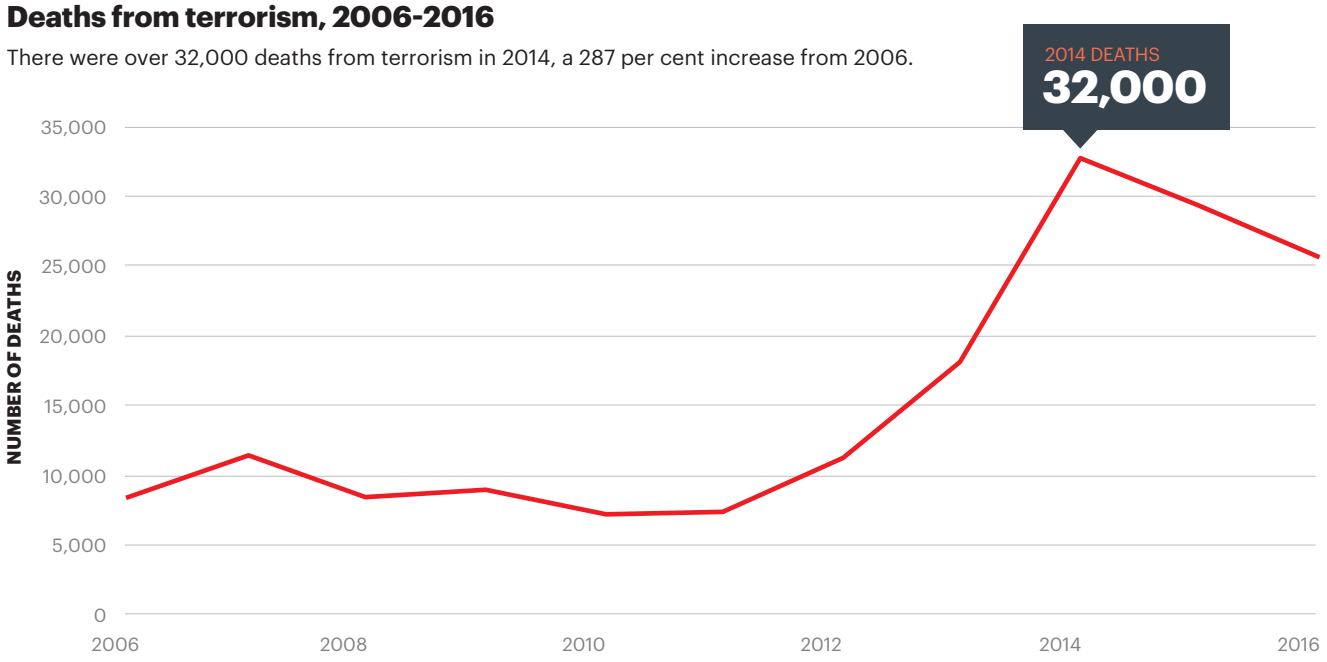


Source: IEP

FIGURE 2.7

Deaths from terrorism, 2006-2016

There were over 32,000 deaths from terrorism in 2014, a 287 per cent increase from 2006.



Source: START Global Terrorism Database

SAFETY & SECURITY

Of the eleven *Safety and Security* domain indicators, nine deteriorated on average between 2008 and 2011 with the worst deterioration being *terrorism impact*. 62 per cent of countries had *terrorism impact* scores that deteriorated between 2008 and 2018. This coincided with the rise of ISIS and Boko Haram, escalating conflicts in the Middle East, and the rising levels of terrorism in Europe.

The *terrorism impact* indicator combines attacks, deaths, injuries, and property damage from terrorism into a single composite score. Figure 2.7 highlights the extent to which terrorism has increased over the past decade, with deaths from terrorism rising from under 10,000 in 2006 to over 32,000 in 2014. Terrorism has also been spreading around the globe, most notably into economically prosperous and peaceful countries in Europe. In the 2008 GPI, 13 countries in Europe had not experienced any terrorism in the preceding five years. By the 2018 GPI, that number had dropped to just six. There are now also six European countries ranked amongst the 50 countries with the highest levels of terrorist activity.

The *homicide rate* indicator had the largest improvement of the two *Safety and Security* indicators that did improve over the past decade. Despite a considerable increase in the *homicide rate* of some Central American countries, 71 per cent of index countries reduced homicides. There are now 30 countries globally which have a *homicide rate* of less than one per 100,000 people, according to the latest available UNODC homicide data.

> “Terrorism has been spreading around the globe, including into economically prosperous and otherwise peaceful countries

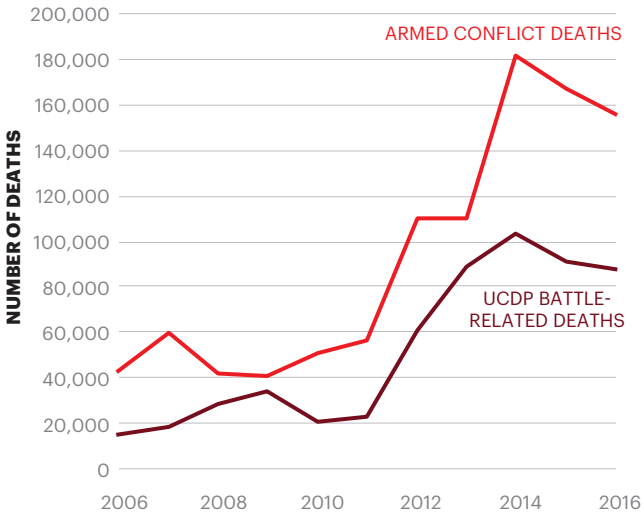
ONGOING CONFLICT

Four of the six *Ongoing Conflict* indicators deteriorated between 2008 and 2018. The most notable change occurred on the *deaths from internal conflict* indicator, which deteriorated by 10.6 per cent. While there is some dispute as to the exact definition of a death in conflict, as opposed to a homicide or death from terrorism, both the IISS ‘Armed Conflict Database’ and the UCDP’s ‘Battle-Related Deaths’ dataset record a significant increase in deaths from 2006 to 2016, with both also showing a decline in deaths for the two latest years of available data, as shown in figure 2.8. The GPI uses the Armed Conflict Database to calculate *deaths from internal conflict*.

FIGURE 2.8

Conflict deaths, 2006-2016

Deaths from conflict peaked in 2014, at the height of the Syrian Civil War.



Source: UCDP and IISS

> The dramatic increase in conflict deaths has been concentrated in a handful of countries.

The dramatic increase in conflict deaths has been concentrated in a handful of countries, with the total number of countries experiencing a death from conflict increasing at a much slower pace. Data from the Armed Conflict Database shows that 26 countries recorded deaths from conflict in 2006, which increased to 30 in 2016. However, the increase in total deaths over the same period was much more significant, with 264 per cent more deaths being recorded in 2016 than in 2006. While the bulk of this increase is attributable to the war in Syria, there were also significant increases Afghanistan, Iraq, and Yemen. If the Syrian war was excluded, the increase would have been 147 per cent.

MILITARISATION

Four of the six indicators on the *Militarisation* domain improved. The most noticeable improvements occurred in *military expenditure (% of GDP)*, where 63 per cent of countries improved, and the *armed services personnel rate*, where 73 per cent of countries improved. Figure 2.9 shows the change in the average *armed services personnel rate* per 100,000 population, which fell from just over 460 to just under 400 over the last decade. This improvement was not confined to any one region or government type, as the indexed chart in Figure 2.9 shows. The *armed services personnel rate* fell across all four government types, with the largest relative change on average occurring in authoritarian regimes, followed by flawed democracies.

There was a slight deterioration in both the *weapons exports* and *weapons imports* indicators, the only two *Militarisation* indicators to show a deterioration over the past decade. *Weapons exports* remain highly concentrated, with 105 countries registering no exports at all for the period 2012 to 2017.

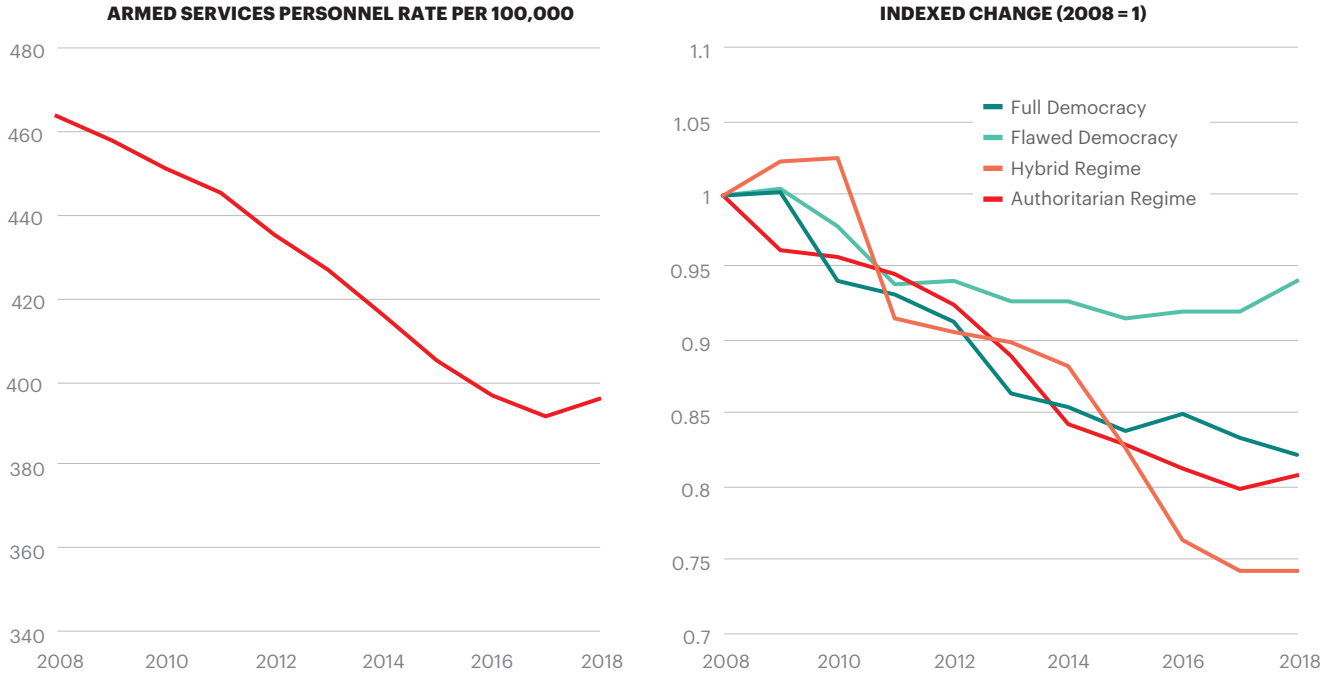
A number of otherwise highly peaceful countries also performed poorly on this indicator, with Norway, Sweden, Switzerland, and the Netherlands all being ranked amongst the ten highest weapons exporters per capita for every year in the last five years. Seven of the ten largest exporters on a per capita basis are western democracies. However, by total export value, just five countries account for over 75 per cent of total *weapons exports*: the US, Russia, Germany, France, and China.

Weapons imports are more evenly distributed, with only 18 of the 163 GPI countries registering no *weapons imports* for the 2012-2017 period.

FIGURE 2.9

Armed services personnel rate & indexed by government type, 2008-2018

Militarisation was the only domain to record an improvement in average peacefulness.



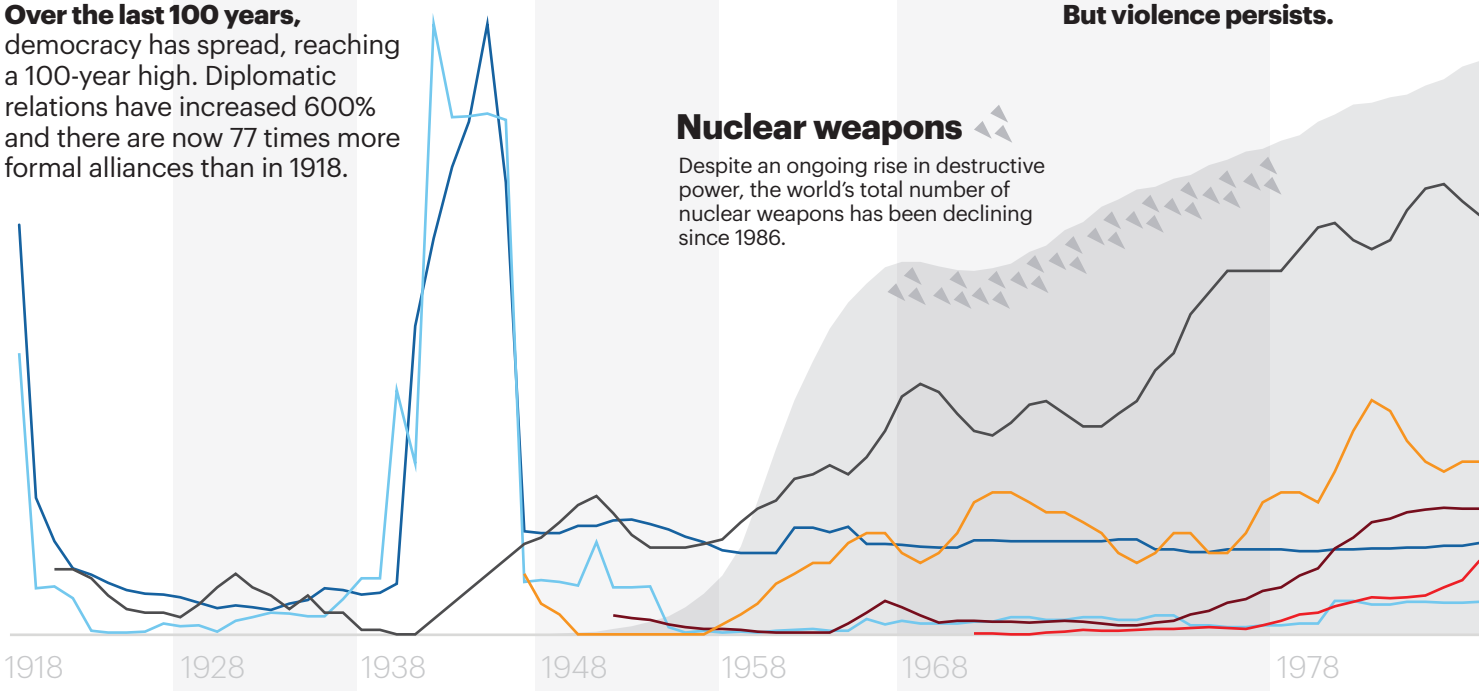
Source: IEP

100 Year Trends

KEY FINDINGS

Over the last 100 years, democracy has spread, reaching a 100-year high. Diplomatic relations have increased 600% and there are now 77 times more formal alliances than in 1918.

But violence persists.



Source: Institute for Economics & Peace. See endnotes for data sources p96

Most analysis of peace in the 20th and early 21st century has focused almost exclusively on war and conflict. However, trends in direct conflict alone cannot convey the bigger picture, which includes internal societal unrest, political instability, and the level of resources needed to prevent violence.

To comprehensively analyse the world's progress towards peace, it is important to include metrics other than armed conflict; particularly, security spending, civilian displacement, criminal violence and incarceration. High levels of security spending or incarceration may lead temporarily to lower levels of violence, but do not indicate any concrete improvement in peacefulness.

November 2018 will mark the centenary of the end of the World War I. To better understand the changing nature of peacefulness over the past century, the Institute for Economics & Peace has constructed an analysis of long term trends in violence based on the indicators used in the GPI. IEP was able to convert and organize the available historical data to approximate the three GPI subdomains: *Ongoing Conflict*, *Safety and Security*, and *Militarisation*. However, as can be seen in Table 2.1, there are large data gaps, some indicators have been dropped, and others calculated using proxies. Table 2.1 highlights what historical data is available, how it relates to the structure of the GPI, and for how long and for how many countries data is available. Fourteen of the 23 GPI indicators have at least proxy data available for much of the past 100 years.

Taken together, the data finds that the second half of the 20th century was considerably less violent than the first half. However, the future trend is difficult to predict, as the last decade has witnessed a mild but steady decrease in global peacefulness. Whether this is the beginning of a new long term trend or a decade of adjustment is difficult to ascertain. Measures of Positive Peace, which are the *attitudes, institutions and structures* that sustain peaceful societies, would indicate that the medium term prognosis is good, as the global measures of Positive Peace have improved over the last decade. It is worth noting that the last three years have seen a deterioration, including in many of the most peaceful countries. However, it is too difficult to determine if this is a reversal of the positive trend in Positive Peace or a temporary correction.

Contemporary violence tends to differ, in a few key aspects, from violence a century ago – most notably in the types of armed conflict occurring and the regions in which those conflicts occur, in the toll of conflict on civilians, and in the methods states are using to combat violence.

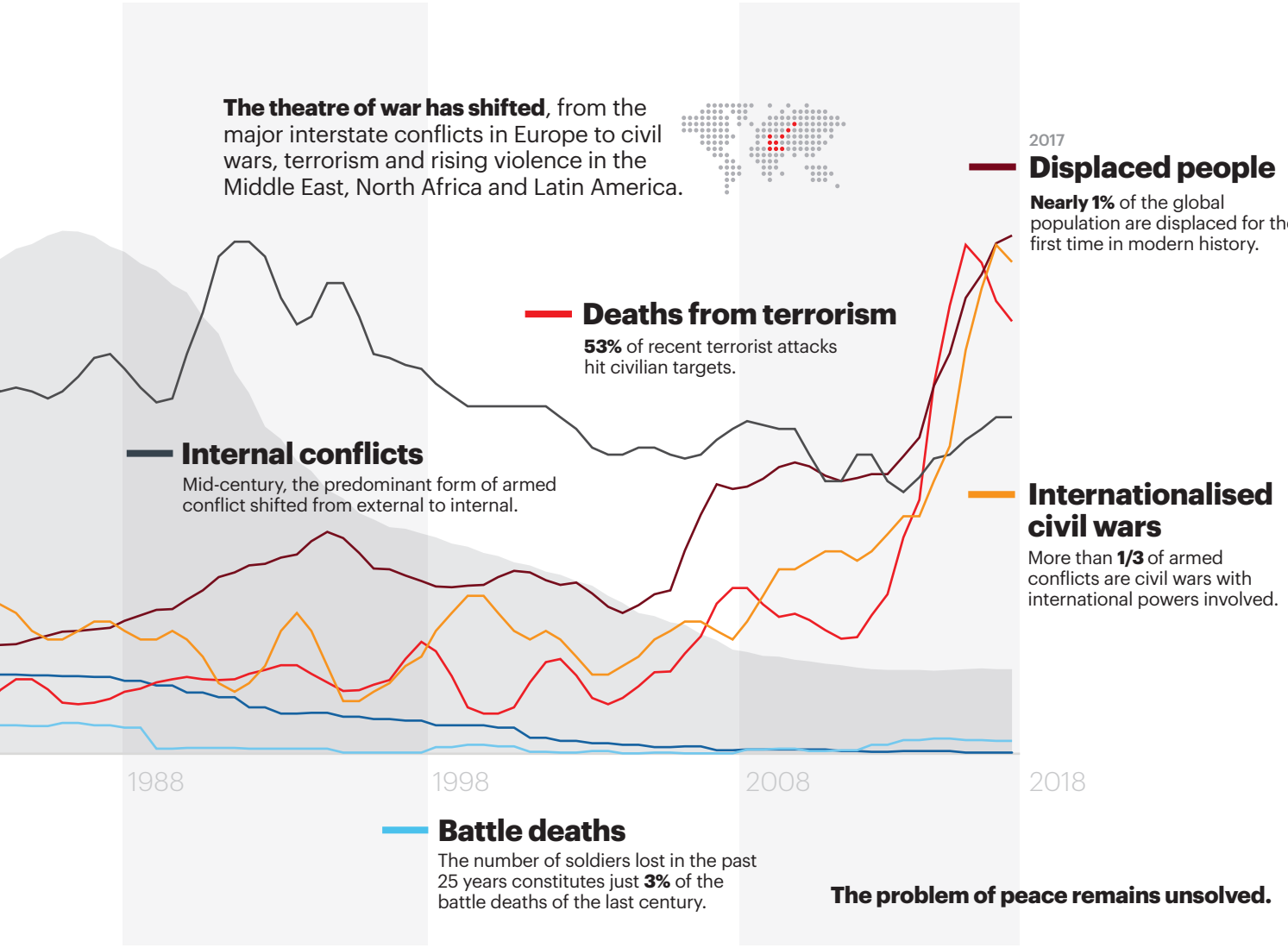


TABLE 2.1

GPI long term trend data availability

GPI INDICATOR	TRENDS INDICATOR	YEARS AVAILABLE	COUNTRIES WITH FULL DATA	COUNTRIES WITH PARTIAL DATA
Country Relations	Diplomacy	1918-2012	50	163
Political Instability	Polity IV	1918-2012	55	163
Incarceration Rate	Incarceration Rate	1918-2015	3	163
Deaths from Conflict (Internal / External)	Total Battle Deaths	1918-2016	50	163
External Conflicts Fought	External Conflicts Fought	1918-2016	50	163
Internal Conflicts Fought	Internal Conflicts Fought	1918-2016	50	163
Homicide Rate	Homicide Rate	1918-2017	21	163
Armed Services Personnel Rate	Armed Services Personnel Rate	1918-2018	50	163
Political Instability	Coups d'Etat	1946-2016	72	163
Nuclear and Heavy Weapons	Nuclear Weapons	1947-2017	163	163
Military Expenditure (% of GDP)	Military Expenditure (% of GDP)	1949-2016	5	163
Weapons Exports	Weapons Exports	1950-2017	163	163
Refugees and IDPs	Refugees and IDPs	1951-2016	17	163
Terrorism Impact	Deaths from Terrorism	1970-2016	163	163

Ongoing Conflict

Long term trend data is available for most of the GPI's *Ongoing Conflict* domain indicators, although data for countries outside of Europe is scarce prior to World War II. Data is available for the number of deaths from conflict and the number of conflicts fought, and proxy data is also available for the GPI's *political instability* and *neighbouring countries relations* indicators.

The analysis finds that the second half of the 20th century saw a sustained and consistent fall in the number of conflict deaths, as well as a fall in the number of conflicts after the end of the Cold War. There was also a considerable increase in formal diplomatic relations, and a rise in state stability heralded by a fall in both coup attempts and successful coups, as well as a shift toward democracy over authoritarianism. However, the last decade has seen a reversal of almost all of these trends, as conflict deaths have increased, the number of conflicts climbed to a record high, and the shift towards democracy began to stall.

INTERNAL & EXTERNAL ARMED CONFLICT

There has been a shift away from external armed conflicts between states to armed conflicts within states. In 1958, the number of countries involved in internal conflicts reached 13, surpassing the number involved in external conflicts for the first time since the end of World War I. Internal conflict has remained the dominant form of armed conflict since then, while interstate conflict has decreased. Figure 2.10 highlights the number of countries involved in an active armed conflict for both internal and external conflicts since the end of the First World War.

A very similar trend can be seen when looking at similar datasets that measure conflict at a more granular level. Figure 2.11 highlights the number and type of conflicts firstly in the period between the two world wars and secondly for the post-World War II period.

While external/interstate conflicts did decrease after 1945, the trend was fairly gradual. However, as the number of external conflicts fell steadily, the number of internal conflicts increased dramatically, peaking at 52 in 1991. This was followed by a 15 year period in which every type of conflict fell, only for the number of armed conflicts to begin increasing again in 2006. In 2015, the number of conflicts reached 52, equalling the high reached in 1991.

BOX 2.1

What are the different types of armed conflict?

Armed conflicts involving state actors can be classified in four main ways:

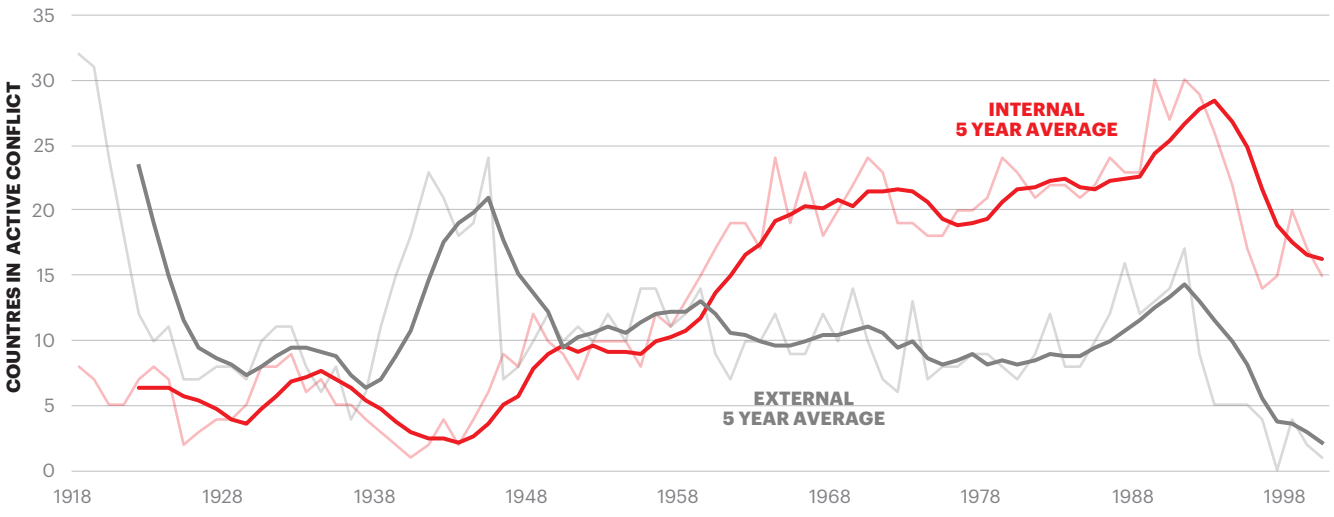
- **Extrasystemic or extra-state** armed conflict occurs between a state and a non-state group outside its own territory, for example, colonial wars or wars of independence.
- **Interstate** armed conflict occurs between two or more states.
- **Internal or intra-state** armed conflict occurs between the government of a state and one or more internal opposition groups without intervention from other states.
- **Internationalised internal** armed conflict occurs between the government of a state and one or more internal opposition groups with intervention from other states on one or both sides.

Source: Correlates of War and Uppsala Conflict Data Program/Peace Research Institute Oslo (UCDP/PRIO)

FIGURE 2.10

Number of countries in internal or external armed conflict, 1918-2000

In 1958, the number of countries in internal armed conflict overtook the number involved in external armed conflict.

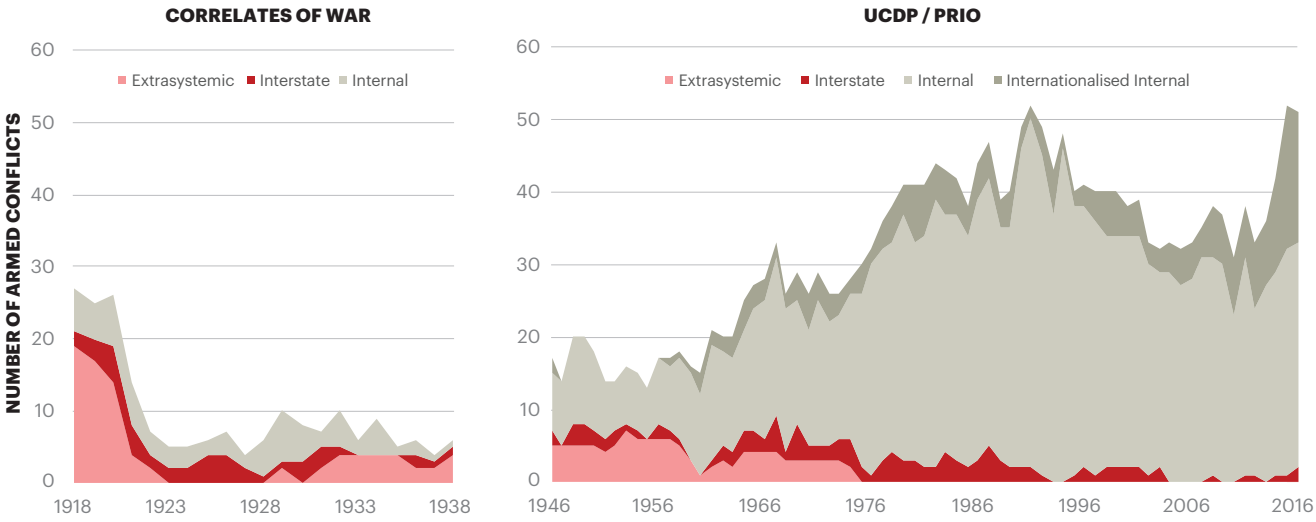


Source: CLIO-INFRA, IEP Calculations

FIGURE 2.11

Total armed conflict by type, 1918-1938 and 1946-2016

The total number of armed conflicts reached a new peak of 52 in 2015, following a 35 year low of 31 in 2010.



Source: Correlates of War, Uppsala Conflict Data Program, Peace Research Institute Oslo

The end of the World War II saw a shift away from Europe as the focus of global conflict. Instead, Africa, the Middle East and Latin America faced higher levels of extra-state and internal conflict which have persisted into the present day for some countries, especially in the Middle East. These regions included high numbers of newly independent countries. The independence of most of the remaining Euro-colonised states and the breakup of the Soviet Union drove the increase in the incidence of armed conflict the 1970s and 80s. As independence movements concluded in the 1990s, the number of countries in active armed conflict declined. The 1991 fall of the Soviet Union meant the end of the traditional global power system and with it generally the end of Cold War proxy wars.

The re-emergence of extra-state war in the early 2000s has been primarily driven by an increase in conflicts in the Middle East and North Africa, with a smaller increase in sub-Saharan Africa, and Central and Southern America. The most striking trend of the past decade has been the rise in internationalised internal conflicts, which made up 36 per cent of total conflicts in 2016, compared to just 3 per cent in 1991.

DEATHS FROM ARMED CONFLICT

Figure 2.12 shows the number of conflict deaths from 1918 to 2016 from three different sources. These numbers do not include civilian deaths, which have come to comprise a greater percentage of conflict related deaths over time. Seventy-five per cent of those killed in armed conflict in the 1990s were civilians, compared to 15 per cent in World War I and 66 per cent in World War II.[1]

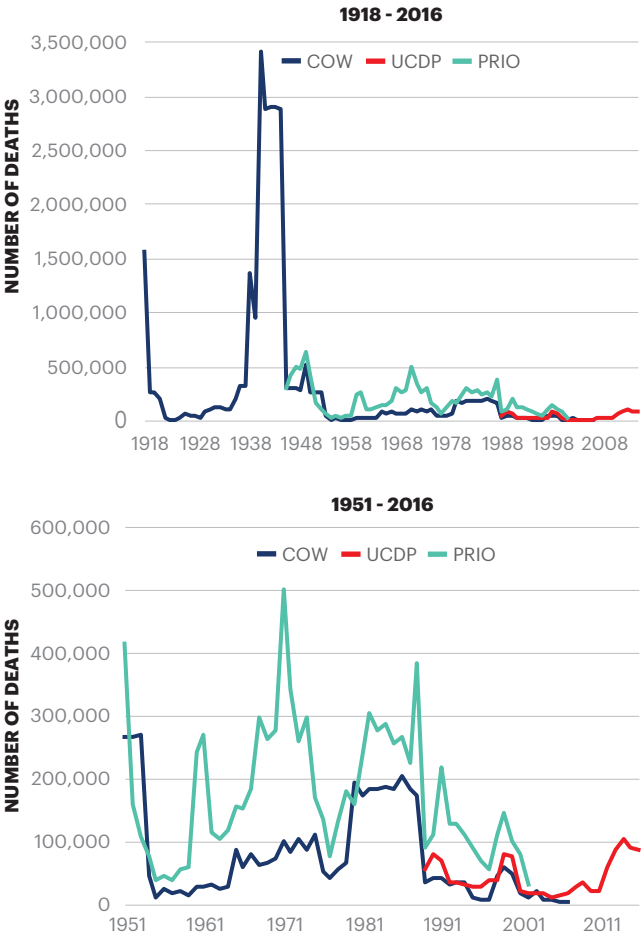
Battle deaths due to interstate conflict declined significantly after World War II, but then had a relatively large increase in the 1960s, 70s and 80s, due to a rise in the number of these conflicts. Although the total number of conflicts has increased, they do not have the high levels of fatalities of the large-scale World Wars. The destruction of the World Wars dwarfs the number of battle deaths in the latter half of the 20th century.

Rising numbers of battle deaths accompanied the post-world war resurgence of independence movements and the rise of extra-state

FIGURE 2.12

Total number of battle deaths, 1918-2016 and 1951-2016

Battle deaths in 2014 reached a 25 year high, but were down 16 per cent in 2016 with the lowest total death count since 2012.



Source: Correlates of War, Uppsala Conflict Data Program, Peace Research Institute Oslo

conflict between independence groups and colonial powers or autocratic regimes. The spike in the early 1950s reflects the Korean War, the high numbers around 1970 are due to the Vietnam War, and in the 1980s the Iran-Iraq and Afghanistan wars contributed to the high number of deaths. Battle deaths declined, however, in the post-Cold War, pre-9/11 era.

The trend of declining conflict deaths has reversed over the last decade; total battle deaths were at a 15 year high in 2014, with 103,109 deaths. The rise in deaths again accompanies a rise in the number of conflicts, due primarily to rising tensions in the Middle East. Nonetheless, while this is a serious deterioration, the annual numbers of battle deaths were higher than the 2014 peak for 40 of the 68 years since the end of the World War II. Battle deaths in the last 25 years account for only 3 per cent of the battle deaths in the last 100 years, or 7 per cent if World War II were excluded.

POLITICAL INSTABILITY

Figure 2.13 shows the global average Polity IV score for 1918 to 2012. Polity IV provides a simplified measure of the competing values of autocracy and democracy in direct comparison. The global average gives a sense of the values dominating the world, which play an important part in the stability of governments and peacefulness. Democratic governments are linked to higher levels of social well-being, economic success, peaceful *relations with neighbouring countries* and lower levels of corruption, and thus the Polity IV score can serve as a useful proxy for *political stability*.

The Polity IV data covered only 55 countries in 1918. It increased to more than 100 in 1961 and by 2012 it included 158 countries. Since many countries were still colonized for much of the early 1900s, they were not assigned a score. Given this, the available scores account for a reasonable amount of the world and therefore of world values.

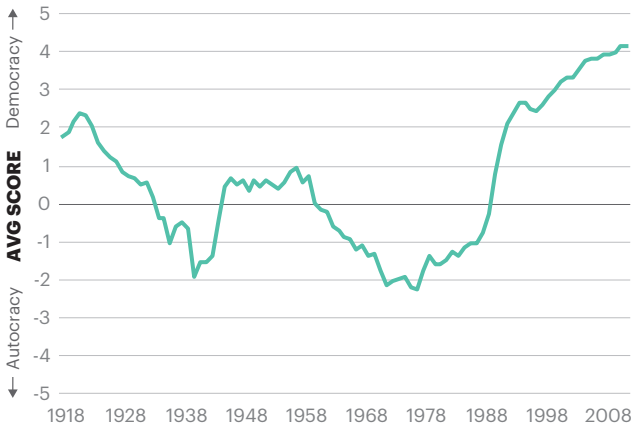
The average Polity IV score deteriorated sharply following World War I as the world dealt with the aftermath of the war and the eventual onset of the Great Depression, leading to social unrest, which grew in the years preceding World War II. Polity IV remained somewhat elevated and steady through the 1940s and 50s, possibly due to higher distrust of autocracy and fascism in response to World War II. The protracted stagnancy also reflects that while Europe became increasingly democratic in the 1950s, the Middle East and North Africa experienced a surge of authoritarian movements.

The 1960s and 70s saw another quick deterioration towards autocracy, due mostly to the spread of military dictatorships in Latin America and Africa. The lowest point, in 1978, at an average of -1.75, also marked the beginning of a quick and persistent positive trend, starting with a shift back towards democracy in Latin America. The beginning of a stronger rate of improvement in 1989 reflected a period of change to more democratic governments in Africa, which was then further enhanced by the dissolution of

FIGURE 2.13

Autocracy vs. Democracy (average Polity IV score), 1918-2012

The world has been more democratic on average since 1993 than any point in the last 100 years.

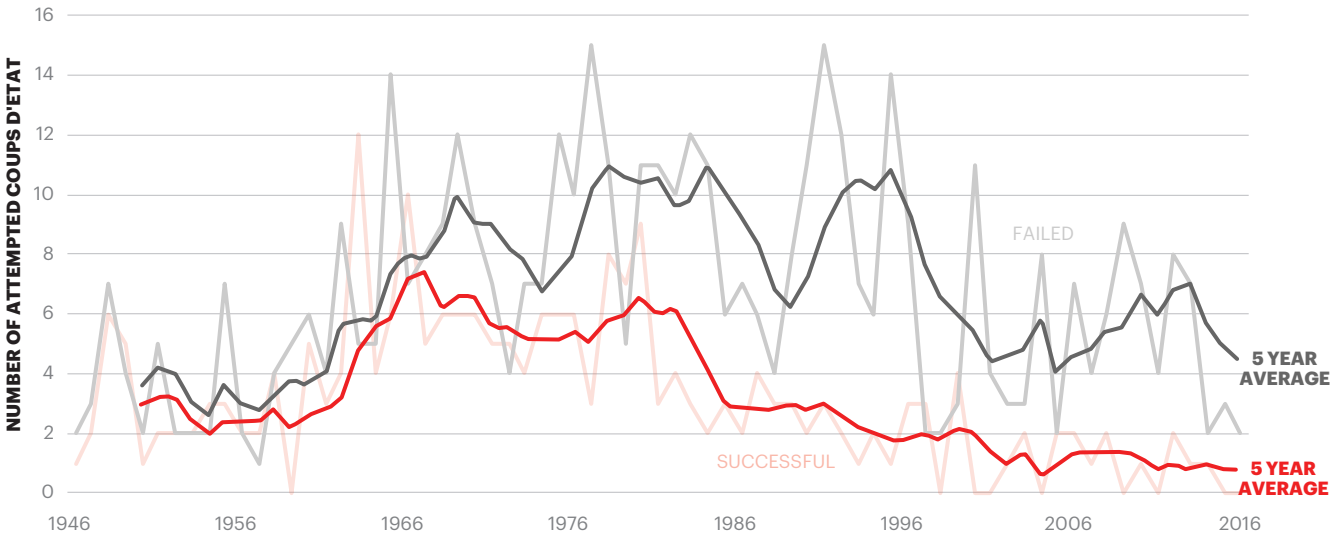


Source: Center for Systemic Peace

FIGURE 2.14

Number of failed & successful coups, 5 year moving average, 1946-2016

The success rate from 2007 to 2016 was 13.3 per cent down from 24 and 21 per cent in the previous two decades.

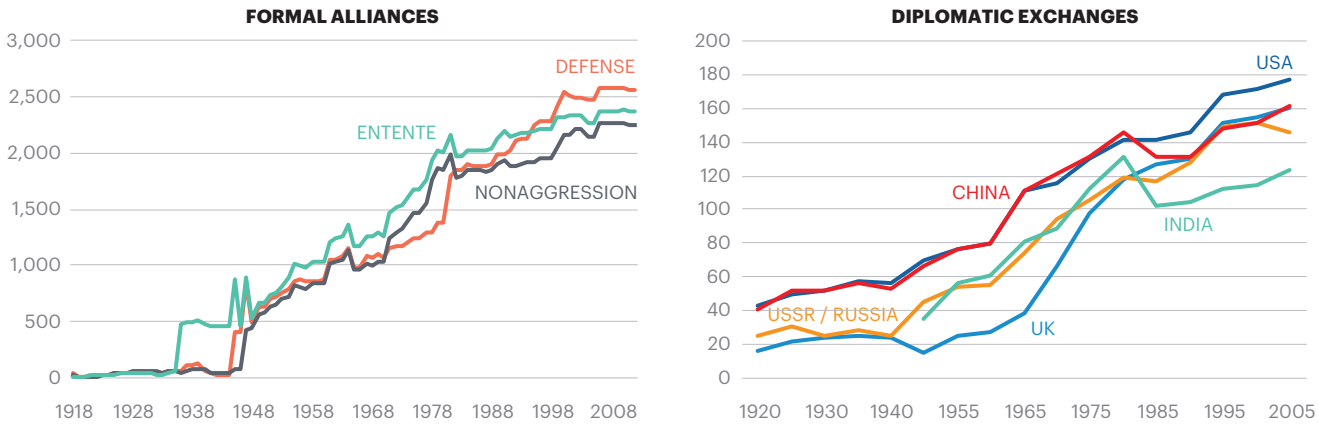


Source: Center for Systemic Peace

FIGURE 2.15

Formal alliances by type (1918-2012) and diplomatic exchanges by country (1920-2005)

The number of formal alliances and diplomatic exchanges has increased considerably over the last century.



Source: Correlates of War

the Soviet Union in 1991. The average has been above 3.0 since 2001, higher than at any point since 1918.

Figure 2.14 shows a five year moving average of the number of both failed and successful coups d'état, in which the power of the state is seized by the military or other elites within the state apparatus. As a coup d'état occurs when the power of the state is extremely unstable or fragile, it serves as a useful proxy indicator for both *political instability* and the *intensity of internal conflict*.

The number of attempted coups increased steadily from the 1950s to the mid-80s, peaking at twenty attempts in 1965 and 1980 before beginning a somewhat volatile decline that has continued to this day. In the 1970s, there were on average 5.6 successful coups and 8.7 failed coups per year. However, the 1970s marked a departure from the prior pattern and although the number of coup attempts was still increasing, the number of successful coups was declining. Though the overall number of coups or attempts remained high throughout the 1980s and 90s, averaging 11.2 per year before beginning a more significant decline in the early 2000s, the number of successful coups has been in consistent decline since the early 1970s. The average success rate from 2007 to 2016 was 13.3 per cent, or 8 successful attempts out of 60 attempts. The previous decade had close to double the average success rate at 23.7 per cent, or 14 out of 59 attempts.

Much of the high coup activity from the 1960s to 80s occurred in sub-Saharan Africa and Central and South America. South Asia also saw a high number of coups and attempts during that period. Cold War proxy-conflict politics also contributed to the spikes in these regions, as Europe avoided local, direct interstate warfare in the aftermath of the World Wars. Africa in the 1990s continued to see an elevated number of coups, but by the mid-2000s that number had declined significantly. The declining number of coups over the last 30 years correlates with the increase in democratic governments, as autocratic regimes have a much higher risk of facing coups.

Poor countries are more likely to experience coups because of younger political institutions and higher levels of *political instability* resulting in internal conflict, social unrest or corruption. Legitimate governments, such as those elected by democratic vote, are much less likely to face coups, and coup attempts against those governments are less likely to succeed.

RELATIONS WITH NEIGHBOURING COUNTRIES

Although the nature and impact of specific diplomatic relations is difficult to quantify, there is some data that provides counts of exchanges, agreements, and alliances. Figure 2.15 shows the number of formal alliances by type and the number of diplomatic exchanges for selected countries between 1918 and 2012. This is the closest available proxy for the *neighbouring countries relations* indicator.

The number of alliances has increased dramatically since the 1920s, rising from 56 in 1921 to 7,267 in 2012. From 1930 to 2000, the average yearly increase was 12 per cent. This rate slowed considerably in the early 2000s; from 2000 to 2012 the average yearly increase was only 0.15 per cent. The number of alliances that include defence, non-aggression or entente agreements have advanced at about the same rate, although entente agreements began increasing about a decade earlier. Entente agreements are friendly relations or informal alliances.

The number of diplomatic exchanges involving the great powers has increased at similar rates since 1918. A diplomatic exchange refers to the presence of diplomatic representation by one country in another, but does not imply either a friendly or tense relationship.

1940 marked the start of 40 years of steady increase. In the 1980s, although the trend was still positive, the rate had slowed somewhat. The UK and the US held similar levels for most of the 1900s, but in the 1980s Britain declined and has remained lower than the US since then. India kept pace until 1980, but mirrored the UK's decline and has increased at a much slower rate since then. China maintained a lower number of diplomatic exchanges until surpassing Russia and India in 1980. By 2005, China recorded 160 diplomatic exchanges, more than any country aside from the US with 177.

The emergence of the United Nations following World War II helps explain the onset of the dramatic increase in alliance-based diplomatic relations. Though the rise of alliances in the early 20th century contributed to the origin and scale of both World Wars, the destruction wreaked by those wars also contributed to a global interest in avoiding repetition. Diplomacy became a tool for both deterrence against other governments' punitive action and a useful tool for conflict prevention.

Safety & Security

Data for the *Safety and Security* domain is less readily available than for the *Ongoing Conflict* domain. While homicide data is available for the past 100 years, only 21 countries have data for the full time period, with over half of the 163 GPI countries only having comparable data from the 1990s onwards. Incarceration data is even scarcer, with only three countries having data from 1918 onwards. Displaced persons data is not fully disaggregated until many decades after the end of World War II, and terrorism data is only available from 1970 onwards. However, despite these data shortfalls, it is possible to discern trends for some regions of the world. In Europe, North America, and Japan, *homicide rates* have been trending downwards for the past two decades. However, this decrease in homicide has been offset by increasing incarceration. Globally, terrorism has been on the increase for the past decade, and the number of displaced people is now equal to almost one per cent of the global population.

HOMICIDE

Homicide data is considered one of the most consistent and reliably comparable aspects of societal violence, and is thus integral to making peacefulness comparisons between countries. Other kinds of violent crime are difficult to compare due to the variances in collection systems, classification, laws and reporting procedures between different countries and municipalities.

Figure 2.16 shows the availability of homicide data by country from 1918 to 2015. Only 21 countries have homicide data before 1920. Of those 21 countries, 14 are European, three are from Asia-Pacific, and none are from Africa, Central or South America, MENA or South Asia. Data in more recent years shows that Europe maintains some of the lowest *homicide rates* in the world, so this average can't necessarily be extrapolated widely. Therefore it is difficult to construct a single global trend for most of the 20th century.

Figure 2.17 shows the homicide trend for 19 of 21 countries with data dating back to 1918. Thirteen of the fourteen European countries are averaged into a single rate.[2] For this limited number of countries,

FIGURE 2.16

Number of countries with available homicide data, 1918-2017

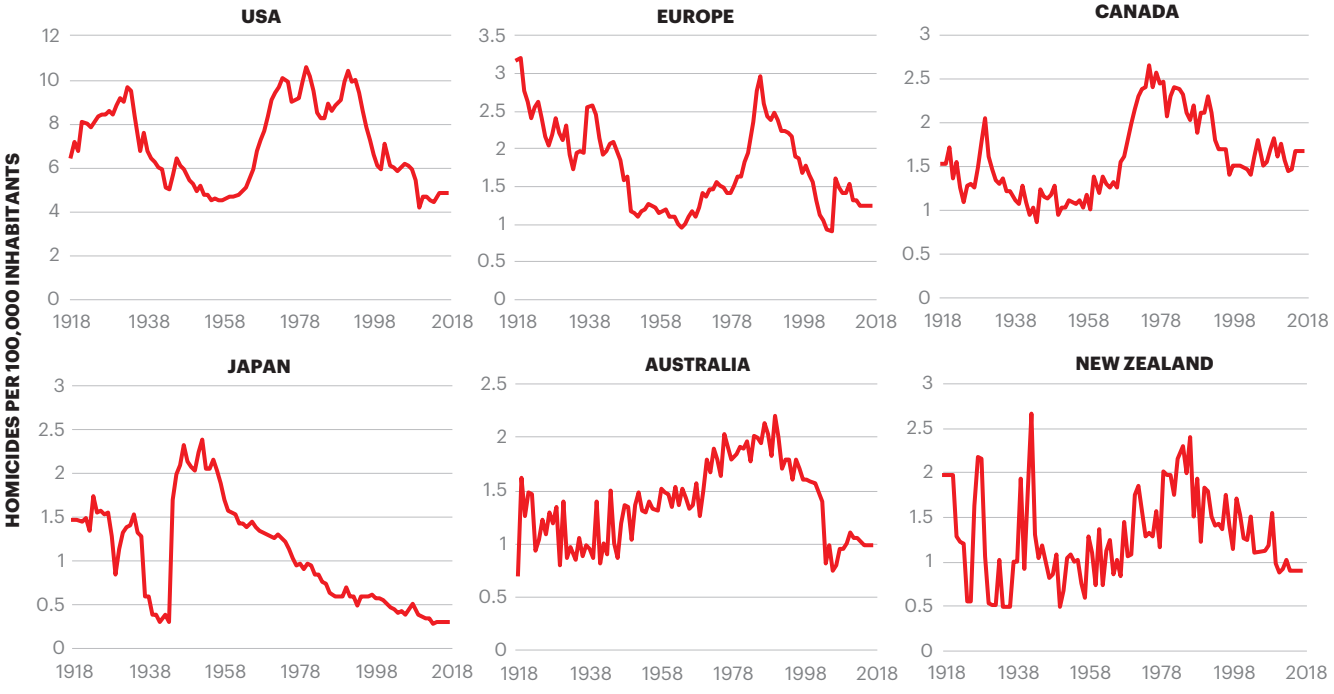
Less than 20 countries have 100 years of homicide data.

Source: Clio Infra, UNODC

FIGURE 2.17

Homicide rate, selected countries (1918-2017)

The homicide rate has been falling in the past 30 years in all countries with 100 year time series.

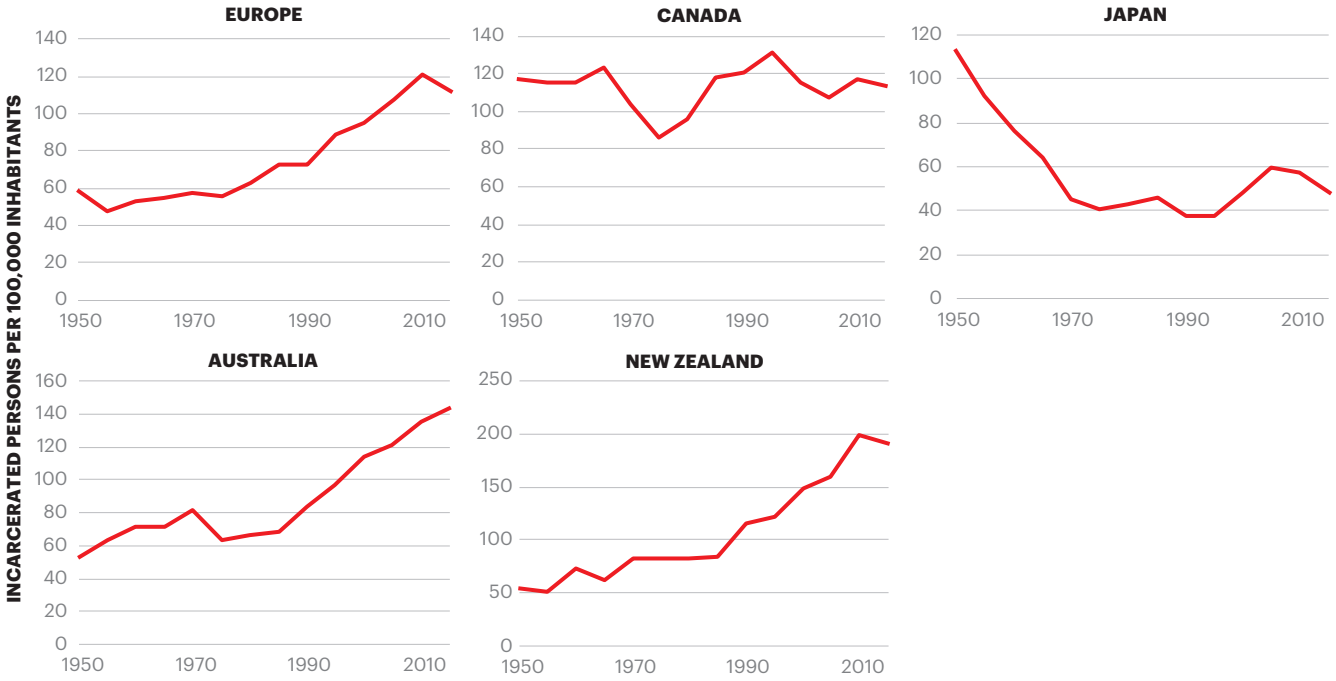


Source: CLIO-INFRA, UNODC

FIGURE 2.18

World prison brief incarceration rate, selected countries and regions, 1950-2015

Incarceration rose or stayed constant for almost every country other than Japan since 1950.



Source: World Prison Brief

the rate of change in the *homicide rate* is both fairly stable and similar. Most grew slowly until the 1970s, when the rate of growth began to increase. The trend reversed rapidly in the 1990s, and 14 of the 21 countries improved between 1996 and 2017. On average, *homicide rate*s were 34 per cent lower in 2017 than 1918.

Within these 21 countries, the average *homicide rate* was consistently low, staying between 1.5 and 4 per 100,000 people for most of the past 100 years. Notably, the US has a much higher *homicide rate* than the average, and even though it has been falling for the past 25 years, it is still at a level above the highest rate for any comparable country in the past century and is currently three times the rate of Canada.

When looking at the wider available data, there are only a few countries with consistently higher *homicide rate*s, with the majority in a concentrated range less than 20 per 100,000 people per annum. The last half of the 20th century saw a trend towards slightly increased *homicide rate*s overall, with outlier countries seeing a higher level of deterioration.

High *homicide rate*s have often been linked to state failures, gang violence and social breakdown, as seen in the turbulence of new regimes in sub-Saharan Africa and Latin America. The general fall in homicides since the height of the 1990s cannot be attributed to a single factor, but there is data to suggest that this improvement correlates with increased police spending, improvements in trauma surgery, reductions in lead exposure, and a general increase in *political stability* across the globe.

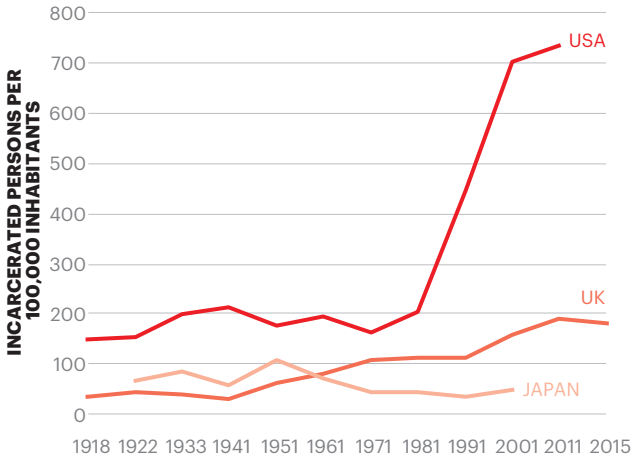
INCARCERATION

Incarceration data is scarce for most countries in the first half of the 20th century. Census data from the US, UK and Japan provides incarceration data from 1918, as shown in figure 2.19. Only eight other countries have data from 1950 to 2018, and five of those are

FIGURE 2.19

Census incarceration rate, 1918-2015

The incarceration rate rose considerably in the US and UK over the past century.



Source: Census Data: US, UK, Japan

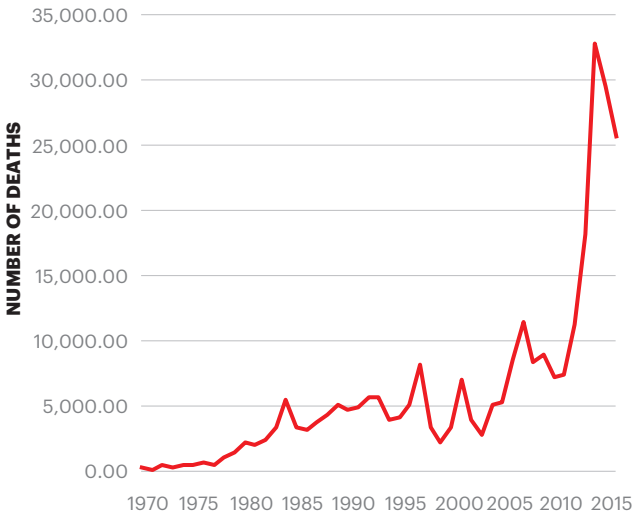
European.[3] This limited availability means that long-term global comparisons are impossible. However, trends among the available countries offer a few useful insights into peacefulness in the developed world.

Within those countries with long-term data, the rate of change in *incarceration rate*s is varied, as shown in figure 2.18. Some, notably Ireland, the UK and New Zealand, increased quickly over the last half-century. Others maintained slow growth, notably Spain, Italy and France. Canada stayed effectively unchanged, fluctuating between 115 and 130 for most of the period. Japan was the only other country that didn't increase, instead decreasing to 48 in

FIGURE 2.20

Deaths from terrorism, 1970-2016

Deaths from terrorism have risen dramatically in the past ten years.



Source: START Global Terrorism Database

FIGURE 2.21

Number of refugees, internally displaced people and stateless people per 100,000 population, 1951-2016

The number of displaced persons per 100,000 people has increased by over 1000 per cent since 1951.

Source: UNHCR

2015, down from a peak of 109 in 1950 and 13 percentage points lower than the next lowest country, Sweden.

The most notable increase in incarceration occurred in the US, where the *incarceration rate* soared from under 200 per 100,000 in the 1960s, to over 700 per 100,000 people in the mid-1990s. Most other countries have maintained an *incarceration rate* of 200 or less, even if they have seen large increases in incarceration over the past 50 years. As of the 2018 GPI, just six countries have an *incarceration rate* of over 500 per 100,000 people: Cuba, Eritrea, Turkmenistan, El Salvador, the United States, and North Korea.

TERRORISM

Figure 2.20 highlights the number of deaths from terrorism from 1970 onwards. Between 1970 and the mid-1980s, most terrorism was related to domestic political or national movements. However, starting in the mid-1980s there was a much more significant increase, rising to over 30,000 deaths in 2014. Around 95 per cent of terrorism-related deaths occurred in conflict countries. These deaths occurred mainly in the Middle East and North Africa, where countries such as Syria, Iraq, and Yemen have been mired in long term civil conflicts.

However, from 2015 to 2016, the number of terrorism related deaths in non-conflict countries increased as the number of deaths in conflict countries decreased. This is only the sixth time in the last 25 years that this has occurred, reflecting the impact of terrorism in OECD countries.

The trend reversed in the OECD in the first half of 2017, and deaths were down in the equivalent period in 2016, a trend which is likely to continue. However, it is still highly likely that over 90 per cent of deaths from terrorism in 2017 will have occurred in countries involved in a conflict, with the majority of the other types of deaths occurring in countries with high levels of state-sponsored terror.

Countries involved in conflict are more susceptible to terrorism, partly because of the lack of a fully functioning state. Terrorism is also one of many tactics employed by insurgencies and paramilitaries in a civil conflict. Terrorist groups like ISIS, Boko Haram, and the Taliban, for example, all carry out conventional military attacks in the context of their respective conflicts, as well as undertaking extensive terrorist activity.

REFUGEES & IDPS

Figure 2.21 shows the total number of displaced people from 1951 to 2016. The number of refugees has been increasing steadily since the 1970s, but began to rise dramatically in the early 2000s and shows no sign of abating. There were 68 million *refugees and internally displaced people* in 2016, a rate of 910 people per 100,000 or 1 out of every 110 people on the planet. The UNHCR notes that in 2005, 6 people were displaced every minute; by 2015 that rate had increased to 24 per minute.[4]

The sharp increase in the number of displaced people in the early 1990s is attributable to the Rwandan genocide. The increase over the last decade comes primarily from the Middle East and Central Africa. These regions have seen prolonged conflicts with little respite, leaving many citizens with no choice but to flee their homes. Protracted civil wars and conflicts are the major drivers of increasing displacement, and the shift away from external and interstate conflicts has been reflected in the considerable increase in the number of displaced people. Meanwhile, the international community has become increasingly reluctant to accommodate refugees with no long-term global sustainable solutions in place. There has been insufficient adjustment to the needed scale since the advent of the UNHCR in 1950.[5]

There is almost no data available on displaced populations prior to the creation of the UNHCR in 1951, and in the early 1950s as few as 17 countries reported data on accepted refugees. The other issue in assessing the accuracy of the data is that it was not until the mid-1960s that categories like internal displacement and statelessness began to be used and persons registered under these categories, with data remaining sparse until the 1990s. However, there is sufficient data available on refugees to assess the general trend since World War II, without distinguishing between different types of displacement.

Militarisation

While militarisation data for the period between the two World Wars is sparse, there is a reasonable amount of data available from 1946 onwards. Military expenditure data is available for most of the developed countries from the end of the World War II, as is nuclear weapons data, and also weapons exports and imports. The armed services personnel rate is the only GPI indicator with significant data available prior to WWII. The overall trend in the *Militarisation* domain, particularly for more economically advanced countries, has been towards reductions in both armed forces personnel and military expenditure as a percentage of GDP. For both nuclear weapons and weapons exports, the trend is somewhat similar, with a reduction in the major powers, but an increase in the total number of nuclear armed states, and an increase in weapons exports across the globe. Combined, these *Militarisation* indicators reveal part of the move away from the tradition of standing armies, and towards increased military sophistication and an ever-greater reliance on increasingly complex technological weapons systems.

MILITARY EXPENDITURE

Figure 2.22 highlights the average level of *military expenditure* as a percentage of GDP, as well as the full range of country spending each year. Data is too scarce to construct a meaningful average for the period in between the two World Wars. Only five countries have data available for 1949, compared to 145 in 2016. 102 countries have data for more than 40 years. Of these countries, 12 are in the Asia-Pacific region, seven in Central America and the Caribbean, 18 in Europe, 16 in the Middle East and North Africa, both North American countries, 11 in South America, five in South Asia, and 29 are in Sub-Saharan Africa

The average rate globally has remained low and fairly stable since World War II. However, the range as a percentage of GDP between countries grew massively in the 1960s and remained so through the rest of the 20th century. The 1970s and 80s had the widest discrepancies, with a consistent difference of at least 20 percentage points. The mid-2000s saw the smallest range in expenditure rates since the 1950s, with the largest and smallest spending rates within 10 percentage points of each other from 2007 to 2011. By 2010, rates began climbing again, and the range of 16.5 percentage points in 2016 was the widest since 2003.

The high spending came from a few countries in the Middle East, and also from other countries in active armed conflict. The end of the Cold War and the fall of the Soviet Union marked an immediate decline in the range of military spending. This decline was interrupted by elevated spending in the late 90s, as Russia and China built their defence systems, but resumed in the early 2000s. The growth following the 2008 recession has been driven mainly by countries in the Middle East increasing military spending, with the largest increases occurring in Saudi Arabia, Algeria, Oman, and Kuwait.

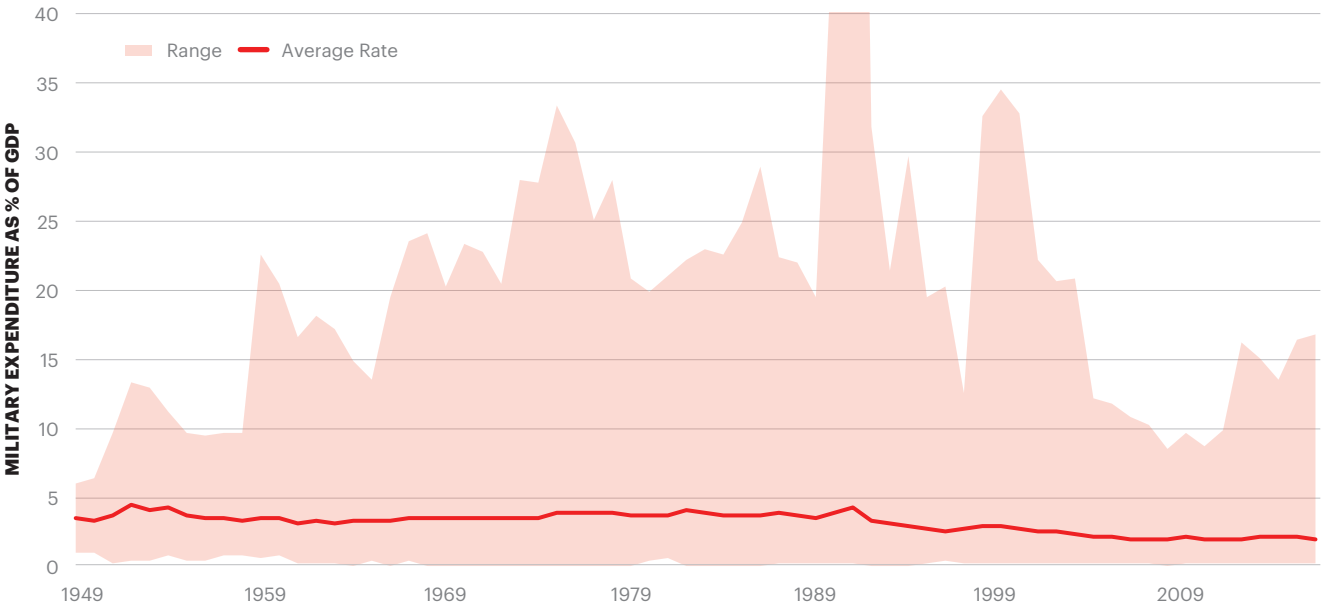
ARMED SERVICES PERSONNEL

Figure 2.23 highlights the average country military personnel rate per 100,000 people, for the period 1918 to 2018. The military personnel rate is a key indicator of the level of militarisation in a country, alongside the *military expenditure* rate. Each offers a way to compare the importance countries place on armed forces for protection. Changes can reflect a number of circumstances, from changing levels of global tension to the introduction of more

FIGURE 2.22

Average and range of military expenditures as a % of GDP, 1949-2016

The range of military expenditure rates in 2016 was 16.5 per cent, triple the 5 per cent range of 1949 and the highest since 2003.

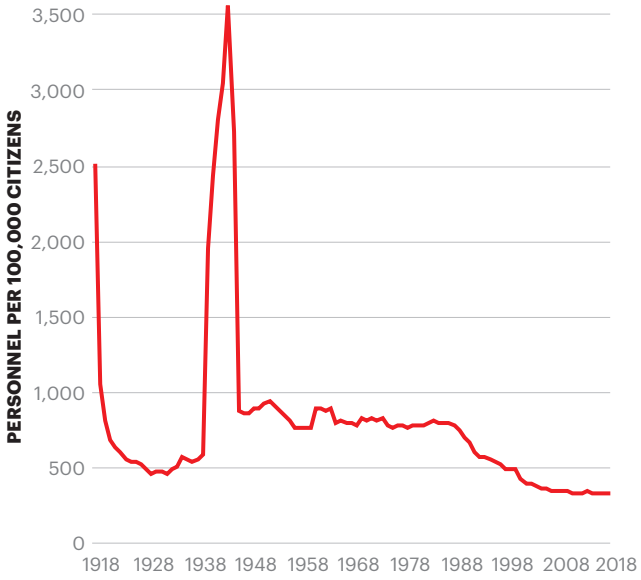


Source: SIPRI

FIGURE 2.23

Average military personnel rate of countries with fully available data, 1918-2018

The average military personnel rate has improved 63% since 1946.

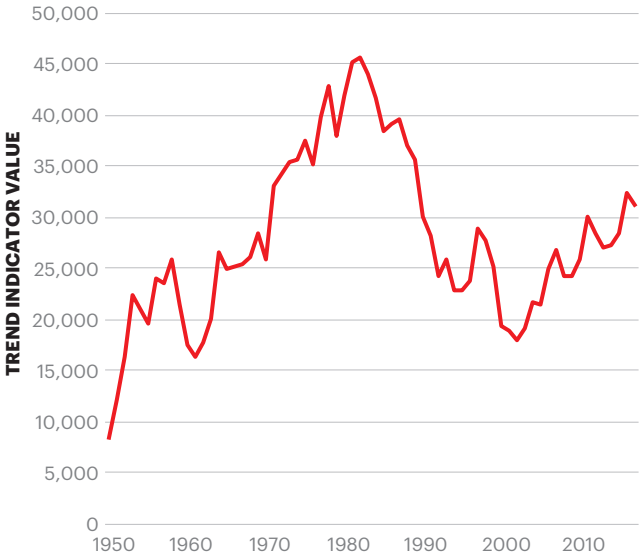


Source: The Military Balance and IEP

FIGURE 2.24

Trend indicator values (TIV) of total global weapons exported, 1950-2016

The total value of weapons exports has been trending upwards since the turn of the century.



Source: SIPRI

cost-effective military technologies or shifting methods of warfare leading to new security emphasis.

In 1918, 50 countries had military personnel data available; by 2018, there were 163. Of the countries for which personnel data was available in 1918, 26 were from Europe, ten from South America, seven from Central America and the Caribbean, three from Asia-Pacific, one from sub-Saharan Africa, one from the Middle East and North Africa, as well as Russia and the United States. For those countries, the average military personnel rate declined slowly after World War II. The lowest global average before World War II was 464 in 1929. The average didn't dip below that again until 2001, when it reached 421.

The military personnel rates of the four countries that maintain the largest armies have all declined over the last fifty years, with Russia and the US reducing their rates after the end of the Cold War. China's rate remained relatively low and stable through the 20th century, other than during World War II. It maintained a rate around 170 throughout the 2000s, almost three times lower than the US rate. However, estimating the rates in China is difficult due to the lack of reliable data, and these figures are likely to be underestimated. India's military personnel rate almost tripled in the 1960s and 70s but has declined slowly since.

The reduced military spending in the late 80s correlated with the declining number of conflicts world-wide. The diminished need for massive militaries reflects the global shift away from interstate warfare to internal, smaller-scale conflicts. Though international involvement by major powers in internal or extra-state warfare continued, it typically required a smaller military than full interstate war. This also reflects the changing nature of warfare, increasingly reliant on technological strength rather than sheer numbers for surveillance and targeted airstrikes.

> “The diminished need for massive militaries reflects the global shift away from interstate warfare to internal, smaller-scale conflicts.

WEAPONS IMPORTS & EXPORTS

The value of the global weapons trade is a useful indication of which regions are building military capacity. It is also important when examining defence spending, especially as the world shifts from standing armies to a greater reliance on technological force. Figure 2.24 shows the total value of *weapons exports* in TIV[6] terms, from 1950 to 2016. Data is not available prior to 1950.

The value of *weapons exports* increased from the 1950s to the 80s, before beginning a steady decrease in 1982, which continued until the trend reversed in 2002. Since then the value has risen fairly steadily, with exports in 2016 valued at their highest level since 1989. The value of exports from each major power remained stable in relation to each other through most of the 20th century, aside from a large decrease in exports from both the USSR and the US during the 80s, bringing their levels substantially closer to that of other powers.

The 1982 turning point was due in part to a large decline in exports out of the United States in the years leading up to the disintegration of the Soviet Union and the end of the Cold War. Russian exports decreased significantly in 1989 with the official end of the Cold War and Soviet disintegration.

The primary regions importing weapons started to shift in the mid-80s. Exports to the Middle East and Asia increased as tensions there escalated, whereas exports to the Americas, Europe and Africa decreased. Additionally, a much larger portion of exports came from non-major powers, as other regions became more conflict-ridden and the decreasing likelihood of interstate war lessened the need for the military powers of the 20th century to arm allies and maintain strong defence networks.

> The apparent end of serious reductions in nuclear stockpiles speaks to the failure of current diplomacy to make breakthroughs of the kind governments achieved in the 1990s.

NUCLEAR WEAPONS

The advent of nuclear power and nuclear weapons drastically changed the nature of warfare in the 20th century. Examining the various nuclear powers' capabilities is an important factor in understanding the likely future of warfare and its impact. Figure 2.25 shows the total number of nuclear weapons by country, for both the world as a whole, and for nuclear armed states excluding the US and Russia only.

Data on the nuclear ability of the US and Russia is precisely documented under international agreements. For other countries the data is estimated, with the notable exception of North Korea. Following the signing of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1970 by the US, Russia, France, the UK and China, three more states successfully detonated nuclear weapons – India, Pakistan and North Korea – and did not sign on to the NPT or have withdrawn since signing. Some of the US weapons are held in other NATO states, effectively spreading their power and bolstering NATO credibility. Belgium, Germany, Italy, the Netherlands and Turkey all have nuclear weapons stationed in their countries.[7] Other states have attempted to develop nuclear powers but have been deterred by global governance, such as Iran, or have given up their efforts and stockpiles to join the NPT, like South Africa and the former Soviet republics, which were left with nuclear warheads after disintegration. Israel's nuclear capability has not been acknowledged by the state but is widely understood to exist.

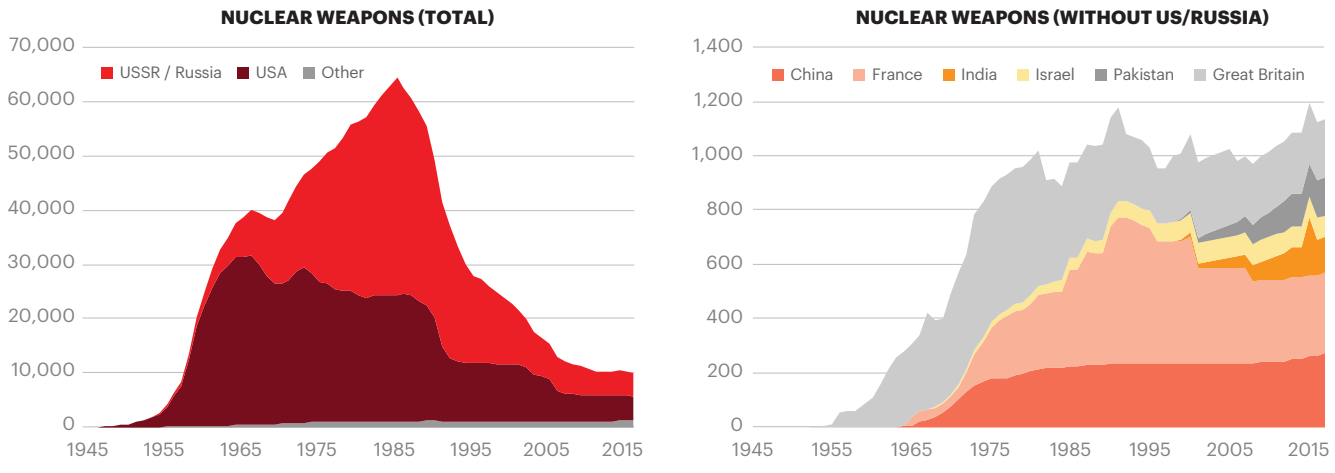
Overall, nuclear weapons peaked in 1986 when 70,300 active, stockpiled and retired weapons were estimated to exist and the total by 2017 is estimated to be down to 14,935, including weapons still designated for dismantlement. During the Cold War, the number of nuclear weapons held by the US and Russia increased dramatically, with the US peaking in 1967 and Russia not until in 1986. The downturn in 1967 is due the signing of the Nuclear Non Proliferation Treaty, after which the US never resumed increasing its nuclear capability. Russia continued to increase its nuclear stock until 1986. At this point, during and after the disintegration of the Soviet Union and the soothing of relations with the US, Russia rapidly decreased its nuclear abilities. The US followed suit in 1987, but halted its quick depreciation by 1993. By 2006, both countries' rate of nuclear depreciation was considerably slower, and by 2013 had essentially plateaued. As relations between the countries soured, disarmament talks slowed and eventually halted. Combined, Russia and the US held 92.4 per cent of all active nuclear weapons in 2017.

Comparing the raw number of nuclear warheads does not give a fully accurate picture of the evolution of nuclear strength. Modern nuclear warheads have vastly more destructive power than those of the Cold War. Even as they reduce numbers, countries continue to modernize and advance their weapons programs. The apparent end of serious reductions in nuclear stockpiles also speaks to the resumption of tensions between the US and Russia and a failure of current diplomacy to make breakthroughs of the kind governments achieved in the 1990s. Nuclear weapons have the potential to destroy life on the planet many times over.

FIGURE 2.25

Global nuclear inventory, 1945-2017

Despite a considerable fall in the total number of stockpiled and active nuclear weapons since the end of the Cold War, more countries than ever before are sustaining nuclear arsenal.



Source: Federation of American Scientists Nuclear Notebook

3 ECONOMIC IMPACT OF VIOLENCE

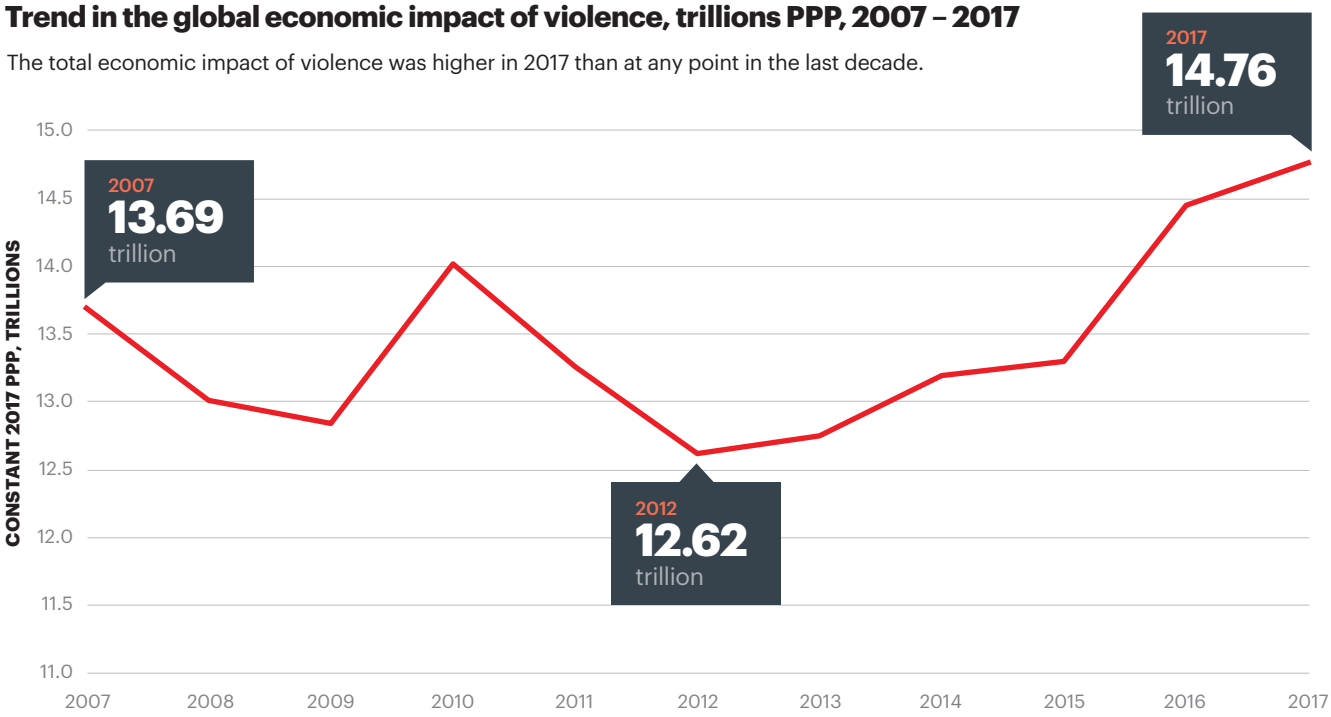
Results

The economic impact of violence to the global economy was $14.76 trillion in 2017, in constant purchasing power parity (PPP) terms. This is equivalent to 12.4 per cent of world gross domestic product (GDP), or $1,988 per person.

FIGURE 3.1

Trend in the global economic impact of violence, trillions PPP, 2007 – 2017

The total economic impact of violence was higher in 2017 than at any point in the last decade.



Source: IEP

The global economic impact of violence increased by 2.1 per cent from 2016 to 2017, mainly due to a rise in internal security expenditure. The economic impact of violence has increased 16 per cent since 2012, corresponding 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 Middle East and North Africa. 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.

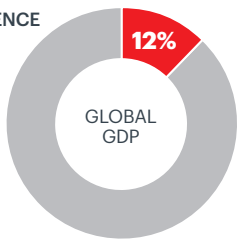
> “ The global economic impact of violence increased by 2.1 per cent from 2016 to 2017, mainly due to a rise in internal security expenditure.

KEY FINDINGS

GLOBAL ECONOMIC IMPACT OF VIOLENCE

The global economic impact of violence was $14.76 trillion PPP in 2017, equivalent to 12.4 per cent of global GDP, or $1,988 per person.

$1,988 PER PERSON OR



TEN MOST VS LEAST AFFECTED COUNTRIES

45% AVG GDP VS **2%** AVG GDP

The average economic cost of violence was equivalent to 45 per cent of GDP in the ten countries most affected by the impact of violence, compared to two per cent in the ten least affected.

THREE MOST AFFECTED

Syria, Afghanistan and Iraq incurred the largest economic cost of violence as a percentage of their GDP at 68, 63 and 51 per cent of GDP, respectively.

COMPOSITION OF THE ECONOMIC IMPACT OF VIOLENCE

Figure 3.2 shows the breakdown of the total economic impact of violence by category. The single largest component of the economic impact of violence was global military expenditure at $5.5 trillion PPP, or over 37 per cent of the total economic impact of violence in 2017. IEP's measure of military expenditure also includes the cost of veteran affairs and interest payments on military related debt in the United States, which was US$231 billion in 2017.

Internal security spending was the second largest component, comprising over 27.4 per cent of the global economic impact of violence at $3.8 trillion. Internal security expenditure includes spending on the police and judicial systems as well as the indirect costs associated with incarceration. The data for internal security spending is obtained from the IMF government finance statistics (GFS) database.

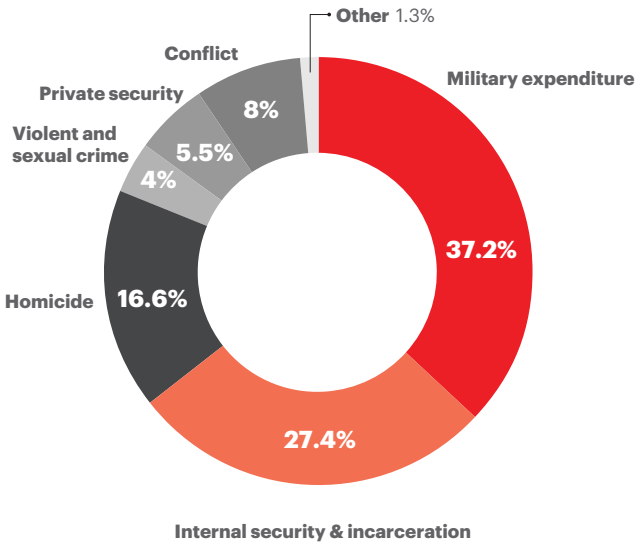
Homicide, at 17 per cent, is the third largest component of the model. The economic impact associated with intentional homicide is greater than the combined totals for both violent crime and armed conflict. Two other categories of interpersonal violence included in the model are violent assault and sexual assault, which make up four per cent of the global economic impact of violence. The economic impact associated with armed conflict is eight per cent of the total, which includes deaths from conflict, population displacement, terrorism, and losses in economic activity due to conflict.

Table 3.1 provides details of the changes in the categories for the last year. The increase in the overall economic impact of violence has largely been driven by the increase in internal security expenditure, as well as the rise in the economic impact of homicide. While the homicide rate has not had any significant changes at the global level, the rise in its economic impact has

FIGURE 3.2

Breakdown of the global economic impact of violence, 2017

Government spending on military and internal security comprises two thirds of the global economic impact of violence.



Source: IEP

KEY FINDINGS

IMPACT SINCE 2012

The economic impact of violence has increased by 16 per cent since 2012, corresponding with the start of the Syrian war and rising violence in the aftermath of the Arab Uprising in the Middle East and North Africa.

TABLE 3.1

Change in the economic impact of violence from 2016 to 2017, constant 2017 PPP

INDICATOR	2016	2017	CHANGE (BILLIONS) 2016-2017	CHANGE (%) 2016-2017
Conflict deaths	249.9	263.5	13.6	5%
Refugees and IDPs	386.1	356.5	-29.7	-8%
GDP losses	368.3	390.1	21.8	6%
Private security	800.6	810.7	10.1	1%
Incarceration	222.7	233.2	10.5	5%
Violent crime	562.3	594.3	32.0	6%
Internal security	3,643.4	3,809.7	166.3	5%
Small arms	9.5	9.4	-0.2	-2%
Homicide	2,332.5	2,452.3	119.8	5%
Fear	129.4	137.6	8.2	6%
Military expenditure	5,563.2	5,487.3	-75.9	-1%
Peacebuilding	28.3	27.8	-0.5	-2%
Terrorism	142.6	160.9	18.3	13%
Peacekeeping	16.9	25.1	8.2	48%
Total	**14,455.9**	**14,758.4**	**302.4**	**2%**

been driven by changes in its indirect effect on the economy. For instance, as countries grow and reach a new level of per capita GDP, the economic effects from violence, such as homicide, on its economy also become more costly.

Refugees and IDPs accounted for the largest decline in costs in 2017, falling by eight per cent globally. Small arms and peacebuilding both declined by one per cent. Military expenditure also decreased by one per cent.

The large increases in the economic impact of armed conflict and terrorism are the result of intensified conflicts in the Middle East. These conflicts resulted in deaths from conflict and impact of terrorism, increasing by five and 13 per cent respectively, with a major proportion of the increase being due to the conflicts in Syria, Iraq, and Afghanistan. However, the economic impact of terrorism declined by 22 per cent at the global level, if the increase in Iraq is excluded from the data.

Violence has both a direct and indirect impact on individuals and societies. The direct costs associated with violence are due to the immediate consequences of violence on the victims, perpetrators and public systems including health, judicial and public safety. The indirect costs of violence refer to the discounted long term costs such as lost productivity, psychological effects and the impact of violence on the perception of safety and security in a society. In addition, IEP also includes the flow on effects from the direct costs as a peace multiplier. For more details on the peace multiplier refer to box 3.1 on page 51. Table 3.2 provides details of the economic impact of violence broken down by direct and indirect costs.

TABLE 3.2

Composition of the global economic impact of violence, constant 2017 PPP, billions

INDICATOR	DIRECT COSTS	INDIRECT COSTS	THE MULTIPLIER EFFECT	TOTAL
Conflict deaths	131.8		131.8	263.5
Refugees and IDPs	0.6	355.2	0.6	356.5
GDP losses		390.1	0.0	390.1
Private security	405.4		405.4	810.7
Violent crime	89.0	416.2	89.0	594.3
Internal security	2,021.4		2,021.4	4,042.9
Small arms	4.7		4.7	9.4
Homicide	285.0	1,882.3	285.0	2,452.3
Fear		137.6	0.0	137.6
Militry expenditure	2,743.6		2,743.6	5,487.3
Peacebuilding	13.9		13.9	27.8
Terrorism	18.8	123.3	18.8	160.9
Peacekeeping	12.6		12.6	25.1
Total	**5,726.8**	**3,304.7**	**5,726.8**	**4,758.4**

THE TEN MOST AFFECTED COUNTRIES

In GDP terms, the economic cost of violence for the ten most affected countries ranges between 30 and 68 per cent of GDP. These countries have either high levels of armed conflict, high levels of interpersonal violence, or both. The conflict-affected countries – Syria, Iraq, Afghanistan, Colombia, South Sudan, Somalia, and Central African Republic – suffer from higher costs in the form of deaths and injuries from conflict or terrorism, population displacement and GDP losses. On the other hand, countries with high levels of interpersonal violence, such as El Salvador and Lesotho, are among the ten most affected countries because of the high costs associated with higher levels of homicide and violent crime. Cyprus is an exception to this dichotomy, in that the majority of its economic cost is related to the internal displacement of its population. Table 3.3 lists the ten most affected countries.

> “In GDP terms, the economic cost of violence for the ten most affected countries ranges between 30 and 68 per cent of GDP.

TABLE 3.3

Ten most affected countries by economic cost of violence as a percentage of GDP

COUNTRY	ECONOMIC COST OF VIOLENCE AS % OF GDP	GPI 2017 RANK
Syria	68%	163
Afghanistan	63%	162
Iraq	51%	160
El Salvador	49%	116
South Sudan	49%	161
Central African Republic	38%	155
Cyprus	37%	62
Colombia	34%	145
Lesotho	30%	104
Somalia	30%	159

REGIONAL COMPOSITION OF THE ECONOMIC COST OF VIOLENCE

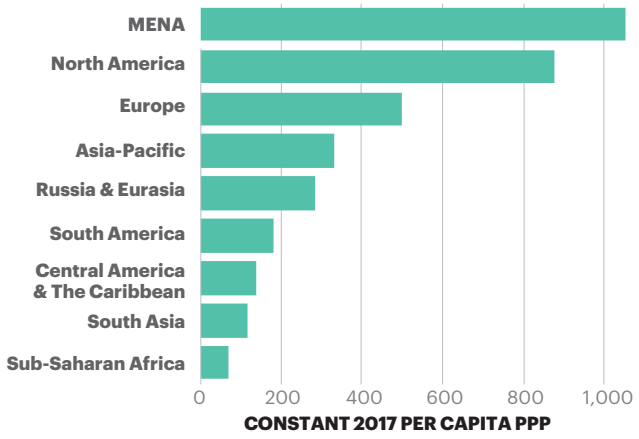
Different regions are affected by different types of violence and, thus, have different economic cost of violence profiles. The greatest variation between regions is the cost of violent crime and homicide. This represents 71 per cent of the economic cost in South America, 65 per cent in Central America and the Caribbean, and only 15 per cent in the Asia-Pacific region. This is followed by military expenditure, which varied from over 45 per cent in Asia-Pacific and North America to five per cent in Central America and the Caribbean. Internal security spending proportions also vary significantly between the highest spending region (Europe), and the lowest spending region (South America). Figure 3.4 shows the variation in the economic cost of violence by region.

Violence containment spending, which refers to military and internal security spending, is highest in MENA and North America,[1] while Central America and the Caribbean, South Asia, and sub-Saharan Africa spend the least on violence containment. On average, countries in sub-Saharan Africa spend seven times less on violence containment than Europe and five times less when compared to the Asia-Pacific region. Fig 3.3 shows violence containment spending per capita by region.

FIGURE 3.3

Per capita violence containment spending (military and internal security) by region, 2017

Per capita violence containment spending is 15 times higher in MENA than Sub-Saharan Africa.

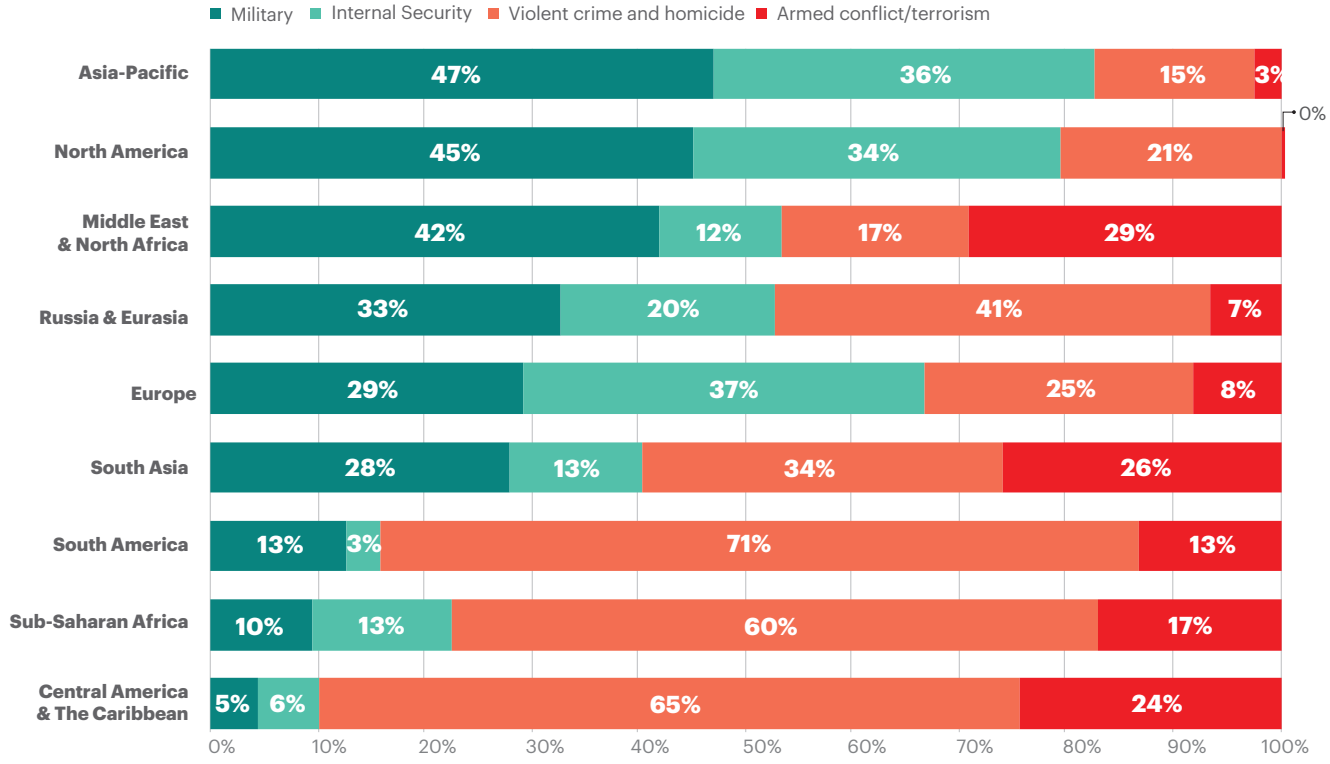


Source: IEP

FIGURE 3.4

Composition of the economic cost of violence by region, 2017

At the regional level, military expenditure accounts for between 4 and 42 per cent of the economic cost of violence.



Source: IEP

Methodology

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

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

This study includes two types of costs: direct and indirect costs. Examples of direct costs include medical costs for victims of violent crime, capital destruction from violence and costs associated with security and judicial systems. Indirect costs include lost wages or productivity from crime due to physical and emotional trauma. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of violent crime alter their behaviour.[2]

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 (PPP) international dollars.

IEP estimates the economic impact of violence using a comprehensive aggregation of 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 2017 version of the economic impact of violence includes 17 variables in three groups.

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

- **The cost of crime to business**
- **Judicial system expenditure.**
- **Domestic violence**
- **Household out-of-pocket spending on safety and security**
- **Spill over effects from conflict and violence**
- **Self-directed violence**

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 physiological trauma to the victim and lost productivity.
3. **The multiplier effect** 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. Box 3.1 provides a detailed explanation of the peace multiplier used.

TABLE 3.4

Variables included in the economic impact of violence, 2017

SECURITY SERVICES AND PREVENTION ORIENTED COSTS	ARMED CONFLICT RELATED COSTS	INTERPERSONAL VIOLENCE
1. Military expenditure	1. Direct costs of deaths from internal violent conflict	1. Homicide
2. Internal security expenditure	2. Direct costs of deaths from external violent conflict	2. Violent assault
3. Security agency	3. Indirect costs of violent conflict (GDP losses due to conflict)	3. Sexual assault
4. Private security	4. Losses from status as refugees and IDPs	4. Fear of crime
5. UN peacekeeping	5. Small arms imports	5. Indirect costs of incarceration
6. ODA peacebuilding expenditure	6. Terrorism	

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

BOX 3.1

The multiplier effect

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

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

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

> “
> A dollar of expenditure can create more than a dollar of economic activity

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.[2]

The macroeconomic impact of peace

KEY FINDINGS

- In the last 70 years, per capita GDP growth has been three times higher in highly peaceful countries when compared to the ones with low levels of peace.
- Over the last decade, countries with the largest improvements in peace recorded seven times higher per capita GDP growth than those that deteriorated the most.
- The global economy would be US$13.87 trillion larger than its current level if low peace countries achieved GDP growth equivalent to highly peaceful countries.
- Interest rates are lower and more stable in countries with higher levels of peace.
- Inflation is on average three times higher and ten times more volatile in low peace countries than high peace countries.
- Foreign direct investment inflows are more than two times higher in countries with higher levels of peace relative to less peaceful countries.
- If the least peaceful countries were to grow at a rate equivalent to that of the most peaceful countries, per capita GDP could be up to US$527 higher by 2030.

ECONOMIC PROGRESS, PROSPERITY & PEACE

The analysis presented in this section highlights the widening 'prosperity gap' between less and more peaceful countries. Since 1960, the most peaceful countries have, on average, seen their per capita GDP grow by an annual rate of 2.8 per cent. Per person GDP was over three times larger in highly peaceful countries in 2016 than it was in 1960.

However, less peaceful countries have experienced economic stagnation. Their annual per capita GDP has, on average, grown by just one per cent over the last seven decades. Economic factors such as high levels of poverty, unemployment and inflation have been shown to be risk factors for political unrest[3], as a result, poor economic performance has effectively made low peace countries more vulnerable to political instability.

There has been sustained economic growth across the world over the past seven decades. Expanded access to goods and services have contributed to a higher life expectancy and better quality of life, even though the growth has been unbalanced between developed and lesser developed countries. Higher global prosperity, henceforth defined as sustained increases in GDP per capita, can be explained by many factors, including higher productivity, itself driven by technological innovation and a steady rise in human capital. Strong and stable institutions also play a critical role by fostering social, cultural and political progress. Put together, these are the kind of factors that help drive economic prosperity, which itself generates positive externalities, notably in the form of higher societal resilience and peacefulness. Research by IEP has found that the same conditions that create highly peaceful societies also create the necessary conditions for the economy to flourish. Please refer to the Positive Peace section.

Countries that have sustained economic progress have managed to reduce their levels of violence and have escaped what has been dubbed as the 'conflict trap'.[4] Conversely, economic instability is a known catalyst for political upheaval and social unrest, which themselves tend to exacerbate poor economic performance. Indeed, different studies have shown that the relation between macroeconomic performance and political instability is one of reverse causality.

The need to promote broad-based economic development in tandem with peacebuilding initiatives is critical for conflict prevention, particularly in fragile countries, where the risk of conflict relapse is high. Poor infrastructure, low levels of human capital and political instability are factors that tend to impede growth in less peaceful or fragile countries.

A common feature of low peace countries is a higher degree of economic volatility. Short spurts of growth are often followed by periods of stagnation and, in extreme cases, prolonged economic contractions. Poor governing mechanisms and prevailing manifestations of political polarization can exacerbate economic shockwaves, thereby prompting a spiral of instability.[5] Prolonged macroeconomic volatility is often a precursor to hyperinflation, currency devaluation and indebtedness – all of which can create further instability.

This section presents a descriptive analysis of the long-term economic performance for different variations of peacefulness across countries. World Development Indicators (WDI) produced by the World Bank are used for estimates of macroeconomic performance. In turn, country scores from the GPI are used to group countries by their level of peacefulness. Overall, this section aims to illustrate the association between peace and long-term economic performance.

PER CAPITA GDP GROWTH

Economic data since 1960 show a sustained and increasing trend in per capita GDP at the global level. However, when broken down at the country level, this trend is characterised by a large degree of variation across nations. While a great number of countries have significantly increased their per person income, others have stagnated. When the level of peacefulness is taken into consideration, long-term growth in per capita income was nearly three times higher in high peace countries when compared to the least peaceful countries.

Countries that have sustained higher levels of prosperity have also achieved improvements in Positive Peace, which is defined the as *attitudes, institutions and structures* that create and sustain peaceful societies. Countries that rank highly in the Positive Peace Index (PPI) are those that tend to register the lowest levels of violence, which shows an association between good economic performance and systemic and societal peace.

Highly peaceful countries registered per capita GDP growth that was nearly three times higher than low peace countries between 1960 and 2016. Average GDP per capita grew annually by 2.8 per cent in the highly peaceful countries, while the rate was only one per cent in the least peaceful countries. The trend analysis does not suggest causality between peace and economic progress, and any such analysis would have to include the impact of Positive Peace on economic growth. Nevertheless, peace and economic progress are interlinked with numerous other factors determining their progress overtime. Poor economic performance is a strong contributing factor to deteriorations in peace and vice versa. Figure 3.5 illustrates the growth gap between four groups of countries by their level of peace.

> “Poor economic performance has effectively made low peace countries more vulnerable to political instability.

FIGURE 3.5

GDP growth by level of peacefulness, 1960–2016

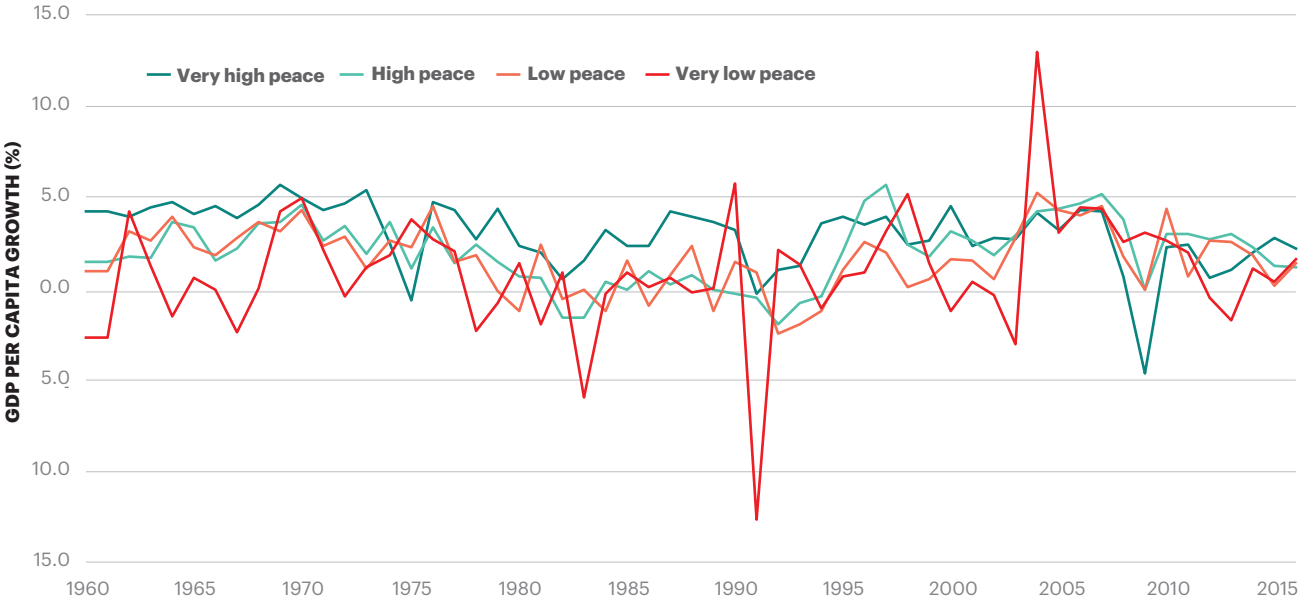
Countries with very high levels of peace, on average, achieved over three times higher per capita GDP growth compared to the least peaceful countries.

Source: WDI, IEP

FIGURE 3.6

Long term growth trend for low and high peace countries, 1960–2016

Very high peace countries have sustained higher growth with fewer and smaller fluctuations over the long term.



Source: WDI, IEP

Per capita GDP growth was higher for countries that improved their level of peace over the last ten years. The twenty countries that improved the most in their GPI scores from 2008 to 2018 also achieved a GDP growth seven times higher than the 20 countries that deteriorated the most. Figure 3.7 shows average GDP per capita growth for the last ten years for countries that deteriorated or improved the most in peacefulness.

> “As such, per capita GDP is 20 times larger in highly peaceful countries because of higher growth rates over the long run.

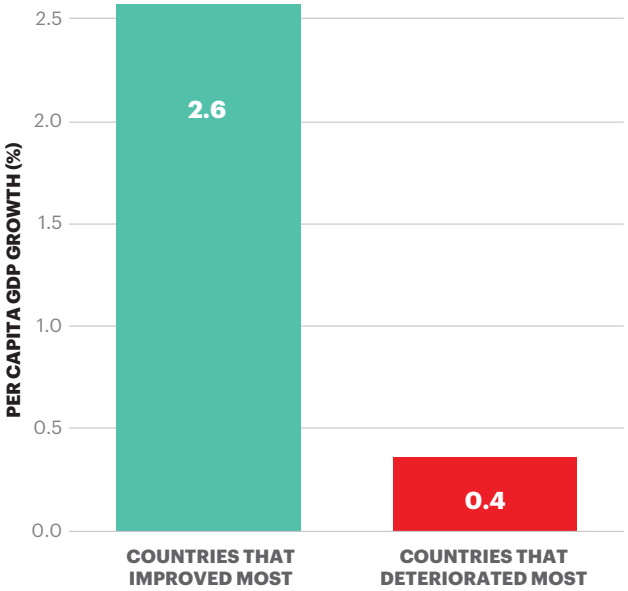
The long-term trend in economic growth shows a divergence in per capita GDP across countries with varying levels of peacefulness. GDP growth in the most peaceful economies is nearly three times higher than in low peace economies. As such, per capita GDP is 20 times larger in highly peaceful countries because of higher growth rates over the long run. The persistent lower level of growth in per capita income makes it challenging for the least peaceful nations to close the existing gap in living standards without major structural changes. Figure 3.6 shows growth over a 70-year period for countries based on the level of peacefulness.

Deviation from the long-term average indicates greater volatility in growth and creates boom and bust cycles, as seen in very low peace countries. Economies that experience higher levels of volatility and fluctuation suffer from economic instability. Deviation from long-term average growth are seven times higher in less peaceful countries, leaving their economies more unstable. Figure 3.6 illustrates that least peaceful countries experience larger deviations from their long-term mean.

FIGURE 3.7

Per capita GDP growth by improvement or deterioration in peace, average of 20 countries with the greatest change, 2008–2018

On average, the countries that improved the most in peacefulness recorded seven times higher per capita GDP growth compared to those that deteriorated the most.



Source: WDI, IEP

GDP GROWTH SCENARIO ANALYSIS

Due to different growth rates, there is a slow and sustained process of 'prosperity' divergence among countries depending on their levels of peacefulness. The magnitude of the income gap between high and low peace countries can be illustrated using a hypothetical scenario where it is assumed that all countries increased their growth rates to the same level as high peace countries.

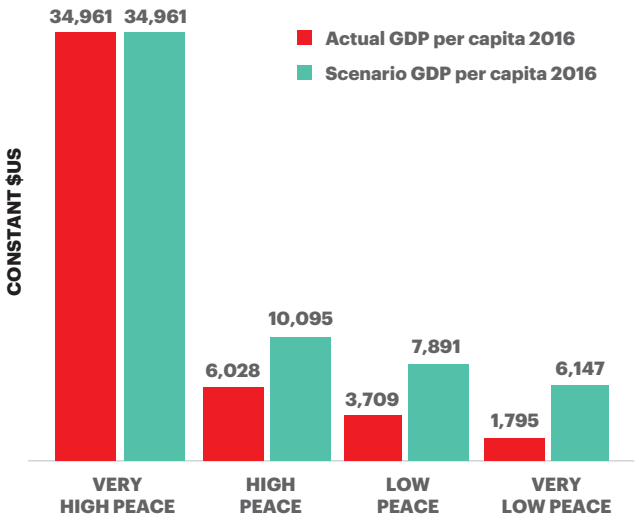
Figure 3.8 shows per capita GDP in 2016 and compares it to a scenario in which the least peaceful countries have an equivalent growth rate to the most peaceful over the past 70 years. It is assumed that per capita GDP in the least peaceful countries increased at the same rate as highly peaceful countries, that is at 2.8 per cent per year instead of the actual one per cent. The results find that per capita GDP in very low peace countries would have been US$6,147 in 2016, compared to the actual US$1,795. In other words, GDP per capita would have been US$4,352 higher than what it actually was in 2016. Estimates from this scenario also show that the global economy in 2016 would have been US$13.87 trillion dollars larger than its current level.

Another way to illustrate the emergence of the income gap is a forward-looking scenario. If growth rate is assumed to be equal among countries, by 2030, the least peaceful countries will achieve US$527 higher per capita GDP. This scenario assumes that very low peace countries maintain a growth rate of 2.8 per cent until 2030. Figure 3.9 shows two scenarios for the least peaceful countries and the resulting difference that arises.

FIGURE 3.8

Prosperity gap between high and low peace countries, 2016

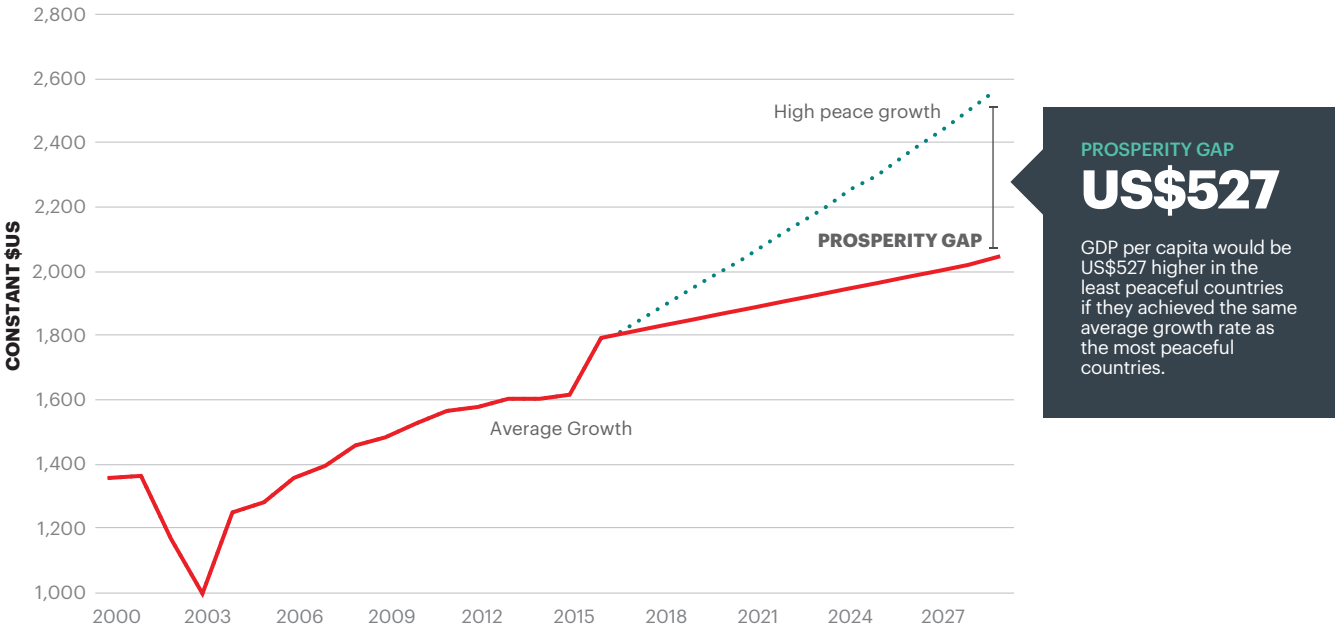
In a scenario where low and very low peace countries achieved an average growth rate equivalent to high peace countries, their per capita income would have been over three times higher than what it was in 2016.



Source: WDI, IEP

FIGURE 3.9

Scenario analysis of per capita GDP growth for least peaceful countries, 2000–2030



Source: WDI, IEP

MACROECONOMIC STABILITY & INVESTMENT

Macroeconomic volatility resulting from political instability and armed conflict dampens economic growth. Macroeconomic stability is important because it enhances business confidence while reducing market distortions. In addition, maintaining balanced public finances results in lower levels of national debt and can provide sufficient financial stimuli to the economy. Instability generally leads to higher levels of debt, which can be difficult to reduce. This can be seen from the Global Financial Crisis in Europe where many countries increased their debt to GDP ratio by more than 40 per cent and a decade later have not substantially reduced the debt level.

Empirical evidence suggests that creating an environment that is conducive to higher rates of investment can reduce the likelihood of violence. Research by the International Monetary Fund (IMF) has shown that higher degrees of political instability, ideological polarization and lower economic freedom are associated with greater economic volatility.[6] Moreover, businesses and investors rank the risk of political instability as a major concern. Other major concerns for investors include macroeconomic instability and structural and institutional issues such as contractual breaches and expropriation by the state.[7]

Low peace countries suffer from a relatively greater level of economic volatility. The volatility in less peaceful contexts stem from political uncertainty, policy ineffectiveness, and market distortions. Politically unstable countries are prone to economic shocks including hyperinflation, currency devaluations and indebtedness. Susceptibility to these economic instabilities result from discontinued and ineffective monetary and fiscal policies.

FIGURE 3.10

Changes in the inflation rate vs changes in peacefulness, 2008-2016

Countries that deteriorated the most in peace experienced higher inflations shocks.

Source: IEP,IMF

INFLATION & PEACE

Price instability has negative implications for economic activity through its effects on savings, investment and consumption. Low and stable inflation – i.e., small and predictable changes in the general level of prices – reduces future uncertainty for investors. In contrast, inflation volatility creates risks, reduces profitability and leads to a concentration of savings in non-productive assets. It can also lead to contractionary monetary policies, including higher interest rates, which make it difficult for businesses, as well as consumers, to borrow and invest.

> “Highly peaceful countries have been more effective in maintaining lower rates of inflation and avoiding incidence of hyperinflation.

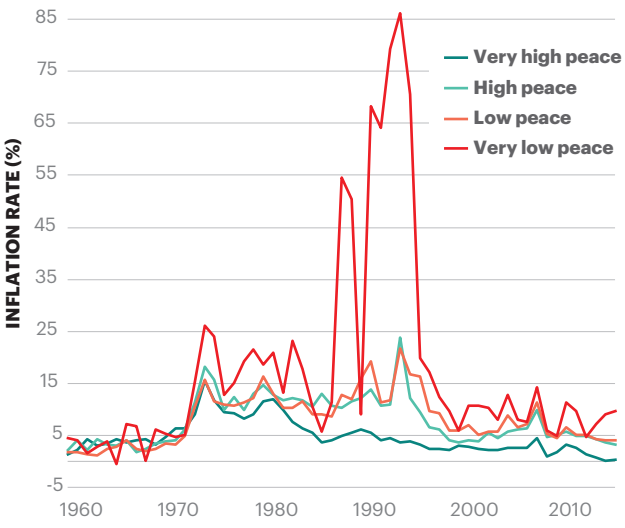
Highly peaceful countries have been more effective in maintaining lower rates of inflation and avoiding incidence of hyperinflation. The data shows that average inflation in very high peace countries was three times lower than the least peaceful countries. Long-term median inflation in very high peace countries was 3.5 per cent compared to 9.7 per cent in very low peace countries. In addition, inflation volatility was also more prevalent in less peaceful countries. Figure 3.11 shows the long-term trend in the inflation rate by levels of peacefulness.

Deteriorations in peacefulness are also associated with higher inflation. Figure 3.11 shows the association between the changes in peacefulness and the changes in the rate of inflation.

FIGURE 3.11

Long term inflation by level of peace, 1960–2016

Long term trends in the inflation rate show that lower peace countries historically have higher inflation and have experienced more severe inflationary shocks.[8]



Source: WDI, IEP

INTEREST RATES & PEACE

The interest rate is another important indicator of macroeconomic stability, as it is critical to economic outcomes and investment certainty. Correlation analysis illustrates that interest rates are more volatile and unpredictable at lower levels of peace. This unpredictability arises from political uncertainties, perceptions of risk and higher inflation. A higher interest rate inhibits investment by businesses and households, leading to a decline in economic activity. Figure 3.12 highlights the relationship between changes in the interest rate and changes in peace.

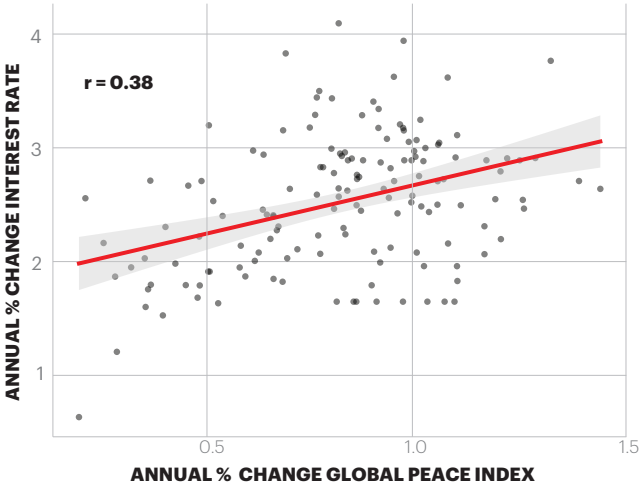
While interest rates have declined significantly in most countries, highly peaceful countries experienced the largest declines. The median lending rate in the least peaceful countries was more than two times that of the most peaceful countries since 1990. The average lending interest rate in the most peaceful countries was 8.7 per cent, compared to 20 per cent in very low peace countries.

Interest rates are affected by many factors including the business environment, risk, inflation, and consumption preferences. Therefore, premiums for inflation and risk partially explain the mark up on interest rates in less peaceful countries. However, scarcity of financial resources and lack of high-return investment opportunities also contribute to higher interest rates in less peaceful contexts. Figure 3.13 shows trends in the interest rate by level of peace.

FIGURE 3.12

Change in interest rates vs change in peace, 2008-2016

Interest rate volatility has been highest in countries that experienced the highest decline in their level of peacefulness.

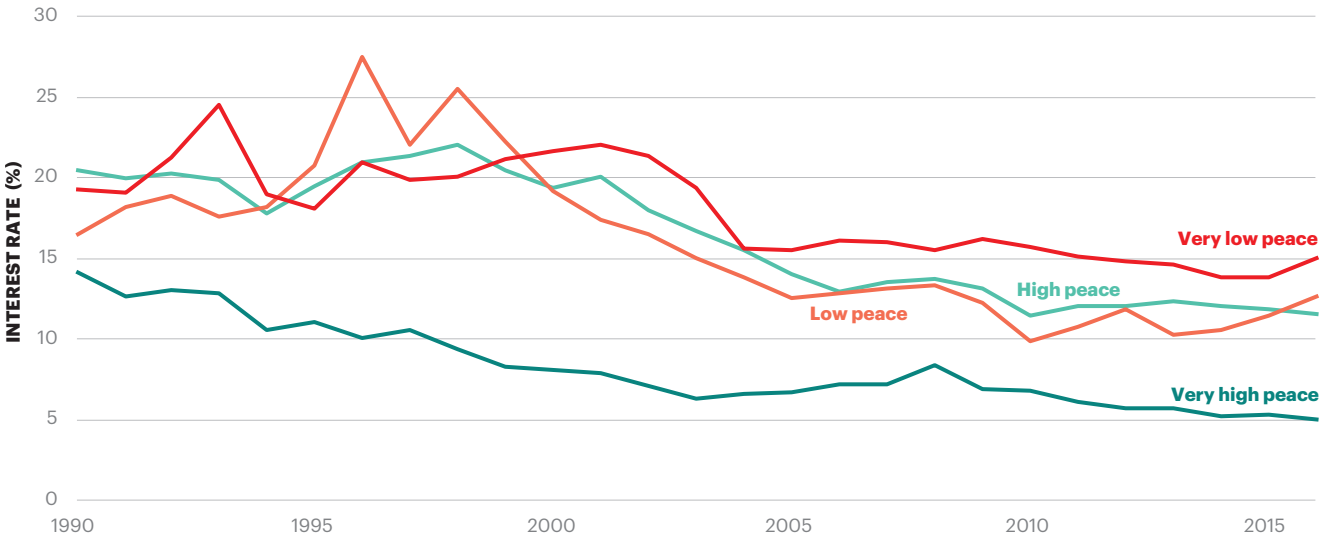


Source: IEP,IMF

FIGURE 3.13

Trend in interest rate by level of peace, 1990–2016

While interest rates have fallen globally since 1990, they are much lower in the most peaceful countries.



Source: WDI, IEP

FOREIGN DIRECT INVESTMENT & PEACE

Since 1980, on average, the most peaceful countries received the equivalent of two per cent of their GDP in FDI inflows, compared to 0.84 per cent in the least peaceful countries. Figure 3.14 shows the trend in foreign direct investment by level of peace. The data does not include OECD member countries and China.

Empirical research has shown that FDI is not only a source of scarce and much needed financing, it also brings new technologies and managerial know-how. It provides the means for new economic activities by creating jobs, enabling consumers and increasing skills in the labour market. Therefore, FDI is an important determinant of economic growth in developing countries.

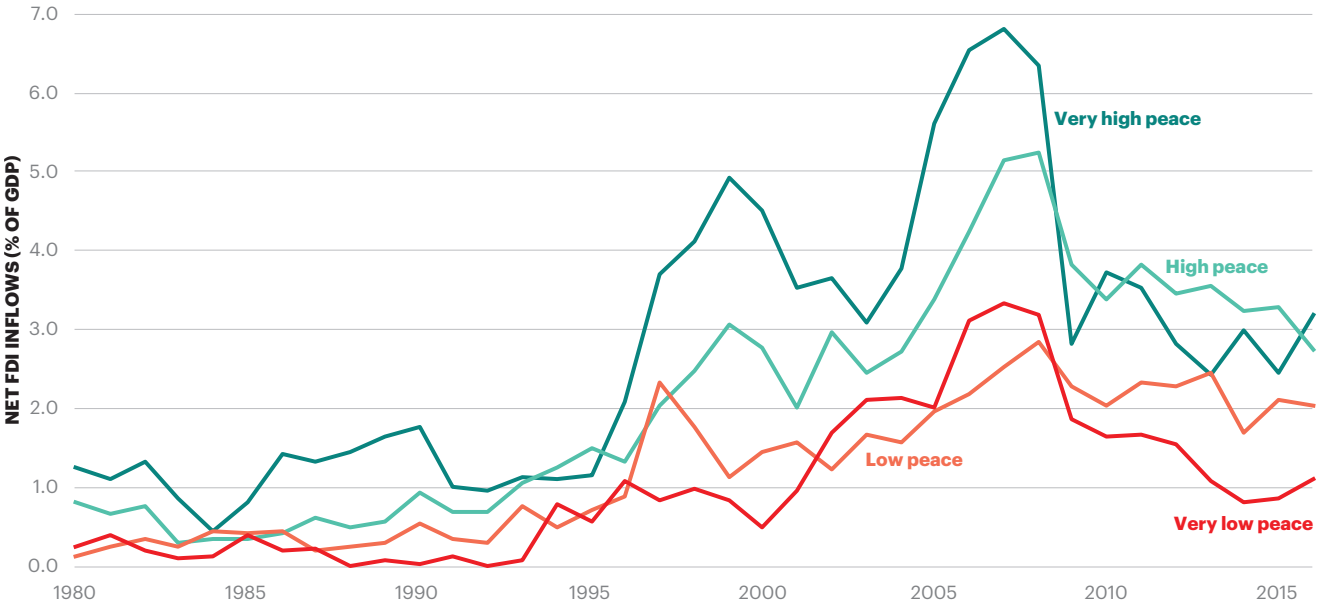
Lower levels of peace are associated with political instability and macroeconomic volatility, creating major constraints for investors and businesses. Political and economic risks act as deterrents to risk-averse foreign investors.[9] Incidents of armed conflict and political unrest discourage investment by creating safety and security challenges, while economic risks such as financial imbalances, currency devaluation and high inflation depress investment. FDI flows into developing countries are also influenced by factors such as market size, natural resource endowment, production costs and greater access to international markets.[10]

“ Since 1980, on average, the most peaceful countries received the equivalent of two per cent of their GDP in FDI inflows, compared to 0.84 per cent in the least peaceful countries.

FIGURE 3.14

Foreign direct investment as per cent of GDP, by level of peace, 1980–2016

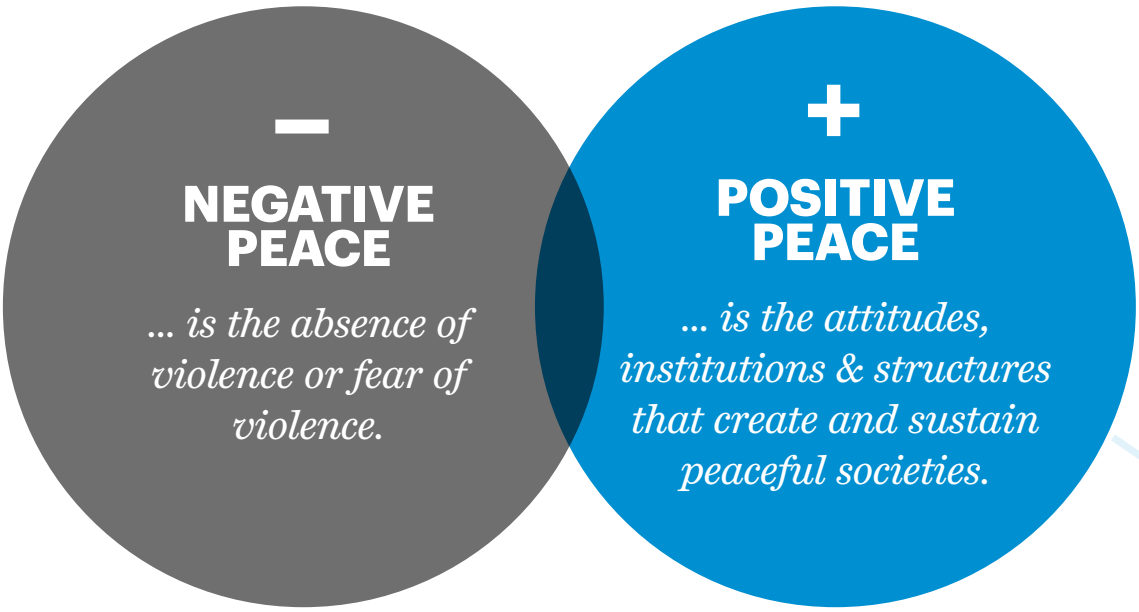
Net foreign direct investment (FDI) inflows as percentage of GDP are higher in highly peaceful countries.



Source: WDI, IEP

4 POSITIVE PEACE

What is Positive Peace?



Positive Peace is defined as the *attitudes*, *institutions*, and *structures* that create and sustain peaceful societies. These same factors also lead to many other positive outcomes which societies considers are important. Therefore, Positive Peace describes an *optimum environment for human potential to flourish*.

Positive Peace has been empirically derived by IEP via the statistical analysis of thousands of cross-country measures of economic and social progress to determine what factors are statistically significantly associated with the Global Peace Index.

Positive Peace is measured by the Positive Peace Index (PPI) which consists of eight domains, each containing three indicators, totalling 24. This provides a baseline measure of the effectiveness of a country to build and maintain peace. It also provides a measure for policymakers, researchers, and corporations to use.

Positive Peace factors 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 be used to measure fragility and to help predict the likelihood of conflict, violence, and instability.

The Eight Pillars of Positive Peace

IEP's framework for Positive Peace is based on eight factors. The Positive Peace factors not only sustain peace but also support an environment where human potential flourishes. They interact in complex ways, are multidimensional and are generally slow moving.

WHY IS POSITIVE PEACE TRANSFORMATIONAL?

Humanity is now facing challenges unparalleled in its history. The most urgent of these are global in nature, such as climate change, ever decreasing biodiversity, increasing migration and over-population. These global challenges call for global solutions and these solutions require cooperation on a scale unprecedented in human history.

In a globalised world, the sources of many of these challenges are multidimensional, increasingly complex and span national borders. For this reason, finding solutions to these unprecedented challenges requires fundamentally new ways of thinking.

Without peace it will not be possible to achieve the levels of trust, cooperation or inclusiveness necessary to solve these challenges, let alone empower the international institutions and organisations necessary to help address them. Therefore, peace is the essential prerequisite for the survival of humanity as we know it in the 21st century.

Without an understanding of the factors that create and sustain peaceful societies it will not be possible to develop the programmes, create the policies or understand the resources required to build peaceful and resilient societies.

Positive Peace provides a framework to understand and then address the multiple and complex challenges the world faces. Positive Peace is transformational in that it is a cross-cutting factor for progress, making it easier for businesses to sell, entrepreneurs and scientists to innovate, individuals to produce, and governments to effectively regulate.

In addition to the absence of violence, Positive Peace is also associated with many other social characteristics that are considered desirable, including better economic outcomes,

> “ Understanding what creates sustainable peace cannot be found in the study of violence alone.

measures of well-being, levels of inclusiveness and environmental performance. In this way, Positive Peace creates an optimal environment in which human potential can flourish.

Understanding what creates sustainable peace cannot be found in the study of violence alone. A parallel can be drawn with medical science. The study of pathology has led to numerous breakthroughs in our understanding of how to treat and cure disease. However, it was only when medical science turned its focus to the study of healthy human beings that we understood what we needed to stay healthy: physical exercise, a good mental disposition and a balanced diet are some examples. This could only be learned by studying what was working. In the same way, the study of conflict is different than the study of peace, producing very different outcomes.

Seen in this light, Positive Peace can be used as an overarching framework for understanding and achieving progress not only in levels of global peacefulness, but in many other interrelated areas, such as those of economic and social advancement.

Understanding Positive Peace

The analysis in this report is based on two simple but useful definitions of peace, each of which has a long history in peace studies – Negative Peace and Positive Peace.

IEP's definition of Negative Peace is the absence of violence or fear of violence – an intuitive definition that many agree with and which enables peace to be measured more easily. Measures of Negative Peace are used to construct the GPI. The 23 GPI indicators are broken into three domains: *Ongoing Conflict*, *Societal Safety and Security* and *Militarisation*. Societal safety and security refer to internal aspects of violence, such as homicide, incarceration or availability of small arms, while *ongoing conflict* and militarisation capture the extent of current violent conflicts and each country's military capacity.

A more ambitious conceptualisation of peace is Positive Peace. Well-developed Positive Peace represents the capacity for a society to meet the needs of its citizens, reduce the number of grievances that arise and resolve remaining disagreements without the use of violence.

> "Well-developed Positive Peace represents the capacity for a society to meet the needs of its citizens, reduce the number of grievances that arise and resolve remaining disagreements without the use of violence.

Human beings encounter conflict regularly – whether at home, at work, among friends, or on a more systemic level between ethnic, religious or political groups. But the majority of these conflicts do not result in violence. Most of the time individuals and groups can reconcile their differences without resorting to violence by using mechanisms such as informal societal behaviours, constructive dialogue or legal systems designed to reconcile grievances. Conflict provides the opportunity to negotiate or renegotiate a social contract, and as such it is possible for constructive conflict to involve *nonviolence*.[1] Positive Peace can be seen as providing the necessary conditions for adaptation to changing conditions, a well-run society, and the nonviolent resolution of disagreements.

This section describes how Positive Peace can be the guiding principle to build and reinforce the *attitudes, institutions and structures* that pre-empt conflict and help societies channel disagreements productively rather than falling into violence. Positive Peace also enables many other characteristics that societies consider important. For example, Positive Peace is also statistically linked to countries with higher GDP growth, higher levels of resilience, better ecological performance, better measures of inclusion (including gender) and much more. Findings from the Global Partnership for the Prevention of Armed Conflict's (GPPAC) review of civil society and conflict conclude that, "When tensions escalate into armed conflict, it almost always reflects the break down or underdevelopment of routine systems for managing competing interests and values and the failure to satisfy basic human needs."[2] Thus, the Positive Peace framework draws out the aspects of societies that prevent these breakdowns, based on their statistical association with the absence of violence.

The distinguishing feature of IEP's work on Positive Peace is that it has been empirically derived through quantitative analysis. There are few known empirical frameworks available to analyse Positive Peace. Historically it has largely been understood qualitatively and based on idealistic concepts of a peaceful society. Instead, IEP's Positive Peace framework is based on the quantitatively identifiable common characteristics of the world's most peaceful countries. In order to address the gap in this kind of quantitative research, IEP utilises the time series of data contained in the GPI, in combination with existing peace and development literature to statistically analyse the characteristics that peaceful countries have in common. An important aspect of this approach is to avoid value judgement and allow statistical analysis to explain the key drivers of peace.

BOX 4.1

The Positive Peace Index

IEP measures Positive Peace using the Positive Peace Index (PPI), which measures the level of Positive Peace in 163 countries or independent territories, covering over 99 per cent of the world's population. The PPI is composed of 24 indicators to capture the eight domains of Positive Peace. Each of the indicators was selected based on the strength of its statistically significant relationship to the absence of violence. For more information and the latest results of the PPI, see the 2017 Positive Peace Report, available from **www.visionofhumanity.org.**

THE EIGHT PILLARS OF POSITIVE PEACE

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 and determine the soundness of the business environment. Business competitiveness and economic productivity are both associated with the most peaceful countries, as is the presence of regulatory systems that are conducive to business operations.

ACCEPTANCE OF THE RIGHTS OF OTHERS

Formal laws guarantee basic human rights and freedoms and the informal social and cultural norms that relate to behaviours of citizens serve as proxies for the level of tolerance between different ethnic, linguistic, religious, and socio-economic groups within the country. Similarly, gender equality and worker's rights are important components of societies that uphold acceptance of the rights of others.

GOOD RELATIONS WITH NEIGHBORS

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. This factor is also beneficial for business and supports foreign direct investment, tourism and human capital inflows.

FREE FLOW OF INFORMATION

Free and independent media disseminates information in a way that leads to greater openness and helps individuals and civil society work together. This is reflected in the extent to which citizens can gain access to information, whether the media is free and independent, and how well-informed citizens are. This leads to better decision-making and more rational responses in times of crisis.

HIGH LEVELS OF HUMAN CAPITAL

A skilled human capital base reflects the extent to which societies care for the young, educate citizens and promote the development of knowledge, thereby improving economic productivity, enabling political participation and increasing social capital. Education is a fundamental building block through which societies can build resilience and develop mechanisms to learn and adapt.

LOW LEVELS OF CORRUPTION

In societies with high corruption, resources are inefficiently allocated, often leading to a lack of funding for essential services. The resulting inequities can lead to civil unrest and in extreme situations can be the catalyst for more serious violence. Low corruption can enhance confidence and trust in institutions.

EQUITABLE DISTRIBUTION OF RESOURCES

Equity in access to resources such as education and health, as well as, although to a lesser extent, equity in income distribution.

BOX 4.2

The Pillars of Positive Peace

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

Attitudes

...refer to norms, beliefs, preferences and relationships within society. Attitudes influence how people and groups cooperate in society, and can both impact and be impacted upon by the institutions and structures that society creates.

Institutions

...are the formal bodies created by governments or other groups, such as companies, industry associations or labour unions. They may be responsible for supplying education or rule of law, for example. The way institutions operate is affected by both the attitudes that are prevalent within a society and the structures that define them.

Structures

... can be both formal and informal and serve as a shared code-of-conduct that is broadly applicable to most individuals. Informally it could be as simple as the protocol for queuing, or formally, as complex as tax law. Interactions are often governed by informal rules and structures, such as politeness, societal views on morality or the acceptance or rejection of other's behaviours.

> High levels of Positive Peace occur where attitudes make violence less tolerated, institutions are more responsive to society's needs and structures underpin the nonviolent resolution of grievances.

These Pillars interact together in a systemic way to build a society's *attitudes, institutions and structures*. High levels of Positive Peace occur where attitudes make violence less tolerated, institutions are more responsive to society's needs and structures underpin the nonviolent resolution of grievances.

Attitudes, institutions and structures are all highly interrelated, and can be difficult to distinguish between. But what is more important than drawing clear lines between them is the understanding of how they interact as a whole.

IEP does not attempt to define the specific *attitudes, institutions and structures* necessary for Positive Peace, as these will very much be dependent on the cultural norms of a specific society and its current trajectory. What is appropriate in one country may not be appropriate in another. Rather, it aims to provide a framework that each country can adopt and adapt to local contexts. This is critical because approaches to peace are best developed locally.

Positive Peace has the following characteristics:

- **Systemic and complex:** it is complex; progress occurs in non-linear ways and can be better understood through its relationships and communication flows rather than through events.
- **Virtuous or vicious:** it works as a process by which negative feedback loops ("vicious" cycles of violence) or positive feedback loops ("virtuous" cycles of violence) can be created and perpetuated, respectively.
- **Preventative:** though overall Positive Peace levels tend to change slowly over time, building strength in relevant Pillars can prevent violence and violent conflict.
- **Underpins resilience and nonviolence:** Positive Peace builds the capacity for resilience and incentives for non-violent means of conflict resolution. It provides an empirical framework to measure an otherwise amorphous concept, resilience.
- **Informal and formal:** it includes both formal and informal societal factors. This implies that societal and attitudinal factors are equally as important as state institutions.
- **Supports development goals:** Positive Peace provides an environment in which development goals are more likely to be achieved.

Trends in Positive Peace

KEY FINDINGS

- Positive Peace was improving from 2005 until a plateau in 2013 and a subsequent deterioration in 2016.
- Despite improvements in most other Pillars, the Acceptance of the Rights of Others has been deteriorating in Europe and North America since 2005.
- Acceptance of the Rights of Others deteriorated across every region from 2013 to 2016.
- The region that experienced the most significant deteriorations across the highest number of Pillars was the Middle East and North Africa (MENA) region, followed by South America.
- The United States has deteriorated in Positive Peace over the last 11 years dropping by 2.4 per cent or the 30th largest deterioration. This deterioration has accelerated over the last three years.

The average global level of Positive Peace increased steadily between 2005 and 2013, as shown in figure 4.1. However, this trend levelled out in the two years to 2015, after which Positive Peace deteriorated in 2016. While it is too early to determine if this deterioration signifies a new trend, IEP has analysed the disaggregated trends in Positive Peace pre and post 2013 in order to better understand the world's slowing progress.

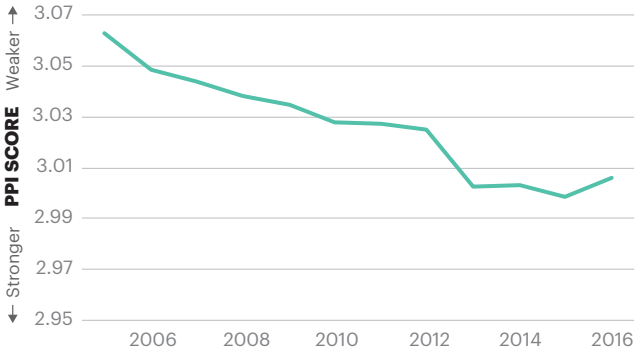
Figure 4.2 illustrates that four Pillars experienced trend reversals (meaning they were improving pre 2013 but deteriorated post 2013): *Acceptance of Rights of Others*, *High Levels of Human Capital*, *Free Flow of Information* and *Sound Business Environment*.

A regional analysis of the Positive Peace Index reveals that Positive Peace has been deteriorating in North America, South America and MENA since 2013, as shown in figure 4.3. MENA and South America experienced significant deteriorations in almost every Pillar from 2013 to 2016, a sharp contrast to the steady

FIGURE 4.1

Global average Positive Peace score, 2005-2016

Positive Peace improved on average between 2005 and 2013, but has stagnated in the last three years.

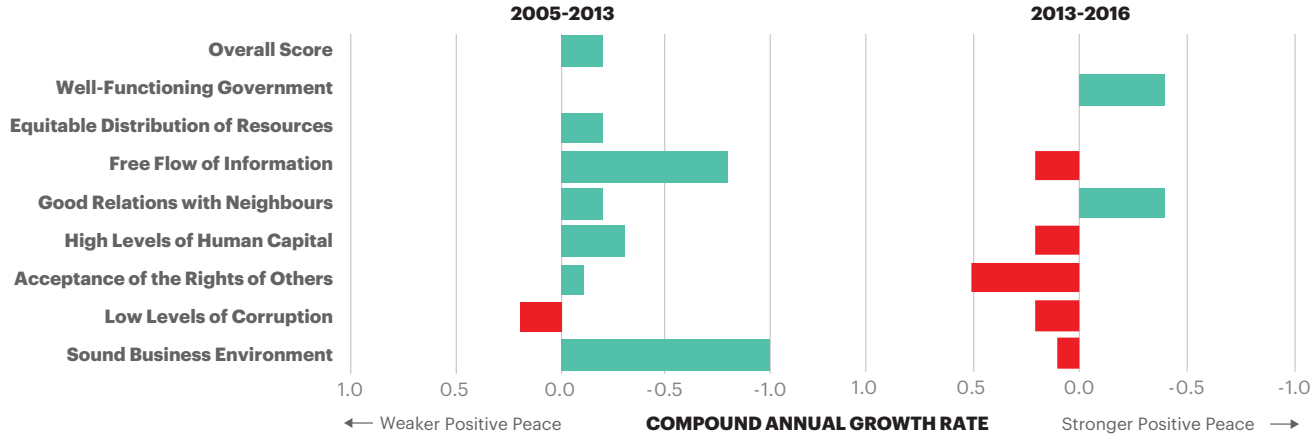


Source: IEP

FIGURE 4.2

Global change in Positive Peace Pillars, 2005-13 & 2013-16

Five Pillars – Acceptance of the Rights of Others, High Levels of Human Capital, Free Flow of Information, Low Levels of Corruption and Sound Business Environment – show an average deterioration post 2013.

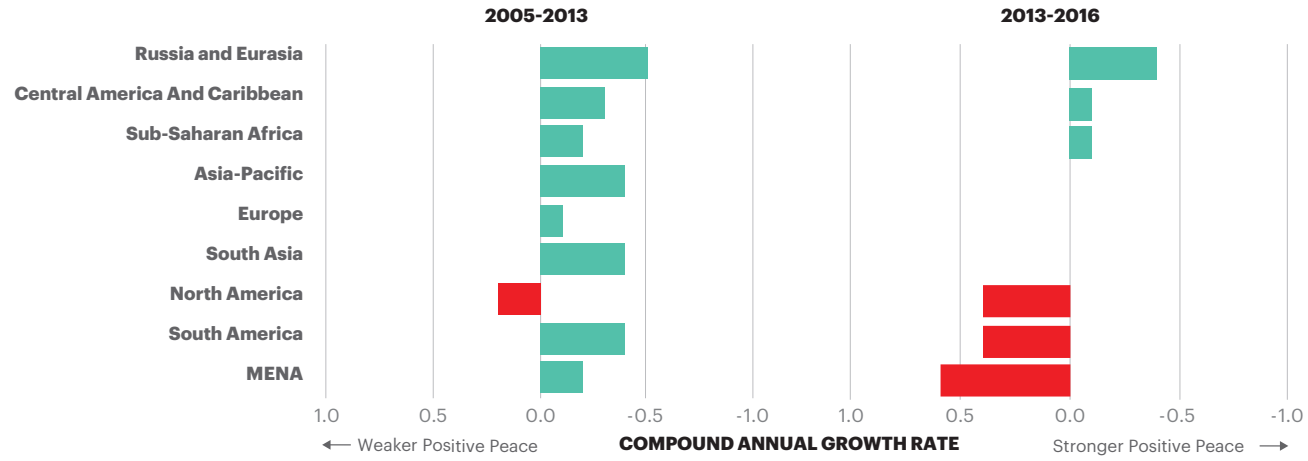


Source: IEP

FIGURE 4.3

Regional change in Positive Peace Pillars, 2005-13 & 2013-16

Three regions - MENA, South America and North America - experienced deteriorations in Positive Peace post-2013.

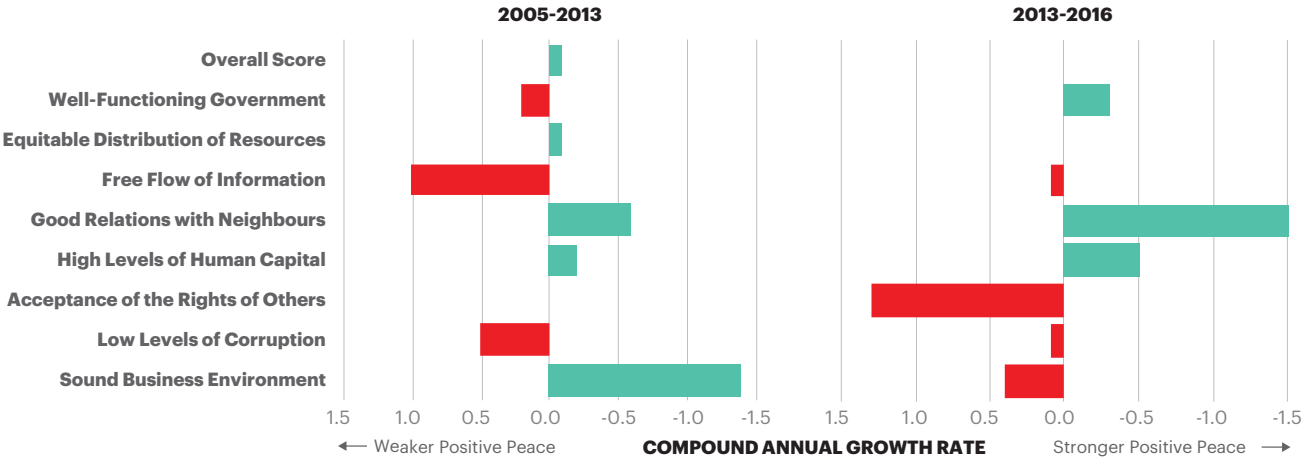


Source: IEP

FIGURE 4.4

Change in Positive Peace Pillars, Europe, 2005-13 & 2013-16

Acceptance of the Rights of Others has deteriorated significantly since 2013.

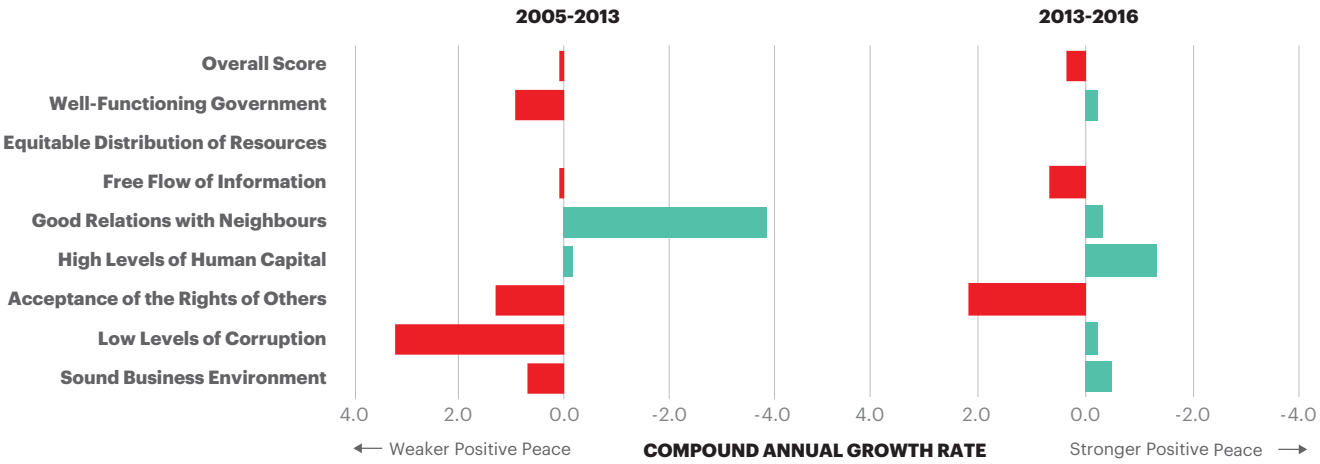


Source: IEP

FIGURE 4.5

Change in Positive Peace Pillars, United States, 2005-13 & 2013-16

Acceptance of the Rights of Others has been deteriorating in the US for the last decade.



Source: IEP

> There has been a notable deterioration in *Acceptance of the Rights of Others* in the two most peaceful regions of the world, as a result of rising grievances between ethnic and social groups.

improvement that occurred between 2005 and 2013. In all other regions, the deterioration in Positive Peace was limited to a smaller number of Pillars.

In Europe and North America, which are the two most peaceful regions in the world, there has been a prominent deterioration in *Acceptance of the Rights of Others*, as a result of increased levels of grievances between different ethnic and social groups.

POSITIVE PEACE IN EUROPE

Figure 4.4 illustrates the changes in the Pillars of Positive Peace in Europe before and after 2013. *Acceptance of the Rights of Others* deteriorated by 4.5 per cent over the 11 years to 2016, largely due to changes in the last three years. The Pillar with the largest improvement was *Good Relations with Neighbours* which improved by 9.3 per cent over the 11 year period to 2016.

POSITIVE PEACE IN THE UNITED STATES

The United States' trend in Positive Peace has now been steadily deteriorating since 2005. However, trends across the Pillars have not been steady, with some Pillars improving prior to 2013 and then deteriorating afterwards, and vice versa.

The Pillar that had the largest deterioration post 2013 was *Acceptance of the Rights of Others*. During the eight years prior to 2013, *Acceptance of the Rights of Others* deteriorated substantially by 11.1 per cent, after which the trend continued, dropping further by 6.8 per cent since 2013.

The Pillar with the largest rate of improvement before 2013 was *Good Relations with Neighbours*, improving by 27.4 per cent overall. This improvement slowed down significantly and resulted in only 1 per cent improvement post 2013.

BOX 4.3

Background conditions in the US and Europe

The changing trends in the US and Europe after 2013 coincide with the rise in populist political movements and increasing concerns surrounding terrorism and immigration. Unrest and conflict in the Middle East have led to the highest levels of refugee flows in Europe since World War II, causing significant social upheaval. This has occurred in conjunction with a significant increase in terrorist activity, deteriorating employment conditions and a stagnation in wages. This has led to a backlash against immigration, which has impacted. Acceptance of the Rights of Others. Similarly, in the US heightened fears of terrorism have also led to increased discussions and political tensions around immigration.

Such debates have seen major shifts in the political landscape of these two regions with significant implications for both positive and negative peace. Increased political, cultural, and social tensions have begun to spill over into incidents of violence. For example, in the months following Brexit, violence against immigrants spiked, and violent assaults on both sides of the asylum seekers debate in continental Europe have received significant press attention. In the US, the rise of far-right groups and concerns over police violence have been central to heightened tensions and violent clashes in many cities.

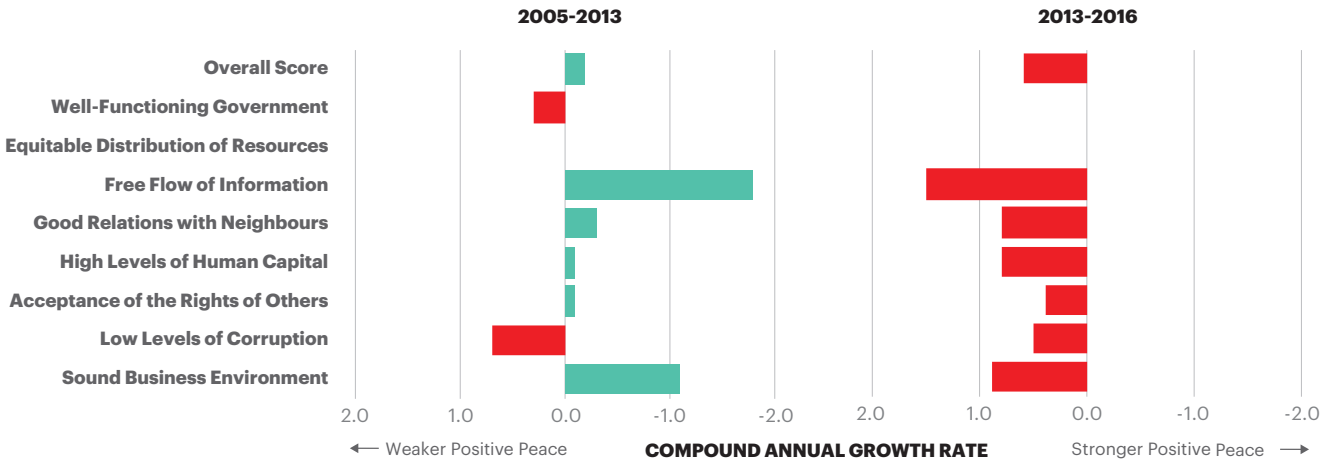
POSITIVE PEACE IN THE MIDDLE EAST & NORTH AFRICA

The MENA region continues to feel the effects of a number of conflicts and humanitarian crises following the Arab Spring of 2011 and the civil wars in Libya, Yemen and Syria. The situation is particularly acute in Syria, Libya, Yemen, and Iraq, although almost every country in the region has been affected to a certain

FIGURE 4.6

Change in Positive Peace Pillars, Middle East and North Africa, 2005-13 & 2013-16

Almost every pillar deteriorated in the MENA region from 2013 to 2016.

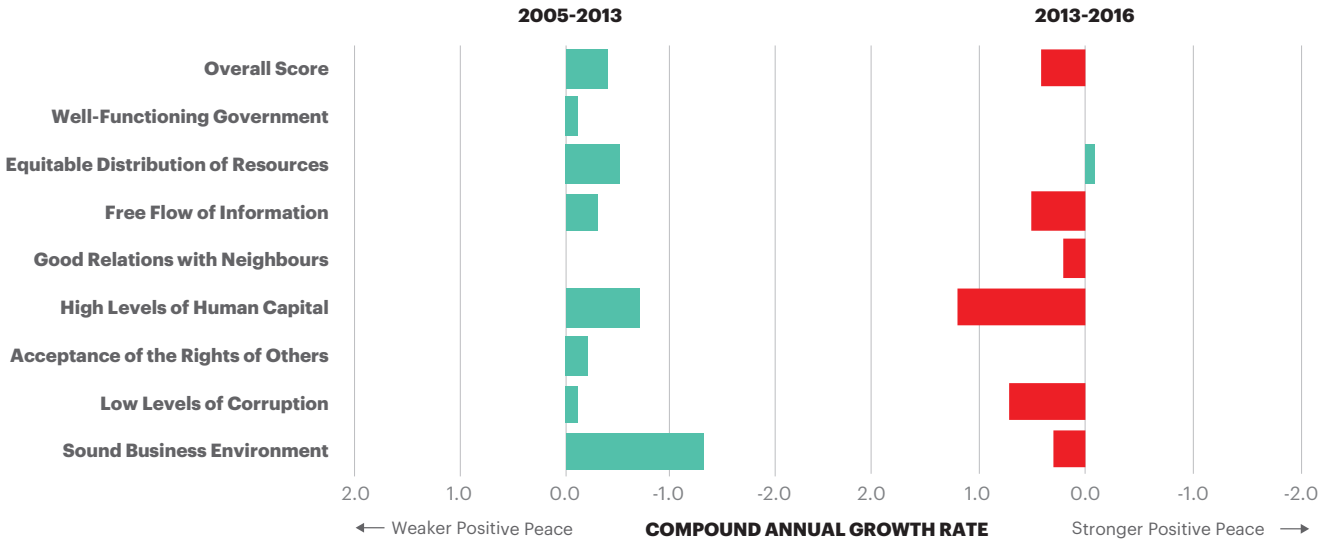


Source: IEP

FIGURE 4.7

Change in Positive Peace Pillars, South America, 2005-13 & 2013-16

South America deteriorated across most pillars from 2013 to 2016, a complete reversal of the trend from 2005 to 2013.



Source: IEP

degree. The constant conflict and upheaval has had a significant effect on Positive Peace. For example, Syria and Libya are facing prolonged civil wars, with their annual average Positive Peace scores deteriorating since 2013. The most notable deterioration in these two countries occurred in terms of *hostility to foreigners*, an indicator in the *Good Relations with Neighbours*. Hostility to foreigners escalated by 61.5 per cent in Libya from 2013 to 2016, while in Syria this indicator reached the least peaceful score possible (5 out of 5) over the same period.

Somewhat surprisingly, the level of Positive Peace actually increased in the region in the lead-up to the events of the Arab Spring, with improvements on six of the eight Pillars from 2005 to 2013. There were particularly notable improvements on the *Free Flow of Information* and *Sound Business Environment* Pillars. However, both *Well-Functioning Government* and *Low Levels of Corruption* declined from 2005 to 2013. Transition analysis conducted by IEP has found that these two Pillars are particularly important for countries with low levels of Positive Peace, and both are key indicators for future negative changes in peacefulness.

> “In Colombia, improvements in Positive Peace preceded the historic peace accord with the Revolutionary Armed Forces of Colombia (FARC).

POSITIVE PEACE IN SOUTH AMERICA

In South America, Brazil, Chile, and Venezuela had the largest deteriorations in Positive Peace from 2013 to 2016 while Colombia had the most significant improvement.

Chile remains the South American country with the highest level of Positive Peace. However, in line with the overall trend, Chile experienced deteriorations in post 2013 period.

Brazil, the largest country in South America, accounting for more than 49 per cent of the region’s population, deteriorated by 5.3 per cent since 2013, with the largest deterioration occurring on the *Good Relations with Neighbours* Pillar. The primary driver of this deterioration was a change in the *hostility to foreigners* indicator, which deteriorated substantially in 2014. South America overall had a small deterioration in the *Acceptance of the Rights of Others* Pillar, mirroring the global trend. Every region in the world saw a deterioration on this Pillar from 2013 to 2016.

At the beginning of 2013, Venezuela already had the lowest level of Positive Peace of any country in South America, which subsequently deteriorated even further. Positive Peace in Venezuela has been affected by the current economic crisis and associated social unrest. In 2016, consumer prices rose by 800 per cent, and the economy contracted by 10 per cent.[3] The economic collapse in the country has led to a public health emergency. About 75 per cent of the population reported having lost body weight averaging 8.6 Kilos in 2016.[4] Due to a severe shortage in medical equipment and medicine, many have died from diseases that were easily treatable.[5]

In Colombia, improvements in Positive Peace preceded the historic peace accord with the Revolutionary Armed Forces of Colombia (FARC). The revised peace accord, which was signed in November 2016, brought to an end to the more than 50-year old conflict between the Colombian Government and the FARC. Colombia made large improvements in two key indicators of Positive Peace: Regional Integration improved by 33.3 per cent and World Press Freedom improved by 32.5 per cent since 2012. Democratic Political Culture and Economic Freedom also improved by 8.7 per cent since 2012.

What precedes a change in peacefulness?

Leading Indicators of Positive Peace

KEY FINDINGS

- A large number of Positive Peace indicators need to improve before Negative Peace can improve. However, only a few key indicators of Positive Peace need to deteriorate in order to trigger increases in violence.
- Sound Business Environment, High Levels of Human Capital, Free Flow of Information and Well-Functioning Government are the key Pillars of Positive Peace that improve prior to the largest improvements in internal peace.
- Low Levels of Corruption, Acceptance of the Rights of Others and Well-Functioning Government are the key Pillars that deteriorate prior to the largest deteriorations in internal peace.
- 70 per cent of the countries that had the largest improvements in their GPI scores also had a sustained rise in their Positive Peace scores prior to the improvements.

IEP's analysis finds that there is a strong connection between future changes in peacefulness and past performance in Positive Peace. The twenty countries that experienced the largest improvements in Negative Peace, as measured by the GPI, since 2013 had experienced sustained improvements in their Positive Peace scores for many years prior to their improvements in the GPI. Out of these 20 countries that improved on the GPI, 14 countries had improvements in their Positive Peace scores from 2007 to 2014. Of the remaining six countries, two recorded no change while four deteriorated.

Figure 4.8 highlights the specific Positive Peace indicators that improved the most for the countries with the largest improvements in the GPI. 19 countries improved on the business environment indicator, 18 improved on the mobile phone subscription indicator, 14 improved on the *perceptions of corruption*, *government effectiveness* and *secondary school enrolment rates* indicators and 13 countries improved on the GDP per capita and *youth development* index indicators.

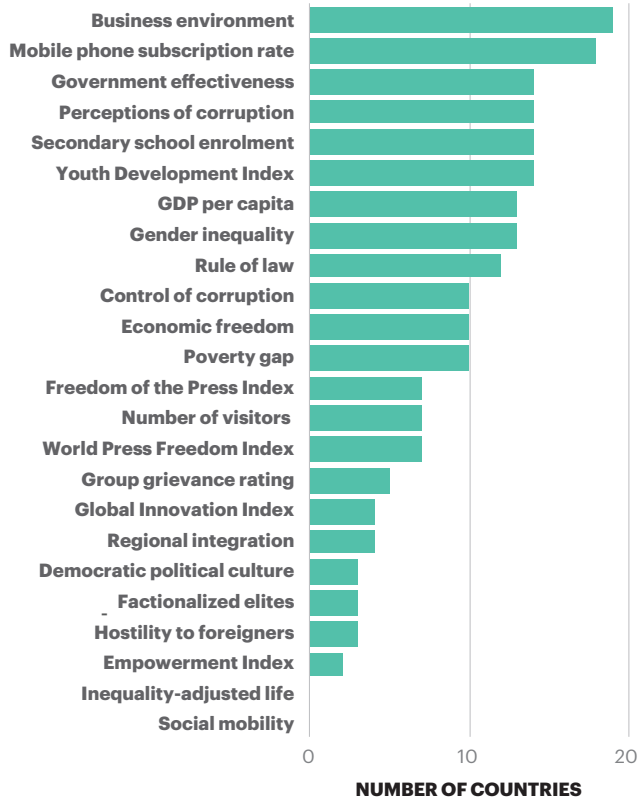
Similarly, IEP analysed the changes in Positive Peace for the 20 countries that experienced the largest deteriorations in the GPI since 2013. Ten out of 20 countries had an overall deterioration in Positive Peace scores prior to their fall. One had no change, while nine improved in Positive Peace. This indicates that by only analysing the overall change in Positive Peace it is not possible to get a strong prediction of future falls in peace. However, when analysing deteriorations in individual indicators a clear picture does emerge.

Figure 4.9 highlights how many countries deteriorated on key indicators of Positive Peace prior to their deterioration in the GPI. With regard to specific indicators, 14 countries deteriorated on the factionalised elites and *group grievances* indicators, 12 on the freedom of the press indicator, and ten on the control of corruption and government effectiveness indicators.

FIGURE 4.8

Improvements in Positive Peace by indicator (2007-2014), 20 countries with the largest improvement on the GPI (2013-2016)

Improvements in the *business environment*, *mobile phones*, and *government effectiveness* indicators are common leading indicators of large improvements in peacefulness.



Source: IEP

An analysis was also performed on the 23 countries which had an episode of instability between 2009 and 2016. An episode of instability was defined as 25 or more deaths due to armed conflict in a given year.

Of the 23 countries that experienced instability, 15 deteriorated in World Press Freedom, 12 deteriorated in Factionalised Elites, Group Grievances and Empowerment Index, and 11 deteriorated in Control of Corruption. This strongly suggests that a deterioration on these Positive Peace indicators is a sign of impending instability in a country.

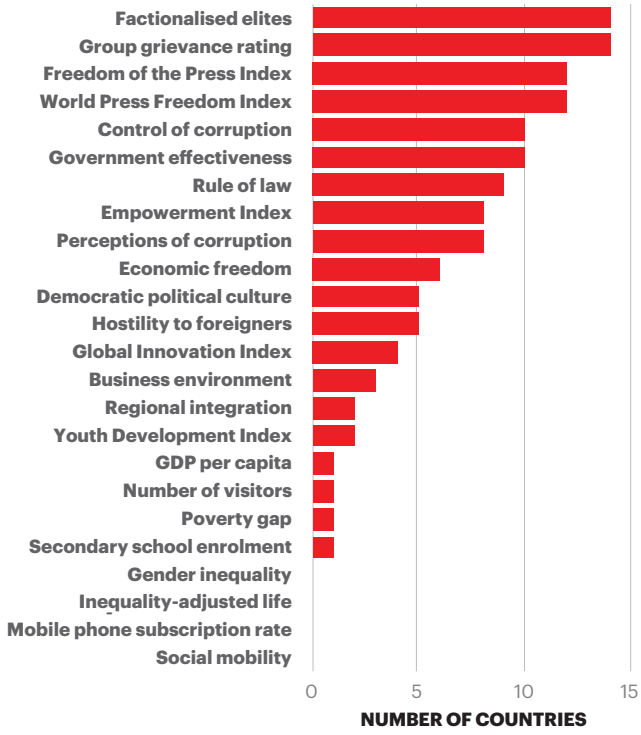
At the Pillar level, deteriorations in *Low Levels of Corruption*, *Acceptance of the Rights of Others*, *Well-Functioning Government* and *Free Flow of Information* are common leading indicators of future instability.

> *Low Levels of Corruption, Acceptance of the Rights of Others, Well-Functioning Government* and *Free Flow of Information* are common leading indicators of future instability.

FIGURE 4.9

Deteriorations in Positive Peace by indicator (2007-2014), 20 countries with the largest deterioration on the GPI (2013-2016)

Deteriorations in Factionalised Elites, Group Grievances, Freedom of the Press and Control of Corruption are common leading indicators of severe deteriorations in peacefulness.



Source: IEP

IMPROVEMENTS & DETERIORATIONS IN POSITIVE PEACE

The previous results show that improving peacefulness requires prior improvements across a number of Positive Peace indicators. Improvements in peacefulness are more closely associated with prior improvements in indicators of an economic nature, whereas for deteriorations in peace or the onset of armed conflict, only a few indicators of Positive Peace tend to deteriorate prior the deteriorations in peace, and they tend to be political in nature.

These results highlight the link between the *attitudes*, *institutes* and *structures* of a society and the subsequent peacefulness within that society. Inclusive *attitudes, institutions and structures* lead to increased peacefulness. Conversely, weak *attitudes, institutions and structures* can cause instability. However, this is not to imply that this relationship is predetermined by a set of initial conditions in a linear cause and effect model. Peace is systemic and the causes are difficult to untangle. Additionally, Pillars or indicators of Positive Peace associated with either improvements or deteriorations in peacefulness have their own interdependencies while also simultaneously impacting on the levels of peacefulness at any given point of time.

For example, *Free Flow of Information* with its indicators that relate to freedom of press does affect *Well-Functioning Government*, *Low Levels of Corruption* and *Acceptance of the Rights of Others*. Simultaneous deteriorations in these four Pillars can significantly increase the likelihood of the onset of instability. Similarly, improving *Sound Business Environment* affects other Pillars that are closely related to improving peacefulness. This Pillar has the potential to improve *Well-Functioning Government* and *High Levels of Human Capital* through higher tax revenue. It can also help improve *Free Flow of Information*.

Given these mutual interdependencies among the Pillars and indicators of Positive Peace, IEP has adopted a 'systems approach' and considers peace as a process rather than a static concept. Building peace can also initiate a virtuous cycle whereby improvements now sets in motion a dynamic that leads to greater improvements in peace in the future.

However, uneven or inappropriate sequencing of improvements in the Pillars of Positive Peace can lead to deteriorations in peacefulness. For example, raising education levels without corresponding improvements in employment opportunities can be harmful for peacefulness. The fallout from the Arab Spring is one such example. Several countries from the Middle East and North Africa have had years of violent conflict in the wake of the Arab Spring. These countries were strong or improving in the Pillars of economic nature such as *Sound Business Environment* and *High Levels of Human Capital*. Conversely, Pillars of political nature such as *Acceptance of the Rights of Others*, *Low Levels of Corruption*, and *Well-Functioning Government* were deteriorating.

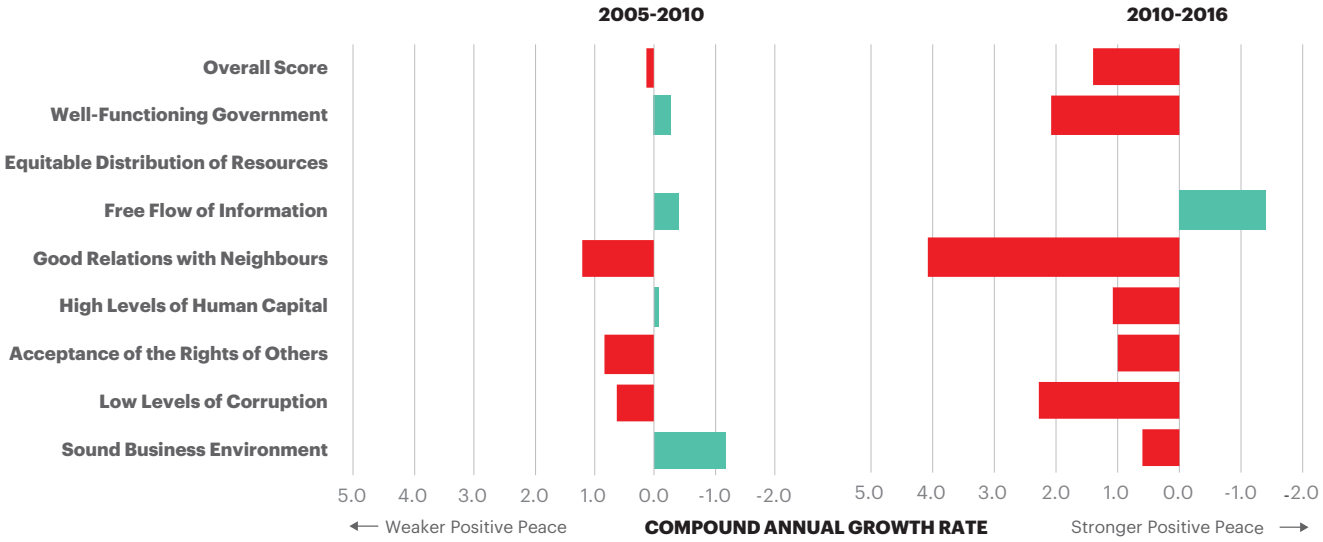
DETERIORATIONS

Syria, Yemen and Libya had the largest deteriorations in peacefulness in the years following the Arab Spring uprisings. Figure 4.10 provides the annual rate of change in the average score of each Pillar for these three countries pre-2010 and post-2010.

FIGURE 4.10

Change in Positive Peace, Syria, Yemen and Libya, pre and post Arab Spring

Syria, Yemen and Libya all saw deteriorations in Positive Peace in the years following the 2010-2011 conflicts.

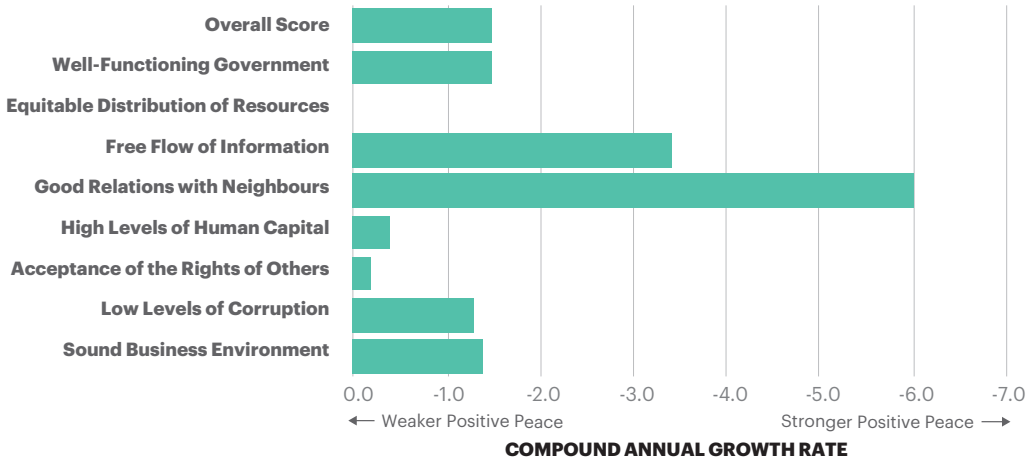


Source: IEP

FIGURE 4.11

Change in Positive Peace, Côte d'Ivoire, 2005-2014

Côte d'Ivoire improved in seven out of eight Pillars of Positive Peace prior to improving in the GPI.



Source: IEP

This finding shows that *Equitable Distribution of Resources*, *High Levels of Human Capital* and *Sound Business Environment* were at relatively better levels in the pre-2010 period. While the *Sound Business Environment* Pillar was improving, *Low Levels of Corruption* and *Acceptance of the Rights of Others* (which were already weak) deteriorated further in the post-2010 period. Such a combination created the environment where individual aspirations were increasing. Countering this however was a limited ability to exercise increased agency due to deteriorations in *Low Levels of Corruption* and *Acceptance of the Rights of Others*. These deteriorations had cumulative effect on *Good Relations with Neighbours*, which deteriorated most significantly post-2010, creating an environment where outside interference compounded the problem, leading to a near total collapse of the state.

IMPROVEMENTS

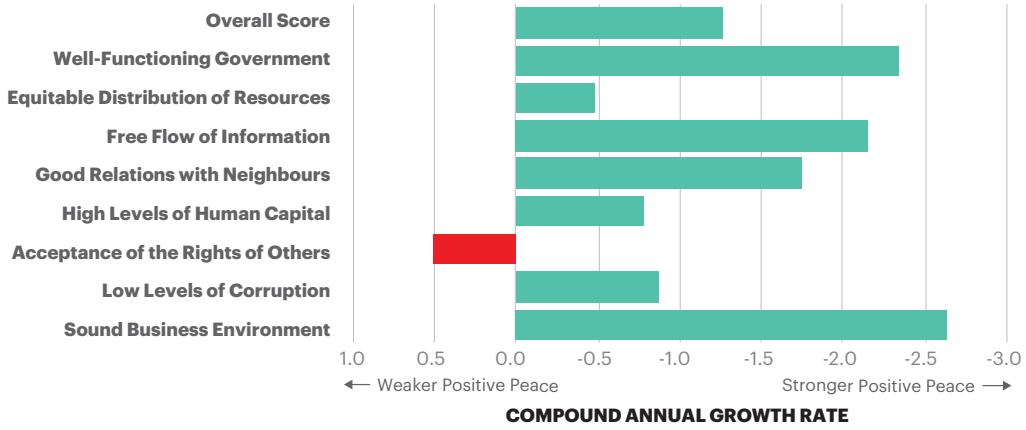
To explore the effect of Positive Peace on improvements in the GPI, it is useful to investigate the countries with the largest improvements in Positive Peace since 2013: Portugal, Georgia, Côte d'Ivoire, Norway and Peru. These countries made the largest improvements across a range of indicators. Norway and Portugal were already amongst the most peaceful nations in 2013. Peru, Georgia and Côte d'Ivoire were at 122nd, 130th and 150th on the GPI in 2013, respectively. Deeper examination of the latter three countries reveal that these countries were consistently improving on most Pillars of Positive Peace prior to making their largest improvements in peacefulness. These countries faced the significant challenges of protracted civil wars and ethnic violence in their recent past.

Côte d'Ivoire experienced five years of civil war from 2002 to 2007, but began building *political stability* after 2010. In recovering from the civil war, the country faced the immediate challenge of building a civil society and state capacity with a relatively low GDP per capita of $1220 PPP in 2010. *Good Relations with Neighbours* and

FIGURE 4.12

Change in Positive Peace, Georgia, 2005-2014

Despite a deterioration in Acceptance of the Rights of Others, Georgia improved on the seven other pillars before a substantial rise in the GPI.

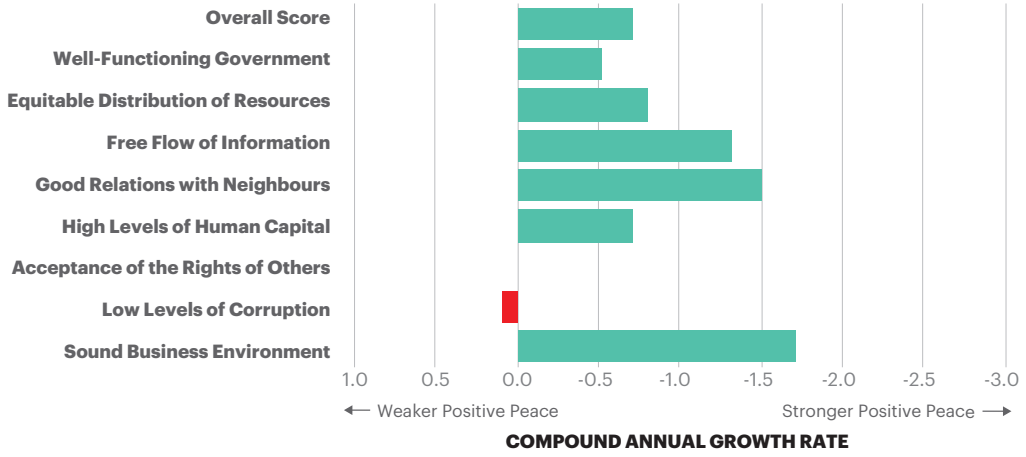


Source: IEP

FIGURE 4.13

Change in Positive Peace, Peru, 2005-2014

Six out of seven Pillars improved in the lead up to Peru's improvemet in the GPI.



Source: IEP

Free Flow of Information in Côte d'Ivoire paved the way for larger improvements in peacefulness; however, all Pillars improved, underscoring the systemic nature of Positive Peace.

Georgia's GDP per capita was about 2.5 times higher than Côte d'Ivoire in 2010. Large improvements in the political and business dimensions of Positive Peace, that is, *Well-Functioning Government* and *Sound Business Environment* paved the way for improving peace. All of the Pillars improved except for *Acceptance of the Rights of Others*, which deteriorated because of conflict in the Abkhazia and South Ossetia regions.

Since achieving independence in 1991, Georgia has faced many challenges. Due to continued separatist and ethnic conflicts in Abkhazia and South Ossetia, Georgia's economy stagnated, corruption rose and the government became increasingly ineffective.[6] It was only after the 'Rose Revolution' in 2003 that the new regime focused its attention on building state capacity and economic growth. The name 'Rose Revolution' itself is indicative of existing levels of Positive Peace in Georgia – people marched in the streets with roses to peacefully oppose what was widely believed to be a rigged election.

Peru struggled with a leftist insurgency from 1980 to 2000. Democratic institutions began to improve after President Alberto Fujimori was deposed in 2000. Peru is one of the fastest growing economies in the region in the last decade and has been able to significantly reduce its level of poverty – the percentage of the number of people below the poverty line of US$5.50 a day, 2011 PPP, fell from 49.9% in 2004 to 26.1 per cent in 2013.[7]

All three countries covered in this analysis improved in most Pillars of Positive Peace, with few exceptions. In the case of Côte d'Ivoire every Pillar improved except for *Equitable Distribution of Resources*, which remained stable during the period. Georgia improved in all Pillars except for *Acceptance of the Rights of Others*. Peru improved in every Pillar except two: *Low Levels of Corruption* and *Acceptance of the Rights of Others*. These figures reiterate that improving peacefulness requires comprehensive improvements in Positive Peace.

Positive Peace & the economy

KEY FINDINGS

- Positive Peace provides the framework for robust economic development.
- Non-OECD countries that improve in Positive Peace on average had 1.45 percentage points higher annual GDP growth between 2005 and 2016 compared to non-OECD countries that deteriorated in Positive Peace.
- Non-OECD countries that deteriorated significantly in Positive Peace from 2010 to 2016 had a fall in their credit rating of 4.5 points on average on a scale of 0 to 22.
- Improvements in Positive Peace are linked to stronger domestic currencies. A one per cent increase in Positive Peace is associated with a 0.9 per cent appreciation of the domestic currency among non-OECD countries.
- The average appreciation in the exchange rate for non-OECD countries that improved in Positive Peace was 1.4 per cent, while countries that deteriorated in Positive Peace depreciated on average by 0.4 per cent between 2005 and 2016.

IEP's Positive Peace framework describes the *attitudes, institutions and structures* that create and sustain peaceful societies. While the Positive Peace Index (PPI) contains some economic indicators, IEP's research finds that broader improvements in Positive Peace initiate a feedback loop in the economic system as a whole. As Positive Peace improves, currencies tend to appreciate and a country's credit rating improves or remains at a high level.

IEP's analysis of the impact of Positive Peace on the economy was confined to non-OECD countries for the period 2005 to 2016, so as to reduce the bias that would emerge due to the high levels of peace and the economic strength of OECD countries. However, these results are generally valid and even stronger when OECD countries are included in the analysis.

EXCHANGE RATES

Figure 4.14 shows changes in the real effective exchange rate (REER) adjusted for the effects of inflation compared to changes in Positive Peace.[8] This shows that improvements in Positive Peace are associated with a currency appreciation. IEP's analysis indicates that every one per cent increase in Positive Peace is linked to a 0.9 per cent strengthening of the domestic currency.

Figure 4.14 shows that countries that improved in Positive Peace between 2005 and 2016 experienced on average a 1.4 per cent currency appreciation compared to 0.4 per cent currency depreciation for countries that deteriorated in Positive Peace.

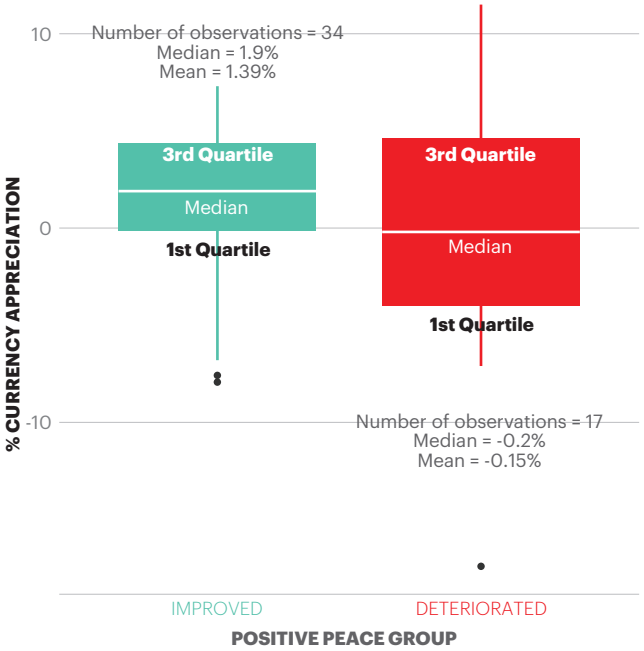
The underlying cause of the improvement is systemic, in that it comes from the interaction of many positive factors as measured by Positive Peace. The same factors that create peace also create the underlying conditions for many other things that society considers important, such as a strong business environment.

The most immediate cause of an appreciation of a domestic currency is its increased demand relative to other currencies.

FIGURE 4.14

Year–on–year change in real effective exchange rates by Positive Peace group, non–OECD countries, 2005–2016

Countries that improved in Positive Peace experienced higher rates of appreciation in the real value of their currency.



Source: WDI, IEP calculations

There can be many causes for this increased demand, such as improvements in peacefulness in the region motivating businesses to invest and outsource in that country, and increases in tourism. These activities lead to increased demand for the domestic currency, causing the domestic currency to appreciate relative to other currencies. Because the given currency can now buy more units of a foreign currency, appreciation increases the purchasing power of incomes and returns on capital earned by residents of the country and foreign investors. This increased purchasing power encourages imports, posing problems in maintaining a trade balance in the short term. However, sustained improvements in peace will improve the inflow of investment in the long term. Thus, trade deficits can be offset using surpluses in the capital account without any interest payment liabilities in future.

CREDIT RATING

There is a similar relationship between changes in Positive Peace and fluctuations in a country's credit score.[9]

Countries that made significant improvements in Positive Peace between 2010 and 2016 were likely to either retain or improve their credit rating during that period. However, countries that deteriorated tended to be downgraded by approximately two credit rating levels. This result is more pronounced for non-OECD countries as seen in figure 4.16. The average level of downgrading for non-OECD countries that deteriorated in Positive Peace was 4.5 points.

Of the 38 non-OECD countries for which credit rating scores were available, 27 countries improved and 11 deteriorated in Positive Peace. Of the 27 countries that improved in Positive Peace, 11 were upgraded in credit rating while nine retained their scoring and seven of them were downgraded. All of the 11 countries that deteriorated in Positive Peace had their credit score downgraded. Venezuela and Mozambique experienced the largest deteriorations in their credit rating – Venezuela was downgraded to 'SD' (selective default) in 2017 from 'BB-' in 2010, while Mozambique was downgraded to 'SD' from 'B+' according to Standard and Poor's credit rating.

These findings suggest that as Positive Peace improves, uncertainties regarding meeting future commitments stipulated in contracts significantly decline. A more robust economy provides governments with higher taxation receipts, thereby allowing faster and more certain repayments of loans. As improvements in Positive Peace lead to a strengthening of the rule of law, third party (court of law) arbitration in executing contracts becomes effective and less costly.

As Positive Peace improves, both the demand and supply sides of the economy get positive feedback.

The supply side of the economy improves because various bottlenecks in the economy begin to dissolve. The improvement in Positive Peace has many positive effects on the supply side. Three of the key effects are:

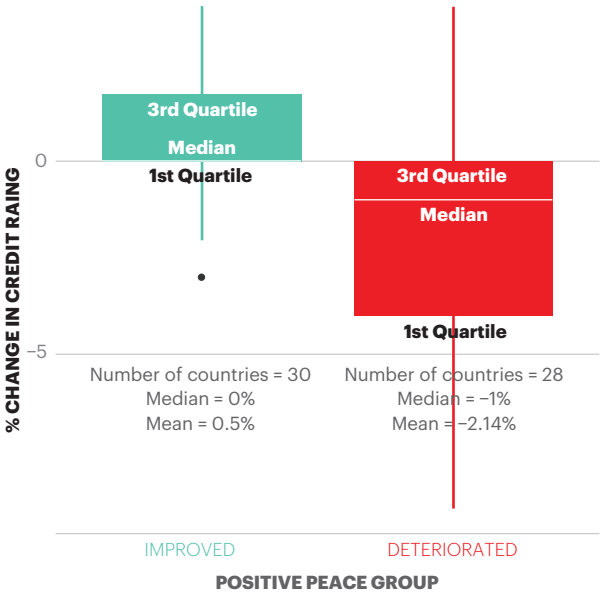
- It enhances countries' capacity to enforce contracts through third party (court of law) arbitration.
- It helps excluded groups to join the labour market, bringing with them new and innovative ideas.
- The logistical efficiency of the economy improves as the impact of corruption along the value chain of various economic activity begins to loosen.

Similarly, the demand side of the economy also gets a boost. Risks and uncertainties regarding future events are significantly reduced due to increased peacefulness in the society. Additionally, as

FIGURE 4.15

Change in credit rating score by Positive Peace group, 2005 to 2016

Countries that deteriorated in Positive Peace also experienced a fall in their credit rating.

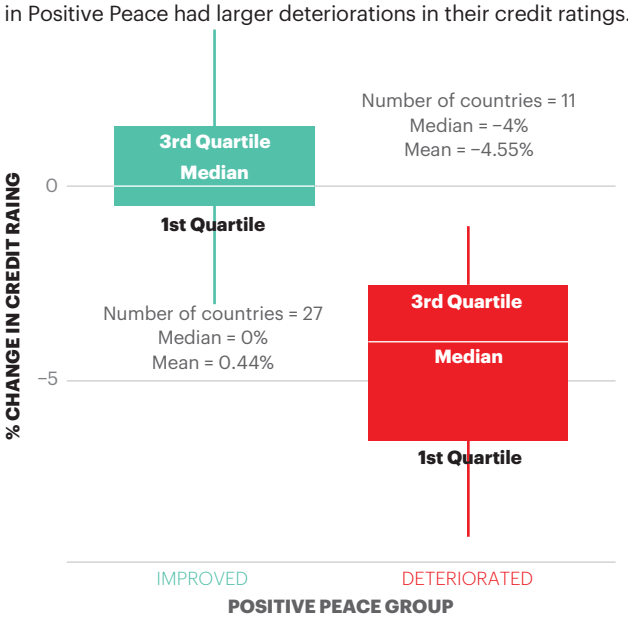


Source: S&P Global Ratings, IEP calculations

FIGURE 4.16

Change in credit rating by Positive Peace group, non–OECD countries, 2010 to 2016

Countries that improved in Positive Peace also experienced an improvement in their credit rating, while those that deteriorated in Positive Peace had larger deteriorations in their credit ratings.



Source: S&P Global Ratings, IEP calculations

Positive Peace improves, so does the resilience of a society, which lessens the impact associated with future negative shocks. In turn, reduced uncertainties facilitate a clearer decision making process. This then leads to increased investment and consumption spending in the economy. Therefore, higher peacefulness, in addition to increasing the efficiency of the existing resources in the economic system, also makes available additional resources for the economy to grow. The impact on both supply and demand leads to increased GDP per capita growth, as shown in figure 4.17.

FIGURE 4.17

Positive peace vs log GDP per capita (2011 PPP dollars), 2005-2016

Every one per cent improvement in Positive Peace is associated with 2.9 per cent growth in real GDP per capita.

Source: WDI, IEP

POSITIVE PEACE AND ECONOMIC EFFICIENCY

Improvements in Positive Peace contribute to the efficient functioning of the economy by reducing frictions and rigidities in the economic system. As Positive Peace improves, undertaking economic activities becomes easier due to reduced bottlenecks or transition costs.

Table 4.1 (overleaf) shows the correlation between the Pillars of Positive Peace to macro-economic indicators relating to the efficiency of the economy. This highlights that while IEP's Positive Peace framework includes economic indicators in the *Sound Business Environment*, the remaining seven Pillars also correlate with many aspects of a well-functioning economy.

Improvements in *Free Flow of Information* can lead to the removal of informational bottlenecks or "black spots" regarding the differences in the prices of products and inputs in different markets. Thus it can help businesses to improve their profitability and encourage new entrants into the market. Similarly, effective third party arbitration of bilateral contracts, which is a major concern of businesses willing to invest in emerging economies, can significantly improve as key components of *Well-Functioning Government* improve, such as an effective and independent judiciary.

High levels of corruption create less transparency, higher costs and lower efficiency, which is a serious bottleneck for domestic as well as foreign investors. Often, foreign investors seeking to invest in emerging countries face the challenge of dealing with officials demanding bribes. IEP also found that reductions in effective tariff rates are associated with Low levels of Corruption, implying that in a corrupt environment domestic businesses are more likely to purchase protection, via graft, from competitive imports. This hurts the long-term interests of the local economy, as inputs are not being allocated to the industries that are most competitive for the country due to inefficiencies, less certainty and higher costs.

A healthy and educated working population is a key factor in promoting economic growth, which is captured by the *High Levels of Human Capital* Pillar. A greater stock of a highly capable workforce in the economy goes a long way in reducing costs and time-overruns of large projects. Additionally, *High Levels of Human Capital* also contributes to growing the knowledge-based economy, which is considered the most potent source of sustainable economic growth. *Sound Business Environment* is another key Pillar that has a strong relationship with the efficient functioning of the economy. It captures the ease with which businesses are able to obtain the necessary finances and navigate regulatory requirements.

Equitable Distribution of Resources improves respect for private property rights by reducing property related crime. The 2017 World Development Report has highlighted that higher levels of inequality are correlated to higher levels of crime, particularly property related crime. Greater *Acceptance of the Rights of Others* ensures larger workforce participation, which greatly enhances the available stock of human capital.

TABLE 4.1

Positive Peace pillars and the economic system

Seven of the eight Pillars of Positive Peace play a significant role in facilitating and strengthening specific aspects of the supply side of the economic system.

POSITIVE PEACE PILLAR	EFFECT ON THE ECONOMY AS THE PILLAR IMPROVES	WORLD DEVELOPMENT INDICATOR METRIC	CORRELATION COEFFICIENT WITH THE PP PILLAR
Free Flow of Information	Greater information	Borrowers from commercial banks (per 1,000 adults)	-0.44
	Increased start-ups	New business density (new registrations per 1,000 people ages 15-64)	-0.49
	Reduced tariff rates	Tariff rate, applied, weighted mean, all products (%)	0.48
	Cost savings	Logistics Performance Index: Ease of arranging competitively priced shipments	-0.53
Well-Functioning Government	Ease of third party arbitration of contracts	Property rights and rule based governance	-0.78
Low Levels of Corruption	Lower tariffs	Tariff rate, applied, weighted mean, all products (%)	0.57
	Bureaucratic transparency	CPIA transparency, accountability, and corruption in the public sector rating	-0.79
	Better resource allocation	IDA resource allocation index	-0.69
High Levels of Human Capital	Higher Productivity	GDP per person employed (constant 2011 PPP)	-0.75
	Reduced talent search costs		
	Knowledge-based economy	Research and development expenditure (% of GDP)	0.71
Sound Business Environment	Ease of navigating regulatory requirements of the government	CPIA business regulatory environment rating	-0.78
	Ease of access to finance	Logistics Performance Index: Efficiency of customs clearance process	-0.85
		Firms using banks to finance working capital (% of firms)	-0.42
Equitable Distribution of Resources	Improved respect for private property rights and reduced property-related crime	Losses due to theft and vandalism (% of annual sales for affected firms)	0.44
Acceptance of the Rights of Others	Increased productive engagement of young women	% of female youth not in education, employment or training, female	0.47

5 APPENDICES

APPENDIX A

GPI methodology

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

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

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

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

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

The expert panel

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

Professor Kevin P. Clements, chairperson

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

Dr Sabina Alkire

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

Dr Ian Anthony

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

Ms Isabelle Arradon

Director of Research and Deputy Director of Communications & Outreach, International Crisis Group, Belgium

Dr Manuela Mesa

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

Dr Ekaterina Stepanova

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

THE INDICATORS

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

ONGOING DOMESTIC & INTERNATIONAL CONFLICT

- **Number and duration of internal conflicts**
  Uppsala Conflict Data Program (UCDP) Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset; Institute for Economics & Peace (IEP)
- **Number of deaths from external organised conflict**
  UCDP Armed Conflict Dataset
- **Number of deaths from internal organised conflict**
  International Institute for Strategic Studies (IISS) Armed Conflict Database (ACD)
- **Number, duration and role in external conflicts**
  UCDP Battle-Related Deaths Dataset; IEP
- **Intensity of organised internal conflict**
  Qualitative assessment by EIU analysts
- **Relations with neighbouring countries**
  Qualitative assessment by EIU analysts

SOCIETAL SAFETY & SECURITY

- **Level of perceived criminality in society**
  Qualitative assessment by EIU analysts
- **Number of refugees and internally displaced people as a percentage of the population**
  Office of the High Commissioner for Refugees (UNHCR) Mid-Year Trends; Internal Displacement Monitoring Centre (IDMC)
- **Political instability**
  Qualitative assessment by EIU analysts
- **Political Terror Scale**
  Gibney, Mark, Linda Cornett, Reed Wood, Peter Haschke, Daniel Arnon, and Attilio Pisanò. 2017. The Political Terror Scale 1976-2016. Date Retrieved, from the Political Terror Scale website: http://www.politicalterrorscale.org.
- **Impact of terrorism**
  Global Terrorism Index (IEP)
- **Number of homicides per 100,000 people**
  United Nations Office on Drugs and Crime (UNODC) Surveys on Crime Trends and the Operations of Criminal Justice Systems (CTS); EIU estimates
- **Level of violent crime**
  Qualitative assessment by EIU analysts
- **Likelihood of violent demonstrations**
  Qualitative assessment by EIU analysts
- **Number of jailed population per 100,000 people**
  World Prison Brief, Institute for Criminal Policy Research at Birkbeck, University of London
- **Number of internal security officers and police per 100,000 people**
  UNODC CTS; EIU estimates

MILITARISATION

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

METHODOLOGICAL NOTES

WEIGHTING THE INDEX

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

1. A measure of how at peace internally a country is;

2. A measure of how at peace externally a country is (its state of peace beyond its borders).

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

MEASURING THE ROBUSTNESS OF THE INDEX

- Robustness is an important concept in composite index analysis. It is a measure of how often rank comparisons from a composite index are still true if the index is calculated using different weightings. For example, if the GPI is recalculated using a large number of different weighting schemes and Country A ranks higher than Country B in 60 per cent of these recalculations, the statement "Country A is more peaceful than Country B" is considered to be 60 per cent robust.
- IEP finds that the Global Peace Index (GPI) is at the same level of absolute robustness as the Human Development Index (HDI), a leading measure of development since it was first constructed by the United Nations Development Programme in 1990.
- Technically, the robustness of the GPI is measured by the fact that 70 per cent of pairwise country comparisons are independent of the weighting scheme chosen. In other words, regardless of the weights attributed to each component of the index 70 per cent of the time the pairwise comparisons between countries are the same.

TABLE A.1

Indicator Weights in the GPI

Internal Peace 60% / External Peace 40%

INTERNAL PEACE (Weight 1 to 5)		EXTERNAL PEACE (Weight 1 to 5)	
Perceptions of criminality	3	Military expenditure (% GDP)	2
Security officers and police rate	3	Armed services personnel rate	2
Homicide rate	4	UN peacekeeping funding	2
Incarceration rate	3	Nuclear and heavy weapons capabilities	3
Access to small arms	3	Weapons exports	3
Intensity of internal conflict	5	Refugees and IDPs	4
Violent demonstrations	3	Neighbouring countries relations	5
Violent crime	4	External conflicts fought	2.28
Political instability	4	Deaths from external conflict	5
Political terror	4		
Weapons imports	2		
Terrorism impact	2		
Deaths from internal conflict	5		
Internal conflicts fought	2.56		

The GPI is a composite index of 23 indicators weighted and combined into one overall score. The weighting scheme within any composite index represents the relative importance of each indicator to the overall aim of the measure, in the GPI's case, global peace. To fully understand the representative nature or accuracy of any measure it is necessary to understand how sensitive the results of the index are to the specific weighting scheme used. If the analysis holds true for a large subset of all possible weighting schemes then the results can be called robust. While it is expected that ranks will be sensitive to changes in the weights of any composite index, what is more important in a practical sense is the robustness of country comparisons. One of the core aims of the GPI is to allow for Country A to be compared to Country B. This raises the question that for any two countries, how often is the first ranked more peaceful than the second across the spectrum of weights. The more times that the first country is ranked more peaceful than the second, the more confidence can be invested in the statement "Country A is more peaceful than Country B".

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

QUALITATIVE SCORING: THE ECONOMIST INTELLIGENCE UNIT APPROACH

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

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

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

APPENDIX B

GPI indicator sources, definitions & scoring criteria

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

INTERNAL PEACE INDICATORS

Level of Perceived Criminality in Society

Indicator type	Qualitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

Definition: Assessment of the level of perceived criminality in society, ranked from 1-5 (very low to very high) by the EIU's Country Analysis team. Country analysts assess this indicator on an annual basis, for the period March to March.

Scoring Criteria:

1 = **Very low:** The majority of other citizens can be trusted; very low levels of domestic insecurity.
2 = **Low:** An overall positive climate of trust with other citizens.
3 = **Moderate:** Reasonable degree of trust in other citizens.
4 = **High:** High levels of distrust in other citizens; high levels of domestic security.
5 = **Very high:** Very high levels of distrust in other citizens; people are extremely cautious in their dealings with others; large number of gated communities, high prevalence of security guards.

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

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	UNODC Survey of Crime Trends and Operations of Criminal Justice Systems
Measurement period	2015

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

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

Scoring Bands

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

Number of Homicides per 100,000 People

Indicator type	Quantitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	UNODC Survey of Crime Trends and Operations of Criminal Justice Systems
Measurement period	2015

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

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

Scoring Bands

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

Number of Jailed Population per 100,000 People

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	Institute for Criminal Policy Research at Birkbeck, University of London, World Prison Brief
Measurement period	2017

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

Scoring Bands

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

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

Ease of Access to Small Arms and Light Weapons

Indicator type	Qualitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	EIU
Measurement period	16 March 2016 to 15 March 2017

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

Scoring Criteria:

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

Intensity of Organised Internal Conflict

Indicator type	Qualitative
Indicator weight	5
Indicator weight (% of total index)	6.3%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

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

Scoring Criteria:

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

Likelihood of Violent Demonstrations

Indicator type	Qualitative
Indicator weight	3
Indicator weight (% of total index)	3.8%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

Definition: Assessment of the likelihood of violent demonstrations ranked from 1-5 (very low to very high) by the EIU's Country Analysis team, based on the question, "Are violent demonstrations or violent civil/labour unrest likely to pose a threat to property or the conduct of business over the next two years?" Country analysts assess this question on a quarterly basis. The score provided for 16 March 2017 to 15 March 2018 is the average of the scores given for each quarter.

Scoring Criteria

"Are violent demonstrations or violent civil/labour unrest likely to pose a threat to property or the conduct of business over the next two years?"

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

Level of Violent Crime

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

Definition: Assessment of the likelihood of violent crime ranked from 1 to 5 (very low to very high) by the EIU's Country Analysis team based on the question, "Is violent crime likely to pose a significant problem for government and/or business over the next two years?" Country analysts assess this question on a quarterly basis. The score provided for 16 March 2017 to 15 March 2018 is the average of the scores given for each quarter.

Scoring Criteria

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

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

Political Instability

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

Definition: Assessment of political instability ranked from 0 to 100 (very low to very high instability) by the EIU's Country Analysis team, based on five questions. This indicator aggregates five other questions on social unrest, orderly transfers, opposition stance, excessive executive authority and an international tension sub-index. Country analysts assess this question on a quarterly basis. The score provided for 16 March 2017 to 15 March 2018 is the average of the scores given for each quarter.

Specific Questions:

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

Scoring Bands

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

Political Terror Scale

Indicator type	Qualitative
Indicator weight	4
Indicator weight (% of total index)	5%
Data source	Gibney, Mark, Linda Cornett, Reed Wood, Peter Haschke, Daniel Arnon, and Attilio Pisanò. 2017. The Political Terror Scale 1976-2016. Date Retrieved, from the Political Terror Scale website: http://www.politicalterrorscale.org.
Measurement period	2016

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

Scoring Criteria

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

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

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.5%
Data source	SIPRI Arms Transfers Database; EIU
Measurement period	2013-2017

Definition: Measures the total volume of major conventional weapons imported by a country between 2013 and 2017, divided by the average population in this time period at the 100,000 people level (population data supplied by the EIU). The SIPRI Arms Transfers Database covers all international sales and gifts of major conventional weapons and the technology necessary for their production. The transfer equipment or technology is from one country, rebel force or international organisation to another country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, missiles, ships, engines.

Scoring Bands

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

Impact of Terrorism

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.5%
Data source	IEP Global Terrorism Index (GTI)
Measurement period	1 Jan 2013 to 31 December 2017

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

A The incident must be intentional – the result of a conscious calculation on the part of a perpetrator.

B The incident must entail some level of violence or threat of violence, including property violence as well as violence against people.

C The perpetrators of the incidents must be sub-national actors. This database does not include acts of state terrorism.

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

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

Methodology: Using the comprehensive, event-based Global Terrorism Database, the GTI combines four variables to develop a composite score: the number of terrorist incidents in a given year, the total number of fatalities in a given year, the total number of injuries caused in a given year and the approximate level of property damage in a given year. The composite score captures the direct effects of terrorist-related violence, in terms of its physical effect, but also attempts to reflect the residual effects of terrorism in terms of emotional wounds and fear by attributing a weighted average to the damage inflicted in previous years. As of the date of publication, the Global Terrorism Database only logs events up to 31 Dec 2016. To assess the impact of terrorism between this date and 31 December 2017 cutoff, IEP uses data from publicly available third party sources to impute terrorist activity in that period.

Scoring Bands

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

Number Of Deaths From Organised Internal Conflict

Indicator type	Quantitative
Indicator weight	5
Indicator weight (% of total index)	6.3%
Data source	International Institute for Strategic Studies (IISS) Armed Conflict Database (ACD)
Measurement period	2015-2016

Definition: This indicator uses the UCDP's definition of conflict. UCDP defines conflict as: "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a year." Statistics are compiled from the most recent edition of the IISS ACD, which has the following definition of armed conflict-related

fatalities: 'Fatality statistics relate to military and civilian lives lost as a direct result of an armed conflict'.

The figures relate to the country which is the main area of conflict. For some conflicts no reliable statistics are available. Estimates of war fatalities vary according to source, sometimes by a wide margin. In compiling data on fatalities, the IISS has used its best estimates and takes full responsibility for these figures. Some overall fatality figures have been revised in light of new information. Changes in fatality figures may therefore occur as a result of such revisions as well as because of increased fatalities. Fatality figures for terrorism may include deaths inflicted by the government forces in counter-terrorism operations.

Scoring Bands

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

Number and Duration of Internal Conflicts

Indicator type	Quantitative
Indicator weight	2.56
Indicator weight (% of total index)	3.2%
Data sources	IEP; UCDP Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset
Measurement period	2012-2016

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

Each individual conflict score is based on the following factors:

Number:

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

Duration:

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

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

Scoring Bands

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

EXTERNAL PEACE INDICATORS

Military Expenditure as a Percentage of GDP

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	International Institute for Strategic Studies, The Military Balance 2018
Measurement period	2017

Alternative Source: When no data was provided, several alternative sources were used: National Public Expenditure Accounts, SIPRI information and the Military Balance 2018. Alternative data are from 2008 to 2017, depending upon data availability.

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

Scoring Criteria: This indicator is scored using a min-max normalisation. Applying this method, a country's score is based on the distance of its military expenditure as a share of GDP from the benchmarks of 0% (for a score of 1) and 12.97% or above (for a score of 5). The bands, while linear, approximately conform as follows:

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

Number of Armed Services Personnel per 100,000 people

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	International Institute for Strategic Studies, The Military Balance 2018
Measurement period	2018

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

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

Scoring Bands

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

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

Financial Contribution to UN Peacekeeping Missions

Indicator type	Quantitative
Indicator weight	2
Indicator weight (% of total index)	2.8%
Data source	IEP; United Nations Committee on Contributions
Measurement period	2014–2016

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

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

Scoring Criteria

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

Additional Notes: All United Nations member states share the costs of United Nations peacekeeping operations. The General Assembly apportions these expenses based on a special scale of assessments applicable to peacekeeping. This scale takes into account the relative economic wealth of member states, with the permanent members of the Security Council required to pay a larger share because of their special responsibility for the maintenance of international peace and security. Due to delays in the release of new data, the 2018 indicator scores take into account a a weighted average from 2014 to 2016.

Nuclear and Heavy Weapons Capabilities

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	4.2%
Data source	IEP; SIPRI; IISS The Military Balance; United Nations Register of Conventional Arms
Measurement period	2016

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

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

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

Countries with nuclear capabilities automatically receive the maximum score of five. Other scores are expressed to the second decimal point, adopting a min-max normalisation that sets the max at two standard deviations above the average raw score. Nuclear-weapon equipped states are determined by the SIPRI World Nuclear Forces chapter in the SIPRI Yearbook, as follows:

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

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

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of total index)	4.2%
Data source	SIPRI Arms Transfers Database
Measurement period	2013-2017

Definition: Measures the total volume of major conventional weapons exported by a country between 2010 and 2014 divided by the average population during this time period (population data supplied by the EIU). The SIPRI Arms Transfers Database covers all international sales and gifts of major conventional weapons and the technology necessary for the production of them. The transfer equipment or technology is from one country, rebel force or international organisation to another country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, missiles, ships and engines.

Scoring Bands

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

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

Indicator type	Quantitative
Indicator weight	4
Indicator weight (% of total index)	5.7%
Data source	UNHCR Mid-Year Trends 2017; International Displacement Monitoring Centre (IDMC), 2017
Measurement period	2017

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

Scoring Bands

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

Relations with Neighbouring Countries

Indicator type	Qualitative
Indicator weight	5
Indicator weight (% of total index)	7.1%
Data source	EIU
Measurement period	16 March 2017 to 15 March 2018

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

Scoring Criteria:

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

Number, duration and role in external conflicts

Indicator type	Quantitative
Indicator weight	2.28
Indicator weight (% of total index)	3.2%
Data source	IEP; UCDP Battle-Related Deaths Dataset
Measurement period	2012-2016

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

Each individual conflict score is based on the following factors:

Number:

- Number of internationalised internal armed conflicts and interstate armed conflicts.
- If a conflict is a war (1,000+ battle related deaths)

it receives a score of one; if it is an armed conflict (25-999 battle related deaths) it receives a score of 0.25.

Duration:

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

Role:

- If the country is a primary party to the conflict, that conflict receives a score of one; if it is a secondary party (supporting the primary party), that conflict receives a score of 0.25.
- If a country is a party to a force covered by a relevant United Nations Security Council Resolution, then the entire conflict score is multiplied by a quarter; if not, it receives a full score.

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

Scoring Bands

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

Number Of Deaths From Organised External Conflict

Indicator type	Quantitative
Indicator weight	5
Indicator weight (% of total index)	7.1%
Data source	UCDP Armed Conflict Dataset
Measurement period	2015-2016

Alternate Source: When no data was provided, several alternative sources have been used: International Institute for Strategic Studies (IISS) Armed Conflict Database; the Iraq Coalition Casualty Count, and the EIU.

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

Scoring Bands

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

APPENDIX C

GPI Domain Scores

TABLE C.1

Ongoing domestic and international conflict domain, most peaceful to least

COUNTRY	SCORE
Botswana	1.000
Brazil	1.000
Chile	1.000
Mauritius	1.000
Uruguay	1.000
Singapore	1.024
Bulgaria	1.036
Iceland	1.036
New Zealand	1.036
Switzerland	1.044
Malaysia	1.051
Austria	1.079
Czech Republic	1.079
Portugal	1.079
Italy	1.094
Romania	1.096
Germany	1.124
Australia	1.178
Canada	1.186
Argentina	1.201
Costa Rica	1.201
Jamaica	1.201
Namibia	1.201
Panama	1.201
Trinidad and Tobago	1.201
Zambia	1.201
Belgium	1.210
Netherlands	1.221
Albania	1.237
Ireland	1.237
Mongolia	1.237
Spain	1.237
France	1.239
United Kingdom	1.253
Finland	1.295
Norway	1.295
Sweden	1.295
Angola	1.403
Bolivia	1.403
Dominican Republic	1.403
Ecuador	1.403
Equatorial Guinea	1.403
Guyana	1.403
Honduras	1.403
Japan	1.403
Laos	1.403
Malawi	1.403
Nicaragua	1.403
Oman	1.403
Peru	1.403
Swaziland	1.403
Tanzania	1.403
Timor-Leste	1.403
Vietnam	1.403
Papua New Guinea	1.418
Denmark	1.423
Kuwait	1.424
Croatia	1.438
Montenegro	1.438
Poland	1.438
Slovakia	1.438
Slovenia	1.438
Hungary	1.445
Lithuania	1.445
Bhutan	1.446
Madagascar	1.446
Benin	1.461
Cambodia	1.461
Liberia	1.461
Nepal	1.461
Latvia	1.474
Burkina Faso	1.476
Guinea	1.476
El Salvador	1.482
Estonia	1.496
Ghana	1.515
Sierra Leone	1.515
United Arab Emirates	1.580
Cyprus	1.604
Gabon	1.604
Guatemala	1.604
Haiti	1.604
Kazakhstan	1.604
Paraguay	1.604
Qatar	1.604
Serbia	1.604
Sri Lanka	1.604
Taiwan	1.604
Republic of the Congo	1.626
South Africa	1.633
Mozambique	1.634
The Gambia	1.647
Tunisia	1.660
Indonesia	1.661
Guinea-Bissau	1.662
Mauritania	1.662
Senegal	1.662
Cote d' Ivoire	1.677
Rwanda	1.737
Uganda	1.750
Belarus	1.805
Cuba	1.805
Kosovo	1.805
Lesotho	1.805
Moldova	1.805
Morocco	1.805
Turkmenistan	1.805
Uzbekistan	1.805
Zimbabwe	1.805
Eritrea	1.820
Greece	1.841
Macedonia (FYR)	1.841
South Korea	1.841
Jordan	1.846
Georgia	1.849
Togo	1.863
Bosnia and Herzegovina	1.877
Djibouti	1.911
Algeria	1.912
Bangladesh	1.937
Niger	1.967
United States of America	1.991
Venezuela	2.006
Thailand	2.019
Kyrgyz Republic	2.059
China	2.100
Burundi	2.134
Kenya	2.169
Colombia	2.195
Myanmar	2.228
Tajikistan	2.229
Bahrain	2.255
Chad	2.259
Israel	2.266
Azerbaijan	2.315
Armenia	2.328
Cameroon	2.335
Saudi Arabia	2.393
Philippines	2.408
Iran	2.413
Mali	2.501
North Korea	2.610
Mexico	2.620
Ethiopia	2.695
Palestine	2.696
Lebanon	2.816
India	2.826
Egypt	2.838
Russia	2.986
Central African Republic	3.029
Iraq	3.100
Democratic Republic of the Congo	3.163
Nigeria	3.164
Turkey	3.178
Sudan	3.276
Libya	3.318
Somalia	3.348
Yemen	3.408
Ukraine	3.494
Pakistan	3.533
South Sudan	3.546
Afghanistan	3.623
Syria	3.828

TABLE C.2

Societal safety and security domain, most peaceful to least

COUNTRY	SCORE
Iceland	1.168
Norway	1.254
Denmark	1.289
Singapore	1.296
New Zealand	1.312
Japan	1.318
Switzerland	1.348
Sweden	1.367
Austria	1.368
Finland	1.426
Canada	1.427
Slovenia	1.438
Portugal	1.496
Australia	1.503
Netherlands	1.564
Ireland	1.576
Czech Republic	1.634
Germany	1.644
South Korea	1.661
Bhutan	1.711
United Arab Emirates	1.728
Taiwan	1.767
Croatia	1.785
Slovakia	1.785
Hungary	1.811
Belgium	1.838
Spain	1.918
United Kingdom	1.934
Romania	1.938
France	1.951
Qatar	1.956
Poland	1.984
Kuwait	1.987
Estonia	1.993
Lithuania	2.006
Ghana	2.012
Latvia	2.014
Oman	2.021
Bulgaria	2.037
Mauritius	2.061
Greece	2.083
Chile	2.112
Sierra Leone	2.115
Malaysia	2.148
Serbia	2.150
Vietnam	2.151
United States of America	2.161
Madagascar	2.168
Italy	2.190
Botswana	2.192
Indonesia	2.207
Laos	2.209
Senegal	2.219
Malawi	2.234
Sri Lanka	2.254
Costa Rica	2.258
Cyprus	2.270
Morocco	2.296
Saudi Arabia	2.313
Jordan	2.327
India	2.356
Uruguay	2.356
Namibia	2.386
Timor-Leste	2.398
Paraguay	2.403
Moldova	2.404
Armenia	2.407
Zambia	2.407
Kazakhstan	2.410
Albania	2.413
Belarus	2.413
Tanzania	2.415
Macedonia (FYR)	2.431
Panama	2.434
Algeria	2.437
Liberia	2.441
Uzbekistan	2.451
Montenegro	2.466
Benin	2.474
Equatorial Guinea	2.477
China	2.479
Mongolia	2.492
Cuba	2.494
Tajikistan	2.503
Bosnia and Herzegovina	2.507
The Gambia	2.508
Tunisia	2.522
Togo	2.523
Guinea	2.525
Israel	2.535
Bangladesh	2.544
Georgia	2.548
Kyrgyz Republic	2.554
Mozambique	2.571
Djibouti	2.572
Nicaragua	2.583
Swaziland	2.585
Cambodia	2.590
Kosovo	2.594
Burkina Faso	2.600
Ecuador	2.607
Bolivia	2.629
Lesotho	2.632
Gabon	2.634
Nepal	2.639
Azerbaijan	2.641
Rwanda	2.642
Peru	2.651
Argentina	2.654
Angola	2.666
Iran	2.716
Egypt	2.722
Uganda	2.726
Myanmar	2.732
Turkmenistan	2.763
Guinea-Bissau	2.766
Papua New Guinea	2.774
Haiti	2.775
Guyana	2.786
Kenya	2.789
Dominican Republic	2.799
Trinidad and Tobago	2.804
Thailand	2.851
Bahrain	2.852
Cote d' Ivoire	2.867
Palestine	2.897
Ethiopia	2.909
Zimbabwe	2.912
Chad	2.960
Niger	2.962
Jamaica	2.978
Cameroon	2.982
Guatemala	3.018
Pakistan	3.053
Brazil	3.066
Mexico	3.080
Republic of the Congo	3.089
Lebanon	3.101
North Korea	3.101
Mauritania	3.124
Philippines	3.131
Turkey	3.187
El Salvador	3.210
Honduras	3.211
Russia	3.220
South Africa	3.254
Nigeria	3.255
Mali	3.280
Burundi	3.291
Ukraine	3.328
Eritrea	3.362
Colombia	3.428
Venezuela	3.505
Sudan	3.591
Libya	3.634
Yemen	3.760
Syria	3.870
Democratic Republic of the Congo	3.943
Central African Republic	3.969
Somalia	4.024
South Sudan	4.085
Iraq	4.140
Afghanistan	4.225

TABLE C.1

Militarisation domain, most peaceful to least

COUNTRY	SCORE
Iceland	1.048
Hungary	1.144
New Zealand	1.199
Slovenia	1.257
Moldova	1.306
Ireland	1.316
Portugal	1.322
Czech Republic	1.338
Denmark	1.350
Slovakia	1.374
Austria	1.387
Bhutan	1.387
Latvia	1.388
Sierra Leone	1.404
Mauritius	1.414
Mongolia	1.428
Tanzania	1.440
Malaysia	1.460
Japan	1.475
Haiti	1.478
Bangladesh	1.488
Senegal	1.498
Indonesia	1.516
Madagascar	1.518
Montenegro	1.526
Bosnia and Herzegovina	1.533
Burundi	1.541
Canada	1.541
Cuba	1.556
Belgium	1.571
Kosovo	1.575
The Gambia	1.575
Tunisia	1.576
Estonia	1.578
Thailand	1.598
Cyprus	1.604
Panama	1.625
Guyana	1.634
Peru	1.639
Croatia	1.652
Serbia	1.652
Botswana	1.655
Namibia	1.655
Malawi	1.671
Kenya	1.672
Myanmar	1.672
Guatemala	1.673
Morocco	1.673
Nicaragua	1.674
Philippines	1.674
Poland	1.680
Zambia	1.685
Australia	1.691
Lithuania	1.696
South Africa	1.698
Ethiopia	1.704
Romania	1.706
Timor-Leste	1.709
Costa Rica	1.710
Jamaica	1.710
Liberia	1.717
Albania	1.721
Ecuador	1.723
Swaziland	1.727
Togo	1.734
Dominican Republic	1.735
Macedonia (FYR)	1.737
Ghana	1.744
El Salvador	1.745
Kyrgyz Republic	1.756
Uganda	1.757
Chile	1.760
Laos	1.760
Argentina	1.766
Georgia	1.774
Bulgaria	1.776
Kazakhstan	1.783
Uruguay	1.785
Mexico	1.786
Lesotho	1.789
Mozambique	1.790
Equatorial Guinea	1.796
Rwanda	1.798
Cote d' Ivoire	1.812
Burkina Faso	1.823
Benin	1.833
Nepal	1.851
Cameroon	1.858
Honduras	1.870
Angola	1.872
Eritrea	1.875
Gabon	1.877
Paraguay	1.882
Taiwan	1.883
Spain	1.888
Germany	1.901
Niger	1.903
Papua New Guinea	1.929
Nigeria	1.942
Sri Lanka	1.964
Finland	1.966
Trinidad and Tobago	1.967
Italy	1.970
Tajikistan	1.973
Armenia	1.980
Bahrain	1.989
Palestine	1.990
Mauritania	1.994
Iran	1.996
Mali	2.006
Sweden	2.026
Switzerland	2.030
Belarus	2.039
China	2.043
Kuwait	2.048
Venezuela	2.048
Turkey	2.049
Zimbabwe	2.049
Republic of the Congo	2.053
South Korea	2.057
Jordan	2.061
Chad	2.075
Singapore	2.076
Netherlands	2.084
Uzbekistan	2.113
Qatar	2.129
Bolivia	2.138
Cambodia	2.156
Turkmenistan	2.159
Algeria	2.162
Vietnam	2.163
Brazil	2.197
Greece	2.207
Lebanon	2.213
Colombia	2.229
Democratic Republic of the Congo	2.256
Somalia	2.266
Central African Republic	2.267
Djibouti	2.272
Ukraine	2.272
Guinea	2.274
Sudan	2.275
Azerbaijan	2.278
Egypt	2.297
Norway	2.318
Guinea-Bissau	2.324
United Arab Emirates	2.366
India	2.413
Yemen	2.439
Afghanistan	2.465
South Sudan	2.479
Pakistan	2.592
Libya	2.632
United Kingdom	2.633
Iraq	2.701
Saudi Arabia	2.705
France	2.760
Oman	2.823
Syria	2.861
United States of America	3.049
North Korea	3.175
Russia	3.307
Israel	3.910

APPENDIX D

Economic Cost of Violence

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

TABLE D.1

Economic cost of violence

ECONOMIC COST OF VIOLENCE (Rank by % GDP)	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (Millions, 2017 PPP)	ECONOMIC COST OF VIOLENCE (Millions, 2017 PPP)	PER CAPITA (2017, PPP)	AS % OF GDP
1	Syria	41,982.7	29,065.2	1,589.6	68%
2	Afghanistan	67,811.1	42,662.6	1,172.9	63%
3	Iraq	366,416.8	277,839.6	7,062.6	51%
4	El Salvador	32,621.7	26,959.2	4,204.8	49%
5	South Sudan	13,131.3	11,255.2	871.2	49%
6	Central African Republic	1,469.5	1,215.9	256.6	38%
7	Cyprus	11,488.6	10,247.4	8,617.9	37%
8	Colombia	276,178.2	233,897.9	4,728.6	34%
9	Lesotho	2,633.7	1,983.0	876.3	30%
10	Somalia	2,406.8	1,881.2	123.9	30%
11	Honduras	15,339.9	12,996.4	1,380.1	30%
12	North Korea	9,084.1	4,726.2	184.5	27%
13	Yemen	26,693.1	17,892.7	618.8	26%
14	Libya	28,963.6	17,715.9	2,737.8	26%
15	South Africa	239,480.2	175,191.0	3,052.2	24%
16	Eritrea	1,941.4	1,504.0	289.9	22%
17	Jamaica	7,054.9	5,359.2	1,848.8	21%
18	Ukraine	102,780.6	68,977.3	1,567.3	20%
19	Sudan	43,067.8	35,286.7	850.0	19%
20	Congo	8,339.3	5,512.9	1,020.9	19%
21	Palestine	6,994.9	4,221.5	835.5	18%
22	Trinidad and Tobago	11,020.1	8,061.1	5,872.9	18%
23	Namibia	7,320.8	4,639.4	1,792.8	18%
24	Russia	1,013,775.5	617,606.2	4,290.0	17%
25	Guatemala	26,873.4	21,563.6	1,250.4	16%
26	Venezuela	105,119.6	84,539.9	2,610.8	16%
27	Oman	51,648.9	26,541.0	5,495.1	16%
28	Republic of the Congo	12,565.9	10,569.2	125.8	15%
29	Azerbaijan	36,212.6	24,908.4	2,509.9	15%
30	Botswana	7,531.2	5,499.4	2,357.0	14%
31	Mexico	419,932.0	312,372.9	2,388.9	14%
32	Burundi	1,633.6	1,116.1	99.5	14%
33	Guyana	1,019.3	805.9	1,030.2	13%
34	Georgia	7,060.4	4,811.1	1,231.4	13%
35	Pakistan	180,488.3	129,916.6	647.0	13%
36	Turkey	373,084.1	257,278.8	3,140.7	13%
37	Brazil	511,364.9	401,639.9	1,904.7	13%
38	Uganda	12,675.6	9,250.1	208.9	12%
39	Swaziland	2,211.2	1,363.7	980.1	12%
40	Kuwait	69,407.2	36,426.2	8,678.8	12%
41	Mali	6,375.6	4,484.5	234.7	12%
42	Mauritania	2,601.0	1,923.7	423.7	12%
43	Algeria	123,877.0	68,649.2	1,634.2	11%
44	Saudi Arabia	376,078.1	196,673.2	5,861.3	11%
45	Nigeria	150,259.7	121,195.1	618.7	11%

TABLE D.1

Economic cost of violence (continued)

ECONOMIC COST OF VIOLENCE (Rank by % GDP)	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (Millions, 2017 PPP)	ECONOMIC COST OF VIOLENCE (Millions, 2017 PPP)	PER CAPITA (2017, PPP)	AS % OF GDP
46	Philippines	117,695.8	88,676.5	832.5	11%
47	Bolivia	12,604.0	8,629.5	769.4	11%
48	Jordan	17,148.0	9,254.3	934.4	11%
49	Dominican Republic	22,406.5	17,033.6	1,565.2	11%
50	Chad	4,283.3	3,000.9	195.5	10%
51	Côte D'Ivoire	12,239.0	9,121.5	366.2	10%
52	Serbia	17,430.5	10,669.5	1,217.7	10%
53	Bahrain	12,813.9	6,882.3	4,392.1	10%
54	United Arab Emirates	137,061.8	69,511.5	7,285.1	10%
55	Mongolia	5,292.6	3,788.2	1,213.5	10%
56	Liberia	686.1	367.8	75.8	10%
57	Myanmar	32,400.1	21,154.5	392.8	10%
58	Nicaragua	4,012.0	3,233.9	514.6	9%
59	India	1,190,509.6	806,236.9	595.4	9%
60	Armenia	4,266.3	2,374.2	809.1	9%
61	Israel	53,624.3	28,879.7	3,416.6	9%
62	Angola	26,819.3	16,756.1	544.5	9%
63	The Gambia	395.2	305.9	141.4	9%
64	Lebanon	13,423.2	7,625.4	1,251.4	9%
65	Costa Rica	10,808.7	7,097.3	1,432.9	9%
66	Rwanda	2,901.8	2,004.7	160.4	9%
67	Ethiopia	19,094.1	15,225.7	141.6	9%
68	Egypt	136,124.5	90,234.9	908.0	8%
69	Guinea	2,928.9	2,057.1	157.6	8%
70	Iran	212,901.3	131,776.7	1,606.8	8%
71	Sri Lanka	31,574.8	21,337.4	1,018.5	8%
72	Kyrgyz Republic	2,723.7	1,712.2	279.2	8%
73	USA	2,670,097.7	1,454,775.7	4,452.0	8%
74	Lithuania	11,034.0	6,510.2	2,263.3	8%
75	Bulgaria	19,079.1	10,370.5	1,473.7	8%
76	Bhutan	853.3	536.7	656.9	8%
77	Tunisia	17,300.9	9,964.3	854.6	8%
78	Kenya	18,035.0	11,271.5	221.2	7%
79	Niger	920.5	579.6	26.0	7%
80	Moldova	2,316.0	1,376.4	340.6	7%
81	Guinea Bissau	296.6	208.7	109.4	7%
82	Haiti	1,851.2	1,379.7	124.2	7%
83	Togo	1,100.0	803.8	100.6	7%
84	Panama	9,223.3	6,552.1	1,574.0	7%
85	Zambia	6,852.4	4,605.7	261.6	7%
86	Paraguay	5,810.2	4,428.9	642.2	7%
87	Argentina	90,258.4	59,667.0	1,335.2	7%
88	Latvia	5,944.2	3,372.3	1,747.4	7%
89	Estonia	4,738.0	2,629.3	2,012.0	7%
90	Belarus	18,713.7	11,521.5	1,218.9	7%
91	Gabon	3,259.7	2,399.7	1,160.6	7%
92	Albania	3,818.0	2,216.0	755.2	7%
93	United Kingdom	312,272.8	184,586.2	2,772.7	7%
94	Qatar	32,563.2	21,347.9	7,921.8	7%
95	Zimbabwe	3,059.8	2,130.6	126.0	7%
96	Uruguay	7,857.4	4,841.8	1,395.5	7%
97	Senegal	3,517.6	2,562.6	157.3	6%
98	Chile	45,205.3	26,684.8	1,466.4	6%
99	Cameroon	6,984.1	5,401.2	218.9	6%
100	Ecuador	17,786.9	11,754.8	697.1	6%
101	Bosnia and Herzegovina	3,595.0	2,702.8	771.5	6%
102	Tanzania	12,160.5	9,344.8	158.1	6%
103	Papua New Guinea	3,134.2	2,099.0	249.3	6%
104	Mozambique	3,477.3	2,165.6	70.9	6%
105	Greece	34,439.6	17,779.8	1,595.7	6%
106	Peru	36,264.6	25,419.1	780.9	6%
107	Kazakhstan	41,414.8	27,596.0	1,499.5	6%
108	Croatia	10,681.8	5,895.2	1,415.5	6%
109	Nepal	7,287.5	4,293.3	144.9	6%
110	France	294,850.6	165,212.6	2,532.6	6%
111	Morocco	27,887.3	16,287.0	450.0	6%

TABLE D.1

Economic cost of violence (continued)

ECONOMIC COST OF VIOLENCE (Rank by % GDP)	COUNTRY	ECONOMIC IMPACT OF VIOLENCE (Millions, 2017 PPP)	ECONOMIC COST OF VIOLENCE (Millions, 2017 PPP)	PER CAPITA (2017, PPP)	AS % OF GDP
112	Thailand	109,604.3	67,213.1	971.5	6%
113	Sierra Leone	955.7	626.5	81.2	6%
114	Poland	113,068.2	59,202.6	1,553.7	6%
115	Romania	47,217.6	25,631.4	1,309.0	6%
116	Hungary	26,120.9	14,747.2	1,522.1	6%
117	Montenegro	1,069.3	614.7	976.9	6%
118	Belgium	49,085.9	29,422.0	2,558.8	6%
119	Portugal	33,733.3	17,587.4	1,709.0	6%
120	Australia	111,653.9	61,477.3	2,481.7	6%
121	Turkmenistan	8,195.3	5,085.7	869.1	5%
122	Djibouti	250.9	163.1	167.9	5%
123	Slovakia	15,812.9	8,355.0	1,533.1	5%
124	Italy	223,436.5	117,521.2	1,982.1	5%
125	Czech Republic	33,183.3	18,246.4	1,717.3	5%
126	Benin	1,583.8	1,170.8	101.9	5%
127	Singapore	46,958.4	24,181.0	4,175.0	5%
128	Uzbekistan	16,886.6	10,180.3	314.5	5%
129	South Korea	160,120.3	86,746.3	1,695.4	5%
130	Spain	147,495.5	77,561.0	1,671.7	5%
131	Mauritius	2,040.1	1,224.0	965.0	5%
132	Netherlands	70,717.9	39,154.2	2,291.8	5%
133	Malaysia	65,286.0	38,571.0	1,203.7	4%
134	Macedonia (FYR)	2,386.2	1,360.9	652.7	4%
135	Laos	2,285.4	1,930.8	277.4	4%
136	Kosovo	433.1	288.5	150.3	4%
137	New Zealand	13,771.0	7,664.8	1,613.8	4%
138	Bangladesh	39,728.3	24,278.2	145.9	4%
139	China	1,704,618.7	888,854.8	628.1	4%
140	Germany	298,695.9	163,538.6	1,987.3	4%
141	Slovenia	5,069.7	2,731.4	1,312.4	4%
142	Vietnam	39,929.1	23,838.4	247.1	4%
143	Timor-Leste	177.0	101.9	76.9	4%
144	Sweden	31,960.1	18,134.8	1,816.6	4%
145	Finland	16,356.3	8,826.2	1,592.4	4%
146	Cambodia	3,347.4	2,063.2	127.0	4%
147	Norway	19,924.5	10,548.9	1,970.5	3%
148	Ireland	19,495.7	11,350.9	2,362.9	3%
149	Cuba	3,645.4	2,854.1	248.4	3%
150	Tajikistan	1,330.5	841.8	92.4	3%
151	Austria	24,155.3	12,874.7	1,471.1	3%
152	Denmark	14,986.7	7,992.4	1,388.9	3%
153	Japan	292,321.4	150,940.9	1,186.8	3%
154	Equatorial Guinea	1,195.2	874.2	665.4	3%
155	Madagascar	1,677.2	1,016.0	38.7	3%
156	Iceland	830.3	459.4	1,360.0	3%
157	Malawi	749.0	553.7	28.9	3%
158	Ghana	4,592.3	2,914.4	98.9	2%
159	Taiwan	25,173.2	13,695.7	578.0	2%
160	Canada	56,326.8	35,817.5	969.3	2%
161	Burkina Faso	1,208.5	724.5	36.7	2%
162	Indonesia	117,586.2	65,837.3	246.8	2%
163	Switzerland	13,789.7	7,472.9	874.6	1%

ENDNOTES

SECTION 2

1 UNICEF, 'Impact of Armed Conflict on Children'. Available at: https://www.unicef.org/graca/patterns.htm.

2 European countries include Belgium, Estonia, Finland, France, Germany, the UK, Hungary, Ireland, the Netherlands, Norway, Spain, Sweden, Switzerland, Denmark.

3 European countries include France, Ireland, Italy, Sweden and Spain.

4 UNHCR, 'With 1 human in every 113 affected, forced displacement hits record high', June 2016. Available at: http://www.unhcr.org/afr/news/press/2016/6/5763ace54/1-human-113-affected-forced-displacement-hits-record-high.html.

5 UNHCR, 'UNHCR says it is "stretched to the limit" by the rising number of refugees', (October 2013). Available at http://www.unhcr.org/en-au/news/latest/2013/10/524ae6179/unhcr-says-stretched-limit-rising-number-refugees.html.

6 R, 'A 'Timeless' Treaty Under Attack', (June 2001). Available at: http://www.unhcr.org/en-au/news/stories/2001/6/3b4c067ac/a-timeless-treaty-under-attack.html.

7 'Trend Indicator Value', the common unit used by SIPRI to measure the volume of international transfers of major conventional weapons. It is intended to convey the transfer of military resources.

8 H. Kristensen and R. Norris (2017) Worldwide deployments of nuclear weapons, 2017. Bulletin of the Atomic Scientists, 73:5, 289-297. Available at: https://www.tandfonline.com/doi/pdf/10.1080/00963402.2017.1363995?needAccess=true&.

Note, 100 Year Trends: Spread of democracy based on Polity IV data, Centre for Systemic Peace. Between 1918 and 2012, the average Polity IV was highest in 2012. Diplomatic relations increased 600 per cent from 1918 to 2005 and there were 77 times as many alliance agreements in place in 2012 than 1918, based on data from Correlates of War (COW). Average armed services personnel rate based on IEP calculations, data from COW and IISS Military Balance. Battle deaths and number of armed conflicts estimates based on data from COW, Uppsala Conflict Data Program (UCDP), and Peace Research Institute Oslo (PRIO). Nuclear inventory data from Federation of American Scientists Nuclear Notebook. In 2016, 36 per cent of active armed conflicts were classified as internationalized internal, UCDP/PRIO. Figures on displacement (refugees and internally displaced persons) are IEP calculations based on UNHCR data. In 2016, 53 percent of terrorist attacks with known targets affected civilian targets, IEP calculations based on data from the START Global Terrorism Database.

SECTION 3

1 As per SIPRI 2015 data, the top ten per capita military spending countries are Saudi Arabia, Oman, Israel, US, Singapore, Norway, Bahrain, Brunei, Australia, and the UK.

2 P. Dolan and T. Peasgood, 'Estimating the Economic and Social Costs of the Fear of Crime', The British Journal of Criminology, 47.1, 121-132, January 2007. Available at: https://academic.oup.com/bjc/article-abstract/47/1/121/355551.

3 M. Farzanegan, 'Can we predict political uprisings?', The Conversation, June 2017. Available at: https://theconversation.com/can-we-predict-political-uprisings-71925.

4 P. Collier, 'Development and Conflict', Oxford University Department of Economics, October 2004. Available at: http://www.un.org/esa/documents/Development.and.Conflict2.pdf.

5 D. Acemoglu, S. Johnson, et al. (2003), 'Institutional Causes, Macroeconomic Symptoms: Volatility, Crises and Growth', Journal of Monetary Economics, 50.1, 49–123. Available at: https://econpapers.repec.org/article/eeemoneco/v_3a50_3ay_3a2003_3ai_3a1_3ap_3a49-123.htm.

6 B. Pierpont, Violent Conflict and Foreign Direct Investment in Developing Economies: A Panel Data Analysis, Macalester College, 2005. Available at: https://www.minneapolisfed.org/~/media/files/mea/contest/2006papers/pierpont.pdf?la=en.

7 A. Aisen and F. Veiga, 'Political Instability and Inflation Volatility', International Monetary Fund, September 2006. Available at: https://www.imf.org/external/pubs/ft/wp/2006/wp06212.pdf.

8 Episodes of hyperinflation in the 1990s emerged in low peace countries like the Democratic Republic of the Congo, Iraq, Nigeria and Sudan.

9 K. Abdul and K. Kalirajan (2010), 'Determinants of Foreign Direct Investment in Developing Countries: A Comparative Analysis', Margin: The Journal of Applied Economic Research, 4(4), 369-404, 1–27. Available at: http://journals.sagepub.com/doi/abs/10.1177/097380101000400401.

10 K. Abdul and K. Kalirajan (2010), 'Determinants of Foreign Direct Investment in Developing Countries: A Comparative Analysis', Margin: The Journal of Applied Economic Research, 4(4), 369-404, 1–27. Available at: http://journals.sagepub.com/doi/abs/10.1177/097380101000400401.

SECTION 4

1 International Alert, 'Peace through Prosperity: Integrating peacebuilding into economic development', June 2015; and R. Rummel, 'Vol. 5: The Just Peace', Understanding Conflict and War, 1981. Available at: http://www.hawaii.edu/powerkills/NOTE14.HTM#FULL.

2 C. Barnes, 'Agents for Change: Civil Society Roles in Preventing War & Building Peace', Global Partnership for the Prevention of Armed Conflict, Issue Paper 2, September 2006. Available at: http://www.peaceportal.org/documents/127900679/127917167/Rapport2_2.pdf.

3 The International Institute of Strategic Studies, 'Strategic Survey 2017: Annual Assessment of Geopolitics', Routledge 2017.

4 B. Kentish, 'Venezuelans lose average of 19lb in weight due to nationwide food shortages, study suggests', The Indep.endent, February 2017. Available at: http://www.independent.co.uk/news/world/americas/venezuela-weight-loss-average-19lb-pounds-food-shortages-economic-crisis-a7595081.html

5 The International Institute of Strategic Studies, 'Strategic Survey 2017: Annual Assessment of Geopolitics', Routledge, 2017.

6 P. Jawad (2006), 'Diversity, Conflict, and State Failure: Chances and Challenges for Democratic Consolidation in Georgia after the "Rose Revolution"', Program Occasional Paper, Cornell Peace Studies, 30(3), 1-36.

7 'Poverty headcount ration at $5.50 a day (2011 PPP) (% of population)', World Bank. Available at: https://data.worldbank.org/indicator/SI.POV.UMIC?locations=PE (Accessed 14 April 2017).

8 Real effective exchange rate (REER) is the weighted average of a country's currency relative to an index or basket of other major currencies, adjusted for the effects of inflation. The weights are determined by comparing the relative trade balance of a country's currency against each country within the index.

9 Credit rating of countries produced by the Standard and Poor (S&P) were used for this analysis. All 22 alphabet based rating codes were converted into numeric scores staring from 'zero' for the lowest rating 'SD' and terminating at 22 for the best rating 'AAA' .

10 World Development Report 2017: Governance and the Law. The World Bank, 2017. Available at: http://www.worldbank.org/en/publication/wdr2017.

Other publications from the Institute for Economics & Peace

2018 Mexico Peace Index
Institute for Economics & Peace, Apr 2018

An analysis of the changing dynamics of peace in Mexico's 32 states over the last 15 years.

2017 Global Terrorism Index
Institute for Economics & Peace, Nov 2017

This is the fifth edition of the Global Terrorism Index, providing a comprehensive summary of the key global trends and patterns in terrorism over the last 17 years.

2017 Positive Peace Report
Institute for Economics & Peace, Oct 2017

An analysis of the factors that create resilience, and a framework for understanding how societies can transition into a more peaceful state.

SDG16 Progress Report
Institute for Economics & Peace, Sept 2017

A comprehensive global audit of progress on available SDG16 indicators, analysing 163 countries and their progress.

Risk Report
Institute for Economics & Peace, Sept 2017

This report presents new and ground-breaking approaches to forecasting and conceptualising the risk of conflict.

Informe Nuevo León 2017
Institute for Economics & Peace, August 2017

An in-depth analysis of peace, conflict and the socio economic factors that influence it in Nuevo León.

2017 Global Peace Index
Institute for Economics & Peace, June 2017

An analysis on the trends in peace, its economic value, and how to develop peaceful societies.

Positive Peace & SDG16
Institute for Economics & Peace, May 2017

The lens to achieve the Sustainable Peace Agenda through IEP's Positive Peace framework.

2017 Mexico Peace Index
Institute for Economics & Peace, April 2017

A comprehensive measure of peacefulness in Mexico, aiming to identify the key trends, patterns and drivers of peace while highlighting policy opportunities.

2017 Measuring Peacebuilding Cost-Effectiveness
Institute for Economics & Peace, Mar 2017

An analysis of the major issues related to measuring the cost-effectiveness of peacebuilding and an attempt to quantify the cost-effectiveness of peacebuilding activities.

2016 Economic Value of Peace
Institute for Economics & Peace, Dec 2016

This report provides an empirical basis to calculate the potential economic benefits from improvements in peace and estimates the economic impact of violence.

2016 Global Terrorism Index
Institute for Economics & Peace, Nov 2016

The fourth edition of the Global Terrorism Index provides a comprehensive summary of the key global trends and patterns in terrorism over the past 16 years.

2016 Positive Peace Report
Institute for Economics & Peace, Aug 2016

This report investigates the eight domains of Positive Peace, why they are important, and how they work together to reduce levels of violence and improve resilience.

2016 Global Peace Index
Institute for Economics and Peace, June 2016

A statistical analysis of the state of peace in 163 countries outlining trends in peace and conflict, the economic cost of violence, and an assessment of SDG 16.

2016 Mexico Peace Index
Institute for Economics & Peace, Apr 2016

The 2016 Mexico Peace Index analyses Mexico's progress in improving peacefulness from the height of the drug war through 2015.

2015 Global Terrorism Index
Institute for Economics & Peace, Nov 2015

The 2015 Global Terrorism Index Report analyses the impact of terrorism in 162 countries and identifies the social, economic and political factors associated with it.

AVAILABLE FOR DOWNLOAD AT **VISIONOFHUMANITY.ORG/REPORTS**

INSTITUTE FOR
ECONOMICS
& PEACE

FOR MORE INFORMATION
INFO@ECONOMICSANDPEACE.ORG
EXPLORE OUR WORK
WWW.ECONOMICSANDPEACE.ORG AND
WWW.VISIONOFHUMANITY.ORG

GlobalPeaceIndex

@GlobPeaceIndex
@IndicedePaz

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

JUNE 2018 / IEP REPORT 58

ISBN 978-0-6483048-0-7

GPI18-EN-V03-TH-HS-20180823