GLOBAL PEACE INDEX 2017



MEASURING PEACE IN A COMPLEX WORLD



INSTITUTE FOR ECONOMICS & PEACE

ECONOMICS

Quantifying Peace and its Benefits

The Institute for Economics and 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.

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

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EXECUTIVE SUMMARY

This is the eleventh 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 2017 GPI, this year's report includes analysis of the Positive Peace factors that are most important for transitioning to higher levels of peace and how deteriorations in Positive Peace are linked to the rise of populism in Europe. The report also assesses the trends in peacekeeping and militarisation, including a cost/benefit analysis highlighting the positive economic benefits from early peacebuilding interventions.

The results of the 2017 GPI find that the global level of peace has slightly improved this year by 0.28 per cent, with 93 countries improving, while 68 countries deteriorated.

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, Portugal, Austria, and Denmark, all of which were ranked highly in last year's GPI. There was also very little change at the bottom of the index. Syria remains the least peaceful country in the world, preceded by Afghanistan, Iraq, South Sudan, and Yemen.

Six of the nine regions in the world improved. South America registered the largest improvement, overtaking Central America and the Caribbean as the fourth most peaceful region. South America's score benefited from improvements across all three domains, with particularly strong gains in Societal Safety and Security.

The largest regional deteriorations in score occurred in North America, followed by sub-Saharan Africa and the Middle East and North Africa (MENA). The score for North America deteriorated entirely as a result of the US, which more than offset a mild improvement in Canada. The US's score has been dragged down largely because of a deterioration in two indicators: *level of perceived criminality in society* and the *intensity of organised internal conflict*. The latter measure has deteriorated because of the increased levels of political polarisation within the US political system. The US also has experienced the fourth largest drop in Positive Peace globally, after Syria, Greece and Hungary in the ten years to 2015.

Europe remains the most peaceful region in the world, with eight of the ten most peaceful countries coming from this region. However, while 23 of the 36 countries improved, the average peace score did not change notably, due to the substantial deterioration in Turkey, the impact of the terrorist attacks in Brussels, Nice, and Paris, and deteriorating relations between Russia and its Nordic neighbours.

MENA is the least peaceful region in the world for the fifth successive year. Saudi Arabia, followed by Libya, recorded the largest deteriorations in the region. Saudi Arabia fell because of its involvement in the Syrian and Yemen conflicts and increased terrorist activity, mainly conducted by ISIL and its affiliates, while the fall for Libya was due to its increased level of internal conflict.

The indicator with the largest improvement was *number*, *duration and role in external conflicts*. This was mainly due to many countries winding down their involvement in Iraq and Afghanistan. While in most cases the withdrawal of troops occurred some years ago, the indicator is lagging in order to capture the lingering effect of conflict. The indicator measuring *political terror* also significantly improved in all regions except sub-Saharan Africa and the MENA. There were also general reductions in the *number of homicides per 100,000 people* and the *level of violent crime*.

Of the three GPI domains, both Militarisation and Safety and Security improved. However, there was a deterioration in the Ongoing Conflict domain, owing to an increase in the intensity of conflicts in the MENA region. **The ten-year trend** in peacefulness finds that global peacefulness has deteriorated by 2.14 per cent since 2008, with 52 per cent of GPI countries recording a deterioration, while 48 per cent improved. The global level of peacefulness deteriorated rapidly after the global financial crisis, however, since 2010, the movements have been within a small range, resulting in this year's levels of peacefulness returning to approximately the same level as in 2010.

Contrary to this year's trend, the domain that deteriorated the most over the ten-year period was Safety and Security, with 61 per cent of countries recording a deterioration. The major falls in this domain occurred in the sub-Saharan Africa region due to increases in *terrorism impact* and *political instability*. Conversely, the domain with the largest improvement was Militarisation where 60 per cent of countries became less militarised over the past decade. Finally, it is important to note the global trend in peacefulness has been dominated by developments in the MENA region. The violence and conflict has been so intense that if the region were excluded from the rest of the world, the average levels of peacefulness would not have changed significantly over the last decade.

The heightened media attention on conflict in the Middle East, refugee flows and terrorism in Europe has meant several positive trends have not been as widely covered. Two of the more positive trends from the last decade are decreases in the *homicide rate* for 67 per cent of the countries covered and improvements in the *Political Terror Scale* which measures state sponsored violence, such as extra-judicial killings and torture, where 68 countries improved, compared to 46 that deteriorated.

The economic impact of violence on the global economy in 2016 was \$14.3 trillion in purchasing power parity (PPP) terms. This figure is equivalent to 12.6 per cent of the world's economic activity (gross world product), or \$1,953 for every person, and is three per cent lower than in 2015. The reduction was mainly due to decreases in the number of people killed by terrorism, which dropped ten per cent, as well as lower expenditure on peacekeeping, lower internal security and lower costs from homicide.

The economic impact of war was \$1.04 trillion. Peacebuilding expenditure is estimated to be approximately \$10 billion, or less than one per cent of the cost of war. The report also estimates the likely return on increases in peacebuilding funding, noting that the return on investment can be up to 16 times the cost of the intervention, highlighting a major opportunity for future investment. This is especially important for countries mired in conflict where the average economic impact of violence for the ten least peaceful countries was equivalent to 37 per cent of their GDP. This compares to only three per cent in the ten most peaceful.

IEP's risk model accurately predicted five of the ten largest deteriorations in the GPI since 2008. This model provides a framework for prioritising peacebuilding activities, where only one in four interventions need to be effective to provide a strong positive return on investment.



The report's Positive Peace research tackles a central issue facing policymakers – understanding what causes societies to transition from one state of peace to another. The research shows that over the last decade, the defining characteristic of countries that have transitioned to more or less peaceful states has been their performance on Positive Peace.

The analysis finds that different factors become more important at differing stages. In low-peace environments, the factors that matter the most are related to *Well-Functioning Government*, *Low Levels of Corruption, Acceptance of the Rights of Others* and *Good Relations with Neighbours*. In these settings, security and rule of law are the most important factors within the *Well-Functioning Government* Pillar. For countries at the midlevel of peace, *Free Flow of Information* and *Sound Business Environment* rise in importance. In order for countries to rank at the top of the GPI they must score well on all eight Pillars of Positive Peace, underlying the systemic nature of Positive Peace.

Finally, the Pillar related to *Low Levels of Corruption* is strongly significant across all stages of peacefulness, showing that regardless of the peace of a country, it is an important transformational factor for both development and peace. This is important to emphasise, as corruption is the least measured Pillar of Peace in the Sustainable Development Goals (SDGs) targets - only three of the 169 SDG targets relate to corruption.

The report also assesses recent political developments in Europe, finding that the sharp increase in support for populist parties in the past decade closely corresponds with deteriorations in Positive Peace. While Europe's overall score on Positive Peace improved very slightly from 2005 to 2015 by 0.3 per cent, its improvement is well behind the global average improvement of 1.6 per cent. Many of the EU countries recorded substantial deteriorations, including Italy, France and Spain. Increased perceived levels of corruption within the political elite, rising inequality in wealth, deterioration in press freedoms and media concentration, along with diminishing *Acceptance of the Rights of Others*, are linked to many of the issues populist parties have successfully capitalised on. This demonstrates how the negative trends in Positive Peace across Europe cannot be separated from the rise of populism across the continent.

KEY FINDINGS

SECTION ONE: RESULTS

- The GPI recorded improvements in average global peace in 2016. The overall score for the 2017 GPI improved slightly this year due to gains in six of the nine geographical regions represented. More countries improved their levels of peacefulness, than deteriorated: 93 compared to 68.
- The improvements are largely due to indicators related to Societal Safety and Security and Militarisation improving, on average. Safety and Security improved due to many countries recording a lower homicide rate and lower levels of political terror. Several indicators of Militarisation improved, most notably military expenditure as a percentage of GDP, number of armed services personnel per 100,000 people, and nuclear and heavy weapons capabilities.
- The most important positive development was the improvement in *political terror* that was apparent in all regions except sub-Saharan Africa and the Middle East and North Africa.
- However, the Ongoing Domestic and International Conflict domain did deteriorate on average. This was due to a persistently high number and duration of internal conflicts and to relations with neighbouring countries also deteriorating. Due to armed conflict in MENA, many related indicators such as deaths from internal conflict, number of refugees and IDPs, and organised internal conflict are at high levels.
- Regionally, the Middle East and North Africa remained the least peaceful region in the world. MENA's score worsened slightly because of ongoing conflicts in Syria and Yemen which have involved numerous other countries in the region.
- The largest regional deteriorations in the score were in North America, followed by sub-Saharan Africa and MENA. North America deteriorated due to the US's score worsening in intensity of organised internal conflict and level of perceived criminality in society.
- The region that registered the strongest improvement was South America, overtaking Central America and the Caribbean as the fourth most peaceful region.

SECTION TWO: LONG-TERM TRENDS

- While the GPI recorded slight improvements in peace in 2016, the Index records a less peaceful world over the past decade.
- Since 2008, the global level of peace has deteriorated by 2.14 per cent, with 80 countries improving while 83 countries deteriorated.
- One of the major trends recorded over the last decade has been the growing inequality in peace between the most and least peaceful countries. The GPI shows the difference in score between the least peaceful and most peaceful countries has been increasing.
- The last decade's deterioration has been dominated by conflicts in the Middle East and the ensuing battlefield deaths, record levels of terrorism and population displacement.
- The largest indicator improvements, by number of countries that improved their scores, was in armed service personnel where 72 per cent of countries improved their scores and in the homicide rate where 67 per cent improved.
- The terrorism impact indicator had the largest deterioration with 60 per cent of countries having higher levels of terrorism than a decade ago. This reflects the historically high numbers of people killed in terrorist incidents over the past five years.
- The GPI Militarisation domain records a long-term reduction. Although there has been a rise in the number of conflicts since the turn of the century, the level of militarisation of the major powers has been decreasing for the past three decades.
- There is a diverging trend between developed and developing countries. In constant 2014 USD, the average military expenditure for developed countries decreased by 25 per cent from 1987 to 2015, while developing countries have increased military spending by an average of 240 per cent.
- The countries that displayed the most significant growth in heavy weapons capabilities over the last thirty years are primarily in unstable regions where there are high tensions with neighbouring countries. These include Egypt, India, Iran, Pakistan, South Korea, and Syria.
- Peacekeeping is no longer only a post-conflict activity, with approximately 53 per cent of personnel deployed in countries with an active armed conflict, such as Sudan and the Democratic Republic of the Congo.

SECTION THREE: ECONOMIC IMPACT OF VIOLENCE

- The global economic impact of violence was \$14.3 trillion PPP in 2016, equivalent to 12.6 per cent of global GDP, or \$1,953 per person. This represents a decrease of three per cent from 2015, a drop of \$431 billion PPP, reflecting the dividend from a more peaceful world.
- The fall in the global economic impact of violence is due to the small decrease in the number of lives lost to terrorism, lower expenditure on peacekeeping and lower internal security and military spending over the past year.
- The least peaceful countries in the world disproportionately suffer economically from the levels of violence they experience. The average cost of violence was equivalent to 37 per cent of GDP in the ten least peaceful countries, compared to only three per cent in the ten most peaceful. The three least peaceful - Syria, Iraq and Afghanistan incurred the largest cost of violence as a percentage of their GDP at 67, 58 and 52 per cent of GDP, respectively.
- Peacebuilding expenditure, at under \$10 billion, is less than one per cent the economic impact of war, which was \$1.04 trillion.
- Peacebuilding activities can be highly cost-effective, providing cost savings 16 times the cost of the intervention, highlighting a major opportunity for future investment.

SECTION FOUR: POSITIVE PEACE

- Positive Peace research tackles a central question facing policymakers: how and why societies transition from one state of peace to another. The research shows that over last ten years, the level of Positive Peace is a country's best long-term indicator of how violent is likely to be.
- Positive Peace is systemic. The most peaceful countries in the world perform strongly on all eight Pillars of Positive Peace. The research finds that different Pillars of Peace become more important at different stages.
- In Low-Peace environments, the factors that matter the most are related to Well-Functioning Government, Low Levels of Corruption, Acceptance of the Rights of Others and Good Relations with Neighbours. In these settings, security and rule of law are the most important factors within the Well-Functioning Government Pillar.
- Free Flow of Information and Sound Business Environment become more important when a country is approaching the global average level of peacefulness, also described as the Mid-Peace level.
- Low Levels of Corruption is the only Pillar that is strongly significant across all three levels of peacefulness. This suggests it is an important transformational factor at all stages of nations' development.
- IEP's Positive Peace framework can be used to monitor progress toward the United Nations' Sustaining Peace Agenda, which calls for a fundamental shift in the way the UN prevents conflict and builds peace in the long term.
- Positive Peace has regressed in much of Europe, the world's most peaceful region, even while the global average is improving. Between 2005 and 2015, 18 out 36 European countries experienced deteriorations in their overall Positive Peace Index (PPI) scores.
- Four of the eight Pillars of Peace deteriorated in Europe over the past ten years. In order of average deterioration these Pillars are Free Flow of Information, Low Levels of Corruption, Acceptance of the Rights of Others and Well-Functioning Government.
- The largest deterioration was in the Free Flow of Information Pillar, which reflected the deteriorations in freedom of the press. Greece, Turkey and Hungary deteriorated the most on this indicator. The rest of the world in fact improved on Free Flow of Information while 23 European countries went backwards.

GLOSSARY

The following terms used throughout the 2017 Global Peace Index report are defined here for reference:

Correlation

The statistical relationship between two variables; how much one variable changes in relation to another variable. IEP uses linear correlations to compare the strength of the association between different variables.

Correlation coefficient

A value between -1 and 1 that shows the strength of the correlation between two variables, where -1 indicates a perfect indirect correlation, 0 indicates no correlation and 1 indicates a perfect direct correlation.

Direct cost of violence

Costs which are directly attributed to a specific form of violence. Direct costs include the cost of violence to the victim, the perpetrator and the government. These include direct expenditures, such as the cost of policing.

Developed and developing countries

The classification of countries as developed or developing was taken from the 2012 UN Statistical Annex. For the purposes of this report, economies in transition and developing economies have been grouped together as developing economies.

Economic impact of violence

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.

External peace

A set of indicators that measures how peaceful a country is outside its national borders.

Global Peace Index (GPI) domains:

> Ongoing Domestic and International Conflict

Indicators of the number and intensity of ongoing civil and international wars.

Societal Safety and Security

Indicators of the levels of safety and security within a country, such as the perception of criminality in society, the level of political instability and the rate of homicides and violent crimes.

> Militarisation

Indicators of a nation's military capacity, both in terms of the economic resources committed to the military and support for multilateral operations.

Homeostasis

A persistent state of self-regulating and balanced stability.

Indirect cost of violence

Accounts for costs that accrue after the violent event and include indirect economic losses, physical and physiological trauma to the victim and lost productivity.

Internal peace

A set of indicators that measures how peaceful a country is inside its national borders.

Multiplier

A scaling factor used to adjust the value of one variable based on another variable. For example, the economic impact of violence is calculated using a multiplier of two.

Negative Peace

The absence of violence or the fear of violence.

Positive Peace

The attitudes, institutions and structures that create and sustain peaceful societies. These same factors also lead to many other positive outcomes that support the optimum environment for human potential to flourish.

Resilience

The ability of a country to absorb and recover from shocks, for example natural disasters or fluctuations in commodity prices.

Self-modification

A process by which society modifies itself to accommodate new situations and challenges.

Significant, statistically

A result that is unlikely to be due to chance alone, as measured statistically using probability. A standard definition is a p-score of less than .05. This means that there is only a 5% chance that the results of an analysis are due to chance.



RESULTS & FINDINGS

HIGHLIGHTS

The overall score for the 2017 Global Peace Index (GPI) improved slightly this year due to gains in six of the nine geographical regions represented. This is the first improvement in global peacefulness recorded since 2014 and does not necessarily indicate a new trend. Of significance is the number of countries that improved, 93, compared to those that deteriorated, 68.

As has been the case since 2015, the Middle East and North Africa was the least peaceful region in the world and deteriorated further, although less noticeably compared with the past two years. The largest deteriorations in the score came from North America, followed by sub-Saharan Africa and the Middle East and North Africa.

The score for North America deteriorated, entirely as a result of the deterioration in the US which more than offset an improvement in Canada. The US's score has been dragged down largely because of a deterioration in intensity of organised internal conflict and level of perceived criminality in society. These have been strongly linked to the deepening political polarisation that peaked during the 2016 presidential campaign. Political polarisation is hardly a new phenomenon, but it has been exacerbated in recent years by income inequality and racial tension. The score for sub-Saharan Africa was influenced by deteriorations in various countries-notably Ethiopia, which worsened more than any other country, reflecting a state of emergency imposed in October 2016 following violent demonstrations. The Middle East and North Africa's score worsened slightly as a result of ongoing conflicts in Syria and Yemen which have involved numerous regional powers. The region that registered the strongest improvement was South America, overtaking Central America and the Caribbean as the fourth most peaceful region.

With regard to the three domains that comprise the index, Ongoing Domestic and International Conflict was the only one to have deteriorated based on a global average in 2017. The number and duration of internal conflicts indicator represented the poorest performance in that all regions, except Russia and Eurasia and Central America and the Caribbean, suffered a deterioration in the past year. Sub-Saharan Africa and the Middle East and North Africa represented the majority of the lowest-ranking countries as well as those that saw the largest declines in score for this indicator. Relations with neighbouring countries also suffered in 2017 and registered the second-largest deterioration as a global average within this domain; indeed, no region improved this year although a number of them maintained stable scores. One positive development was that the indicators measuring number of deaths from internal conflict and number deaths from external conflict both improved. However, the main positive contribution to the category was the reduction in the number, duration and role in external conflicts which had the added benefit of being broad-based: all regions improvedparticularly North America as a result of a windingdown of US military operations abroad in the later years of the Obama administration.

In contrast, the score for **Societal Safety and Security** made a modest improvement overall, with the main gains materialising in South America, and Russia and



68 Countries became LESS – PEACEFUL

Eurasia. The most important positive development came with an improvement in political terror which was apparent in nearly all regions except sub-Saharan Africa and the Middle East and North Africa (the scores for Europe and North America were unchanged although these were already the top-ranking regions). There were also noticeable reductions in the number of homicides per 100,000 people and level of violent crime in general. In the latter case the score improved or remained unchanged in all regions. A decline in likelihood of violent demonstrations also contributed to the overall improvement, with only sub-Saharan Africa worsening its score as a result of ethnic tensions and election-related instability. This is concerning given that the region is next to last in the rankings for this indicator. However, all other indicators worsened, which prevented a stronger improvement in the global score of this domain. The level of perceived criminality in society rose noticeably, either worsening or remaining stagnant in all regions. The deterioration in the impact of terrorism was even more pronounced, worsening in all regions except sub-Saharan Africa and, especially, Central America and the Caribbean. Although to a lesser extent than for the abovementioned indicators, compared with 2016 the world suffers from worsened number of jailed population per 100,000 people, number of internal security officers and police per 100,000 people, political instability, and number of refugees and internally displaced people as percentage of the population.

Finally, there was another very mild improvement in the **Militarisation** domain, where the deterioration in the Middle East and North Africa (already the lowest-

ranked region) and sub-Saharan Africa contrasted with improvements in Russia and Eurasia as well as South Asia. Most indicators in this category showed only moderate changes compared with last year, with the most notable positive change coming from volume of transfers of major conventional weapons, as recipient, per 100,000 people. Nevertheless, Russia and Eurasia, as well as the Middle East and North Africa, worsened considerably in this indicator as former Soviet republics as well as Middle Eastern states (including Israel) continued to bolster their arsenals. The scores for military expenditure as a percentage of GDP, number of armed services personnel per 100,000 people, and nuclear and heavy weapons capabilities also improved, with South Asia showing the only worsening in the latter two indicators. The overall score for Militarisation, however, was dragged down by deteriorations in financial contributions to UN peacekeeping missions as well as ease of access to small arms and light weapons; in the latter indicator no region showed an improvement on 2016 scores. Volume of transfers of major conventional weapons, as supplier, per 100,000 people also worsened slightly in global terms, although this showed a particularly large deterioration in North America, already (by far) the worst-scoring region due to the huge volume of US arms sales abroad. Pledges for a major rise in US military spending on top of continued military build-up in Russia, China, and the Middle East suggest that the risk of the Militarisation domain reversing its gains in the near future is very high.

ANK	COUNTRY	SCORE	CHANGE										
1	Iceland	1.111	\leftrightarrow	= 10	Japan	1.408	↓ 1	21	Singapore	1.534	↓ 2	31	Croatia
2	New Zealand	1.241	1 2	12	Australia	1.425	↑ 3	22	Mauritius	1.547	1	32	Latvia
3	Portugal	1.258	1 2	13	Bhutan	1.474	\leftrightarrow	23	Spain	1.568	1 2	33	Poland
4	Austria	1.265	↓ 1	14	Norway	1.486	↑ 3	24	Chile	1.595	1 2	34	Costa Rica
5	Denmark	1.337	₩3	15	Hungary	1.494	↑ 5	25	Romania	1.6	个 5	35	Uruguay
6	Czech Repub	lic 1.36	\leftrightarrow	16	Germany	1.5	\leftrightarrow	26	Slovakia	1.611	↓ 2	36	Estonia
7	Slovenia	1.364	▲ 3	17	Finland	1.515	↓ 6	27	Botswana	1.622	\leftrightarrow	37	Lithuania
8	Canada	1.371	\leftrightarrow	18	Sweden	1.516	↓ 4	28	Bulgaria	1.631	\leftrightarrow	38	Italy
9	Switzerland	1.373	↓ 2	=19	Belgium	1.525	↓ 1	29	Malaysia	1.637	\leftrightarrow	39	Sierra Leone
=10	Ireland	1.408	1 2	=19	Netherlands	1.525	个 2	30	Qatar	1.664	个 5	40	Taiwan

THE STATE OF PEACE

Very high
High
Medium
Low
Very low
Not included

2017 GLOBAL PEACE INDEX

A SNAPSHOT OF THE GLOBAL STATE OF PEACE

RANK	COUNTRY	SCORE C	HANGE
81	Guyana	2.021	↑ 12
82	Liberia	2.023	↓ 10
83	Haiti	2.026	个 5
=84	Bangladesh	2.035	↓ 2
=84	Bosnia-Herzegovi	na 2.035	↓ 21
86	Bolivia	2.045	↓ 6
87	Gabon	2.052	↓ 9
88	Cuba	2.056	↓ 5
89	Cambodia	2.065	↑ 15
90	Lesotho	2.066	↓ 28

91	Burkina Faso	2.07	↓ 4
92	Jamaica	2.072	$\mathbf{\Psi}1$
93	Nepal	2.08	↓ 16
94	Georgia	2.084	个 2
95	Jordan	2.087	$\mathbf{\Psi}1$
96	Guinea	2.089	个 6
=97	Papua New Guinea	2.095	1
=97	Trinidad & Tobago	2.095	↓ 12
99	Dominican Republic	2.114	↔
100	Angola	2.116	↔

101	Uzbekistan	2.132	1 8
102	Macedonia (FYR)	2.133	↓ 7
103	Belarus	2.141	个 4
104	Myanmar	2.179	1 0
105	Uganda	2.182	↓ 4
106	Honduras	2.185	个 5
107	Djibouti	2.196	1 4
108	Brazil	2.199	↓ 3
109	Algeria	2.201	↓ 1
110	The Gambia	2.211	↓ 18

111	Kyrgyz Republic	2.216 12
112	Armenia	2.22 🔸 2
113	Rwanda	2.227 15
114	United States	2.232 🔸 11
115	El Salvador	2.239 🔸 3
116	China	2.242 🛧 3
117	Guatemala	2.245 🔸 1
118	Tajikistan	2.263 🛧 4
119	Turkmenistan	2.27 🔸 13
120	Thailand	2.286 🛧 5

 $\begin{array}{ccc} 1.665 & \longleftrightarrow \\ 1.67 & \longleftrightarrow \\ 1.676 & \bigstar 11 \\ 1.701 & \bigstar 1 \end{array}$

1.709 🔸 1

 $\begin{array}{ccc} 1.712 & \longleftrightarrow \\ 1.732 & \longleftrightarrow \\ 1.737 & \uparrow 1 \\ 1.76 & \uparrow 4 \end{array}$

1.782 1

Eq. Guinea	1.93 ↔	71 Peru	1.986 12
Moldova	1.938 🛧 2	72 Kazakhstan	1.992 🔺 3
Togo	1.939 🛧 2	73 Greece	1.998 🛧 8
Cyprus	1.94 🛧 7	74 Nicaragua	2.002 🔸 5
UAE	1.944 🔸 9	75 Morocco	2.004 15
Ecuador	1.948 10	76 Kosovo	2.007 110
Montenegro	1.95 🔸 7	77 Swaziland	2.01 12
Paraguay	1.961 11	78 – Mozambique	2.013 10
Tunisia	1.977 🔸 4	79 Benin	2.014 🛛 🖊 6
Oman	1.983 🛧 4	80 📃 Sri Lanka	2.019 117
	Moldova Togo Cyprus UAE Ecuador Montenegro Paraguay Tunisia	Moldova 1.938 ↑ 2 Togo 1.939 ↑ 2 Cyprus 1.94 ↑ 7 UAE 1.944 ♦ 9 Ecuador 1.948 ↑ 10 Montenegro 1.95 ↓ 7 Paraguay 1.961 ↑ 11 Tunisia 1.977 ↓ 4	Moldova 1.938<↑2 72 Kazakhstan Togo 1.939<↑2



121	Cote d' Ivoire	2.307 🔸 4
122	Guinea-Bissau	2.309 🔶 7
123	South Africa	2.324 13
124	Rep of Congo	2.334 \leftrightarrow
125	Kenya	2.336 🛧 6
126	Niger	2.343 🔰14
127	Zimbabwe	2.352 +
128	Mauritania	2.355 🔸 8
129	Iran	2.364 🛧 4
130	Cameroon	2.39 \leftrightarrow
131	Bahrain	2.404 🔨 1

132	Azerbaijan	2.426 🛧 2
133	Saudi Arabia	2.474 🔸 4
134	Ethiopia	$2.477 \clubsuit 16$
135	Chad	2.495 🛧 1
136	Eritrea	2.505 🔸 1
137	India	2.541 🛧 4
138	Philippines	$2.555 \uparrow 1$
139	Egypt	2.583 🛧 3
140	Mali	2.596 🔸 3
141	Burundi	2.641 🔸 3
142	Mexico	2.646 🔸 2

143	Venezuela	2.652	1
144 📕	Israel	2.707	↓ 1
145	Palestine	2.774	^ 3
=146	Colombia	2.777	1
=146	Turkey	2.777	$\mathbf{\Psi}1$
148	Lebanon	2.782	↓ 2
149	Nigeria	2.849	↔
150	North Korea	2.967	↔
151	Russia	3.047	↔
152	Pakistan	3.058	1
153	Dem. Rep. Congo	3.061	$\mathbf{\Psi}1$

1	54	Ukraine	3.184	个 2
=	155	Central African Rep.	3.213	个 2
=	155	Sudan	3.213	↔
1	57	Libya	3.328	↓ 3
1	58	Somalia	3.387	1
1	59 📕	Yemen	3.412	↓ 1
1	60	South Sudan	3.524	个 2
1	61 📕	Iraq	3.556	↔
1	62	Afghanistan	3.567	↓ 2
1	63	Syria	3.814	↔

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RESOUS

Iceland has maintained its position as the most peaceful country in the world in the 2017 GPI and has been ranked as the world's most peaceful country every year since 2008. It was also ranked as the most peaceful country on two of the three domains covered in the GPI, Societal Safety and Security and Militarisation.

Portugal moved to third position, its highest ranking since the inception of the index, a notable improvement given that it was ranked 16th less than five years ago. Portugal has improved on 12 of the 23 GPI indicators, most notably on *weapons imports* and *violent demonstrations*. Denmark fell from second position to fifth due to increases in the *impact of terrorism* and a deterioration in the *neighbouring country relations* indicators.

Syria remains the world's least peaceful country for the second successive year, and has been ranked amongst the world's five least peaceful countries since the start of the civil war in 2013. It has fallen 64 places in the rankings since the inception of the index and has had the largest fall in score of any country in the last decade. Iraq and Afghanistan have also remained amongst the bottom five countries of the index for the past five years. South Sudan is now the fourth least peaceful country and has experienced a steady decline in recent years, dropping 15 places since achieving independence from Sudan. Yemen's deterioration has it ranked as the fifth least peaceful country for the first time in 2017, owing to an increase in the level of violent crime, intensity of internal organised conflicts, and the impact of terrorism. Yemen has fallen considerably in the GPI since 2008, when it was ranked 131st. It has slipped 28 places in the rankings since then.

There is considerable variance in the rankings of countries across the three GPI domains: Societal Safety and Security, Ongoing Domestic and International Conflict, and Militarisation. Countries in the Militarisation domain have the largest variance in rankings when compared to the overall GPI. Of the five most militarised countries, only Syria is ranked amongst the bottom five on the overall index. Similarly, only Iceland is ranked amongst the five most peaceful countries for both the Militarisation domain and the index overall. Although both Israel and the US are amongst the five most militarised countries in the world, they perform much better on the Societal Safety and Security domain, ranking in the top 60.

TABLE 1.1 FIVE MOST AND LEAST PEACEFULCOUNTRIES 2017, MILITARISATION DOMAIN

Of the five least peaceful countries only Syria ranks amongst the five most militarised countries while Iceland is the only country of the five most peaceful countries to rank in the five least militarised countries.

OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
1	Iceland	↑ 2	1.009	-0.254
2	Hungary	↓ 1	1.131	-0.007
3	Slovenia	个 3	1.185	-0.100
4	Bhutan	↔	1.233	-0.039
5	Portugal	个 7	1.253	-0.104
OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
163	Israel	↔	3.940	+0.191
162	Russia	↔	3.277	-0.015
161	North Korea	↔	3.231	+0.096
160	Syria	↔	3.100	+0.041

There are strong regional similarities in the rankings between the most and least peaceful countries on the Safety and Security domain, which can be seen in table 1.2. All five of the most peaceful countries on this domain are from Europe, with four of the five being Nordic countries. However, despite the high scores, the level of Safety and Security has deteriorated in Europe over the past decade, with Iceland, Denmark, and Sweden all recording worse scores, owing largely to a deterioration in the *impact of terrorism* indicator.

Of the five countries with the lowest levels of peacefulness on the Safety and Security domain, three are located in the Middle East and North Africa. Both Yemen and Syria used to have much higher rankings in this domain, falling 63 and 91 places respectively in the rankings since 2008.

There are four countries on the Ongoing Conflict domain that have scores of one, meaning that they currently have no tensions with neighbouring countries and have not recently been involved in any domestic or international conflicts. These four countries are Botswana, Chile, Mauritius and Uruguay. Although Europe has the best average regional score on this domain, only one European country, Switzerland, is in the top five, and no European country has a score of one.

Syria remains the country at the bottom of the Ongoing Conflict domain, and is the only country to be ranked amongst the five least peaceful countries on all three GPI domains. Of the other four countries, Somalia and Afghanistan have been ranked in the five least peaceful on this domain since the inception of the index, reflecting the intractable nature of the conflicts embroiling these countries.

There is considerable variance in the rankings of countries across the three GPI domains: Societal Safety and Security, Ongoing Domestic and International Conflict, and Militarisation. The Militarisation domain has the largest variance when compared to the overall GPI rankings.

TABLE 1.2 FIVE MOST AND LEAST PEACEFULCOUNTRIES 2017, SAFETY AND SECURITYDOMAIN

Four of the five safest countries are Nordic, all five are located in Europe.

OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
1	Iceland	↔	1.232	-0.016
2	Norway	↑ 2	1.249	-0.064
3	Switzerland	↓ 1	1.305	+0.011
4	Denmark	↓ 1	1.347	+0.045
5	Sweden	↔	1.373	+0.034
OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
	COUNTRY Iraq			
RANK		RANK	SCORE	SCORE
RANK 163	Iraq	RANK ↔	SCORE 4.318	SCORE -0.015
RANK 163 162	Iraq Syria	RANK ↔	SCORE 4.318 4.237	SCORE -0.015 -0.007

TABLE 1.3 FIVE MOST AND LEAST PEACEFULCOUNTRIES 2017, ONGOING CONFLICT DOMAIN

Only four countries had no involvement in ongoing international or domestic conflict and no tensions with neighbouring countries.

OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
=1	Botswana	↔	1.000	0
=1	Chile	↔	1.000	0
=1	Mauritius	↔	1.000	0
=1	Uruguay	↔	1.000	0
5	Switzerland	↓ 4	1.008	+0.008
OVERALL RANK	COUNTRY	CHANGE IN RANK	OVERALL SCORE	CHANGE IN SCORE
	COUNTRY Syria			
RANK			SCORE	SCORE
RANK 163	Syria	RANK ↔	SCORE 4.318	SCORE -0.015
RANK 163 162	Syria Afghanistan	RANK ↔ ↓2	SCORE 4.318 4.237	SCORE -0.015 -0.007

REGIONAL OVERVEN

Six of the world's nine regions became more peaceful, with the largest overall improvement being recorded in South America, where there were improvements for all three domains. The largest improvement was in the Safety and Security domain. This was driven by improvements in Guyana, Argentina, Peru, and Paraguay. Overall, eight of the eleven countries in South America improved their levels of peace.

The largest average deterioration occurred in the North America region, with deteriorations across all three GPI domains. However this region only consists of two countries, United States and Canada. A change in the score of either country can substantially affect the region's score. This year's fall was entirely due to the deterioration in the United States' score.

Sub-Saharan Africa and the Middle East and North Africa also deteriorated across all three domains. The deterioration in the Middle East and North Africa was driven by a fall in peacefulness in 11 out of 20 countries. Saudi Arabia's involvement in the Yemen conflict, in particular, has affected its relationship with neighbouring countries. In sub-Saharan Africa, 24 of the 44 countries became less peaceful, with the largest deteriorations occurring in Ethiopia, Burundi, Mali, and Lesotho.

Europe remains the most peaceful region, followed by North America, and then Asia-Pacific. These regions have been ranked first, second, and third respectively for the entire history of the GPI. The Middle East and North Africa remains the least peaceful region in the world, a position it has held for the last three years. Five of the world's ten least peaceful countries are from this region (Syria, Iraq, Yemen, Libya and Sudan), while only one country (Qatar) is ranked amongst the world's 50 most peaceful countries.

FIGURE 1.1 CHANGE IN OVERALL GPI SCORE AND IN EACH DOMAIN BY REGION, 2016 TO 2017

Although six regions became more peaceful, only three improved on the Ongoing Conflict domain.



EUROPE

Europe is still the most peaceful geographic region in the world according to the GPI, claiming eight out of the top 11 places. Iceland remains at the top of the global ranking, followed by Portugal, which has made the biggest improvement in the region. The continuation of the economic recovery has supported an improvement in the score for indicators such as *likelihood of violent demonstrations*. The largest drop in score is recorded by Poland, driven by a deterioration in the *intensity of organised internal conflict* and *likelihood of violent demonstrations*. Several of the policies enacted by the government of the right-wing PiS party, which took power in 2015, have led to growing tensions between liberal and socially conservative values, resulting in public protests.

Much of south east Europe saw its score worsen this year. An increase in nationalist rhetoric led to a deterioration in *relations with neighbouring countries* for Bosnia and Herzegovina and Croatia, while Montenegro (67th) saw a strong increase in *political instability* following a tumultuous election in October 2016 that involved an alleged attempted coup. Turkey remains the most significant outlier in Europe; in 2017 it falls another place in the global ranking, to 146th, as its scores for *number of deaths from internal conflict, Political Terror Scale* and the *impact of terrorism* deteriorate significantly.

The political situation had been worsening in Turkey over the last few years but the situation came to a head in July 2016, when parts of the military attempted a coup, resulting in a government crackdown on alleged conspirators. In Western Europe, France fell another five places to 51st in the global ranking. The deterioration was largely due to an increase in the *impact of terrorism* after an attack in Nice in July 2016, which marked the latest in a number of terrorist attacks in recent years. However, other western European countries have also seen their scores worsen through an increased *impact of terrorism*, including Germany and most of the Nordic countries.

The Brexit vote in the UK revealed high levels of polarisation within the society, which has resulted in political uncertainty; however, the political scene was relatively stable after the new prime minister was installed. A continued improvement in the UK's overall score is driven by international conflict indicators, following the country's withdrawal from Afghanistan in 2014. Although the risk of conflict remains low, tensions between Russia and the Nordic countries increased further in 2016, leading to the scores for *relations with neighbouring countries* of Denmark, Finland, Norway and Sweden also deteriorating, substantially impacting their scores.

TABLE 1.4 EUROPE RANKINGS

REGIONAL	COUNTRY	OVERALL	CHANGE IN	OVERALL
RANK		SCORE	SCORE	RANK
1	Iceland	1.111	-0.081	1
2	Portugal	1.258	-0.098	3
3	Austria	1.265	-0.013	4
4	Denmark	1.337	0.091	5
5	Czech Republic	1.360	0	6
6	Slovenia	1.364	-0.044	7
7	Switzerland	1.373	0.003	9
8	Ireland	1.408	-0.024	10
9	Norway	1.486	-0.016	14
10	Hungary	1.494	-0.042	15
11	Germany	1.500	0.014	16
12	Finland	1.515	0.086	17
13	Sweden	1.516	0.054	18
14	Belgium	1.525	-0.003	19
14	Netherlands	1.525	-0.016	19
16	Spain	1.568	-0.039	23
17	Romania	1.600	-0.049	25
18	Slovakia	1.611	0.009	26
19	Bulgaria	1.631	-0.014	28
20	Croatia	1.665	-0.005	31
21	Latvia	1.670	-0.011	32
22	Poland	1.676	0.119	33
23	Estonia	1.712	-0.021	36
24	Lithuania	1.732	-0.003	37
25	Italy	1.737	-0.036	38
26	United Kingdom	1.786	-0.045	41
27	France	1.839	0.010	51
28	Serbia	1.888	0.019	56
29	Albania	1.908	0.007	57
30	Cyprus	1.940	-0.050	64
31	Montenegro	1.950	0.028	67
32	Greece	1.998	-0.047	73
33	Kosovo	2.007	-0.053	76
34	Bosnia and Herzegovina	2.035	0.083	84
35	Macedonia (FYR)	2.133	0.005	102
36	Turkey	2.777	0.069	146
REGIONAL	AVERAGE	1.664	-0.003	

NORTH AMERICA

The North America regional score has deteriorated from the 2016 GPI, with an improvement in Canada offset by a much larger deterioration in the US. The past year has been a deeply worrying one for the US, with the presidential campaign highlighting the deep divisions within American society.

Accordingly, the score for *intensity of organised internal conflict* has worsened. Data have also shown a declining level of trust in government and other citizens which has generated a deterioration in the score for *level of perceived criminality in society*. Social problems within the US are also likely to become more entrenched and racial tensions may continue to simmer. Reflecting these tensions, rising homicide rates in several major American cities led to a deterioration in the *homicide rate* indicator, contributing to the decline in the US's peace score.

In contrast, Canada (ranked 8th in the world) became slightly more peaceful. This was largely driven by improvements in its external indicators with the biggest improvements occurring for *the number, duration and role in external conflicts* and the indicator measuring *weapons exports*. Improvements in the external indicators were somewhat offset by increases in the number of *homicides, incarceration rates* and *terrorism impact*.

TABLE	1.5 NORTH A	MERICA R	ANKINGS	
REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Canada	1.371	-0.017	8
2	United States of America	2.232	0.079	114
REGIONAL	AVERAGE	1.802	0.031	

ASIA-PACIFIC

The Asia-Pacific region is ranked third after Europe and North America in the GPI, with the majority of the countries making improvements in their overall scores. Coming second, tenth and twelfth respectively in the global ranking, New Zealand, Japan and Australia remain among the most peaceful countries, while the Philippines (138th) and North Korea (150th) remain among the least peaceful.

Cambodia made the most progress in the region, while Indonesia registered the largest drop. Cambodia's improvement reflects lower levels of labour unrest in the past year as well as an improvement in the *number, duration and role in external conflicts*, reflecting the ending of a border dispute with Thailand in 2011. Aided by the government's healthier fiscal position, meeting its commitments for *financial contributions to UN peacekeeping missions* has also been a driver for improvement. However, stability in the level of protests contrasts with the growing authoritarian nature of the Cambodian People's Party-led government, and there are risks of heightened political tensions—particularly during the 2017-18 election calendar—

with the breakdown in relations between the ruling party and the opposition Cambodia National Rescue Party. Following peaceful elections in November 2015, Myanmar has continued to make progress on its overall score. Democratisation, and the entrance of a legitimate government (NLD), has helped reduce the *likelihood of violent demonstrations* and *political instability*. However, the risk of internal conflict remains as the army continues to have run-ins with ethnic armed groups (EAG), with a peace process gradually developing.

Indonesia registered the greatest score deterioration in the region, driven by a deterioration in the indicators measuring *political terror* and the *number and duration of internal conflicts*, particularly owing to increased tensions between hard-line Muslims and minority sectarian groups, chiefly Christian.

The Philippines' overall score has deteriorated since new president Rodrigo Duterte took office in June 2016. A bloody war against drugs and crime has been extended nationwide, and is reflected in a deterioration of the country's Societal Safety and Security indicators. The Philippines *homicide rate, incarceration rate* and *number of deaths from internal conflict* have all deteriorated. The extrajudicial killings of alleged criminals, drug mules and users has significantly increased security risks, even for ordinary citizens who could potentially get caught in the crossfire.

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	New Zealand	1.241	-0.044	2
2	Japan	1.408	0.013	10
3	Australia	1.425	-0.039	12
4	Singapore	1.534	0	21
5	Malaysia	1.637	-0.010	29
6	Taiwan	1.782	-0.004	40
7	Laos	1.800	-0.052	45
8	Mongolia	1.801	-0.038	46
9	South Korea	1.823	-0.034	47
10	Indonesia	1.850	0.050	52
11	Timor-Leste	1.866	-0.017	53
12	Vietnam	1.919	0.018	59
13	Cambodia	2.065	-0.103	89
14	Papua New Guinea	2.095	-0.047	97
15	Myanmar	2.179	-0.079	104
16	China	2.242	-0.045	116
17	Thailand	2.286	-0.027	120
18	Philippines	2.555	0.044	138
19	North Korea	2.967	0.023	155
REGIONAL	AVERAGE	1.920	-0.020	

TABLE 1.6 ASIA-PACIFIC RANKINGS

SOUTH AMERICA

South America's score improved slightly compared with 2016 enough to outstrip Central America and the Caribbean, and to place fourth out of the nine geographical groupings. In the past year, South America's score has benefited from improvements across all domains, particularly Societal Safety and Security. In terms of overall scores, Guyana and Argentina stand out as the most improved countries. In March 2016, Guyana held its first local elections since 1992, and political tensions have eased, improving the scores for *likelihood of violent demonstrations* and *political instability*. In Argentina, meanwhile, a new administration headed by Mauricio Macri has taken a consensusbuilding approach when interacting with internal opponents, which has resulted in improved scores for the Societal Safety and Security domain such as the *Political Terror Scale*, *likelihood of violent demonstrations*, and *political instability*.

A similar situation is evident in Peru where performance on the *Political Terror Scale* and *political instability* have improved under the government of Pedro Pablo Kuczynski. Brazil and Venezuela, which saw their *political instability* scores worsen, are at the other end of the spectrum—the former because of the political crisis that resulted in the impeachment of President Dilma Rousseff, and the latter reflecting growing tensions between government and opposition amid a deep economic and social crisis. The Venezuelan government's control of key state institutions has allowed it to reduce the policymaking influence of the opposition-dominated National Assembly. Opposition voters' increasingly limited means of addressing their concerns via institutional channels is heightening the risk of violent social unrest and protests have intensified since the start of 2017.

In Colombia, the ceasefire and peace process between the government and the FARC was reflected in improved scores in a host of indicators-most importantly, reductions in impact of terrorism and number of deaths from internal conflict. However, a slight deterioration in its score is explained by the continued activity of the smaller armed group ELN and a lag in financial contributions to UN peacekeeping missions. Improved conditions in Colombia have had an impact across its borders, particularly in Ecuador, where the intensity of organised internal conflict has improved as a result of less spillover effects from the conflict. South American nations have not recently engaged in external conflicts, and their disputes are usually limited to border issues which are channelled through international tribunals, explaining the good performance in external conflict indicators. Chile and Uruguay remain at the top of the regional rankings, with Chile ranked 24th and Uruguay 35th globally.

CENTRAL AMERICA AND THE CARIBBEAN

Central America and the Caribbean swapped places with neighbouring South America in 2017, having edged down one position to fifth in the regional rankings. Costa Rica maintained its top position in the region despite falling one spot (to 34th). Of the twelve countries in the region, five saw their scores deteriorate, while the other seven improved. The largest deteriorations were registered in Mexico and Trinidad

TABLE 1.7 SOUTH AMERICA RANKINGS

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Chile	1.595	-0.040	24
2	Uruguay	1.709	-0.016	35
3	Argentina	1.880	-0.076	55
4	Ecuador	1.948	-0.072	66
5	Paraguay	1.961	-0.075	68
6	Peru	1.986	-0.071	71
7	Guyana	2.021	-0.086	81
8	Bolivia	2.045	0.005	86
9	Brazil	2.199	0.024	108
10	Venezuela	2.652	-0.003	143
11	Colombia	2.777	0.014	146
REGIONAL	AVERAGE	2.070	-0.036	

and Tobago. In the latter case, this was on account of a rise in military expenditure as a percentage of GDP and weapons imports. For Mexico, which at 142nd ranks the lowest in the region, the decline was due to the effect of the Donald Trump presidency in the US on its *relations with neighbouring* countries and, to a lesser extent, a deterioration in political terror. Nicaragua also suffered a noticeable deterioration in the score, as well as a drop of five positions in the global rankings. Under the government of Daniel Ortega, in office since 2007, there has been a deterioration in *political terror* and financial contributions to UN peacekeeping missions, while the recent purchase of Russian T-72 tanks has affected its scores for *weapons imports*. Aside from Mexico, the other three countries in the region with significant Societal Safety and Security concerns are the so-called "Northern Triangle" countries: Honduras, El Salvador and Guatemala. Of these, Honduras showed the strongest improvement (and in the region as a whole) thanks to improvements in *political* terror, financial contributions to UN peacekeeping missions, and *impact of terrorism*. The country has benefited from government efforts to combat crime, although scores for indicators such as the homicide rate are still among the highest in the world. Guatemala also performed better this year as the likelihood of violent demonstrations diminished with the election of President Jimmy Morales in late 2015, who pledged to tackle corruption and improve public services. Meanwhile, El Salvador slipped slightly in its overall score, driven by a deterioration in financial contributions to UN peacekeeping missions and an increase in number of internal security officers and police per 100,000 people.

CENTRAL AMERICA & THE CARIBBEAN RANKINGS

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Costa Rica	1.701	0.002	34
2	Panama	1.835	-0.002	49
3	Nicaragua	2.002	0.027	74
4	Haiti	2.026	-0.040	83
5	Cuba	2.056	-0.001	88
6	Jamaica	2.072	-0.019	92
7	Trinidad and Tobago	2.095	0.036	97
8	Dominican Republic	2.114	-0.029	99
9	Honduras	2.185	-0.050	106
10	El Salvador	2.239	0.002	115
11	Guatemala	2.245	-0.025	117
12	Mexico	2.646	0.089	142
REGIONAL	AVERAGE	2.101	-0.001	

Central America and the Caribbean swapped places with neighbouring South America in 2017, having edged down one position to fifth in the regional rankings.

SUB-SAHARAN AFRICA

Sub-Saharan Africa's average score has deteriorated again this year. However, its global position in the GPI-where it is ranked ahead of Russia and Eurasia, South Asia, and MENAremains unchanged. Ethiopia suffered the biggest decline, both in the region and globally, as violent demonstrations, partly driven by rising ethnic tensions, led the government to introduce a six-month state of emergency in October 2016. In turn, this was reflected in a sharp worsening in indicators of domestic conflict. Political tensions in Lesotho have remained at a high level, in the wake of an attempted military coup in 2014, and *political instability* has been exacerbated by the recent collapse of the ruling coalition. In Burundi, the number and duration of internal conflicts and the likelihood of violent demonstrations remain a major drag on the country's score. What began as a series of protests against the controversial re-election of the president in 2015 has evolved into a looselyorganised resistance movement, with the targeted assassination by rebel groups of senior government and military officials. The threat posed by Islamist terrorist groups continues to weigh on countries in the Sahel, including Mali and Mauritania-as well

as Nigeria in West Africa. In Mali, a combination of security threats by jihadists and *political instability* caused by the slow implementation of the 2015 peace deal signed with an alliance of Tuareg groups, is driving a significant deterioration in Societal Safety and Security indicators.

In contrast, a number of countries in sub-Saharan Africa have recorded gains in the 2017 index. The Central African Republic (CAR) has recorded the largest improvement in the region and the world, as the country continues to emerge from a wave of inter-communal violence. That said, although scores for number of deaths from internal conflict and political terror have improved, much of the CAR's remote northern and eastern regions remain under the control of rebel groups, and the overall political situation remains fragile. A lower likelihood of violent demonstrations has helped Djibouti recover some of the ground that it lost over the previous two years, as robust economic growth has helped defuse some of the tensions caused by the government's increasingly authoritarian political stance. The smooth transition of power in Ghana that followed the December 2016 presidential and legislative elections is reflected in an improved overall score in the GPI. At the same time, Sierra Leone and Guinea, which have recovered from the 2014 Ebola outbreak, also registered improvements in their overall level of peace. Improvements in the overall scores of Senegal and Rwanda are consistent with the countries' well-entrenched democratic institutions, with both countries experiencing sustained economic growth.

TABLE 1.9 SUB-SAHARAN AFRICA RANKINGS

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK	
1	Mauritius	1.547	-0.012	22	
2	Botswana	1.622	-0.021	27	
3	Sierra Leone	1.760	-0.046	39	
4	Zambia	1.786	0.006	41	
5	Ghana	1.793	-0.016	43	
6	Madagascar	1.797	0.034	44	
7	Malawi	1.825	0.010	48	
8	Namibia	1.838	-0.037	50	
9	Tanzania	1.876	-0.023	54	
10	Senegal	1.929	-0.049	60	
11	Equatorial Guinea	1.930	-0.010	61	
12	Togo	1.939	-0.015	63	
13	Swaziland	2.010	-0.064	77	
14	Mozambique	2.013	0.052	78	
15	Benin	2.014	0.015	79	
16	Liberia	2.023	0.026	82	
17	Gabon	2.052	0.022	87	
18	Lesotho	2.066	0.125	90	
19	Burkina Faso	2.070	0.006	91	
20	Guinea	2.089	-0.059	96	
21	Angola	2.116	-0.028	100	

22	Uganda	2.182	0.036	105
23	Djibouti	2.196	-0.096	107
24	The Gambia	2.211	0.115	110
25	Rwanda	2.227	-0.096	113
26	Cote d'Ivoire	2.307	0.028	121
27	Guinea-Bissau	2.309	0.044	122
28	South Africa	2.324	0.007	123
29	Republic of the Congo	2.334	0.027	124
30	Kenya	2.336	-0.042	125
31	Niger	2.343	0.106	126
32	Zimbabwe	2.352	0.032	127
33	Mauritania	2.355	0.067	128
34	Cameroon	2.390	0.034	130
35	Ethiopia	2.477	0.193	134
36	Chad	2.495	0.032	135
37	Eritrea	2.505	0.045	136
38	Mali	2.596	0.126	140
39	Burundi	2.641	0.140	141
40	Nigeria	2.849	-0.028	149
41	Democratic Republic of the Congo	3.061	-0.051	153
42	Central African Republic	3.213	-0.119	155
43	Somalia	3.387	-0.027	158
44	South Sudan	3.524	-0.069	160
REGIONAL	AVERAGE	2.243	0.009	

RUSSIA AND EURASIA

Most countries in Russia and Eurasia improved their score in the 2017 GPI, but the region retains the third-worst regional score. The deterioration in Turkmenistan's overall score was driven by worsening relations with neighbouring countries with Iran over a dispute about gas payments, causing tensions between the governments of the two countries. In April 2016 Armenia also saw its worst episode of fighting since 1994 in its intractable conflict with Azerbaijan regarding Nagorno-Karabakh. The fighting resulted in the deaths of up to 200 people, reflected in both countries' scores for number of deaths from external conflict. Similarly, military expenditure as a percentage of GDP has increased in both countries. While most countries in the region improved their scores in all three domains, this did not indicate significant progress in the resolution of ongoing conflicts. Ukraine, for example, saw improvements in scores for financial contributions to UN peacekeeping missions, number, duration and role in external conflicts, likelihood of violent demonstrations and impact of *terrorism*; however, the underlying factors that could lead to the re-emergence of large-scale military conflict have not dissipated. Society, especially near the war zone, has become more militarised, and the military more politicised, while separatist-held areas saw a large number of assassinations of high-profile commanders. Uzbekistan saw the strongest improvement in the region. Following the death in September

2016 of the long-time authoritarian leader, Islam Karimov, the new president, Shavkat Mirziyoyev, has made some positive reform announcements. This includes boosting the role of the legislature and strengthening the rule of law, although progress on any tentative democratising plans is likely to be minimal. Russia's performance was more mixed. While a cut in its defence budget saw its *military expenditure as a percentage of GDP* score improve, its continued bombing campaign in Syria drove a deterioration in the *number, duration and role in external conflicts*. Conflict in the North Caucasus, which saw many high-profile security operations last year, affected the score for the indicator measuring the *number and duration of internal conflicts*.

TABLE 1.10 RUSSIA AND EURASIA RANKINGS

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Moldova	1.938	-0.015	62
2	Kazakhstan	1.992	-0.026	72
3	Georgia	2.084	-0.048	94
4	Uzbekistan	2.132	-0.084	101
5	Belarus	2.141	-0.062	103
6	Kyrgyz Republic	2.216	-0.083	111
7	Armenia	2.220	0.003	112
8	Tajikistan	2.263	-0.034	118
9	Turkmenistan	2.270	0.068	119
10	Azerbaijan	2.426	-0.024	132
11	Russia	3.047	-0.027	151
12	Ukraine	3.184	-0.077	154
REGIONAL	AVERAGE	2.327	-0.033	

SOUTH ASIA

South Asia continues to be ranked eighth out of the nine regions in the 2017 GPI. This region hosts some countries as peaceful as Bhutan (ranked 13th overall), yet also some of the least peaceful countries in the world such as Pakistan (152nd) and Afghanistan (162nd). The scores for Sri Lanka and Pakistan improved this year, while the only deteriorations (although moderate) were registered in Nepal, Afghanistan and Bhutan. In Nepal, a high level of *political instability* is partly to blame for the slow progress in rebuilding efforts after the devastating earthquake of 2015. Indicators of Societal Safety and Security have deteriorated in the fragile environment. Afghanistan's overall score deteriorated for the sixth successive year as overall hostility continued to increase. Fierce rivalry within the political leadership, factionalism and growing discontent with government policy has ensured a deterioration in the number and duration of internal conflicts. A contrasting situation was seen in Sri Lanka, Pakistan and India-the countries that have made the most improvement in terms of overall score. The ongoing consolidation of power undertaken by Sri Lanka's government led by the president, Maithripala Sirisena, has

allowed it to undertake structural political reforms for improved governance, which are reflected in improved performance in the indicators measuring *political instability*, *likelihood of violent demonstrations* and *political terror*. India has moved up four positions in the overall ranking from 141st to 137th. This has largely been due to a reduction in *level of violent crime*, driven by increased law enforcement. Meanwhile, unrest in Indian-administered Kashmir in mid-2016 raised tensions between India and its neighbour Pakistan, with the *number of deaths from external conflict* increasing in both countries. The unresolved dispute over Kashmir remains the central issue in Indo-Pakistani relations.

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Bhutan	1.474	0.029	13
2	Sri Lanka	2.019	-0.116	80
3	Bangladesh	2.035	-0.012	84
4	Nepal	2.080	0.052	93
5	India	2.541	-0.024	137
6	Pakistan	3.058	-0.085	152
7	Afghanistan	3.567	0.029	162
REGIONAL AVERAGE		2.396	-0.018	

TABLE 1.11 SOUTH ASIA RANKINGS

MIDDLE EAST AND NORTH AFRICA

The Middle East and North Africa is the lowest-ranked region in the GPI, reinforced by a further deterioration in its overall score in 2017. Regional instability is being exacerbated by the intense rivalry between Shia Iran and the Sunni Arab Gulf monarchies, with Saudi Arabia at the forefront. This enmity has contributed to the length of the devastating civil war in Syria-where the two sides have backed opposing players-and has played a direct role in Saudi Arabia's costly military intervention in Yemen, where it has been fighting to oust the Iranian-backed Houthis. Saudi Arabia's involvement in the Yemen conflict-as well as its military support for rebels fighting the regime of Bashar al-Assad in Syria-is reflected in a worsening in its scores for both relations with neighbouring countries and number, duration and role in external conflicts. Despite the recent military setbacks experienced by ISIL, governments throughout the region are well aware that this could translate into a growing domestic threat from jihadist groups-as demonstrated by the deteriorating impact of terrorism scores for a number of countries, including Jordan, Saudi Arabia, Palestine, Qatar, Libya and Egypt. Meanwhile, Israel's overall score has declined, with the absence of any progress in the Israeli-Palestinian peace process continuing to weigh on its scores in the Ongoing Domestic and International Conflict domain. At the same time, a reduction in number of deaths from external conflict has driven an improvement in Palestine's overall score. Nevertheless, a number of countries have

bucked the overall negative trend in the region by achieving an improvement in their overall score. Morocco continues to benefit from a broader degree of political and social stability than most of its neighbours in North Africa, and recorded the highest improvement, driven by lower levels of militarisation. Tensions between Qatar and some fellow Gulf Arab states—namely Saudi Arabia, the UAE and Bahrain—have eased noticeably, following moves by Qatar to curb some of its visible support in the region for Islamist groups (including the Muslim Brotherhood). Iran's overall score has also improved; a high turnout in elections in early 2016 is reflected in a reduction in *political instability* and the *likelihood of violent demonstrations*.

The Middle East and North Africa is the lowest-ranked region in the GPI, reinforced by a further deterioration in its overall score in 2017.

TABLE 1.12MIDDLE EAST AND NORTH AFRICA RANKINGS

REGIONAL RANK	COUNTRY	OVERALL SCORE	CHANGE IN SCORE	OVERALL RANK
1	Qatar	1.664	-0.062	30
2	Kuwait	1.909	0.055	58
3	United Arab Emirates	1.944	0.051	65
4	Tunisia	1.977	0.023	69
5	Oman	1.983	-0.033	70
6	Morocco	2.004	-0.082	75
7	Jordan	2.087	-0.027	95
8	Algeria	2.201	-0.014	109
9	Iran	2.364	-0.043	129
10	Bahrain	2.404	0.005	131
11	Saudi Arabia	2.474	0.136	133
12	Egypt	2.583	0.014	139
13	Israel	2.707	0.068	144
14	Palestine	2.774	-0.058	145
15	Lebanon	2.782	0.026	148
16	Sudan	3.213	-0.047	155
17	Libya	3.328	0.108	157
18	Yemen	3.412	0.013	159
19	Iraq	3.556	-0.014	161
20	Syria	3.814	0.008	163
REGIONAL	AVERAGE	2.559	0.006	

RISERS & FALLERS

The Central African Republic had the strongest improvement in score in the 2017 GPI, although this was only enough to rise two positions in the rankings, to a very low 155th (among the lowest in the index). It was followed by Sri Lanka, whose score improvement resulted in the most pronounced increase in the rankings, by 17 places to reach 80th in the index. Cambodia had the third largest score improvement and rose in the rankings nearly as much, by 15 positions to 89th. Portugal, already one of the most peaceful countries in the world, rose two positions to third place. Finally, Djibouti also had a strong improvement in score and rose in the rankings to 107th, a gain of 14 positions.

Underpinning the improvements in most of these countries has been a recovery from *political instability* in previous years (in Portugal's case largely due to its fiscal crisis), even though the domestic situation in all except Portugal remains fragile. For example, the score for *likelihood of violent demonstrations* improved or remained stable in all five countries, and there were also strong improvements in the scores for *political terror*. Nevertheless, the weak state of democratic development in countries like Cambodia and Djibouti will pose ongoing risks to peace.

A welcome development is the fact that this year's biggest fallers deteriorated to a lesser extent than the worst performers in the last edition of the GPI; indeed this year's top faller, Ethiopia, had a score change less than half of that of last year's top faller, Yemen. The five worst-performing countries are all in the sub-Saharan Africa and the Middle East and North Africa regions. Ethiopia's score has suffered as a result of violent protests that led to a state of emergency giving the government significant powers to crack down on dissidents.

A similar story can be seen in Burundi where the government appears to be drifting towards authoritarianism. Saudi Arabia was the only country among the top fallers whose score was mostly influenced by international conflict indicators—in this case, its involvement in regional conflicts such as Syria and especially Yemen. Mali continues to struggle to implement a 2015 peace treaty and remains under threat by jihadists, despite a UN and French military presence. Finally, Lesotho has suffered from political instability and internal security issues following a failed coup in 2014.



TOP FIVE NATIONAL IMPROVEMENTS IN PEACE

CENTRAL AFRICAN REP. RANK155

Change in score 2016/17:	-0.119
Change in rank 2016/17:	2

The Central African Republic was the country that improved the most, with a score improvement of 0.119. However, this was enough for it to climb only two places in the ranking to 155th, close to the bottom of the index. Its score benefited from improvements in *number of deaths from internal conflict*, political terror, and the number, duration and role in external conflicts. This is mostly due to a gradual reduction in instability following the overthrow of the previous president, François Bozizé, in 2013 and the recent successful elections in 2016 (leading to the election of Faustin-Archange Touadéra), which has spurred some rebuilding of democratic institutions such as a new constitution setting out a two-term limit for the president and creating an upper house of parliament. A lower impact of terrorism score also contributed positively to the country's performance this year, although it will continue to suffer from the presence of numerous armed factions that are fuelling violence between Christians and Muslims, particularly in regions which the government security forces do not control, such as the remote north and east. A sharp deterioration in the score for financial contributions to UN peacekeeping missions, coupled with a still fragile political outlook, will continue to pose major risks to peace.

SRI LANKA	RANK 80
Change in score 2016/17:	-0.116
Change in rank 2016/17:	⊘ 17

Sri Lanka saw its score improve by 0.116 points which propelled it 17 places to 80th—the largest jump in the rankings this year. Sri Lanka benefited primarily from improvements in the Societal Safety and Security as well as Militarisation domains. In particular, *financial contributions to UN peacekeeping missions* improved sharply, and there were also visible gains in reducing *political terror*, *likelihood of violent demonstrations*, and to a lesser extent, *political instability* and the *impact of terrorism*. Much of this is due to a strengthening of political stability following the end of a decades-long civil war in 2009 and efforts by the ruling coalition composed of the United National Party (UNP) and the Sri Lanka Freedom Party (SLFP) to address long-standing concerns among the electorate about the political and human rights landscape. Nevertheless, ethnic tensions between the Tamil minority and the Sinhalese majority remain latent, and could hinder attempts to achieve national reconciliation. On the downside, the *number of homicides per 100,000 people* rose modestly although it is still at a relatively low level, while the *number of armed services personnel per 100,000 people* has risen sharply to one of the highest levels in the world.

CAMBODIA	RANK 89
Change in score 2016/17:	-0.103
Change in rank 2016/17:	Q 15

With a score improvement of 0.103 and a rise of 15 positions in the rankings to 89th, Cambodia is one of the best performers this year despite numerous political challenges. Financial contributions to UN peacekeeping missions improved strongly, as did the scores for *political terror*, *political instability* and the number, duration and role in external conflicts. Unfortunately, much of these improvements are the result of a more heavyhanded approach by the ruling Cambodian People's Party (CPP), in power for nearly 40 years, against the opposition. This, in turn, has avoided any resumption of large-scale protests such as those seen after the disputed 2013 election. In recent years, Cambodia has been gradually gravitating towards China's sphere of influence, which risks further antidemocratic measures being implemented, although these may lead to a positive impact on security and stability by providing the CPP with a strategic ally. Cambodia's improvement in its overall score was hampered by a deterioration in the *impact* of terrorism score and, to a lesser degree, a higher number of jailed population per 100,000 people which is reflective of punitive measures taken against critics and dissidents.

PORTUGAL	RANK 3
Change in score 2016/17:	-0.098

♦ 2

Portugal's score improved by 0.098 and the country moved up two positions to third in the overall ranking, thereby consolidating its standing as one of the most peaceful countries in the world. Aside from a rise in *weapons imports* (the main negative contributor to the score), and in the *number* of internal security officers and police per 100,000 people, all other indicators either improved or remained flat this year. Volume of transfers of major conventional weapons, as recipient, per 100,000 people fell strongly, representing the main improvement to the overall score. This was followed by an improvement in the *number*, *duration and role in external conflicts, likelihood of violent demonstrations* and political *terror* scores. The *number of homicides per 100,000 people* and *political instability* scores also improved. Internal stability has been aided by a gradual recovery from a fiscal crisis; Portugal exited its fiscal assistance programme in 2014, although there is continued pressure from the EU to achieve fiscal consolidation. Budget constraints have consequently led to a winding-down of military operations abroad as well as in the size of and funding for the armed forces. As a result, Portugal is among the highestranked countries in the domain of Militarisation. This, along with a steady economic recovery, will be supportive of peace going forward.

DJIBOUTI	RANK 107
Change in score 2016/17:	-0.096
Change in rank 2016/17:	Q 14

Djibouti rounds up the top five risers with a score improvement of 0.096, which was enough to propel it 14 positions in the rankings to 107th. Djibouti's score improved primarily as a result of greater Societal Safety and Security due to a decline in likelihood of violent demonstrations and political instability, in turn a result of the peaceful conclusion of a general election in January 2016, which was preceded by an increase in violence. The government's strong mandate will be aided by a weak opposition. The *impact of terrorism*, mainly caused by rebel groups such as the FRUD, has also lessened as a result of the limited scope of their operations which are confined to the northern regions. However, the country's score was affected by higher weapons imports and a lag in financial contributions to UN peacekeeping missions. Djibouti will continue to benefit from its geographical position as a base for foreign militaries which will also provide some degree of security and stability. However, despite its strong gain in the 2017 GPI, the threat of political repression and anti-democratic attitudes by the government maintain the risk of a deterioration in peace in the short term.

TOP FIVE NATIONAL DETERIORATIONS IN PEACE

ETHIOPIA

RANK 134

Change in score 2014/15:	+0.193
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Change in rank 2014/15:	© 16

Ethiopia saw its score worsen by 0.193 and fell 16 places in the rankings to 134th. The country suffered a major deterioration of peace reflecting the state of emergency introduced in October 2016, which was originally intended to put a stop to nearly a year of protest-related violence. This state of emergency has given the government significant powers such as the ability to impose curfews, suspend due process, and use the military to suppress protests. Ethiopia's score worsened the most in the domain of Ongoing Domestic and International Conflict, as evidenced by deteriorations in the indicators of intensity of organised internal conflict, number and duration of internal conflicts, and number of deaths from internal conflict. However, in order to address the turbulent domestic environment, the government has strengthened its military, leading to a deterioration (albeit much milder) in the score for *military* expenditure as a percentage of GDP. Ethiopia's most-improved indicator was the number, duration and role in external conflicts, as it has drawn down its involvement in neighbouring Somalia, although further instability in that country as well as in South Sudan poses the risk of a deterioration in the external environment as well.

RANK 141
+0.140

Change in rank 2014/15:

Although Burundi's score improved in two of the three domains (Ongoing Domestic and International Conflict and Militarisation), a steep deterioration in Societal Safety and Security was enough to worsen the overall score by 0.140, and lead to a drop in three places in the ranking to 141st. The decline was driven by the political crisis triggered by the controversial re-election of Pierre Nkurunziza in July 2015 for a third consecutive five-year term in office. This resulted in major protests that developed into a low-level insurgency, contained only through significant repression and a drift towards authoritarianism. The indicators that worsened to the greatest extent include political terror, likelihood of violent demonstrations, the number of internal security officers and police per 100,000 people and level of perceived criminality in society-all reflective of the turbulent domestic situation. On the positive side, Burundi's score improved for various indicators, including the level of financial contributions to UN peacekeeping missions, number, duration and role in external conflicts (notwithstanding tense relationships with its neighbour, Rwanda) and military expenditure as a percentage of GDP.

Although Burundi's score improved in two of the three domains, a steep deterioration in Societal Safety and Security was enough to worsen the overall score down by 0.140.

03

SAUDI ARABIA	RANK 133
Change in score 2016/17:	+0.136
Change in rank 2016/17:	⊘4

Saudi Arabia's score remains strongly affected by its participation in numerous ongoing regional conflicts, including Syria but notably the intervention in Yemen where it leads a coalition of mostly Gulf States. In this case, it is driven by a desire to contain Iranian influence. Consequently, Saudi Arabia's scores for relations with neighbouring countries and number, duration and role in external conflicts have suffered. Its financial contributions to UN peacekeeping missions have also declined. Meanwhile, the kingdom continues to deal with domestic pressures arising from the decline in oil prices. This has broadened low-level discontent (although no outright protests have taken place) among the population, and this is being exacerbated by the roll-back of generous entitlements. There also remains a domestic terrorist threat which is reflected in a higher impact of terrorism indicator. The country has consequently also seen deteriorations in the scores for *political* terror, number and duration of internal conflicts and political instability. The Saudi military, one of the region's most powerful, continues to be built up, as evidenced by a rise in weapons imports and nuclear and heavy weapons capabilities, although its number of armed services personnel per 100,000 people improved slightly. Its active participation in regional affairs suggests continued engagement in conflicts in the coming years.

MALI	RANK 140
Change in score 2016/17:	+0.126
Change in rank 2016/17:	♥ 3

Mali continues to suffer from a difficult security situation, despite the recapture, with French assistance, of the northern region from Islamist groups in 2013, and a peace agreement signed with an alliance of Tuareg groups in 2015. Mali saw declines in all three domains, with the worst-performing indicators being *political instability* and *level of violent crime* related to the difficulties in implementing the 2015 peace deal, coupled with an opposition that has become more vocal since the November 2016 local elections. Added to this is a rise in number of deaths from internal conflict; security forces including UN peacekeepers and a contingent of French troops remain engaged against jihadists and also against groups violating the ceasefire agreement. The country has also seen a decline in financial contributions to UN peacekeeping missions, which has contributed to the score change. In order to respond to the terrorist threat, Mali has been undergoing a process of strengthening its armed forces, resulting in deteriorations in

the scores for *military expenditure as a percentage of GDP*, and the number of armed services personnel per 100,000 *people*. Supporting the score, however, has been a reduction in the number of refugees and internally displaced people as percentage of the population following the peace agreement, and a lower number of homicides per 100,000 people-these being the only two indicators that improved.

Saudi Arabia's score remains strongly affected by its participation in numerous ongoing regional conflicts, including Syria but notably the intervention in Yemen where it leads a coalition of mostly Gulf States.

LESOTHO

Change in score 2016/17:	+0.125
Change in rank 2016/17:	♥ 28

RANK 90

The fifth-biggest faller, Lesotho, saw its score deteriorate by 0.125, falling 28 positions in the rankings to 90th. Lesotho's score deteriorated primarily due to two indicators: relations with neighbouring countries (in this case with regional partners due to a reform programme it has largely failed to implement), and political terror. Furthermore, the scores for impact of terrorism and political instability worsened. Lesotho's internal security issues stem from a failed 2014 coup d'état against the then prime minister Tom Thabane and the political instability that has followed. The political turmoil worsened following splits in the ruling Democratic Congress party over an alleged corruption scandal. This eventually led in March 2017 to a vote of no confidence against the Prime Minister, Pakalitha Mosisili, resulting in the dissolution of parliament and new elections scheduled for June 2017. On the positive side, Lesotho did see its score for militarisation improve due to rising *financial* contributions to UN peacekeeping missions, as well as a decline in military expenditure as percentage of GDP and number of armed services personnel per 100,000 people (the latter decline being quite small), which is the result of a relatively peaceful external environment compared with the domestic situation.

RISERS & FALLERS BY DOMAIN

TABLE 1.13 FIVE LARGEST IMPROVEMENTS AND DETERIORATIONS, SOCIETAL SAFETY AND SECURITY DOMAIN

IMPROVED	SCORE	SCORE CHANGE	RANK	RANK CHANGE
Greece	2.072	-0.261	36	↑ 21
Djibouti	2.596	-0.244	97	1 20
Sri Lanka	2.343	-0.209	62	↑ 26
Guyana	2.793	-0.194	118	1 6
Argentina	2.439	-0.167	71	↑ 24
DETERIORATED	SCORE	SCORE CHANGE	RANK	RANK CHANGE
DETERIORATED Burundi	SCORE 3.494		RANK 151	
		CHANGE		CHANGE
Burundi	3.494	CHANGE +0.527	151	CHANGE ↓ 19
Burundi Mali	3.494 3.046	CHANGE +0.527 +0.215	151 134	CHANGE

TABLE 1.15 FIVE LARGEST IMPROVEMENTS AND DETERIORATIONS, MILITARISATION DOMAIN

IMPROVED	SCORE	SCORE CHANGE	RANK	RANK Change
Angola	1.788	-0.255	78	↑ 42
Iceland	1.009	-0.254	1	↑ 2
Rwanda	1.691	-0.203	54	个 33
Morocco	1.780	-0.192	75	↑ 27
Burundi	1.844	-0.179	85	↑ 27
DETERIORATED	SCORE	SCORE CHANGE	RANK	RANK CHANGE
DETERIORATED Mozambique	SCORE 1.782		RANK 76	
		CHANGE		CHANGE
Mozambique	1.782	CHANGE +0.363	76	CHANGE
Mozambique Lithuania United Arab	1.782 1.636	CHANGE +0.363 +0.246	76 44	CHANGE ↓ 61 ↓ 30

TABLE 1.14 FIVE LARGEST IMPROVEMENTS AND DETERIORATIONS, ONGOING CONFLICT DOMAIN

IMPROVED	SCORE	SCORE CHANGE	RANK	RANK Change
Palestine	2.787	-0.231	146	个 4
Qatar	1.201	-0.202	25	个 15
Ecuador	1.403	-0.201	39	↑ 43
Laos	1.403	-0.201	39	↑ 43
Central African Republic	3.235	-0.167	156	↑ 2
		SCORE		RANK
DETERIORATED	SCORE	CHANGE	RANK	CHANGE
DETERIORATED Ethiopia	SCORE		RANK 149	
		CHANGE		CHANGE
Ethiopia Bosnia and	2.904	CHANGE +0.423	149	CHANGE
Ethiopia Bosnia and Herzegovina	2.904 1.833	CHANGE +0.423 +0.349	149 113	CHANGE ↓ 9 ↓ 42

K Reductions in Ongoing Conflict in Central African Republic put it amongst the top five improvers in that domain and the largest riser in the index in 2017.

SPX DOMANN & MUDICIATOR ANNUAL CHANGES

The 2017 GPI recorded a slightly more peaceful world, in spite of the ongoing conflicts in the Middle East, terrorism in Europe, and rising geopolitical tensions between Russia and the US. The average level of country peacefulness improved by 0.28 per cent when compared to the 2016 GPI.

This was largely driven by improvements in the Militarisation domain, which improved by 0.1 per cent, and the Safety and Security domain which improved by 0.28 per cent. The only domain which deteriorated was Ongoing Domestic and International Conflict, which fell by 0.28 per cent. In total, 93 countries became more peaceful while 68 deteriorated.

Figure 1.3 highlights the average change by domain, as well as the number of countries that improved, deteriorated, or showed no change from the 2016 GPI. As shown in figure 1.2, the changes from the 2016 to 2017 GPI were less volatile than in previous years, with no country either improving or deteriorating by more than ten per cent. By contrast, in every other year of the index, at least one country has deteriorated in peacefulness by more than ten per cent.

Four of the five largest deteriorations in the Ongoing Conflict domain occurred in countries in the Middle East and North Africa and sub-Saharan Africa, with large deteriorations in Ethiopia, Saudi Arabia, Libya, and the Gambia.





Bosnia and Herzegovina also had a large deterioration on this domain, owing to a deterioration in both the level of internal conflict, and its relations with neighbouring countries. The fall in peacefulness in Bosnia and Herzegovina was echoed in the region more generally, with both Serbia and Croatia also experiencing falls in peacefulness.

Figure 1.4 highlights the five largest improvements and deteriorations by indicator. The most noticeable change by indicator occurred on the *external conflicts fought* indicator, where the average score improved by 0.237 points, or just under 16 per cent. This is mainly because of the pull-out of European countries from Iraq and Afghanistan, which had occurred over the prior three years. Due to the way that the indicator is scored there can be a delay between the withdrawal and the full impact of the withdrawal being recorded.

The second largest improvement occurred on the *Political Terror Scale* indicator, where the average country score moved from 2.59 to 2.49. Significant improvements occurred in Rwanda, Somalia, the Central African Republic, and Sri Lanka. In total, 42 countries improved on this indicator while only 32 deteriorated. This is the continuation of a ten-year trend where the number of extra-judicial killings, torture, and imprisonment without trial has been falling globally. Sixty-eight countries have improved on the *Political Terror Scale* indicators since 2008, compared to 45 that have deteriorated over the same time period. The changes from the 2016 to 2017 GPI were less volatile than in previous years, with no country either improving or deteriorating by more than ten per cent.



Of the indicators that deteriorated, the largest deterioration occurred for the level of *internal conflicts fought* indicator, where the average country score deteriorated by 7.3 per cent. The largest deteriorations occurred in Libya, Israel, Ethiopia, Burundi, and the Philippines, with 37 countries in total having deteriorations, and only nine showing any improvement. The *neighbouring countries relations* indicator recorded the second largest deterioration, reflecting increasing geopolitical tensions in Europe and the Middle East and North Africa. Twelve countries experienced a deterioration on this indicator, seven of which are in Europe. Almost every Nordic country deteriorated owing to a worsening of relations with Russia, with Finland, Sweden, Denmark, and Norway all moving from a score of one to two. A score of two indicates that relations with neighbouring countries are generally good, but that some aggressiveness is manifest in political speeches. Qatar was the only country to experience an improvement on this indicator last year. The 6.8 per cent deterioration in *neighbouring countries relations* was the largest year-on year-deterioration for this indicator in the history of the GPI and has largely been caused by deteriorations between Russia and its European neighbours.



Of the indicators that deteriorated, the largest deterioration occurred for the *internal conflicts fought* indicator, where the average country score deteriorated by 7.3 per cent.

TRENDS IN PEACE

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SECTION 2

THE GLOBAL LEVEL OF PEACE HAS DETERIORATED BY



HIGHLIGHTS



In the decade to 2017 the global level of peace has deteriorated by 2.14 per cent, with 80 countries improving while 83 countries deteriorated.

- One of the major trends recorded over the last decade has been the growing inequality in peace between the most and least peaceful countries, with the difference in score between the least peaceful and most peaceful increasing.
- The last decade's deterioration has been dominated by conflicts in the Middle East and the ensuing battlefield deaths, increased terrorism and refugee flows.
- The largest indicator improvements, by number of countries that improved their scores, was in armed service personnel where 72 per cent improved and in the homicide rate where 67 per cent of countries improved their scores.
- If the Middle East and North Africa was omitted from the calculations, then 52.5 per cent of countries would have actually improved in peace.

- Sixty per cent of countries improved their military scores, with Militarisation being the domain that improved the most.
- The terrorism impact indicator had the largest deterioration with 60 per cent of countries having higher levels of terrorism than a decade ago.
- More countries are dealing with historically high levels of terrorism. The number of countries experiencing record number of deaths from terrorism in 2015 jumped to 23, including Denmark, Sweden, France, and Turkey.
- There has been a very significant increase in the total number of deaths from internal conflict, rising from 35,988 in 2006/2007 to over 285,000 in 2015/2016.



Although the world became more peaceful this year, it is still considerably less peaceful than it was in 2008, with the average country GPI score declining 2.14 per cent since then.

Most of this decline occurred in the two years following the Global Financial Crisis, after which the average country score stabilised and is approximately the same as it was in 2010.

The improvement in peacefulness in 2017 is the first increase since the 2014 GPI. The deterioration in peacefulness over the last ten years has been dominated by falls in in the Middle East and North Africa. Excluding the countries from this region, world peacefulness would have stayed approximately the same from the 2008 to 2017 GPI. Figure 2.2 shows the percentage of countries that have improved or deteriorated on the GPI, by indictor and domain.



Overall, 52 per cent of countries had deteriorations in their level of peacefulness over the last decade which highlights how finely balanced peace has been. If the Middle East and North Africa was omitted, then 52.5 per cent of countries would have actually improved in peace.

For the Safety and Security domain, 61 per cent of countries deteriorated. However, for the other two GPI domains, the majority of countries actually improved or had no change, with 60 per cent of countries improving their Militarisation scores, and 59 per cent improving or remaining the same on the Ongoing Conflict domain.

The terrorism impact indicator had the largest number of countries deteriorating, with 60 per cent recording higher levels of terrorism in 2017 than in 2008. *Incarceration rates* and *weapons imports* both deteriorated substantially with 55 per cent of countries now having worse scores, while the number of *refugees and IDPs* as a percentage of the population increased in 43 per cent of countries. The rise of populism over the past decade has been reflected in changes to the *political instability* indicator, with 41 per cent of countries experiencing increases in *political instability*.

Of those indicators that improved, the *armed services personnel rate* had the most widespread improvement, with 72 per cent of countries decreasing the number of armed services personnel per 100,000 people. Along a similar line, *military expenditure as a percentage of GDP* dropped in 65 per cent of countries. There were also improvements in interpersonal violence, with 67 per cent of countries experiencing a fall in the *homicide rate* over the past decade.

One of the findings for the last decade is that peace is highly 'sticky' in the most peaceful countries, meaning that countries that are highly peaceful to begin with are more stable and less likely to experience fluctuations in peacefulness.

FIGURE 2.2 PERCENTAGE OF COUNTRIES THAT HAVE IMPROVED OR DETERIORATED, 2008 TO 2017

Fifty-two per cent of countries are less peaceful now than in 2008.

	Im Im	proved	No c	hange		Deteri	orated
OVERALL SCORE	48%						52%
SAFETY & SECURITY	39%						61%
ONGOING CONFLICT	45%		1	14%			42%
MILITARISATION	60%						40%
TERRORISM IMPACT	24%	17	7%				60%
WEAPONS IMPORTS	37%		7%				55%
INCARCERATION RATE	42%		<mark>3%</mark>				55%
UN PEACEKEEPING FUNDING	45%		79	%			48%
POLICE RATE	29%		29%				43%
REFUGEES AND IDPs	34%		24%				43%
POLITICAL INSTABILITY	37%		22	%			41%
NUCLEAR AND HEAVY WEAPONS	40%		19	9%			40%
EXTERNAL CONFLICTS FOUGHT	25%		38%				37%
VIOLENT DEMONSTRATIONS	20%		47%				34%
MILITARY EXPENDITURE (% GDP)	65%				2%		34%
POLITICAL TERROR SCALE	42%			30%			28%
HOMICIDE RATE	67%				6%		27%
PERCEPTIONS OF CRIMINALITY	7%		68%				25%
HBOURING COUNTRIES RELATIONS	15%	60%		25%			
INTENSITY OF INTERNAL CONFLICT	12%	65%		23%			
ARMED SERVICES PERSONNEL RATE	72%				6	%	22%
VIOLENT CRIME	17%	61%		22%			
INTERNAL CONFLICTS FOUGHT	24%	56%			20%		
WEAPONS EXPORTS	21%	58%			20%		
DEATHS FROM INTERNAL CONFLICT	9%	77%			14%		
ACCESS TO SMALL ARMS	10%		8	1%			9%
EATHS FROM EXTERNAL CONFLICT	12%			84%			<mark>3%</mark>
	0%	20%	40%	60%		80%	100%

Source: IEP

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The *terrorism impact* indicator had the largest number of countries deteriorating, with 60 per cent recording higher levels of terrorism in 2017 than in 2008.

FIGURE 2.3 CHANGE IN GPI SCORE BY LEVEL OF PEACEFULNESS IN 2008

Countries that were more peaceful in 2008 were less likely to have large variations in their GPI scores over the following decade.



These deteriorations and improvements over the past decade mean that the distribution of GPI scores is now quite different in 2017 than its original distribution in 2008. One of the major trends is the growing inequality in peace between the most and least peaceful countries.

The least peaceful countries in the world are now considerably less peaceful than the least peaceful countries in 2008, while the most peaceful countries have approximately the same levels of peacefulness as their counterparts in 2008, as shown in figure 2.4.

In 2017, the least peaceful country in the GPI has a score that is 12.6 per cent worse than the least peaceful country in 2008. The difference in the average score of the 20 most peaceful countries between 2008 and 2017 is just 0.49 per cent, compared to 11.8 per cent for the 20 least peaceful countries.

This indicates that the gap between the most and least peaceful countries has widened over the past decade, meaning that there is much greater 'peace inequality' now than there was a decade ago.


INDICATOR TRENDS



FIGURE 2.6 INDEX OF GPI INDICATOR TRENDS 2008 TO 2017, (2008 = 0)





Two of the three GPI domains have deteriorated since 2008, while the other, Militarisation, improved by 2.3 per cent.

Overall, Safety and Security had the biggest deterioration, falling four per cent, while Ongoing Conflict deteriorated by two per cent, as shown in figure 2.5.

The past decade has seen a shift away from external conflicts between states accompanied by a fall in militarisation in the developed world. However, these improvements have been offset by increases in the number and intensity of internal conflicts, deaths from terrorism and increases in the number of refugees and internally displaced persons. The increase in terrorism since 2011, combined with the inability of the global community to solve many long standing conflicts such as Afghanistan and Iraq underscores these changes.

Furthermore, the entanglement of more nations in the Syrian conflict, coupled with the enormous outflow of displaced people, shows that internal conflict has not been effectively contained.

This section reviews the four most significant changes in the index indicators: the escalation in the impact of terrorism, displacement and deaths from internal conflict, as well as the improvement in external conflicts fought.

TERRORISM IMPACT

The impact of terrorism increased dramatically over the last decade, with 60 per cent of countries' scores deteriorating. Highlighting just how severe this increase has been, over 22 countries had their *terrorism impact* scores deteriorate by over 100 per cent, while a further 18 countries recorded deteriorations of over 50 per cent. Globally, deaths from terrorism rose from just over 11,000 in 2007 to over 29,000 in 2015, with the number of deaths peaking in 2014 at 32,765. Similarly, the total number of terrorist incidents increased by 326 per cent over the same time period, from approximately 2,800 attacks in 2007 to just over 12,000 in 2015.

The impact of terrorism is not evenly distributed around the world. Five countries accounted for approximately 75 per cent of total deaths, with Iraq, Afghanistan, Nigeria, Syria, and Yemen recording over 21,000 deaths between them in 2015.

More countries are dealing with historically high levels of terrorism than ever before. The number of countries experiencing record number of deaths from terrorism in 2015 jumped to 23, including Denmark, Sweden, France, and Turkey. The number of countries that experienced over 100 deaths from terrorism rose from 12 in 2007 to 26 in 2015.

The most notable increase in *terrorism impact* has occurred in highly economically developed countries. Deaths from terrorism in OECD countries increased over 900 per cent between 2007 and 2016, with the largest increases occurring in Turkey, France, the United States, and Belgium, as shown in figure 2.7. Although this increase was substantial, deaths in OECD countries still accounted for less than two per cent of all deaths from terrorism in 2015.

FIGURE 2.7 DEATHS FROM TERRORISM IN OECD

COUNTRIES, 2007-2016



Source: Global Terrorism Database; 2016 based on IEP estimates

DEATHS FROM INTERNAL CONFLICT

Over the past decade there has been a very significant increase in the total number of deaths from internal conflict, rising from 35,988 in 2007 to just under 300,000 in 2016, a 732 per cent increase. The majority of this increase is the result of the conflict in Syria, however, even if these deaths were excluded there still would have been a 440 per cent increase.

While the total number of deaths has risen, the number of countries experiencing deaths from internal conflict has fluctuated, increasing from 26 in 2007 to 42 in 2010, before gradually falling back down to 30 in 2016. Of the 26 countries that recorded deaths in 2007, 16 recorded deaths in 2016.

Figure 2.8 highlights the countries with the greatest decreases and increases in the number of deaths from internal conflict over the last decade. The greatest increase in the number of deaths occurred in Syria, followed by Mexico, Afghanistan, Iraq, and Yemen, while the biggest decreases occurred in Sri Lanka, India, Chad, Colombia, and Uganda.

FIGURE 2.8 LARGEST INCREASES AND DECREASES IN INTERNAL CONFLICT DEATHS, 2008 TO 2017 GPI

The number of deaths from internal conflict has increased markedly in Syria and Mexico.





REFUGEES AND IDPs

Thirty-four million people were classified as refugees or IDPs in 2008, equivalent to 0.51 per cent of the global population. By the end of 2015 this number had increased to just under 64 million, or 0.87 per cent of the global population. The most recent estimates put the total number of refugees and IDPs at over 65 million people worldwide. By far the largest increase occurred in Syria, where over 68 per cent of the population are either refugees or internally displaced, according to the latest available data. In 2008, less than one per cent of the Syrian population were refugees or internally displaced. While the increase in refugees and IDPs in Syria was by far the most dramatic of the last decade, a number of other countries have also had large increases in the number of displaced people, as shown in figure 2.9. Over 20 per cent of the population is displaced in Cyprus and South Sudan, with approximately 15 per cent being displaced in Colombia and the Central African Republic. Displacement in Colombia was rising even as the government was in the process of resolving the half-century old armed conflict with the Revolutionary Armed Forces of Colombia (FARC). Despite the ultimate success of the peace process - which was being implemented at the time of writing - incidents of armed conflict continued to affect the country and displace its citizens.



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Thirty-four million people were classified as refugees or IDPs in 2008, equivalent to 0.51 per cent of the global population. The most recent estimates put the total number of refugees and IDPs at over 65 million people worldwide.

EXTERNAL CONFLICTS FOUGHT

The substantial improvement in the score for this indicator has been driven by the drawdowns by international coalition members in conflicts in Afghanistan and Iraq, although this has been somewhat offset by increased international participation in Mali. Figure 2.10 shows the number of states involved in a supporting role in these three countries, from 2006 to 2015.

In Afghanistan, the NATO-led mission officially ended combat operations at the end of 2014. This means that many of the 50 countries that were in some way involved in the conflict had their scores improve in 2015. Nevertheless, there are still forces from several countries present in Afghanistan, providing training and advice to the Afghan National Guard. To a lesser extent, the withdrawal of United States soldiers in Iraq in 2011 also corresponded with an improvement in external conflict scores. Other countries also withdrew, including Australia and the United Kingdom. However, this reduction has been offset somewhat by the Combined Joint Task Force – Operation Inherent Resolve, a coalition of countries fighting against ISIL. This has seen the number of countries involved in a supporting role in Iraq rise to 12 in 2014.

Similarly, international involvement in the conflict in Mali has changed. The conflict started as a civil conflict between several insurgent groups and the Government of Mali in 2012. The UN Security Council passed resolution 2100 in 2013 that established the United Nations Stabilization Mission in Mali (MINUSMA) with forces from 35 different countries.

FIGURE 2.10 NUMBER OF COUNTRIES SUPPORTING ONE SIDE IN THE CONFLICTS IN IRAQ, AFGHANISTAN AND MALI, 2006 TO 2015

The number of countries involved in a supporting role in Afghanistan dropped from 50 to four in the last two years.



TRENDS IN MILITARISATION 1987 TO 2017

KEY FINDINGS

- Although there has been a rise in the number of conflicts since the turn of the century, the level of militarisation of the major powers has been falling for the past three decades.
- There is a diverging trend between developed and developing countries. The average military expenditure for developed countries decreased by 25 per cent from 1987 to 2015, while developing countries have increased military spending by an average of 240 per cent, from US \$2.13 billion in 1987 to US \$7.25 billion in 2015.
- As a percentage of GDP, military expenditure in the developed world fell from 2.85 per cent in 1987 to 1.39 per cent in 2015, while in the developing world expenditures fell, on average, from 4.06 per cent in 1987 to 2.35 per cent in 2015.
- The axrmed forces personnel rate has decreased globally since 1987 by 16 per cent, with 27 million people in the armed forces globally in 2014.

- The countries that displayed the most significant growth in heavy weapons capabilities over the last thirty years are primarily in unstable regions where there are high tensions with neighbouring countries. These include India, Syria, Egypt, South Korea, Iran and Pakistan.
- Global nuclear weapons stores have declined significantly between 1987 and 2014, from 62,725 active nuclear warheads in 1987 to 10,145 in 2014, an 84 per cent decrease. However, the number of countries with nuclear weapons has increased from six to nine since 1987.
- Measures of militarisation do not account for the significant increases in the sophistication of military technologies in recent history. This is an area where new measures need to be devised.



The indicators of militarisation are lower today than they were three decades ago at the height of the Cold War.



Although global peace has recently deteriorated, key indicators of militarisation have improved considerably in the past three decades. This decrease has been driven by significant disarmament in the developed world and through the breakup of the Soviet Union. However, the positive global trend in militarisation conceals the fact that the developing world is becoming more militarised, where many countries have experienced both high levels of economic growth and increased military spending, although military expenditure as a percentage of GDP has decreased. Also, countries in tense regions have increased their militarisation over the last thirty years, these include: Egypt, South Korea, Iran and Pakistan.

It must be noted that the indicators of militarisation do not account for the significant increases in the sophistication of military technologies in recent history. The advent of GPS in the 1970s played a major role in increasing the accuracy of modern weapons. In the first Gulf War, only seven per cent of the munitions fired were laser-guided, yet these munitions did 75 per cent of the total damage to enemy combatants and structures, which further increased the emphasis on precise as opposed to unguided weapons.¹ The sophistication of modern weapons continues to increase; the advent of stealth aircraft came in the 1980s as the F-117 bomber was used in combat for the first time by the United States. Payload sizes also continue to rise; an example of this increase can be seen in the "mother of all bombs", which was developed by the United States in 2003 and was recently used against targets in Afghanistan. It became the largest non-nuclear device ever to be used in combat, and is the most powerful non-nuclear weapon in the American arsenal. Despite these examples, it is difficult to accurately measure the increased potency of modern military technologies. As such, more research is necessary to fully understand the destructive capabilities of today's military powers.

This section of the report looks at changes in militarisation in the past three decades, focusing in particular on nuclear and heavy weapons, military expenditure, and the armed forces personnel rate.

NUCLEAR WEAPONS

The total number of nuclear weapons has fallen dramatically since the height of the cold war, yet Indian, Pakistani and North Korean defiance of the Nuclear Non-Proliferation Treaty (NPT) means that there are now more countries that possess nuclear weapon capability.

After reaching a peak in 1986, the number of existing nuclear weapons decreased significantly, but more countries possess them today than ever before. In 1987, six countries were believed to have had offensive nuclear capabilities: the United States, the Soviet Union², China, the United Kingdom, France and Israel. Over the past three decades, India, Pakistan and most recently North Korea have also obtained nuclear weapons. In 1987, there were 62,725 active nukes, with the majority in the arsenals of the Soviet Union, which had 38,107 weapons stockpiled, and the United States, with 23,575. Today, there are 10,145 active nuclear weapons, an 84 per cent decline over the period, as illustrated by Figure 2.12. In addition to that total, there are an estimated 6,300 retired weapons that are awaiting dismantlement.

This dramatic decrease has been primarily driven by the series of bilateral Strategic Arms Reduction Treaties (START) between the US and Russia, the first of which was signed in 1991. The United States Department of Defense recently emphasised the need to modernise the US military including US nuclear capabilities, as much of the nation's nuclear arsenal dates back to the late Cold War.³ The US Congressional Budget Office estimates that this modernisation will cost \$400 billion over the next ten years.

After reaching a peak in 1986, the number of existing nuclear weapons decreased significantly, but more countries possess them today than ever before.

FIGURE 2.12 GLOBAL NUCLEAR WEAPONS, 1945-2014

While the global total of nuclear weapons has decreased by 84 per cent since 1987, three additional countries now possess offensive nuclear capability. The existing stockpile nonetheless has devastating destructive capacity.



HEAVY WEAPONS

Heavy weapons capabilities have not decreased uniformly. The decrease in traditional heavy weapons has been made by the world's largest military powers, while developing powers and smaller states vary greatly but tend to be equally or slightly-more well-armed than in 1987. Additionally, a number of states, most notably China, have recently begun increasing their stores of heavy weapons creating rising global instability and regional tensions particularly in the South China Sea. However, this indicator fails to capture the modernisation of the militaries of these great powers and their disparity in terms of technology and capability.

In a post-Cold War era, categorised by protracted, dispersed conflicts with non-state actors, military modernisation efforts in the United States have emphasised precision and mobility.⁴ In accordance with the changing nature of conflict, the leading global militaries have in turn shifted their priorities from tanks, which are most useful in conventional army versus army engagements, to more mobile, versatile categories of weapons, such as armoured vehicles and helicopters. In addition to this, the most powerful militaries have invested significant sums into the research and development of autonomous weapons systems.

Despite the fall in the number of heavy weapons, routine advancements in military technologies have resulted in the more powerful, accurate and effective heavy weapons now employed by the world's foremost military powers; an analysis of the major changes to American military equipment confirms this. The M-60A3 Abrams tank, which formed the backbone of the American military throughout the Vietnam and Cold Wars, was phased out in 1997⁵. Today, the main battle tank in the US army is the M1A2 SEPV2 Abrams, which features, among other things, improved armour protection and computer systems, and a more powerful main cannon. New iterations of existing equipment have been complemented by acquisitions of additional brands of heavy weapons, such as the Stryker family of armoured vehicles and the B1-B Lancer bomber, which have diversified the American military arsenal and replaced outdated weapons systems.

BOX 2.1 WHAT COUNTS AS A HEAVY WEAPON?

The nuclear and heavy weapons capabilities indicator in the GPI is based on a categorised system for rating the destructive capability of a country's stock of heavy weapons.

It was developed by IEP in conjunction with the Stockholm International Peace Research Institute (SIPRI). Only stockpiles of government forces are included. The indicator does not include holdings of armed non-state 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 heavy weapons, each of which receive a certain number of weighted points.

THE FIVE CATEGORIES ARE WEIGHTED AS FOLLOWS:

- 1. Armoured vehicle and artillery pieces above 100mm = 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

The decrease in traditional heavy weapons has been made by the world's largest military powers, while developing powers and smaller states vary greatly but tend to be equally or slightly-more well-armed than in 1987. The world's militaries have reduced their stores of all forms of heavy weapons, most drastically in the category of major ships, with the global average falling by 62 per cent.

Nations owned 48 per cent fewer tanks in 2016 than they did in 1987; that decrease was primarily driven by decreases in the developed world, with developed nations decreasing their number of tanks on average by 69 per cent, while the developing world experienced a 28 per cent reduction on average.

On average, developing countries increased their stores of artillery and armoured vehicles by 19 per cent and 0.5 per cent respectively. These were the only categories of heavy weapons to increase in either the developed or the developing world.

Although there was an overall decline, some regions of the world did increase the size of their military stockpiles. Militaries in South Asia and the Middle East and North Africa increased their heavy weapons capabilities most significantly. The South Korean heavy weapons score increased the most, by 20,746, from 23,520 to 44,266. This increase was motivated by continued rising tensions with North Korea. South Korea was closely followed by Egypt, whose score increased by 18,695, and India, which increased by 14,982.

The fall in the number of heavy weapons globally is primarily due to large contractions in the world's three most powerful militaries. The breakup of the Soviet Union brought about significant disarmament in Russia as weapons were lost, fell into disrepair or stayed in the newly formed outlying states. As a result, the Russian heavy weapons score recorded an improvement, decreasing from 651,834 in 1987 to 244,065 in 2016, down by 63 per cent. The United States' score fell by 130,508 to 230,910, leaving the state at relative parity with Russia. The Chinese score fell by 78,069, or 35 per cent, to a current total of 145,831, although this number has increased significantly over the past three years, up from 113,323 in 2013.

FIGURE 2.13 LARGEST INCREASES IN HEAVY WEAPONS SCORES, 1987 VS. 2016

Countries that displayed the most significant growth in heavy weapons capabilities over the period are primarily in unstable regions and have high tensions with neighbouring countries.



Source: The Military Balance

FIGURE 2.14 CHANGES IN SUPERPOWER HEAVY WEAPONS CAPABILITIES, 1987 VS. 2016

The three global superpowers displayed the three largest decreases in traditional heavy weapons.



ARMED FORCES PERSONNEL

The number of armed forces personnel globally has stayed fairly constant over the past three decades, decreasing by two per cent from 27.8 million in 1987 to 27.1 million in 2014.

Total levels peaked in 1996 at 30 million. The average armed forces personnel rate, that is, the number of armed forces personnel employed per 100,000 members of the population, fell from 633 in 1987 to 535 in 2014.

The armed forces personnel rate fell significantly in most regions, most notably in Russia and Eurasia, by 80 per cent, and in North America, down by 47 per cent. The only regions to display significant increases in the rate were South Asia, up by 109 per cent, and South America, up by 15 per cent. FIGURE 2.15 REGIONAL ARMED FORCES PERSONNEL RATES, 1987 VS. 2014

South America and South Asia were the only regions to notably increase their numbers of employed armed forces personnel per 100,000 members of the population.



MILITARY EXPENDITURE

Harmonised global military expenditure data is only available back to 1990, although data for NATO member nations is available back to 1955. Total military expenditure peaked in 2010 at US\$1.76 trillion, 47 per cent higher than the estimated 1987 levels of US\$1.20 trillion (2014 constant dollars).

Today, total military expenditure has fallen to US\$1.72 trillion, two per cent lower than the peak of 2010, but 44 per cent higher than it was in 1987. The main reason for the decrease was due to the US drawdown in Iraq and Afghanistan and the global financial crisis which resulted in many European countries reducing military spending. The large increases in total military expenditure without corresponding increases in the number of heavy weapons stores highlights the increased technological sophistication of modern weaponry.

Figure 2.16 shows the five countries that proportionally had the largest increase in military expenditure and the five which had the largest decreases between 1987 and 2015.



Source: SIPRI Military Expenditure Data

Of the countries that most increased, the BRIC countries are most prominent, with China, India and Brazil making large increases. Saudi Arabia's increase also reflects its emergence as a regional power since the end of the Cold War. South Korea's more than doubling of yearly military expenditure also reflects the persistent tensions with North Korea and response to China's very significant increases. Of the large fallers in military expenditure, it is interesting to note they are all NATO member countries, including two UN Security Council members France and the United Kingdom. Despite current tensions between Russia and Europe based on rhetoric about the increasing threat of NATO, military spending of the major NATO powers including Germany is significantly down in 2015 from 1987.

The fall of the Soviet Union in 1991 led to a dramatic decrease in military expenditure by Russia from US\$343.6 billion in 1988 to US\$91.1 billion in 2015, a 73 per cent decrease. However, looking more recently, Russian military expenditure has significantly increased in the past five years, from US\$65.1 billion to US\$91.1 billion. Nonetheless, Russia's spending today is at a level almost four times smaller than the 1988 levels in constant terms. As a percentage of GDP, Russian military expenditure is slightly higher today than it was in 1992, at 5.4 per cent compared to 4.9 per cent in 1992. This is despite the faltering Russian economy caused in part by international sanctions following the Russian annexation of Crimea in 2014.

MILITARISATION IN EMERGING POWERS

Over the past three decades, China and India have established themselves as major military powers thanks to exponential economic growth which has enabled high levels of investment in their respective militaries. This military expansion comes amid rising global instability and regional tensions, particularly between India and Pakistan and in the South China Sea.

Chinese military expenditure has increased significantly over the past 30 years, despite a 35 per cent decline in heavy weapons score and an almost constant level of armed personnel, as seen in figure 2.18. However, the recent increase in spending has resulted in an increase in the heavy weapons capabilities score. The Chinese heavy weapons score has increased sharply over the past three years, from 113,323 in 2013 to 145,831 in 2016, a 28 per cent increase due to the acquisition of numerous armoured vehicles, heavy artillery, combat aircraft and helicopters, and the expansion of the Chinese naval fleet.

This reflects China's stance in regard to the territorial disputes in the South China Sea. China is building its first domestically produced aircraft carrier, and is actively modernising all three parts of its nuclear triad as it aims to upgrade from a 'minimum deterrence' to having the capability to destroy the nuclear systems of an aggressing state, as well as the cities they protect⁷. India and Pakistan have undergone significant militarisation in the past three decades, with growth in all indicators and the simultaneous acquisition of nuclear weapons in 1998 amid constantly high tensions between the two states.

In 1987, 36 countries invested more than the global average of four per cent of GDP whereas today there are 38 countries that are spending more than the global average of 2.1 per cent of GDP, indicating a slightly more multipolar group of relatively high spending militaries.



^{*} Pre-1991 data represents the Soviet Union

Military expenditure has increased by 193 per cent in India and 111 per cent in Pakistan, and the number of armed forces personnel have increased by 118 per cent in India and 93 per cent in Pakistan. The heavy weapons scores have increased by 35 per cent in India and 53 per cent in Pakistan.

FIGURE 2.18 INDEX CHART OF CHANGES IN CHINESE MILITARISATION, 1987-2016 (1987 = 100)

Chinese military expenditure has grown exponentially since the end of the cold war despite declines in employed armed forces personnel and heavy weapons capabilities, suggesting significant emphasis on military modernisation.



Source: The Military Balance, WB Armed Forces Data, SIPRI Milex Data

FIGURE 2.19 CHANGES IN INDIAN AND PAKISTANI MILITARISATION, 1987-2016 (1987 = 100)

India and Pakistan have steadily increased their respective military powers over the past three decades amid high levels of tension in the region, culminating in the simultaneous acquisition of nuclear weapons by the two states in 1998.



TRENDS IN THE DEVELOPING AND DEVELOPED WORLD

The global decrease in militarisation has been driven by significant disarmament in the developed world and by the fall of the Soviet Union. However, many nations in the developing world remain at militarisation levels similar to or higher than at the end of the Cold War. Russia and the major Western powers, despite scoring lower on many of the indicators today than they did in 1987, are no less capable, however, of direct, destructive conflict due to their remaining military strength, nuclear capabilities and substantially improved technological capabilities.

Furthermore, increased militarisation and nuclear proliferation in the developing world, enabled by significant economic growth, have resulted in a more multipolar world with a greater number of major military powers.⁸

The post-Cold War period saw significant decreases in all indicators of militarisation across Europe. European defence spending increased moderately in 2016 and is expected to continue trending upwards partly in response to rising regional insecurity brought about by the Russian annexation of Crimea and several successful terrorist attacks on European soil. This shift represents a change from prior years, as most European states significantly reduced their respective military sizes and strengths at the end of the Cold War. Additionally, a number of nations have outlined plans to establish internal defence forces focused on homeland security.

On average, countries in the developed world, excluding the US, spent US\$17.5 billion on their militaries in 1987, while countries in the developing world averaged US\$2.1 billion. In 2015, on average, developed countries spending had fallen to US\$12.5 billion, a 29 per cent decrease, while developing countries increased their spending by 241 per cent to US\$7.3 billion (constant 2014).

FIGURE 2.20 CHANGES IN MILITARY COMPOSITION, DEVELOPED VS. DEVELOPING WORLD, 1987 VS. 2016

Almost every developed country has reduced both its total number of heavy weapons and its armed forces personnel rate.





FIGURE 2.21 INDEX CHART OF MILITARISATION TRENDS IN THE WESTERN WORLD, 1987-2016 (1987 = 100)

Much of the world's demilitarisation has been driven by decreases in heavy weapons and armed forces personnel in the western world, although levels of military expenditure in major western powers are similar to those seen at the height of the cold war.



FIGURE 2.22 MILITARY EXPENDITURE, DEVELOPING VS. DEVELOPED WORLD, CONSTANT 2014 US\$, 1987-2015 Military expenditure has increased in the developing world and decreased in the developed world in the past three decades.



TRENDS IN UN PEACEKEEPING

After the end of the Cold War and at the turn of the 21st century, the international community had been successfully ending more armed conflicts and reducing the number of deaths from organised violence. But as the overall GPI results show, peacefulness has declined in many parts of the world since 2008. The end of the conflict in Colombia is encouraging, but violence has escalated significantly in Syria, Iraq and Afghanistan. Whereas there were 80 episodes of war, armed conflict or organised violence in 2010, there were 148 in 2015 (the latest year of available data).

In 2014, the UN Secretary-General commissioned a High-level Independent Panel on Peace Operations (HIPPO) for a comprehensive review of how UN peace operations can be "more effective, efficient and responsive in a changing world."¹⁰ The review underscored that political solutions to armed conflict are critical to peacekeeping, as peacekeepers are increasingly deployed to places where "there is no peace to keep."¹¹

The UN has expanded the mandates of peacekeeping operations to increasingly provide multidimensional peacebuilding support in a variety of contexts, meaning that the UN no longer needs to wait for a comprehensive peace agreement to be in place before deploying peacekeepers. But UN missions are unable to operate without consent from the country government; host governments must show at least enough commitment to peace to allow peacekeepers to operate in the country. Peacekeeping is no longer solely a post-conflict activity, but the political will of the groups in conflict to make peace remains a prerequisite for keeping peace.

KEY FINDINGS

- The number of active peacekeepers has doubled in the past 25 years, from roughly 50,000 to nearly 100,000 deployed personnel.
- Roughly 43 per cent of peacekeeping personnel – troops, police and observers – come from lowermiddle income countries. Eighty per cent are from lower and lower-middle income member states.
- At the start of 2017, there were 21 active peace operations around the world. Of the 100,000 deployed personnel, about 85 per cent of peacekeepers are military troops and 15 per cent are police and experts or military observers.
- > The average mission lasts 31 months, although there are five ongoing missions that are over 26 years old.
- In 2016, 94 per cent of peacekeepers were deployed to sub-Saharan Africa and the Middle East and North Africa. There has been a significant increase in the number of peacekeepers deployed in the Middle East and North Africa since 2005.
- Peacekeeping is no longer only a post-conflict activity, with approximately 53 per cent of personnel deployed in countries with an active armed conflict, such as Sudan and the Democratic Republic of the Congo.

FIGURE 2.23 TREND IN ORGANISED VIOLENCE AND ARMED CONFLICT, 1990-2015*

Non-state armed conflicts and instances of one-sided violence are the most frequent, but internal armed conflicts and internationalised internal conflicts have been the deadliest for at least the last decade.



Source: UCDP/PRIO Non-state, One-sided, and Armed conflict datasets

BOX 2 HOW DOES PEACEKEEPING WORK?

UN peacekeeping operations support countries transitioning from active armed conflict to ceasefire to sustainable peace. The first peacekeeping missions simply monitored agreed upon ceasefires. Today, peace operations take on many roles, including protecting civilians, ensuring the rule of law, assisting in disarmament processes and the facilitation of elections, and supporting the development of functioning national institutions.

UN PEACEKEEPING HAS THREE MAIN PRINCIPLES:

- 1. Consent of the parties: peacekeepers cannot enter a country unless invited by the government and with the consent of other groups involved in the conflict.
- 2. Impartiality: peacekeepers do not take sides in a conflict, but simply help to implement existing cease fire or peace agreements.

3. Non-use of force except in self-defence and defence of the mission's mandate.

A new peace operation is formed based on consultations with relevant parties: the groups in conflict, the country government, UN organisations, member states that will contribute peacekeeping troops and any other external stakeholders. A technical assessment is also conducted to ensure that peacekeepers will be able to operate on the ground. Then, if peacekeeping is deemed appropriate, the UN Security Council authorises a mission and outlines the mandate and budget for the operation.

Peacekeeping troops come from UN member states. The UN does not have a military and troops wear their own country's uniform in the field. They are identified as UN peacekeepers by their iconic blue helmets.

The UN Secretary-General provides regular reports to the UN Security Council on mission progress. Sometimes, the mandate of a mission will change as the security context evolves. More than one mission may be deployed to the same country. Overall, peacekeepers provide a variety of types of support for the specific country context until peace and security have been restored.

OVERVIEW OF UN PEACEKEEPING

There have been over 70 UN peacekeeping operations since the first deployment of military observers to the Middle East in 1948, with more than 50 of them commencing in the last 25 years. Over 120 countries have committed troops, police and military and expert observers. At the time of writing, over 100,000 men and women were serving in 21 UN peace operations and special political missions worldwide.¹²

Since 1990, the average mission strength has been roughly 5,300 observers, police and troops, but some missions are much larger. In 1994, more than 39,800 people were deployed as part of the United Nations Protections Force in Croatia and Bosnia and Herzegovina (UNPROFOR). The largest ongoing mission in early 2017 was the African Union/United Nations Hybrid Operation in Darfur (UNAMID), with roughly 17,290 personnel.

The post-Cold War shift from interstate armed conflict toward more civil wars also affected UN peace operations. The numbers of both missions and troops increased dramatically after the Cold War. The UN Security Council authorised 20 new operations between 1989 and 1994 and more than quadrupled the number of personnel in the field, reaching 75,000 peacekeepers.¹³

Today, peace operations are considered part of the UN's broader efforts to build and sustain peace around the world. Peacekeepers took on increasing roles; in addition to monitoring ceasefire agreements, mission mandates included:

- > stabilising the security situation,
- > reorganising domestic military and police forces,
- > helping to implement complex peace agreements, and
- assisting with elections and the development of democratic institutions.¹⁴

Today, peace operations are considered part of the UN's broader efforts to build and sustain peace around the world. Multidimensional peace operations are tasked with protecting civilians and human rights, disarming and demobilising combatants, and restoring the rule of law, among other things.¹⁵

The two newest peace operations reflect the diverse roles peacekeepers play. The United Nations Mission in Colombia (UNMC), which began in July of 2016, reflects the traditional role of peacekeepers. UNMC is a political mission of unarmed international observers tasked with monitoring and verifying the disarmament and ceasefire agreement signed in the 2016 peace process, which ended half a century of armed conflict between the government and FARC. On the other hand, the United Nations Support Office in Somalia (UNSOS), which had its first deployment in September 2016, will support the active UN and African Union missions in Somalia with activities ranging from providing medical care to coordinating logistics.

TRENDS IN UN PEACEKEEPING DEPLOYMENTS

The number of active missions has hovered around 20 for the past 25 years, but the number of deployed personnel has doubled, from roughly 50,000 at the start of 1993 to nearly 100,000 active peacekeepers in February of 2017.

The increasing number of deployed peacekeepers suggests that the international community is more willing and able to address conflict situations than in the immediate period after the Second World War.

However, an increase in the resources devoted to violence containment should not be equated with a more peaceful world. Peacekeepers increasingly find themselves operating in armed conflict contexts. Despite that fact, the rates of fatal attacks on peacekeepers has fallen in the last 25 years, from 1.6 deaths per 1,000 people deployed in 1993 to less than 0.4 since the turn of the century.

FIGURE 2.24 UN DEPLOYED PEACEKEEPERS, NOVEMBER 1990 TO FEBRUARY 2017

Deployment of peacekeeping troops, police and expert observers has doubled in the last 25 years, from about 50,000 personnel in 1993 to nearly 100,000 in early 2017.



Source: International Peace Institute Peacekeeping Database



Figure 2.23 shows the number of UN peacekeeping personnel broken down by police, observers and troops from late 1990 to early 2017. The share of peacekeepers that are police, military observers or other experts, rather than troops, increased significantly leading up to the turn of the last century, reaching its peak of 37 per cent in late 1999 and then falling back below 15 per cent in 2003, where it has remained, roughly, for the past decade.

For the last decade, police and observers have made up about 15 per cent of personnel deployed, reflecting **two dynamics:**

- As peace operation mandates expand to include civilian functions, more civilian personnel are needed on the ground.
- At the same time, as peacekeepers are increasingly deployed to countries with active armed conflicts, more military personnel are needed as well.

Regionally, the majority of peacekeepers have been deployed to sub-Saharan Africa and the Middle East and North Africa since the early 1990s. In 2016, 94 per cent of peacekeeping personnel were deployed to these two regions.

Most peacekeepers come from developing countries. Peacekeeping police, troops and observers are contributed by UN Member States. Since the turn of the century, at least half of contributed peacekeepers have come from low or lower-middle income countries. By 2015, the proportion had reached 80 per cent, as seen in figure 2.27 (overleaf). The largest group is from lower-middle income countries, which currently make up 43 per cent of active peacekeepers.

FIGURE 2.26 UN DEPLOYED PEACEKEEPERS BY REGION, NOVEMBER 1990 TO FEBRUARY 2017

In 2016, 94 per cent of peacekeeping personnel were deployed in MENA and sub-Saharan Africa.



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An increase in the resources devoted to violence containment should not be equated with a more peaceful world. Peacekeepers increasingly find themselves operating in armed conflict contexts.

FIGURE 2.27 PEACEKEEPING PERSONNEL BY INCOME LEVEL OF CONTRIBUTING COUNTRY. NOVEMBER 1990 TO FEBRUARY 2017



In 2016 and 2017, 43 per cent of peacekeepers came from lower-middle income countries.



The breakdown in peace that followed the Arab Spring has resulted in a sharp escalation in both deaths from and instances of organised violence. In 2015, just over half of the 100,000 active peacekeepers were deployed in a country with an active armed conflict.

Figure 2.28 highlights peacekeeper deployments to countries with an active armed conflict. The trend has been increasing since the turn of the century, even while the number of armed conflicts and instances of organised violence declined in the early 2000s. However, the breakdown in peace that followed the Arab Spring has resulted in a sharp escalation in both deaths from and instances of organised violence. In 2015, just over half of the 100,000 active peacekeepers were deployed in a country with

an active armed conflict.

FIGURE 2.28 PEACEKEEPING OF PERSONNEL DEPLOYED TO COUNTRIES WITH ACTIVE ARMED CONFLICT, (ANNUALISED AVERAGE) 1990-2015

Peacekeepers are increasingly active where armed conflicts are still going on. In 2015, roughly 53 per cent of peacekeepers were deployed in countries with active armed conflicts.





ECONOMIC IMPACT OF VIOLENCE



HIGHLIGHTS

The global economic impact of violence was \$14.3 trillion PPP in 2016, equivalent to 12.6 per cent of global GDP, or \$1,953 per person.

- 2016 saw the first decrease in the economic impact of violence since 2011, which is the year that corresponded with the start of the Syrian war and ISIL's territorial gains in Iraq.
- Syria, Iraq and Afghanistan incurred the largest economic cost of violence as a percentage of their GDP at 67, 58 and 52 per cent of GDP, respectively.
- The global economic impact of violence decreased by three per cent from 2015, a drop of \$431 billion PPP.

- There has been a fall in the number of lives lost to terrorism, lower expenditure on peacekeeping and lower internal security and military spending.
- The average economic cost of violence was equivalent to 37 per cent of GDP in the ten least peaceful countries, compared to only three per cent in the ten most peaceful.

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. 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 2016 version of the economic impact of violence includes 17 variables in three groups.

SECURITY SERVICES AND PREVENTION ORIENTED COSTS		ARMED CONFLICT RELATED COSTS		INTE	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			

TABLE 3.1 VARIABLES INCLUDED IN THE ECONOMIC IMPACT OF VIOLENCE, 2016

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:

- > Domestic violence
- > Violence against children and the elderly
- Household out-of-pocket spending on safety and security
- > The cost of crime to business

- > Spill over effects from conflict and violence
- > Self-directed violence
- Judicial system expenditure

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.
- 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.

The term **economic impact of violence** is used to explain 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.

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.

RESULTS

The economic impact of violence on the global economy was \$14.3 trillion in 2016, in constant purchasing power parity terms. This is equivalent to 12.6 per cent of world gross domestic product (i.e. global GDP) or \$1,953 per person.

The global economic impact of violence decreased three per cent from 2015 to 2016 mainly due to a reduction in the number of lives lost to terrorism, lower expenditure on peacekeeping and lower internal security and military spending. This is the first drop since 2011 which is the year that corresponded with the start of the Syrian war and the start of ISIL's territorial gains in Iraq.

The single largest component was global military expenditure at \$5.6 trillion PPP, or 39 per cent of the economic impact of violence in 2016. 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\$233 billion in 2016. Internal security spending was the second largest component, comprising over 29 per cent of the global economic impact of violence at \$4.1 trillion. Internal security expenditure includes spending on the police and prison 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. Figure 3.2 shows the breakdown of the total economic impact of violence by category.

Homicide, at 14 per cent, is the third largest component of the model with the economic impact associated with intentional homicide being greater than the combined total for all violent crime and conflict.



FIGURE 3.2 BREAKDOWN OF THE GLOBAL ECONOMIC IMPACT OF VIOLENCE, 2016

Government spending on military and internal security comprises 68 per cent of the global economic impact of violence.



TABLE 3.2 CHANGE IN THE ECONOMIC IMPACT OF VIOLENCE FROM 2015 TO 2016 The seconomic impact of deaths from conflict

The economic impact of deaths from conflict increased by six per cent.

INDICATOR	2015	2016	CHANGE (BILLIONS)	CHANGE (%)
Conflict deaths	176.0	186.6	10.6	6.0%
Refugees and IDPs	363.6	370.1	6.5	1.8%
GDP losses	345.0	349.3	4.3	1.3%
Private security	777.7	787.4	9.7	1.2%
Incarceration	110.9	112.3	1.3	1.2%
Violent crime	497.1	501.9	4.8	1.0%
Internal security	4,052.9	4,032.7	-20.2	-0.5%
Small arms	9.4	9.2	-0.2	-2.2%
Homicide	2,122.2	2,071.2	-51.1	-2.4%
Fear	146.0	138.8	-7.2	-4.9%
Military expenditure	5,975.3	5,615.8	-359.5	-6.0%
Peacebuilding	30.0	27.2	-2.8	-9.3%
Terrorism	155.3	130.7	-24.6	-15.9%
Peacekeeping	19.6	16.5	-3.1	-16.0%
TOTAL	14,781.0	14,349.5	-431.5	-2.9%

Two other categories of interpersonal violence included in the model are violent assault and sexual assault, which total three per cent of the global economic impact of violence. The economic impact associated with armed conflict is seven per cent of the total which includes deaths from conflict, population displacement, terrorism, and losses in economic activity due to conflict.

Table 3.2 provides details of the changes in the categories for the last year. The decrease in the overall economic impact of violence has largely been driven by the decrease in terrorism, expenditures on peacebuilding and falls in internal security spending and military expenditure.

Although the economic impact of terrorism trebled in OECD countries from 2015 to 2016, globally it declined by 16 per cent. This was due to a ten per cent drop in the overall number of deaths from terrorism.

Military spending fell by six per cent globally, mainly due to declining expenditure by the United States which has decreased its expenditure by 21 per cent from 2010 to 2015¹. The economic impact of homicide accounted for the third largest decline, decreasing by \$51 billion PPP or two per cent from 2015 to 2016. Internal security expenditure, which captures incarceration and police expenses, accounted for the remaining amount, declining globally by one per cent or \$20 billion PPP in 2016.

The two largest increases in the economic impact of violence are the result of intensified armed conflicts in the Middle East. These conflicts resulted in deaths from conflict and population displacement increasing by six and two per cent respectively with a major proportion of the increase being due to the conflicts in Syria, Iraq, and Afghanistan.

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. Table 3.2 provides details of the economic impact of violence broken down by direct and indirect costs.

TABLE 3.3COMPOSITION OF THE GLOBAL ECONOMIC IMPACTOF VIOLENCE, 2016

INDICATOR	DIRECT COSTS	INDIRECT COSTS	DIRECT COSTS WITH MULTIPLIER EFFECT	TOTAL
Violent crime	38.8	424.3	77.6	501.9
Homicide	179.0	1,713.1	358.0	2,071.2
Fear		138.8	0.0	138.8
Conflict deaths	93.3		186.6	186.6
Terrorism	11.3	108.2	22.6	130.8
GDP losses		349.3	0.0	349.3
Internal security	2,016.3	112.3	4,032.7	4,144.9
Military expenditure	2,807.9		5,615.8	5,615.8
Private security	393.7		787.4	787.4
Small arms	4.6		9.2	9.2
Peacekeeping	8.2		16.5	16.5
Peacebuilding	13.6		27.2	27.2
Refugees and IDPs	3.3	363.5	6.6	370.1
Security agency	143.1		286.1	286.1
TOTAL	5,570.0	3,209.6	11,140.1	14,349.7

The economic impact of homicide accounted for the third largest decline, decreasing by \$51 billion PPP or two per cent from 2015 to 2016.

THE TEN MOST AFFECTED COUNTRIES

In GDP terms, the economic cost of violence for the ten most affected countries ranges between 30 and 67 per cent of GDP.

These countries have either high levels of armed conflict or high levels of interpersonal violence or both. The conflict-affected countries - Syria, Iraq, Afghanistan, Colombia, South Sudan, Somalia, and Central African Republic - suffer from high costs of conflict 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 Honduras and Lesotho are in the ten most affected countries because of high costs associated with high levels of homicide and violent crime.

North Korea is an exception to this dichotomy in that the majority of its economic cost is related to its high levels of militarisation. Table 3.4 lists the ten most affected countries.

TABLE 3.4 TOP TEN COUNTRIES FOR ECONOMIC COST OF VIOLENCE AS A PERCENTAGE OF GDP In Syria, Iraq, and Afghanistan, the economic cost of violence was equivalent to over 50 per cent of GDP.

COUNTRY	ECONOMIC COST OF VIOLENCE AS PERCENTAGE OF GDP	GPI 2017 RANK
Syria	66.9%	163
Iraq	57.6%	161
Afghanistan	52.1%	162
Colombia	36.9%	146
South Sudan	36.2%	160
Honduras	33.4%	106
Somalia	33.0%	158
Lesotho	32.6%	90
North Korea	32.4%	150
Central African Republic	29.7%	155

REGIONAL COMPOSITION OF THE ECONOMIC IMPACT OF VIOLENCE



FIGURE 3.4 PER CAPITA CONTAINMENT SPENDING (MILITARY AND INTERNAL SECURITY) BY REGION, 2016

Per capita containment spending is 12 times higher in MENA than sub-Saharan Africa.



Different regions are affected by the various types of violence in very different ways. Figure 3.3 shows the variations in the economic impact of violence at the regional level.

The greatest variation between regions is violent crime and homicides – this represents 55 per cent of the economic impact for the South America region, but only 11 per cent for MENA and North America respectively. This is followed by the military which varied from 54 per cent in North America to 12 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 – Central America and the Caribbean.

Violence containment spending, which includes both military spending and internal security spending is highest in MENA and North America² while Central America and Caribbean, South America, and sub-Saharan Africa spend the least on violence containment. On average countries in sub-Saharan Africa spend ten times less on violence containment than Europe and five times less when compared to the Asia-Pacific region.

Violence containment spending, which includes both military spending and internal security spending, is highest in MENA and North America.

KEY FINDINGS

- War and violent conflict substantially impact economic growth, both during a conflict and after its > cessation. In Syria, GDP fell by 53 per cent between 2011 and 2014.
- > The economic ramifications from conflict are felt for decades or even longer. Liberia has still not returned to its pre-civil war growth trajectory, despite almost a decade of strong GDP growth and international support.

The economic cost of violence disproportionately affects the least peaceful countries. On average, violence cost the equivalent of 37 per cent of GDP in the ten least peaceful countries, compared to only three per cent in the ten most peaceful countries. Whilst the decline in GDP growth during armed conflict periods is usually followed by a period of economic recovery, the recovery is usually smaller than the lost growth and a complete catch up is rare.

Armed conflict affects economic activity through various channels depending on the scale and intensity of the conflict. Large scale intense conflict, such as the Syrian civil war or Iraqi insurgency, has substantial costs, leading to high numbers of deaths, severe population displacement and substantial property and infrastructure destruction. Violence also imposes other costs such as increased security-related spending, delaying planned investment and capital flight.

Additionally, there are indirect costs of violence exemplified by the collapse of government services and the erosion of formal and informal institutions.

Unless completely resolved through comprehensive long-term post conflict peacebuilding and development, conflict and weak economic performance can create a vicious circle that is hard to break. This is epitomised by how 'sticky' the ten least peaceful countries are on the GPI and how difficult it is for them to become more peaceful.

The World Development Report 2011 lists low GDP growth, inequalities, lack of economic opportunity and unemployment, severe corruption and price shocks as stressors that contribute to the cycle of conflict and underdevelopment.

Unless completely resolved through comprehensive long-term post conflict peacebuilding and development, conflict and weak economic performance can create a vicious circle that is hard to break.

The economies of fragile and conflict-affected countries also often depend on volatile sources of revenues. Large revenue dependence on natural resources which relies on the global price of such resources has been found to be statistically associated with the outbreak of civil war when the prices of these products fall substantially.

Official development assistance (ODA) is another important source of revenue for fragile and conflict-affected contexts. Data from the OECD ODA database shows that approximately 63 per cent of the total ODA between 2011 and 2014 went to fragile and conflict-affected countries.

The flow of ODA and remittances to fragile and conflictaffected countries has substantially increased in the 12 years to 2014. ODA increased by 96 per cent, in constant absolute dollars. Additionally remittances sent back to families has increased even more, growing by 334 per cent. Both of these types of financial resources help to buffer countries against internal and external shocks.

FIGURE 3.5 OFFICIAL DEVELOPMENT ASSISTANCE RECEIPTS BY FRAGILITY LEVEL, TOTAL 2011 TO 2014

Fragile and conflict-affected countries receive nearly twice as much aid as other countries.



FIGURE 3.6 ODA AND REMITTANCES TO FRAGILE AND CONFLICT-AFFECTED COUNTRIES, 2002-2014 Remittances to fragile and conflict-affected countries increased by 334 per cent from 2002 to 2014, while ODA increased 96 per cent.



GDP measures the monetary value of final goods and services-that is, those that are bought by the final userproduced in a country in a given period of time. GDP is a flow concept that does not include the stock of capital - an important indicator of the long term welfare of a nation. Conflict causes both a decline in GDP and the destruction of infrastructure and human and social capital. Yet while GDP recovery starts immediately after a conflict subsides, the accumulation of capital is a far more challenging task and requires careful management of national saving. investment and consumption polices.

Two types of capital make up what is termed the stock of capital, described in box 3.2. There are considerable differences in the composition of stock of capital between conflict-affected and fragile nations and the rest of the world, as shown in figure 3.8. While produced capital consist 78 per cent of the stock of capital of the rest of the world, it constitutes only 27 per cent of the stock of capital of fragile and conflict-affected countries. Conversely, natural capital is only 22 per cent for the rest of the world compared to 73 per cent for conflictaffected and fragile countries.

Conflict causes large erosions in the level of capital. Figure 3.9 shows per capita wealth over time for Rwanda, Sierra Leone, and Liberia, illustrating the decline in per capita wealth in the years when conflict occurred. In Rwanda, per capita wealth decreased by eight per cent and in Sierra Leone 11 per cent from 1995 to 2000.

FIGURE 3.7 GLOBAL GDP AND CAPITAL STOCKS, 2005

The global capital stock was three times higher than global GDP in 2005, which shows the extent to which GDP based analysis might underestimate the real economic losses of conflict.



Source: The World Bank

FIGURE 3.8 COMPOSITION OF WEALTH BY FRAGILITY LEVEL, 2005

Conflict-affected and fragile countries have smaller levels of produced capital and higher proportions of natural capital compared to rest of the world.



BOX 3.2 STOCK OF CAPITAL

IEP counts two types of capital when assessing the wealth of a nation, produced capital and natural capital.

- 1. Produced capital consist of buildings, machinery, equipment, infrastructure and urban land.
- 2. Natural capital comprises exhaustible resources such as oil, natural gas, coal and mineral resources as well as land used for purposes such as agriculture, forestry, and pastureland.

FIGURE 3.9 PER CAPITA WEALTH OF NATIONS FOR 1995, 2000 AND 2005 FOR THREE CONFLICT-AFFECTED COUNTRIES



Per capita wealth declined by 2, 8 and 11 per cent in the aftermath of conflict in Liberia, Rwanda and Sierra Leone.

Although the use of GDP data to estimate economic losses from conflict means that costs are usually severely under-reported, it is still a widely used measure because of the availability of long term time-series data. Additionally, GDP and GDP growth-based estimates of the cost of conflict provides an indication of how economic activity is affected by conflict. The following case studies illustrate the long term economic implication of armed conflict for GDP growth. These models do not calculate the cost of capital destruction, such as buildings and infrastructure, falling valuations of businesses or the stock market. It also attempts to show an alternative non-conflict scenario to estimate what the likely outcomes would be if there was no conflict or if conflict could be prevented.

CASE STUDY THE COST OF CONFLICT IN SYRIA

The Syrian civil war started in 2011 after the uprising of various militias opposed to the Assad regime. The uprising against the Syrian regime was part of a chain of complex events unfolding in the Middle East and North Africa, following the 'The Arab Spring'.

Six years on, the civil war in Syria has led to the death of between 250,000-470,000 people and has displaced over 11 million Syrians either inside Syria or as refugees in the region and beyond.³ While it is not possible to quantify the human tragedy of the Syrian civil war, its effects on the economy have been devastating, with a 53 per cent decline in GDP between 2011 and 2014.

Estimating GDP losses due to the Syrian conflict can be done by calculating GDP trajectories of the hypothetical 'no-war' scenario, and contrasting this with what actually occurred. Using Syrian GDP data from the Penn World tables, and the counterfactual GDP growth estimates from Syrian Centre for Policy and Research (SCPR), figure 3.10 shows the huge GDP divergence between the two scenarios. The cumulative economic losses amount to \$240 billion PPP or nearly 200 per cent of Syrian GDP in 2011.

While it is not possible to quantify the human tragedy of the Syrian civil war, its effects on the economy have been devastating, with a 53 per cent decline in GDP between 2011 and 2014. Syria's GDP contracted by 53 per cent from 2011 to 2014. The decline in GDP is even larger when comparing this to a scenario in which no war had happened and the country had experienced similar economic growth as recorded before the war. The no-war scenario assumes growth rates of 6.1, 5.4, 5.5 and 4.9 per cent for each year from 2011 to 2014.⁴ This compares to actual GDP growth rates of 4, 6, and 3 per cent in 2008, 2009 and 2010.

In addition to the economic losses, the Syrian civil war has reversed years of development-related achievements. Syria slipped 29 places on the Human Development Index in 2015 and is now part of the low human development group of countries.⁵ Life expectancy decreased from 69.7 to 48.2 years for males and 72 to 64.8 for females between 2010 and 2014.⁶ In addition, there are significant spill over effects from the Syrian conflict that have affected other countries in the region. Both Jordan and Lebanon, which were already debt-ridden countries, are hosting nearly one million Syrian refugees.

This has exacerbated the fiscal deficits and estimates show an increase in the poverty rate across both countries.⁷ However, the Syrian civil war is not the only reason for slow economic performance in Jordan and Lebanon. Increased levels of violence in Iraq has also impacted these countries.

FIGURE 3.10 SYRIA GROSS DOMESTIC PRODUCT IN PURCHASING POWER PARITY TERMS, 1990-2014

The economic cost of the Syrian conflict in terms of GDP losses from 2011 to 2014 was \$240 billion PPP, equivalent to nearly 200 per cent of its 2011 GDP.



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In addition to the economic losses, the Syrian civil war has reversed years of developmentrelated achievements. Syria slipped 29 places on the Human Development Index in 2015 and is now part of the low human development group of countries.

CASE STUDY THE COST OF CONFLICT IN LIBERIA



In 1980 a military coup d'état in Liberia brought Sergeant Samuel Doe to power, a coup which initially had popular support because of the hopes that the military would bring an end to political, economic and social repression. However, the regime failed in delivering on these expectations and the economy contracted at an average of one per cent annually between 1980 and 1989. The first Liberian civil war, which started in 1989 and ended in 1997 with the Abuja II peace accord, led to a further contraction of the economy. The conflict resumed between 1999 and 2003, displacing up to one third of the population and caused the collapse of government institutions.⁸

The cumulative GDP losses from the two Liberian civil wars amounted to \$39 billion PPP, equivalent to ten times the Liberian GDP in 2014. In this estimate, the no-war scenario assumes that GDP growth would have been equal to the average of 25 years prior to the conflict.

Figure 3.11 shows real GDP growth and GDP in constant PPP from 1980 to 2014, as well as the hypothetical no-war scenario. The largest contraction of the economy happened during the first civil war, where GDP fell 150 per cent between 1990 and 1996. Although a post-conflict economic recovery followed the first contraction, the second wave of intense conflict that occurred caused another 33 per cent contraction of the economy.

The post conflict recovery was boosted by high levels of commitment from foreign donors. From 2002 to 2015, ODA flows to Liberia increased 17 fold, increasing from US\$62 million to US\$1.1 billion in constant terms. Without this the economy could be as much as 25 per cent lower.

The cumulative GDP losses from the two Liberian civil wars amounted to \$39 billion PPP.

The case of Liberia highlights the reciprocal relationship between conflict and economic performance. The slowdown in the economic activity during the 1980s was mainly due to declining revenue from the exploration of natural resources, particularly iron, and was a precursor to conflict.

Once the civil war ensued, it further hindered the country's economic performance. Stability only returned to the country after a UN-led intervention in 2003, sending 10,000 peacekeepers to Liberia, and the implementation of post conflict development and peacebuilding programmes. Nevertheless, economic and social problems persist and the country is still among the list of fragile and conflict-affected countries.





CASE STUDY THE COST OF CONFLICT IN SIERRA LEONE

Civil war ravaged Sierra Leone between 1991 and 2002, leading to the death of more than 50,000 people and the displacement of two thirds of the population. The war destroyed both social and economic infrastructure in Sierra Leone. In addition to death and displacement, acts of extreme violence were committed, and the abduction and recruitment of children as child soldiers has left long term scars on the country.

Figure 3.12 shows that the total losses of forgone GDP over the two decades amounted to \$113 billion PPP, which is equivalent to over seven times Sierra Leone's GDP in 2014.

The economy contracted by 72 per cent between 1991 and 2000, and a real recovery only started once the war was declared over and the peacekeeping mission and integration and disarmament got underway. Sierra Leone has since received large amounts of foreign aid to rebuild its economy.

Sierra Leone is still one of the least developed countries globally, ranking 179 out of 188 on the Human Development Index.



In addition to death and displacement, acts of extreme violence were committed, and the abduction and recruitment of children as child soldiers has left long term scars on the country.

CASE STUDY THE COST OF CONFLICT IN RWANDA

In the Rwandan genocide in 1994, as many as 800,000 people were killed and approximately three million displaced in a matter of months. The genocide and conflict was the result of long standing structural issues within Rwandan society, mainly ethnic divisions between the Hutus and Tutsis, fuelling intergroup grievances. The final result was that post-conflict Rwanda was mired by high levels of poverty and social tension.

Between 1989 and 1994, in the lead up to the genocide, the Rwandan economy contracted 57 per cent, fuelled in large part by the collapse of the coffee market in 1989.

The economic cost of the Rwandan genocide in terms of GDP losses reached \$120 billion PPP or six times the country's 2014 GDP, as shown in figure 3.13.

The GDP losses alone do not reflect the entirety of the devastation that the genocide left behind. Rwanda's population decreased from 7.1 to 5.5 million, and the under-five mortality increased from 150 per 100,000 in 1990 to 209 per 100,000 in 1994. Over the same period, immunisation coverage dropped from 83 to 25 per cent of the population, and life expectancy in Rwanda dropped from 33.4 to 31.5 years.

Rwanda is, however, an astonishing example of post-conflict recovery. The country has achieved annual average GDP growth of nearly nine per cent between 1995 and 2015. GDP per capita at purchasing parity terms has increased from \$533 in 1995 In the Rwandan genocide in 1994, as many as 800,000 people were killed and approximately three million displaced in a matter of months.

to \$1,810 in 2014. The Human Development Index score has improved 116 per cent between 1995 and 2015, driven by an increase in life expectancy from 31.5 to 64.7 years and mean years of schooling from 1.8 to 3.8 years from 1995 to 2015. Post-conflict peacebuilding in Rwanda is used as the basis for finding a unitcost of successful peacebuilding, discussed in depth in the next section of this report.

Strong international support through ODA allocations is one of the elements that contributed to the post-conflict recovery. Available ODA data shows that ODA flow to Rwanda nearly doubled between 2002 and 2015, increasing from US\$462 million to US\$1,108 million in constant terms. Nevertheless, Rwanda still faces numerous development challenges and fragilities. The country's progress is highly dependent on the leadership of the ruling party and the continuation of the post-genocide peace.

FIGURE 3.13 RWANDA GDP IN PURCHASING POWER PARITY TERMS, 1980-2014

The cumulative economic cost of conflict in Rwanda in terms of GDP losses from 1994 to 2014 amounted to \$120 billion PPP, equivalent to more than six times its 2014 GDP.



THE COST-EFFECTIVENESS OF PEACEBUILDING

KEY FINDINGS

- IEP estimates that the cost of conflict in 2016 was \$1.04 trillion. Reducing this cost would lead to a significant positive impact on the economies of fragile and conflict-affected states.
- Peacebuilding expenditures are distributed unevenly. Over the past twelve years Afghanistan and Iraq received 49 per cent of donor-financed peacebuilding funding.
- For the 12-year period 2002-2013, peacebuilding expenditures averaged US\$13 per capita, per year, for conflict-affected countries.¹ This is less than half of the needed level of peacebuilding, which IEP estimates at US\$27 per capita.
- IEP uses a definition of peacebuilding activities that identifies three areas: support for basic safety and security, support to political processes, and support to core government functions.

- IEP has developed a model for assessing conflict risk based on 'Positive Peace deficit'. Between 2008 and 2017, the model identified Syria as being at risk of deterioration three years before the outbreak of civil war.
- Using IEP's risk model as a basis for selecting countries at risk of falling into conflict, the total cost of conflict in countries correctly predicted to be at risk of conflict was twelve times higher than the estimated level of ideal peacebuilding expenditure required to prevent conflict. Thus even up to a twelve fold increase in peacebuilding expenditure would have been more cost-effective for the international community than allowing conflict to occur.

This section of the report analyses the cost-effectiveness of peacebuilding, using IEP's risk tool as a guide for identifying those countries at risk of falling into conflict. This forms a list of countries likely to benefit from peacebuilding assistance. The analysis also calculates the optimum per capita expenditure for peacebuilding and finally calculates a cost/return ratio for increased peacebuilding.

The global cost of conflict was estimated to be \$1.04 trillion in 2016. The cost of violent conflict is a subset of the total economic impact of violence that is outlined earlier in this report. Conflict costs consist of deaths from conflict, terrorism, GDP losses from conflict and IDPs and refugees, but does not include internal security expenditure, incarceration, and other internal costs. The costs of violent conflict are orders of magnitude larger than current peacebuilding expenditure. IEP estimates show that the cost of violent conflict in 2013 was over 120 times higher than peacebuilding and peacekeeping funding.

The potential benefits from investing further in peacebuilding are substantial. Based on IEP's model of the cost-effectiveness of peacebuilding, the total peace dividend that the international community would reap if it increased peacebuilding commitments over the next ten years could be as high as US\$2.94 trillion.
DEFINING PEACEBUILDING

Peacebuilding involves a range of measures aimed at preventing a country from falling or relapsing back into violent conflict by strengthening a specific set of capabilities.

Peacebuilding activities are defined under three priority areas: basic safety and security, supporting the political processes, and supporting core government functions. This is distinct from peacekeeping and peace-making activities, which broadly involve the activities aimed at ending violence and establishing security.

Peacebuilding involves a range of measures aimed at stopping a country from falling or relapsing back into violent conflict. While peacebuilding activities are extremely important, there is no standard definition for what constitutes peacebuilding actions. IEP has attempted to fill this gap by using a simple and non-expansive definition of peacebuilding to arrive at the estimated costs of peacebuilding. This provides a practical and useful method to further understand when peacebuilding initiatives should be actioned and their likely payback based of the costs of conflict in similar countries.

IEP uses a definition of peacebuilding activities based on the 2009 "Report of the Secretary-General on Peacebuilding in the Immediate Aftermath of Conflict", and in consultation with the UN Peacebuilding Contact Group, which was convened by the UN's Peacebuilding Support Office (PBSO). Three priority areas were identified: support to basic safety and security, support to political processes, and support to core government functions, which is further broken down into 17 categories of peacebuilding activities based on the OECD's Development Assistance Committee Creditor Reporting System. Table 3.5 summarises the activities related to peacebuilding.

TABLE 3.5 CATEGORIES OF PEACEBUILDING EXPENDITURES

	DOMAIN	NUMBER	CATEGORY DESCRIPTION	CRS CODE	
CORE PEACEBUILDING		1.1	Security system management and reform	15210	
	l. Basic safety and security	1.2	Reintegration and SALW control	15240	
		1.3	Removal of land mines and explosive remnants of war	15250	
		1.4	15261		
		1.5	Participation in international peacekeeping operations	15230	
	Other		Other specific peace-related expenses		
		2.8	Civilian peacebuilding, conflict prevention and resolution	15220	
SECONDARY PEACEBUILDING	2. Inclusive political processes	2.1	Legal and judicial development	15130	
		2.2	Legislatures and political parties	15152	
		2.3	Anti-corruption organizations and institutions	15113	
		2.4	Democratic participation and civil society	15150	
		2.5	2.5 Media and free flow of information		
		2.6	Human rights	15160	
		2.7	Women's equality organizations and institutions	15170	
	3. Core government functions	3.1	Public sector policy and administrative management	15110	
		3.2	Public finance management	15111	
		3.3	Decentralisation and support to subnational government	15112	

Based on these peacebuilding parameters, our analysis shows that peacebuilding is a relatively underfunded aspect of ODA. Over the 12-year period 2002-2013, peacebuilding expenditures averaged US\$13 per capita, per year, for conflict-affected countries.¹⁰ This compares to US\$62 per capita for all other official development aid over the period. In 2013 conflictaffected countries received approximately 24 per cent of total ODA from donor countries. The ten countries most at risk of falling into conflict received US\$10 billion¹¹ from 2002 to 2013, which was just 6.65 per cent of total peacebuilding funding over this period.

 Over the 12-year period 2002-2013, peacebuilding expenditures averaged US\$13 per capita, per year, for conflictaffected countries.

FINDING THE OPTIMAL LEVEL OF PEACEBUILDING

Upfront spending on preventing conflict by investing in peacebuilding efforts is cost-effective up to the point that the cost of prevention is less than the reduction in the cost of conflict. Current estimates of the ratio of cost of prevention to the cost of doing nothing suggest that it is 1:10.⁴

Peacebuilding is cost-effective as long as the cost of engaging in peacebuilding is less than the total reduction in the cost of conflict. If peacebuilding activities are 100 per cent effective at preventing conflict, then the savings to the international community would be substantial.

IEP's cost-effectiveness of peacebuilding analysis suggest that the necessary peacebuilding expenditure is \$27 per capita per year (measured in constant 2014 USD) in conflict-affected countries.

This 'unit' cost of peacebuilding was estimated based on Rwanda as a model of successful peacebuilding, and was derived using 20 years of peacebuilding commitment data for Rwanda (between 1995 and 2014). The unit cost is assumed to be the minimal amount of peacebuilding funding needed to ensure the longterm durability of peace, based on the critical assumption that peacebuilding activities are indeed effective at bringing about peace.

Figure 3.14 shows the trends in peacebuilding expenditure in Rwanda between 1994 and 2015 broken down according to the three peacebuilding categories. Total peacebuilding expenditure has increased year on year since the end of the genocide, with the 'basic safety and security' domain receive only three per cent of the total overall funding allocated to peacebuilding.



The cost of conflict in any particular country is estimated using IEP's cost of violence to the global economy methodology. The cost of conflict includes the cost of battle deaths, impact of terrorism, population displacement, and the adverse economic effects of war on the economy.

Figure 3.15 highlights the projected impact on the cost of conflict from increasing peacebuilding to optimal levels in countries with existing conflicts.

The 'increasing war' scenario represents the worst possible outcome if there is no increase in peacebuilding from current levels, leading to existing conflict intensifying, and the cost of conflict increasing. The 'peace' scenario models the best case outcome of increasing peacebuilding funding to optimal levels, which would lead to the costs of conflict being substantially reduced over the next ten years. The peace dividend is the difference in the cost of conflict between these two scenarios. In order to achieve this large peace-dividend, however, a more than doubling of current peacebuilding expenditures would be required over what is currently being spent on the 31 most fragile and conflictaffected countries in the world. Peacebuilding expenditure would have to increase from \$64.8 billion to \$183.7 billion over the next ten years.

This increase would lead to a peace dividend of \$2.94 trillion dollars over the decade providing all conflicts ceased. This means that if the recommended level of peacebuilding was reached, every dollar invested in peacebuilding would lead to a \$16 reduction in the cost of conflict.



The cost of conflict could vary between the two scenarios presented in the graph. The peace scenario represents the greatest possible fall in the cost of conflict.





If the optimum level of peacebuilding was reached, every dollar invested in peacebuilding would lead to a \$16 reduction in the cost of conflict.

RISK MODELLING AND THE RISK OF CONFLICT

It is highly unlikely that peacebuilding could be increased to necessary levels in all countries with existing conflicts or at risk of new conflicts breaking out. Therefore, an accurate understanding of the risk of conflict in any specific country is critical in channelling limited resources.

IEP has developed a methodology for assessing the risk of conflict using a heuristic measure: the 'Positive Peace deficit' model.⁵ This model is more accurate in predicting deteriorations in peacefulness than other commonly used measures, therefore it has been chosen to analyse the costeffectiveness of peacebuilding if a strategy was undertaken to target countries which the model assessed as being at risk. By comparing internal peace scores from the GPI with the Positive Peace Index (PPI), IEP calculates a country's peace gap to

predict the potential for future deteriorations into violence and conflict. The model assumes that weak institutional capacity is a good indicator of the risk of conflict.

When Positive Peace is relatively weaker than Negative Peace (as measured by the GPI internal score), a country is said to have a Positive Peace deficit, indicating that the current levels of Positive Peace are not likely to sustain the current low levels of violence.

Therefore, investments need to be made in the institutional capacities of such countries in order to be able to maintain - let alone reduce - current low levels of violence. One of the advantages of this model is that it provides long foresight into future substantial falls in peace, thereby allowing time to adequately address shortfalls in governance, policing and security.

An extra \$3.9 billion would have had to be spent each year in order to reach the optimum level of peacebuilding. In total, between 2008 and 2017, a six-fold increase in peacebuilding expenditure would have been required to reach ideal levels.

IEP'S ASSESSMENT OF CONFLICT RISK

Looking back over a ten year period to 2008, the 10 most 'at risk' countries in 2008 according to the Positive Peace deficit model are shown in Table 3.6. Of these, five had seen deteriorations in peacefulness⁶ by 2017, and two had fallen into conflict⁷ by 2017. These countries are highlighted in table 3.6.

Notably, many of the countries that did not fall into conflict had increases in their levels of Positive Peace. This lessens the likelihood of future conflict. This shows that having a Positive Peace deficit is not a guarantee of future conflict, if institutional capacity is improving.

Assessing the Positive Peace deficit model on more conventional definitions of conflict confirms the model's reasonable performance. Table 3.7 shows the list of 20 countries that fell into conflict after 2008. These are all countries that did not have battle deaths in 2008, but subsequently experienced more than 25 battle deaths in any given year.

Of these 20, two are in the 10 countries most 'at risk' according to the Positive Peace deficit model - Syria and Mozambique, and five are in the top 20 at risk countries - Syria, Mozambique, Angola, Cameroon, Yemen.

The Positive Peace deficit model provides a reasonable assessment of countries at risk of deteriorations in peace and compared to other models it provides a more accurate predictive capacity.

6	Notably, many of the countries that did
•	not fall into conflict had increases in
	their levels of Positive Peace.

COST-EFFECTIVENESS USING THE RISK MODEL

TABLE 3.6TOP 10 'AT RISK'COUNTRIES IN 2008 ACCORDING TOTHE POSITIVE PEACE DEFICIT MODELCountries highlighted in red suffereddeteriorations in peacefulness.Countries marked by an * fell intoconflict, according to the UCDP.

COUNTRY
Sierra Leone
Eritrea
Laos
Equatorial Guinea
Bhutan
Syria*
Niger
Vietnam
Timor-Leste
Mozambique*

TABLE 3.7COUNTRIES THAT FELLINTO CONFLICT, 2008 - 2017Conflict is defined as 25 or more battledeaths in any given year.

COUNTRY
Angola
Cambodia
Cameroon
Central African Republic
Egypt
Cote d'Ivoire
Kenya
Lebanon
Libya
Malaysia
Mauritania
Mozambique
Nigeria
Rwanda
Senegal
South Sudan
Syria
Tajikistan
Ukraine
Yemen

If the Positive Peace deficit model had been used as a forecasting tool for allocating peacebuilding funding, the ten most 'at risk' countries in 2008 according to the model would have been allocated a peacebuilding amount totalling US\$47.3 billion over the next ten years (in constant 2014 dollars) calculated at the unit-cost rate (\$27 per capita per year), between 2008 and 2017.

The actual peacebuilding expenditure in this group of ten countries from 2008 to 2014 was US\$5.8 billion. Projecting this forward to 2017 (assuming the same levels of funding) gives a figure of \$8.3 billion much lower than the ideal peacebuilding scenario.

An extra \$3.9 billion would have had to be spent each year in order to reach the optimum level of peacebuilding. In total, between 2008 and 2017, a six-fold increase in peacebuilding expenditure would have been required to reach ideal levels. Based on this analysis, up to a six-fold increase in current peacebuilding expenditures appears to be a cost-effective path to reducing the economic cost of conflict.

Using the Positive Peace deficit model as a conflict-risk tool, two scenarios of peacebuilding cost-effectiveness were analysed. Under both conflict definition scenarios, it is evident that spending at ideal levels of peacebuilding is cost-effective to the international community.

However not all peacebuilding exercises are successful. Both of the scenarios above yield cost savings of approximately \$550 billion over a ten year period. This is due to the large impact Syria has on the model. Therefore the outcomes of both models are similar.

FIGURE 3.16 IDEAL VS. ACTUAL PEACEBUILDING FUNDING IN THE TEN COUNTRIES DEEMED MOST 'AT RISK' OF CONFLICT, 2008 TO 2017



Source: OECD CRS database, IEP calculations

Relaxing the assumption that peacebuilding works wherever it is implemented, calculations show that ideal levels of peacebuilding funding would be cost-effective, as long as it prevents conflict in at least eight per cent of cases (that is, even one country). Excluding Syria from the analysis, peacebuilding would need to be effective in 75 per cent of cases for it to be cost-effective at ideal levels of peacebuilding. Even in countries where conflict would not have broken out, investment in peacebuilding is not wasted as the increased institutional capacity would result in a more efficient and productive society, thereby improving business, human capital and good governance, all worthy goals in and of themselves.

SCENARIO ONE: Deterioration in internal GPI score as definition of 'conflict'

Of the 10 countries that the Positive Peace deficit risk model highlighted as being at risk of conflict in 2008, five had substantial deteriorations in peace between 2008 and 2017: Eritrea, Syria, Niger, Vietnam, and Mozambique. These large shifts can be brought on by factors other than a descent into open war.

For example, Vietnam had an increase in *political terror* and *violent demonstrations*, and a deterioration in *relations with neighbours*, increase in *homicide rate*, *police rate*, *incarceration rate*, and *weapons imports*. Under this definition using violence rather than simply conflict, the probability that a country would fall into violence after being identified as at risk by IEP's model

is 50 per cent. The total cost of conflict for these five countries between 2008 and 2017 has been estimated as \$599.4 billion (constant 2014 USD).

If peacebuilding funding had been allocated to the ten most at risk countries, assuming that peacebuilding was 100 per cent effective, and conflict was prevented, the total savings to the international community would have been \$599.4 billion, minus the cost of peacebuilding (\$47.3 billion) or a 12:1 ratio. This means that under this model, total savings would have been \$552.1 billion in constant 2014 USD, as highlighted in figure 3.17.



Source: IEP calculations

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If peacebuilding funding had been allocated to the ten most at risk countries, and conflict was prevented, the total savings to the international community would have been \$552.1 billion.

SCENARIO TWO: Battle-deaths definition of 'conflict'

Of the 10 countries the Positive Peace risk model highlighted, two fell into conflict according to the UCDP definition: Syria and Mozambique. The positive predictive value of the model, that is, the probability that a country fell into conflict given that it was identified as being "at risk" by the Positive Peace Deficit model, is 20 per cent. The total cost of conflict for these two countries between 2008 and 2017 is \$592.5 billion constant 2014 USD.

The model assumes that peacebuilding funding was allocated to the ten countries identified by IEP's model as most at risk, and that peacebuilding was 100 per cent effective at preventing conflict outbreak. In this scenario, the total savings to the international community from having invested at ideal rates in peacebuilding (even though eight countries subsequently didn't fall into conflict), would have been \$592.5 billion, minus the cost of peacebuilding (\$47.3 billion). This means that total savings from optimal investment in peacebuilding would be \$545.5 billion constant 2014 USD.



POSITIVE PEACE

WHAT IS POSITIVE PEACE?

NEGATIVE PEACE

... is the attitudes, institutions and structures that create and sustain peaceful societies.

- Positive Peace is defined as the attitudes, institutions and structures that create and sustain peaceful societies. These same factors also lead to many other positive outcomes that society feels are important. Therefore, Positive Peace is described as creating the 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.

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 POSITIVE PEACE IS 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 fundamentally requires 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, 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 do to stay healthy: the correct 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 that enables peace to be easily measured. 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* refers 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.

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 societal attitudes that curtail violence, 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 and the necessary backdrop for the smooth running of society.

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 an environment for many other characteristics that societies consider important to flourish. For example, Positive Peace is also statistically linked to countries with higher GDP growth, higher levels of resilience, better ecological performance, and better measures of inclusion and gender equality. 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 resulting in 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.

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.

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 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.



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 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 which are conducive to business operations.



Acceptance of the Rights of Others

A country's formal laws that 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 socioeconomic groups within the country. Similarly, gender equality, worker's rights and freedom of speech are important components of societies that uphold acceptance of the rights of others.

Good Relations with Neighbours

Having peaceful relations with other countries is as important as good relations between groups inside 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 low levels of organised internal conflict. This is also beneficial for business and supports foreign direct investment, tourism and human capital inflows.

Free Flow of Information

Peaceful countries tend to have free and independent media that 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.

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High Levels of Human Capital

A skilled human capital base — reflected in the extent to which societies educate citizens and promote the development of knowledge improves economic productivity, care for the young, enables political participation and increases 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, by contrast, can enhance confidence and trust in institutions.

Equitable Distribution of Resources

Peaceful countries tend to ensure equity in access to resources like education and health, as well as, although to a lesser extent, equity in income distribution. These Pillars interact 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. But what is more important than the drawing of clear lines between them is the understanding of how they interact as a whole.

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. 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 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.

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 162 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 2016 Positive Peace Report, available from **www.visionofhumanity.org**.



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.

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 where negative feedback loops or vicious cycles of violence can be created and perpetuated or, alternatively, positive feedback loops are where virtuous cycles of peace are created and perpetuated.
- 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 alternatives to 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.

BOX 4.2 THE PILLARS OF POSITIVE PEACE

The pillars of Positive Peace describe the *attitudes, institutions* and *structures* that underpin peaceful societies.



PEACE TRANSITIONS: HOW LEVELS OF POSITIVE PEACE RELATE TO CHANGES IN NEGATIVE PEACE

KEY FINDINGS

- The level of Positive Peace is a country's best long-term indicator of how peaceful it is likely to be.
- The most peaceful countries in the world perform strongly on *all* eight Pillars of Positive Peace.
- The transition to high Positive Peace is gradual. As countries improve in peace, all Pillars become more strongly correlated, highlighting the need to focus on all Pillars.
- The importance of each Pillar to a country depends on a country's current level of peace.
- Well-Functioning Government, Low Levels of Corruption, Acceptance of the Rights of Others and Good Relations with Neighbours are more important in countries suffering from high levels of violence.
- Free Flow of Information and Sound Business Environment become more important when a country is approaching the global average level of peacefulness, also described as the Mid-Peace level.

- Low levels of corruption is the only Pillar that is strongly significant across all three levels of peacefulness. This suggests it is an important transformational factor at all stages of nations' development.
- Over the last ten years, the defining characteristic of countries that have transitioned to more or less peaceful states has been their performance on Positive Peace.
- Security forces can be a key force for both greater peace and greater violence; the broader performance on Positive Peace is the key factor that determines the outcome.
- IEP's Positive Peace framework can be used as a lens to monitor progress toward the United Nations' Sustaining Peace Agenda that calls for a fundamental shift in the way the UN prevents conflict and builds peace in the long term.

One of the central questions facing policymakers, peacemakers and peacebuilders globally is how and why societies transition from one state of peace to another. Yet, understanding the key factors that help countries transition from war to post-conflict and from fragility to high Positive Peace is still largely a mystery. IEP's Positive Peace framework and data analysis provide an empirical basis for answering this big question.

Understanding which factors are associated with changes in peacefulness, and whether they differ across different types of societies, is crucial to building a framework for creating higher rates of development and more peaceful societies. This section of the report analyses these transitions using IEP's Positive Peace framework and measurements, to highlight what factors are most important at varying stages of development and peace.

Systems thinking provides a mechanism with which to understand how Positive Peace operates and how to better apply it in developing policy. By applying systems thinking to the nation state, new and unique approaches can be developed to understand how societies work, how to better manage the challenges they face and how to improve their overall well-being.

Systems theory first originated in the scientific attempts to better understand the workings of organic systems, such as cells or the human body. Through such studies, it became clear that merely understanding the individual characteristics or parts of a system was inadequate to describe how that system worked.

This led to the key realisation in systems thinking that the system is more than the mere sum of its parts and cannot be understood by breaking it down to its constituent parts. This approach offers alternatives to traditional or reductionist techniques of understanding development and peace that typically rely on mono-causal explanations.

For instance, the cause of peace is often explained by reductive criteria such as a nation's natural resources, neighbouring countries or the actions of a benevolent leader. Systems thinking, however, applied to the understanding of peace, suggests that a much more complex reality exists.

A central question to understanding national systems is what makes nations transition from one level of peace to another. In systems language this is about identifying the factors that change the encoded norms to allow a system to modify itself to become either *more* or *less* peaceful.

To answer this, IEP has looked at both the GPI and PPI to identify different characteristics of national systems and how they operate at different levels of peace.

Figure 4.1 shows the positions of countries in 2008 with respect to their levels of internal peace. Countries have been split into three groups, High-Peace, Mid-Peace and Low-Peace based on their position in the index in 2008.

Exploring each group and how the individual countries have changed over time provides a good starting point in which to identify the key characteristics associated with these changes. This then provides an understanding of how peace either selfregulates or self-modifies into new levels of complexity. These groupings are shown in Figure 4.1.

BOX 4.2 THE PROPERTIES OF SYSTEMS THINKING

THERE ARE FOUR MAJOR PROPERTIES ASSOCIATED WITH SYSTEMS THINKING.¹

- 1. The system is a *whole*: it cannot be reduced to its parts as individually, the parts will have a different pattern of behaviour.
- 2. The system is *self-regulating*: it aims to maintain a steady state by stabilising itself through feedback loops. The system adjusts to create balance between inputs, outputs and internally coded requirements so as to maintain what is termed homeostasis.
- 3. The system is self-modifying: when there is a persistent mismatch between inputs and its codes, the system searches for a new pattern by which it can function. This creates differentiation from the original system and increases complexity.
- **3.** The system does not stand on its own: it is part of a larger system but also contains its own sub-systems. It also interacts with other similar systems. This 'system of systems' adapts together.

FIGURE 4.1 GPI INTERNAL PEACE RANK VS PPI RANK, 2008

Countries with high levels of peace tend to have high levels of Positive Peace as well. However, there is much more variation within countries with mid and low levels of peace than countries with high peace.



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The most peaceful countries in the world perform strongly on *all* eight Pillars of Positive Peace.

SELF-REGULATING PEACE SYSTEMS

The PPI was derived by identifying the factors that correlate most strongly with the GPI at a global level. The most peaceful countries in the world perform strongly on *all* eight Pillars of Positive Peace. However, this is not the case for mid and low peace countries. Figure 4.2 shows the different correlations at each level, with a correlation coefficient of greater than r=0.45 being considered strongly significant, and above r=0.3being considered moderately significant. The transition to high Positive Peace is gradual, as countries improve in peace, the correlations become stronger, highlighting the need to focus on all Pillars.

Figure 4.2 shows that as levels of violence dissipate, the number of Pillars associated with peacefulness increases. Five of the Pillars correlate with Low-Peace countries, six with Mid-Peace countries, and all eight Pillars correlate strongly in High-Peace countries. Low peace countries correlate strongly with four of the eight Pillars: (1) Low Levels of Corruption, (2) Well-Functioning Government, (3) Good Relations with Neighbours and (4) Acceptance of the Rights of Others. The remaining four Pillars correlate less strongly.

The fact that four Pillars correlate less than the others suggests that the most important Pillars to build peace in low developed, fragile and less peaceful contexts are (1) *Low Levels* of Corruption, (2) Well-Functioning Government, (3) Good Relations with Neighbours and (4) Acceptance of the Rights of Others. However, this does not mean that the other Pillars are unimportant. As can be seen in table 4.1, as countries become more peaceful the strength of the correlation of each Pillar increases, highlighting that building these Pillars still matters, but their criticality varies depending on levels of peace.

The core requirement of government in low peace environments is to provide security to its citizens, without which a country cannot be peaceful or develop. In order for governments to function well and be trusted, corruption needs to be controlled. Poor relations with neighbours and poor social capital or group grievances (*Acceptance of the Rights of Others*) can be both a symptom of poor government and/or a cause for conflict.

Mid-peace countries have a different profile. While *Low Levels of Corruption* has a significant relationship, six Pillars become important, however at a lower level of significance. When compared to low peace countries however, *Free Flow of Information* and *Sound Business Environments* show a stronger relationship. This aligns with classic state-building theory that suggests that security is a prerequisite for the development of other institutions.¹ For example, in the absence of individual security or a judiciary system to enforce transactions and contracts, it is difficult for legitimate businesses to thrive and provide alternatives to conflict. Further, without a functioning government, *Free Flow of Information* may be hindered and censored. In order for these Pillars to become mutually reinforcing within the national system, they first need a functioning state to reinforce them.

FIGURE 4.2 CORRELATION COEFFICIENTS BETWEEN POSITIVE PEACE AND INTERNAL GPI SCORE IN HIGH, MID, AND LOW PEACE COUNTRIES, 2016



Low Levels of Corruption is the only Pillar that is strongly significant across all three levels of peacefulness.

To investigate this further, IEP has correlated each of the 24 indicators of Positive Peace to their GPI internal peace score for different levels of peace.

By shifting the group of countries used in the correlation analysis based on the ranks of the GPI internal score, it is possible to gain insights into the growing importance of the Pillars as countries improve in their peace scores. Table 4.1 shows the progression of these correlations shifting the groups of countries by ranks of ten.

Once again, Acceptance of the Rights of Others, Good Relations with Neighbours, Low Levels of Corruption and Well-Functioning Government correlate for the most and the least peaceful countries. Some Pillars are not as significant for mid peace countries, however, transitioning to higher levels of peace requires improving in all Pillars. Table 4.1 shows that the transition to high peace is gradual.

In analysing this transition it can be seen that *Equitable Distribution of Resources* becomes very important from a GPI ranking 100 and up. *High Levels of Human Capital* become important from a ranking of 90 and up.

Similarly, the emphasis on different Pillars becomes more critical at different stages of peace. It needs to be emphasised that all the Pillars operate as a system and that improving in each is important long term.

SELF-MODIFYING NATIONAL SYSTEMS

While it is useful to look at the different profiles of countries based on the levels of peace, it is more interesting to explore which factors allow countries to transition from one level of peace to another. The period from 2008 to 2016 is an interesting period to analyse because it reflects a historic downturn in global peacefulness, with some countries experiencing dramatic changes in their GPI scores.

This period recorded more countries deteriorating in peace than improving. Several countries transitioned from Mid to Low peace status, such as Syria, Libya and Ukraine, while other countries transitioned from Low to Mid levels of peace, such as Algeria, Ecuador and Uganda. To explore peace transitions further, it is useful to compare countries that moved between 2008 and 2016 to those that did not. Characteristics of transitioning countries have been identified using statistical hypothesis tests.

These tests highlight, within 95 per cent confidence, specific indicators that the transitioning countries scored particularly high or low in in 2008 when compared to other countries within the same group within the same year. Figure 4.3 highlights the results of this analysis.

TABLE 4.1CORRELATIONS OF INTERNAL GPI SCORES WITH ALL POSITIVE PEACE SCORES AND INDICATORS(R>0.3 HIGHLIGHTED)

Indicators within Acceptance of the Rights of Others, Good Relations with Neighbours, Low Levels of Corruption and Well-Functioning Government correlate for the most peaceful countries and the least peaceful countries, but not for the mid-range countries. The remaining indicators only correlate for the most peaceful countries.

	RANKS IN THE GPI INTERNAL SCORE										
POSITIVE PEACE FACTORS	1 TO 60	11 TO 70	21 TO 80	31 TO 90	41 TO 100	51 TO 110	61 TO 120	71 TO 130	81 TO 140	91 TO 150	103 TO 162
1. ACCEPTANCE OF THE RIGHTS OF OTHERS	0.73	0.67	0.53	0.43	0.36	0.35	0.25	0.37	0.23	0.05	0.4
Empowerment Index	-0.53	-0.4	-0.33	-0.17	-0.16	-0.14	-0.16	-0.13	0.06	0.13	-0.14
Gender inequality	0.66	0.69	0.5	0.35	0.15	0.09	-0.03	0.25	0.18	0.02	0.22
Group grievance rating	0.46	0.28	0.1	0.28	0.34	0.26	0.26	0.25	0.27	0.27	0.51
2. EQUITABLE DISTRIBUTION OF RESOURCES	0.64	0.71	0.52	0.45	0.2	0.15	0.04	0.18	0.1	-0.17	0.02
Inequality adjusted life expectancy	-0.64	-0.65	-0.54	-0.43	-0.21	-0.19	-0.05	-0.19	-0.13	0.18	-0.14
Social mobility	0.6	0.63	0.32	0.32	0.14	0.11	0.07	0.22	-0.06	-0.07	-0.01
Poverty gap	0.37	0.41	0.35	0.17	-0.03	-0.09	-0.11	-0.07	0.16	-0.08	0.08
3. FREE FLOW OF INFORMATION	0.58	0.51	0.5	0.48	0.45	0.36	0.2	0.11	-0.03	-0.02	0.24
Freedom of the Press Index score	0.63	0.57	0.54	0.46	0.43	0.3	0.15	0.09	-0.04	-0.03	0.18
Mobile phone subscription rate	0.04	-0.03	-0.16	-0.34	-0.28	-0.25	-0.17	-0.05	-0.01	0.04	-0.2
World Press Freedom Index score	0.49	0.4	0.37	0.28	0.31	0.29	0.18	0.07	-0.06	0.04	0.25
4. GOOD RELATIONS WITH NEIGHBOURS	0.47	0.54	0.57	0.57	0.39	0.36	0.23	0.26	0.03	0.14	0.42
Hostility to foreigners private property	0.34	0.31	0.37	0.52	0.37	0.31	0.2	0.16	0.05	0.24	0.47
Number of visitors	-0.29	-0.32	-0.41	-0.42	-0.29	-0.34	-0.17	-0.2	0.17	0.05	-0.07
Regional integration	0.42	0.56	0.48	0.32	0.13	0.12	0.13	0.26	0.05	-0.02	0.31
5. HIGH LEVELS OF HUMAN CAPITAL	0.74	0.79	0.66	0.48	0.2	0.11	-0.03	0.19	0.09	-0.19	0.19
Scientific publications	-0.8	-0.81	-0.6	-0.37	-0.13	-0.13	-0.12	-0.27	0.08	0.21	-0.07
Secondary school enrolment	-0.45	-0.55	-0.44	-0.41	-0.19	-0.15	-0.01	-0.15	0.08	0.18	-0.14
Youth Development Index score	-0.75	-0.74	-0.62	-0.44	-0.19	-0.01	0.09	-0.15	-0.14	0.12	-0.23
6. LOW LEVELS OF CORRUPTION	0.77	0.69	0.57	0.6	0.53	0.42	0.27	0.25	0.06	0.01	0.45
Control of corruption	-0.75	-0.68	-0.54	-0.6	-0.48	-0.42	-0.24	-0.16	0.07	-0.04	-0.49
Factionalised elites	0.72	0.58	0.46	0.44	0.48	0.29	0.2	0.14	0.05	-0.02	0.39
Perceptions of Corruption score	-0.76	-0.71	-0.58	-0.62	-0.5	-0.45	-0.27	-0.25	0.05	0.03	-0.38
7. SOUND BUSINESS ENVIRONMENT	0.72	0.72	0.65	0.59	0.32	0.3	0.09	0.23	0.03	-0.18	0.21
Doing Business rank	0.63	0.68	0.61	0.54	0.25	0.28	0.07	0.19	0.03	-0.17	0.26
Economic freedom overall score	-0.51	-0.57	-0.56	-0.62	-0.37	-0.31	-0.07	-0.07	0.07	-0.02	-0.11
GDP per capita	-0.65	-0.58	-0.47	-0.39	-0.21	-0.2	-0.05	-0.22	-0.08	0.2	-0.13
8. WELL-FUNCTIONING GOVERNMENT	0.72	0.67	0.52	0.58	0.48	0.28	0.11	0.09	-0.17	0.09	0.49
Democratic political culture	-0.62	-0.53	-0.43	-0.43	-0.37	-0.04	-0.11	-0.25	-0.17	-0.32	-0.37
Judicial independence	-0.59	-0.46	-0.25	-0.46	-0.44	-0.36	-0.07	0.02	0.27	-0.02	-0.26
Revenue collection and service delivery	-0.68	-0.65	-0.48	-0.43	-0.28	-0.21	-0.08	-0.02	0.23	0.11	-0.42

FIGURE 4.3 PEACE TRANSITIONS 2008-2016

When compared to other high-peace countries in 2008, countries that **deteriorated** by 2016 had:

- Higher access to small arms and light weapons
- Weaker Positive Peace scores in all eight Pillars

When compared to other mid-peace countries in 2008, countries that **deteriorated** by 2016 had:

- Higher number of internal security officers and police per 100,000
- Higher group grievances



When compared to other mid-peace countries in 2008, countries that **improved** by 2016 had:

- · Lower access to small arms and light weapons
- Higher income

Source: IEP

- More free flow of information
- Better business environment
- Higher number of internal security officers and police per 100,000

When compared to other low peace countries in 2008, countries that **improved** by 2016 had:

- Lower access to small arms and light weapons
- Higher economic freedom
- Better relations with neighbours
- Less hostility to foreigners' private property
- Higher youth development

TRANSITIONS TO LOWER LEVELS OF PEACE

HIGH TO MID PEACE TRANSITIONS

Between 2008 and 2016, seven countries deteriorated from the High to the Mid Peace group. These countries include Argentina, Costa Rica, Kuwait, Oman, United Arab Emirates, Uruguay and Vietnam. When compared to other countries that had high levels of peacefulness in 2008, these seven countries performed worse in all eight Pillars of Positive Peace and had higher access

MID TO LOW PEACE TRANSITIONS

Between 2008 and 2016, ten countries deteriorated from the Mid to the Low Peace group. These countries include Bahrain, Cameroon, Djibouti, Egypt, Libya, Niger, Rwanda, El Salvador, Syria and Ukraine. When compared to other countries that were Mid-Peace in 2008, these countries had markedly higher levels of group grievances and had a higher number of internal security and police officers. Once again, the combination of grievances with limited options for peaceful resolution within these countries to small arms and light weapons. Lower levels of Positive Peace gives rise to factors that cause increases in grievances. Poor scores on *Well-Functioning Government* combined with lower levels of *Acceptance of the Rights of Others* and *Good Relations with Neighbours* limit the ability of the system to deal with grievances in a peaceful way.

and the high levels of state security forces offer greater potential for large scale violence to erupt, pushing countries into rapid deteriorations in peace. It needs to be noted that the solutions to avoiding these types of slippages involve focusing on the system and therefore the functioning of all of the Pillars does need to be considered. Depending on the circumstances of individual countries, different approaches will need to be applied.

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TRANSITIONS TO HIGHER LEVELS OF PEACE

As figure 4.3 highlights, increasing from one level of peace to a higher level requires strengthening of Positive Peace. However, through investigating the countries that did transition to a higher level of peace between 2008 and 2016, the following additional observations can be made.

LOW TO MID PEACE TRANSITIONS

Between 2008 and 2016, eight countries improved from the Low to the Mid-Peace group. These countries include Algeria, Ecuador, Georgia, Haiti, Sri Lanka, Peru and Uganda. When compared to other countries that were Low Peace in 2008, these countries had lower access to small arms and light weapons. They also had more economic freedom, better relations with neighbours, less hostility to foreigners and performed better in youth development. This combination of factors provides a useful avenue out of violence. As most violence is perpetrated by young males, youth development in terms of health, education, employment, and engagement both

in the civic and political arenas is critical in reducing push and pull factors for this cohort to resort to violence. Higher levels of economic freedom offer educated youths options for legitimate income generation.² It further avoids feelings of disillusionment and isolation that have been shown to be key to recruitment into rebel or violent extremist groups.³ Less hostility to foreigners and lower access to small arms and light weapons both contribute to lowering the motives and the means of violence.

MID TO HIGH PEACE TRANSITIONS

Between 2008 and 2016, only two countries improved from the Mid to the High Peace group. These countries are Botswana and Serbia. The small number of countries to make this transition suggests that while it is possible to have large and rapid deteriorations in peace, transitioning into high peace was much more difficult in the decade measured. It also makes it difficult for statistical tests to confidently identify features of these countries that made them different to other Mid-Peace countries in 2008. However, both Botswana and Serbia once again had lower access to small arms and light weapons. On average, these countries had

These societies were more transparent through higher levels of *Free Flow of Information* and had better business environments. They also had higher numbers of security and police forces.

higher incomes than other Mid-Peace countries in 2008.

This raises a question on the role of state security forces in peace transitions. Larger security forces were also a characteristic of countries that had large deteriorations between 2008 and 2016. This suggests that security forces are important for transitions, however they alone are not sufficient to determine whether the transition will be an improvement or a deterioration. Without strong Positive Peace, security forces can contribute to large-scale eruptions of violence. Conversely, when security forces provide stability within a society in such a way as to allow Positive Peace to develop and strengthen, they can be an important factor in building sustainable peace. Continued strengthening of these provides the environment for all eight Pillars to develop and become mutually reinforcing.

BOX 4.3 POSITIVE PEACE: A FRAMEWORK FOR ACHIEVING THE UN'S SUSTAINING PEACE AGENDA

The April 2016 resolutions adopted by the UN Security Council and General Assembly introduced the concept of "Sustaining Peace". This represents a fundamental shift in the way the UN approaches peace and conflict. Underpinning the shift is a new focus on preventing conflicts via the identification of the factors that foster peace.

This new agenda requires a change in mindset from reactive to proactive. Ideally, it should provide a framework with short as well as longer term strategies for building resilient societies. But there are few practical guidelines, tools or measurements currently in place for conceptualising, tracking and supporting the key drivers of peace. IEP's Positive Peace framework provides a lens through which to track and identify the multitude of factors that underpin this agenda.

WHY POSITIVE PEACE IS KEY TO SUSTAINING PEACE:

- > IEP's Positive Peace framework has been empirically derived and has a rigorous, well-documented set of materials to explain how it has been developed.
- Positive Peace shifts thinking from an overt focus on what makes countries violent to what makes them peaceful and resilient.
- One of Positive Peace's advantages is its applicability for empirically measuring a country's resilience, or ability to absorb and recover from shocks. Resilience is commonly referred to by peacebuilders and within the UN system, but there is little guidance on how to measure it.
- > IEP's analysis demonstrates that resilience is built by building high levels of Positive Peace. It is also an effective way to reduce the potential for future violence.
- Countries with high Positive Peace are more likely to maintain their stability and adapt and recover from both internal and external shocks, thereby reducing the risks of conflict relapse.
- Well-developed Positive Peace represents the capacity for a society to thrive. Societies with high Positive Peace have better outcomes on a range of factors that are considered important, such as higher incomes, better environmental performance, less civil resistance movements or violent political shocks, and better infrastructure to weather the impact from natural disasters.
- Positive Peace is associated with many of the indicators in the Sustainable Development Goals (SDGs) of the 2030 Agenda. It therefore provides a useful analytical framework for orienting international action that can provide the supporting environment for development.

TRENDS IN POSITIVE PEACE In Europe: The Rise of Populisn

Since 2005, half of the countries in Europe have seen a deterioration in Positive Peace, with deteriorations in key Positive Peace pillars coinciding with the rise of populism and political strife.

KEY FINDINGS

- Between 2005 and 2015, 18 out 36 European countries experienced deteriorations in their overall Positive Peace Index (PPI) scores.
- While Europe's overall score on Positive Peace improved very slightly, by 0.3 per cent over the period from 2005 to 2015, it was well behind the global average improvement of 1.6 per cent.
- It was only the performance of mostly former Eastern bloc countries like Serbia, Romania and Estonia that has maintained overall progress in Positive Peace in Europe.
- This concerning deterioration of Positive Peace in several European countries occurred while populist political parties gained significant electoral traction.
- Of the eight Pillars, Free Flow of Information, Low Levels of Corruption, Acceptance of the Rights of Others and Well-Functioning Government deteriorated, on average across the region, from 2005 to 2015.

- The largest deterioration was in the Free Flow of Information Pillar, which reflected the deteriorations in freedom of the press. Greece, Turkey and Hungary deteriorated the most on this indicator. The rest of the world in fact improved on Free Flow of Information while Europe went backwards.
- The global average for Low Levels of Corruption deteriorated by two per cent but the deterioration in Europe has been more significant at 3.3 per cent, reflecting increased perceptions of corruption in the wake of highprofile scandals in Spain, France and Iceland.
- The poor performance on Low Levels of Corruption reflects the very low levels of trust in major political parties and the fact it has deteriorated in several countries over the past ten years.
- Two Pillars did however improve over this period highlighting some positive trends: Sound Business Environment and, to a lesser extent, High Levels of Human Capital.

- The trend in Positive Peace cannot be separated from the rise of populism in Europe. Deteriorations in Free Flow of Information, Low Levels of Corruption and the Acceptance of the Rights of Others are directly related to many of issues populist parties have successfully capitalised on, and have provided the enabling environment for their political platforms.
- The attitudinal data in Europe highlights the systemic way in which the Pillars interact with each other. Concerns with the economic situation and unemployment (Sound Business Environment) coincided with increases in concerns around immigration and terrorism and the deterioration in Acceptance of the Rights of Others, which was facilitated by deteriorations in Free Flow of Information.

POSITIVE PEACE TRENDS IN EUROPE

Between 2005 and 2015, 18 out of 36 European countries experienced deteriorations in their overall Positive Peace Index (PPI) scores, which represents the second highest proportion of countries deteriorating for any region. Overall, the region saw deteriorations in four of the eight Pillars of Positive Peace, a trend that is markedly different to the global averages, as seen in Figure 4.4. Changes in Positive Peace can also be associated with other societal changes, as Positive Peace can be used as a measure of societal resilience. In the case of Europe this is important because the rise of anti-establishment politics and the rise of populism can be associated with deteriorations in key Pillars. This is covered in more detail later in this section.

FIGURE 4.4 PERCENTAGE CHANGE IN POSITIVE PEACE SCORES, EUROPE AND THE WORLD, 2005-2015

In Europe, four of the eight Pillars of Positive Peace have seen deteriorations in score since 2005, while globally only two Pillars have seen deteriorations.



While Europe saw deteriorations in the score for *Wellfunctioning Government, Low levels of Corruption, Free Flow of Information* and the *Acceptance of the Rights of Others,* the global average deteriorated in only two of these domains: *Low levels of Corruption* and the *Acceptance of the Rights of Others.* Although there is overlap in the categories of deterioration, Europe stands out as having larger deteriorations than the world average. Moreover, the rest of the world improved on *Free Flow of Information,* while Europe deteriorated.

Europe's overall score on Positive Peace improved very slightly, 0.3 per cent over the period from 2005 to 2015, well behind the average global improvement of 1.6 per cent. This overall score improvement was driven mainly by performance on *Sound Business Environment* and to a lesser extent *High Levels of Human Capital*, highlighting the strength of higher education in Europe and recent efforts to improve the business environment.

Additionally, much of the recent thrust in education has been on business training. Although a strong emphasis has been placed on governments' business policies, other areas that affect the population more generally have not been given enough attention, especially perceived corruption, acceptance of the rights of others, and a more equitable distribution of wealth.

The global average for *Low Levels of Corruption* deteriorated by two per cent but the deterioration in Europe has been more significant at 3.3 per cent, reflecting increased perceptions of corruption. These negative changes cannot be separated from the decline in the *Free Flow of Information* Pillar, which is indicative of deteriorations in freedom of the press in countries like Greece and Hungary, for example. Meanwhile, *Acceptance of the Rights of Others*, composed of indicators such as group grievances, deteriorated by 2.4 per cent during this time period, eight times the deterioration seen at the global level (0.3 per cent).

ASSESSING THE TREND IN POPULISM IN EUROPE

In the past ten years, there has been a marked increase in the popularity and traction of populist parties throughout Europe.

The rise of populist parties in Europe is symptomatic of the decline across key Pillars of Positive Peace. In the wake of recurrent terrorist attacks, a massive influx of refugees, and a prolonged period of subdued economic growth prompted by twin financial and sovereign debt crises, the share of Europeans supporting populist parties has been gaining ground. In 2016, more than 50 per cent of citizens in Spain, the UK and Italy reported to view Eurosceptic parties as a good thing.

In Germany, the right-wing *Alternative for Germany* (AfD) party established in March 2013 was able to gain seats in four regional parliaments: Brandenburg, Thuringia, Saxony and Hamburg.

In Finland, the *Eurosceptic Finns Party (Perussuomalaiset)* became the second strongest political force in the April 2015 elections by taking 38 out of the 200 seats. The National Front (FN) was a major contender in the 2012 and 2017 French presidential elections.

FIGURE 4.5 VIEWS ON EUROSCEPTIC PARTIES IN EUROPE, 2016

More than 50 per cent of citizens in Spain, the UK and Italy view Eurosceptic parties as a good thing.



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The rise of populist parties in Europe is symptomatic of the decline across key Pillars of Positive Peace. In Austria, the far-right *Freedom Party* (FPÖ) came close to winning the presidency, prompting a second round run-off. Although fraught with irregularities that caused a re-vote, the FPÖ eventually conceded defeat in an election where close to half of Austrians, 46.2 per cent, voted for it.

More recently, in the Netherlands, the *Party for Freedom* (PVV) led the polls up until the March 2017 election. Although it resulted in the victory of the incumbent *People's Party for Freedom and Democracy* (VVD), the PVV came in second with 13.1 per cent of the votes, gaining five seats in parliament.

Similarly, the 2014 *European Parliament* (EP) elections were marked by the significant gains made by Eurosceptic parties. This was particularly the case for the *United Kingdom Independence Party* (UKIP) and the FN of France as both came first in the polls for the first time since the first EP elections in 1979. The former won 24 seats - eleven more than in the previous EP election - while the latter won the same amount of seats, but up from three in 2009.

It is important to highlight that populist parties are not homogenous, as they cover the left-right spectrum. There are however two generally accepted and encompassing features of populism. The first one is the promotion of an anti-establishment agenda, one that is aimed at questioning the policies of mainstream political parties and their ideology. The second is an opposition to immigration or multiculturalism in general, complemented by policies that place the emphasis on the national interest and away from integration with regional blocs.

In the past ten years, there has been a marked increase in the popularity and traction of populist parties throughout Europe.

FIGURE 4.6 PERCENTAGE SHARE OF VOTES WON BY POPULIST PARTIES, NATIONAL PARLIAMENTARY ELECTIONS Populist parties across Europe have been winning a greater share of the parliamentary vote in the last decade.



*Note: refers to the first round of French parliamentary elections.

FIGURE 4.7 PERCENTAGE SHARE OF VOTES WON BY POPULIST PARTIES, EUROPEAN PARLIAMENTARY ELECTIONS Populist parties across Europe have been winning a greater share of the European Parliamentary votes in the last decade.



EU TRENDS IN PERCEPTIONS

According to polling data from Eurobarometer, attitudes on the most important issues facing the European Union as a whole have changed significantly between 2010 and 2016. From 2010 to 2014 the economic situation stood out as the most important issue facing the EU, according to citizens across the 28 Member States. However, by 2016 it has dropped to the third highest priority, well behind immigration and terrorism, as shown in figure 4.8.

Since 2014, the percentage of citizens reporting immigration and terrorism to be among the most important issues facing the EU has been on the rise. For the former, the percentage more than doubled between 2014 and 2015, going from 24 to 58 per cent, overtaking the share of people worried about the economic situation. FIGURE 4.8 PERCEPTION OF THE MOST IMPORTANT ISSUES FACING THE EU, EU AVERAGE 2010-2016

The percentage of people reporting immigration as the most important issue more than tripled between 2010 and 2016.



The trend was the same for terrorism, for which the percentage of people reporting it as important almost tripled between 2014 and 2016, from 11 to 32 per cent. This corresponds with the steep increase in terrorist activity in this period. This is reflective of the impact of terrorist attacks in major capital cities, most notably in Paris and Brussels. It is likely to continue trending upwards following the more recent attacks in Berlin, London and Stockholm.

The percentage of people reporting that terrorism is among the most important issues facing the EU tripled from 2014 to 2016.

NATIONAL TRENDS IN PERCEPTIONS

At the national level, the trend in perceptions over the most important issues is similar, with the notable exception of terrorism. Unemployment remains the main concern, although the share of citizens reporting it as an important issue has fallen 20 percentage points from a peak of 51 per cent in 2013, down to 31 per cent in 2016.

Meanwhile, the percentage of citizens reporting immigration to be an important concern at the national level has increased significantly, going from nine per cent in 2013 to 36 per cent in 2015. That same year, the number of asylum seekers surged to a record 1.3 million, nearly double the previous high watermark of 700,000 that was set in 1992 after the collapse of the Soviet Union.

Growing concerns over immigration and terrorism have been exacerbated by concerns over the economy, unemployment and the financial and security setbacks at the European level. These are the same issues that populist parties have been capitalising on.

This comes at a time when the percentage of citizens reporting to align with the ideas of populist parties has been gaining ground. One year prior to the 2015 peak in asylum seekers, more than 50 per cent of citizens in the UK and France reported to want fewer immigrants. In Italy and Greece, the percentage was 80 and 86, respectively.



FIGURE 4.10 ATTITUDES ON IMMIGRATION, PERCENTAGE OF POPULATION, 2014

More than 50 per cent of citizens in the UK, France, Italy and Greece reported wanting fewer immigrants in 2014.







Source: Pew Research Centre, 2016 Global Attitudes Survey

FIGURE 4.13 POSITIVE VIEWS ON NATIONAL ECONOMY, PERCENTAGE OF POPULATION, 2007-2016

The percentage of people with negative views on national economies is particularly high in southern European countries.



Moreover, negative perceptions towards migrants, and in particular those relating to viewing migrants as an economic burden, has been gaining the most traction among voters who identify themselves as being on the right of the political spectrum.

In 2014, more than 60 per cent of rightwing voters in Italy, Greece and France reported to believe that immigrants were a burden because they take jobs and social benefits. The share of rightwing voters holding these beliefs was highest across all of the eight European countries surveyed, with Germany standing out as the country for which this percentage was the lowest, at 16 per cent.

In addition, the percentage of European citizens linking refugees with terrorism and crime was high in 2016, particularly in eastern and southern European countries. In Hungary and Poland, over 70 per cent of the population reported to believe that refugees increase the likelihood of terrorism. Thirty and 47 per cent of citizens in Greece and Italy reported that refugees are more to blame for crime than other groups, respectively.

Divergent views on the national economic outlook exist amongst the core European countries. Countries like Germany and the UK, which are performing relatively well compared to other countries, are less likely to view migrants as an economic burden with over 70 per cent of the German population being positive about the economy.

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POPULISM AND CHANGES IN POSITIVE PEACE IN EUROPE

Examining changes in Positive Peace reveals why the populist parties in Europe have been able to make such strong headway. The data shows that there has been a deterioration in the functioning of governments and the equitable distribution of resources and an increase in perceived corruption, thereby providing plenty of fodder for populist parties to take aim at the "corrupt and incompetent political elite". Likewise, promoting a platform of "country first" becomes relatively easy where European countries are struggling with increased refugee inflows, growing inequality and reduced job security.

The rise of discontent and simultaneous deteriorations in Positive Peace can become a reinforcing trend. If this discontent is politically channelled into areas that do not address the underlying issues and becomes part of the mainstream political discussion, such as with populism, attitudes can be shaped accordingly, which in turn creates a cyclic effect with the political debate continuing to not address the underlying problems, thereby creating a further decay in Positive Peace. Taken to extremes, a breakdown in Positive Peace can lead to growing deficits in European countries' abilities to weather the consequences of financial, socio-economic and security shocks akin to the ones that have swept across Europe in the past decade.

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A breakdown in Positive Peace can lead to growing deficits in European countries' abilities to weather the consequences of financial, socioeconomic and security shocks.

Between 2005 and 2015, there was a very minor improvement in Europe's overall Positive Peace score, despite deteriorations in four of the eight Pillars themselves. However, Europe is not homogenous, with 18 of the 36 European countries experiencing deteriorations in their overall Positive Peace Index (PPI) scores. Although half of the European countries did improve, this still represents the second highest proportion of countries deteriorating for any region. Table 4.2 shows the percentage deterioration on each Pillar for every country in Europe from 2005 to 2015. Notably, Hungary, Greece, Iceland and Spain, who saw the largest deteriorations in overall levels of positive peace, and across most domains, also had a more than two fold increase in the vote shares going to populist parties when compared to the rest of Europe – 7.98 per cent increase versus a 3.72 per cent increase.

Of the countries that improved their positive peace levels, the majority were former Eastern bloc countries that have significantly benefitted from proximity to or integration into the EU. There were notable exceptions to this, with Hungary being the largest faller in Positive Peace, followed by Greece, due to the economic and institutional turmoil it is has faced in the past five years. Surprisingly, Iceland, the most peaceful country in the world, also suffered on its Positive Peace score due to a deterioration in *Low Levels of Corruption*, and in fact deteriorated on six of the eight Pillars, although it was starting from a very high base level.

While exactly half of the countries improved overall, performance on each of the Pillars was less evenly distributed. Thirty out of 38 countries improved in *High Levels of Human Capital* and 32 improved in *Sound Business Environment*. However, 24 countries deteriorated in *Low Levels of Corruption* and 23 in *Free Flow of Information*.

Exactly half of the European countries saw a deterioration in *Equitable Distribution of Resources*, including France, Hungary, Greece and Spain. Poland, on the other hand, has achieved the greatest improvement in *Equitable Distribution of Resources*.

The largest Pillar deterioration of all was seen in Norway's score for *Acceptance of the Rights of Others,* which fell 43 per cent over the decade. This was the result of a significant deterioration in the group grievances indicator, which fell significantly in 2012 in the aftermath of the 2011 Norway terrorist attacks.

Equitable Distribution of Resources, Acceptance of the Rights of Others, and Free Flow of Information had the largest changes. Deteriorations in these three Pillars averaged between nine and ten per cent. Improvements in Equitable Distribution of Resources were also large, averaging eight per cent, while improvements in the other pillars were correspondingly smaller.

TABLE 4.2CHANGES IN POSITIVE PEACE PILLARS BY COUNTRY, 2005 TO 2015

21 countries experienced a deterioration in the Acceptance of the Rights of Others.

COUNTRY	PPI OVERALL SCORE	WELL- FUNCTIONING GOVERNMENT	Sound Business Environment	LOW LEVELS OF CORRUPTION	ACCEPTANCE OF THE RIGHTS OF OTHERS	EQUITABLE DISTRIBUTION OF RESOURCES	FREE FLOW OF INFORMATION	GOOD RELATIONS WITH NEIGHBOURS	HIGH LEVELS OF HUMAN CAPITAL
Poland	-9.3%	-16.7%	-10.2%	-1.0%	-0.8%	-28.1%	-14.6%	-1.7%	-6.0%
Serbia	-4.9%	1.9%	-4.1%	-1.5%	-0.4%	1.6%	-4.7%	-15.5%	-18.7%
Cyprus	-4.6%	7.7%	-2.4%	-4.3%	-4.0%	-20.5%	3.5%	0.0%	-20.8%
Estonia	-3.9%	-1.2%	-11.7%	-5.9%	8.4%	-12.0%	-8.4%	0.0%	1.3%
Romania	-3.8%	-8.4%	-11.7%	5.0%	4.5%	0.2%	-7.2%	-5.3%	-7.9%
Croatia	-3.7%	-0.8%	-8.3%	1.6%	-12.8%	1.2%	5.9%	0.0%	-14.0%
Germany	-3.1%	6.6%	-15.3%	2.8%	-13.0%	3.0%	-0.3%	-1.1%	-2.0%
Denmark	-2.8%	-5.1%	-1.0%	-0.3%	-7.8%	-7.3%	0.3%	13.4%	-8.8%
Albania	-2.6%	0.7%	-13.0%	6.3%	-2.9%	-0.1%	-3.2%	-7.0%	-3.6%
Montenegro	-2.5%	-2.8%	-11.9%	-0.7%	13.0%	-4.0%	-4.4%	0.0%	-6.3%
Lithuania	-2.5%	-4.1%	-10.1%	-3.5%	2.4%	-4.4%	14.1%	-1.7%	-5.1%
Macedonia	-2.4%	-8.3%	-7.4%	-1.5%	1.4%	-6.2%	8.6%	-0.3%	-4.1%
Latvia	-1.6%	-10.3%	-9.4%	-1.5%	14.5%	-8.1%	12.3%	1.1%	-3.4%
Bosnia & Herzegovina	-1.3%	-3.1%	-4.8%	1.3%	-4.4%	-1.3%	4.9%	-0.3%	-1.5%
Sweden	-0.8%	-4.9%	-3.2%	3.1%	6.4%	-6.7%	-1.0%	0.4%	-2.2%
Finland	-0.7%	-9.0%	-6.3%	5.3%	21.7%	-7.2%	-4.4%	-0.3%	-4.0%
Slovakia	-0.6%	10.0%	-6.4%	0.8%	19.5%	10.9%	1.9%	-36.3%	-10.2%
Turkey	-0.2%	1.8%	-8.6%	2.2%	-4.1%	10.4%	14.6%	-0.3%	-9.2%
Belgium	0.1%	0.2%	-5.2%	11.9%	4.1%	-6.5%	0.7%	-0.5%	-11.0%
United Kingdom	0.1%	-1.5%	0.7%	3.5%	0.9%	-15.6%	12.2%	0.1%	-6.5%
Switzerland	0.3%	0.8%	-2.1%	-2.0%	17.7%	-14.2%	-3.5%	0.3%	2.3%
Kosovo	0.6%	0.6%	-4.5%	0.8%	-4.8%	-4.9%	29.4%	-1.7%	-2.7%
Ireland	1.0%	-2.5%	2.0%	-1.2%	4.4%	3.5%	8.6%	0.0%	-5.3%
Netherlands	1.0%	2.6%	-1.0%	13.3%	-3.9%	-3.3%	-0.6%	-1.0%	-1.9%
Czech Republic	1.1%	8.7%	-12.1%	5.5%	-3.2%	14.1%	2.2%	-0.6%	0.4%
Italy	2.4%	0.0%	-2.3%	13.7%	-1.8%	2.0%	-0.3%	0.0%	-0.3%
Austria	2.5%	18.9%	-5.9%	9.2%	0.8%	1.9%	-5.6%	0.0%	-1.9%
Bulgaria	2.8%	-2.0%	-5.5%	7.4%	9.7%	15.9%	3.1%	-2.1%	1.7%
France	2.9%	7.6%	-11.5%	2.7%	4.5%	24.4%	7.7%	-1.4%	-2.2%
Portugal	3.3%	11.9%	-4.8%	4.3%	-2.8%	8.8%	12.7%	-1.0%	-2.4%
Slovenia	3.7%	14.5%	-4.2%	6.8%	-12.7%	28.6%	12.9%	-3.7%	-7.5%
Norway	4.1%	-3.9%	-6.5%	-5.3%	43.3%	8.8%	1.1%	0.0%	4.9%
Spain	4.7%	10.5%	-4.9%	9.8%	1.2%	8.0%	10.9%	-1.0%	-2.1%
Iceland	5.9%	6.8%	5.0%	20.3%	1.9%	1.2%	8.4%	0.0%	-1.3%
Greece	6.9%	10.6%	1.1%	10.9%	7.6%	-8.5%	30.5%	0.0%	-9.2%
Hungary	8.9%	0.5%	-4.5%	13.8%	23.0%	18.5%	24.2%	-0.8%	2.9%

FIGURE 4.14 PERCENTAGE CHANGE IN POSITIVE PEACE, LARGEST IMPROVEMENTS AND DETERIORATIONS, 2005-2015

Half of European countries saw a deterioration in their overall PPI score between 2005 and 2015.



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Of the countries that improved their positive peace levels, the majority were former Eastern bloc countries that have significantly benefitted from proximity to or integration into the EU.

CHANGES IN FREE FLOW OF INFORMATION

Free Flow of Information was the Pillar that deteriorated the most in Europe. The regional average fell five per cent, but of the countries that saw this pillar worsen, the average deterioration was ten per cent. Conversely, the average improvement was only four per cent.

Greece suffered the largest deterioration in score for the *Free Flow of Information* Pillar, declining by more than 30 per cent between 2005 and 2015. At the same time, Poland made significant progress on this front improving by almost 15 per cent. These large variations can be seen in Figure 4.15.

Between 2010 and 2015, Greece witnessed the largest decline in the freedom of the press indicator, a measure developed by Freedom House.³

This was largely the result of the New Democracy government's introduction of restrictive legislative changes to the broadcast market and the creation of digital transmission monopolies via flawed tender procedures.⁴ The *Press Freedom Index* developed by Reporters without Borders also showed that Greece had fallen fifty places in the world rankings during this five year period.⁵ According to polling data, in Greece, the percentage of people reporting trusting the press fell by 12 percentage points between 2005 and 2016.

The UK has the lowest percentage of trust in the press, but levels increased by three percentage points in this time period. This trend has also been evident in Hungary, where the incumbent party has been imposing restrictions on the media.



FIGURE 4.15 PERCENTAGE CHANGE IN FREE FLOW OF INFORMATION, LARGEST IMPROVEMENTS AND DETERIORATIONS, 2005-2015

There are significant variations in the extent to which free flow of information deteriorated or improved across European countries, with Greece deteriorating by more than 30 per cent between 2005 and 2015.

CHANGES IN LOW LEVELS OF CORRUPTION

Most European countries have seen a deterioration in the *Low Levels of Corruption* Pillar, with the majority that improved being those on the periphery of the European region, which generally had high levels of corruption to start with.

Europe has seen significant variations in terms of its score on corruption over the last decade, with several large corruption scandals exploding in countries such as Spain and France, but also Iceland. The latter registered the largest deterioration in this Pillar, no doubt due to the high profile cases of corruption involving the Prime Minister in the wake of the near-collapse of the economy in the aftermath of the global financial crisis.

All of the Western European countries deteriorated in the corruption measure, including Germany, France, Spain, Italy and the United Kingdom.

Across the region, perceptions of corruption are highest in political institutions. Averaged across countries, 69 per cent of citizens reported that they find political parties to be 'corrupt' or 'extremely corrupt,' followed by 57 per cent saying the same for national parliaments. Public officials and civil servants are thought to be corrupt by 51 per cent of European respondents, on average. Figure 4.17 gives the perceptions of corruption by institution.

FIGURE 4.16 PERCENTAGE CHANGE IN LOW LEVELS OF CORRUPTION, LARGEST IMPROVEMENTS AND DETERIORATIONS, 2005-2015

There are significant variations in the extent to which corruption perceptions deteriorated or improved across European countries, with lceland deteriorating by more than 20 per cent between 2005 and 2015, followed by Hungary.



Source: IEP

FIGURE 4.17 PERCEPTIONS OF CORRUPTION BY INSTITUTION, AVERAGE OF EUROPEAN COUNTRIES, 2013

Europeans find political institutions to be the most corrupt, with an average of 69 per cent of citizens in European countries reporting that political parties are 'corrupt' or 'extremely corrupt', followed by an average of 57 per cent saying the same for national parliaments.



Source: Transparency International Global Corruption Barometer

FIGURE 4.18 TRUST IN THE NATIONAL JUSTICE SYSTEM, 2005 AND 2016

Poland, Sweden, and the Netherlands were the countries which saw the greatest improvement in the share of citizens reporting to trust the national justice system between 2005 and 2016.



Attitudinal data suggests a perception of elite corruption in Europe, whereas petty corruption in institutions is far less prevalent compared to other countries. Polling data from Eurobarometer on trust across various institutions shows generally high levels of trust in the national justice system and the police, but not in political parties. Country changes for the perception of corruption varied considerably.

In Denmark, Finland, Sweden and Austria, over 70 per cent of citizens reported to trust the national justice system in 2005, a share which increased in 2016. In contrast, the share of citizens trusting the justice system in Hungary, France the UK and Poland was below 50 per cent in 2005. Notable improvements were however reported in the latter two in 2016, with the share of citizens reporting to trust the justice system increasing by 19 and 22 percentage points, respectively.

With regards to trust in the police, all European countries surveyed showed improvements between 2005 and 2016, with 60 per cent or more citizens across these EU Member States reporting to trust the police. Levels remained consistently highest in Finland, Denmark and Germany, and the largest improvements were recorded in the countries with the lowest levels of trust in 2005, namely France, Spain, Hungary and Poland.

However, when it comes to political parties, the percentage of citizens reporting to trust them is considerably low across the board and it fell in many countries between 2005 and 2016. Notable exceptions were recorded in Sweden, Germany and Finland, where the number of people reporting to trust political parties increased. But in 2016, no more than 35 per cent of citizens reported trusting political parties in the Netherlands, whilst only six per cent did so in Greece in that year.

In this context, political shake ups across Europe are not surprising. Trust and perceptions of corruption have been deteriorating in the political sphere specifically, driving the regional backlash against the political establishment.

FIGURE 4.19 TRUST IN THE NATIONAL POLICE, 2005 AND 2016

Poland, France and Spain saw the highest improvements in trust towards the police between 2005 and 2016. Italy stands out as the only country where trust deteriorated.





FIGURE 4.20 TRUST IN NATIONAL POLITICAL PARTIES, 2005 AND 2016

Trust in political parties deteriorated the most in Spain and Greece between 2005 and 2016.



Source: Eurobarometer

CHANGES IN ACCEPTANCE OF THE RIGHTS OF OTHERS

Twenty-one European countries saw a deterioration in the *Acceptance of the Rights of Others* Pillar between 2005 and 2015. Norway and Finland, the top two countries in the 2016 PPI ranking, saw the largest percentage deteriorations in this time period. Sweden, another top five PPI country, had the sixth largest percentage deterioration.

Although Finland and Norway have pursued strict refugee policies for over two decades, tightening of asylum legislation has been more recent. By contrast, Sweden has been the Nordic country to have adopted the most accommodating refugee policy. It is the EU country that receives the highest per capita number of applications for asylum and has taken 80,000 Syrians since 2011. Due to the large influx of those seeking refuge in 2015, the number of incoming refugees and those applying for asylum has risen in all Nordic countries. At 163,000, Sweden recorded the largest number of asylum seekers in 2015, half from Syria. A total of 32,000 people applied for asylum in Finland – the largest number ever. Norway, which is not an EU member state, had a total of 31,000 refugees.

Due to the increase in numbers of applicants, all three countries swiftly introduced new restrictions: limited family reunification, shorter residence permits, along with benefit cuts. This harder line can be connected with the rise anti-immigration sentiment and the rise of populist parties, which have been part of the coalition governments in Norway and Finland since 2013 and 2015, respectively.

FIGURE 4.21 PERCENTAGE CHANGE IN ACCEPTANCE OF THE RIGHTS OF OTHERS, LARGEST IMPROVEMENTS AND DETERIORATIONS, 2005-2015

There are huge variations in the extent to which the Acceptance of the Rights of Others deteriorated or improved across European countries, with Norway deteriorating by more than 40 per cent between 2005 and 2015.



Twenty-one European countries saw a deterioration

in the Acceptance of the Rights of Others Pillar between 2005 and 2015

Many Europeans perceive the refugee crisis and the threat of terrorism to be related. In eight of the 10 European nations surveyed in 2016, half or more of the respondents believed incoming refugees increased the likelihood of terrorism in their country, as seen in figure 4.22.

Most of the recent refugees are arriving from majority-Muslim nations such as Syria and Iraq.

Among Europeans, perceptions of refugees are influenced in part by negative attitudes toward Muslims already living in Europe. In Hungary, Italy, Poland and Greece, more than sixin-ten say they have an unfavourable opinion of the Muslims in their country – an opinion shared by at least one-in-four in each nation polled. For some Europeans, negative attitudes toward Muslims are tied to a belief that Muslims do not wish to participate in the broader society. In every country polled, the dominant view is that Muslims want to be distinct from the rest of society rather than adopt the nation's customs and way of life. More than six-in-ten hold this view in Greece, Hungary, Spain, Italy and Germany.

Notably, the percentage saying that Muslims want to remain distinct has actually declined since 2005 in four out of five countries where trend data are available.⁴ The biggest drop has been in Germany, where the share of the public expressing this view has declined from 88 per cent to 61 per cent.

FIGURE 4.22 CONCERNS ABOUT TERRORISM IN EUROPE, 2016

The great majority of Europeans see ISIS as a major threat. Europeans also perceive a link between incoming refugees and terrorism.



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The tightening of refugee policies can be connected to the rise of antiimmigrant sentiment and populist parties.



CHANGES IN EQUITABLE DISTRIBUTION OF RESOURCES

Equitable Distribution of Resources has arguably been Europe's most volatile Pillar over the last decade. Half of the region improved, while half of the region deteriorated, and the changes recorded were some of the largest.

Poland's 28 per cent improvement was the largest in this domain and the second largest improvement recorded across all aspects of Positive Peace in Europe. Conversely, Slovenia had the largest deterioration in the Equitable Distribution of Resources and among the four largest deteriorations on any Pillar in the region. On average, improvements in this domain were eight per cent and deteriorations were nine per cent, while other Pillars averaged much smaller changes.

In Europe, income equality shows a stronger relationship with peacefulness than in other parts of the world, highlighting the potential effects of dramatic changes in Equitable Distribution of Resources. The Gini coefficient does not show a strong relationship with peacefulness worldwide, as shown in figure 4.24. However, in Europe, income equality has a strong relationship with a country's internal peacefulness, at r = 0.7. This unique regional relationship makes Equitable Distribution of Resources a critical factor for bolstering Europe's high levels of peacefulness. Thus the trend observed in both fluctuations in Equitable Distribution of Resources and volatility in other social and political aspects is most likely connected.

FIGURE 4.24 PERCENTAGE CHANGE IN EQUITABLE DISTRIBUTION OF RESOURCES, LARGEST IMPROVEMENTS AND DETERIORATIONS, 2005-2015



Slovenia was the European country whose score deteriorated the most between 2005 and 2015.



FIGURE 4.25 INCOME EQUALITY AND INTERNAL PEACEFULNESS,




CHANGES IN WELL-FUNCTIONING GOVERNMENT

Twenty European countries deteriorated in their scores for *Well-Functioning Government* between 2005 and 2015. The largest percentage deterioration was seen in Austria, which over the past decade has seen the rise of the far-right FPÖ.

With Austria receiving more refugees per capita than Germany, the FPÖ has been gaining traction at a time when only 12 per cent of Austrians perceived the country to be moving in the right direction, and 52 per cent reporting it was moving in the wrong direction.⁶ Twenty European countries deteriorated in their scores for *Well-Functioning Government* between 2005 and 2015.

FIGURE 4.26 WELL-FUNCTIONING GOVERNMENT, LARGEST IMPROVEMENTS AND DETERIORATIONS, PERCENTAGE CHANGE, 2005 TO 2015

There are significant variations in the extent to which Well-Functioning Government deteriorated or improved across European countries, with Austria deteriorating by almost 20 per cent between 2005 and 2015.



CHANGES IN SOUND BUSINESS ENVIRONMENT

Sound Business Environment is the Pillar that has improved the most in Europe between 2005 and 2015, improving by 6.5 per cent. This improvement in the European regional average is twice as large as the global improvement of 3.6 per cent. Germany recorded the largest improvement at 15 per cent, and Iceland the largest deterioration, at five per cent.

The performance of this Pillar is reflected by trends in a variety of macroeconomic indicators. Real GDP growth, for example, has jumped back to positive territory in a majority of European countries, following negative rates across many countries in 2008, 2009, 2012 and 2013. The rising trend in growth rates tentatively demonstrates that the European business environment is improving.

Many European and western governments have been focusing on improving the competitiveness of their business environments, however, without improvements in the other Pillars, especially *Equitable Distribution of Resources* and *Acceptance of the Rights of Others* the improvements are less likely to lead to citizen satisfaction with the economy.

Attitudinal data from Eurobarometer sheds light on improving perceptions in relation to the business environment. Between 2013 and 2015, a higher percentage of citizens in 10 of the 12 European countries surveyed agreed that the EU is making doing business easier in Europe, the only exception being Spain and the Netherlands.

Everywhere but Italy and Spain, respondents agreed that the EU is creating the conditions for more jobs. The figures on the following page give country-level indicators related to the business environment and perceptions of economic progress in Europe.



FIGURE 4.28 REAL GDP GROWTH, ANNUAL PERCENTAGE CHANGE, 2005 TO 2015

EU28 average growth between 2005 and 2015 was at a subpar 0.9 per cent. Growth rates in 2015 for the EU28 and the Eurozone were however five and 18 per cent higher than in 2005.



FIGURE 4.29 EMPLOYMENT RATE, ANNUAL PERCENTAGE CHANGE, 2005 TO 2015

The EU average employment rate between 2005 and 2015 was 68.9 per cent, with the employment rate higher in 2015 than in 2005.



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Between 2013 and 2015, a higher percentage of citizens in 10 of the 12 European countries sampled agreed that the EU is making doing business easier in Europe.

FIGURE 4.30 AGREE THAT THE EU MAKES DOING BUSINESS EASIER IN EUROPE, 2013-2015

Spain and the Netherlands are the only European countries surveyed that did not see an improvement in views as to whether the EU is making business easier.



FIGURE 4.31 AGREE THAT THE EU IS CREATING THE CONDITIONS FOR MORE JOBS IN EUROPE, 2013-2015

Spain and Italy are the only European countries surveyed that did not see an improvement in views as to whether the EU is creating the conditions for more jobs.



CHANGES IN HIGH LEVELS OF HUMAN CAPITAL

The *High Levels of Human Capital* Pillar had the second largest improvement between 2005 and 2015. The largest improvements were recorded in south eastern European countries, namely Cyprus, Serbia and Croatia. In turn, the largest deteriorations were recorded in Norway, Hungary and Switzerland.

This is due to significant improvement in education rates as well as health outcomes. Figure 4.32 shows that almost all European countries have improved their tertiary education outcomes.

FIGURE 4.32 HIGH LEVELS OF HUMAN CAPITAL, TOP AND BOTTOM FIVE, PERCENTAGE CHANGE, 2005 TO 2015

The largest improvements were recorded in south eastern European countries, namely Cyprus, Serbia and Croatia.



FIGURE 4.33 TERTIARY EDUCATIONAL ATTAINMENT, PERCENTAGE OF POPULATION, 2004-2015

There is a rising trend in tertiary education attainment across all European countries, except Spain and Finland, which have stagnated.



APPENDICES

APPENDIX A

SPV METHODOLOGX

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 and Peace, a global think tank dedicated to developing metrics to analyse peace and to quantify its economic benefits. The GPI is collated and calculated in collaboration with The Economist Intelligence Unit (EIU), which has also contributed to some sections of this report, including the regional analysis and the risers and fallers.

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 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 1-5, to the third decimal point.



ONGOING DOMESTIC AND 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 and 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 AND 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

Qualitative assessment of Amnesty International and US State Department yearly reports

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



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;
- 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.

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:

- Individual country analysts score qualitative indicators based on a scoring methodology and using a digital platform;
- Regional directors use the digital platform to check scores across the region; through the platform they can see how individual countries fare against each other and evaluate qualitative assessments behind proposed score revisions;
- Indicator scores are checked by the EIU's Custom Research team (which has responsibility for the GPI) to ensure global comparability;
- 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.

TABLE A.1 INDICATOR WEIGHTS

Internal Peace 60% / External Peace 40%

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

EXTERNAL PEACE (WEIGHT 1 TO 5)

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

APPENDIX B

SPV INDICATOR SOURCES, DEFINITIONS AND 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 are either banded into ten groupings or rounded to the first decimal point. The Economist Intelligence Unit has provided imputed estimates in the rare event there are gaps in the quantitative data.

INTERNAL PEACE INDICATORS

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

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	2014

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.

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	2014

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	2016

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 tota	al index)	6.3%
Data source		EIU
Measurement period	16 March 2016 to	15 March 2017

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 inc	ex) 3.8%
Data source	EIU
Measurement period 16 M	Narch 2016 to 15 March 2017

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 March 2015 - March 2016 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 inde	ex) 5%
Data source	EIU
Measurement period 16 M	arch 2016 to 15 March 2017

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 March 2015 -March 2016 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 2016 to 15 March 2017

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 March 2015–March 2016 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 Indicator weight	Qualitative 4
Indicator weight (% of total index)	5%
Data source	Gibney, M., Cornett, L. & Wood, R. (2011): Political Terror Scale 1976-2015
Measurement period	2015

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	2012-2016

Definition: Measures the total volume of major conventional weapons imported by a country between 2010 and 2014, divided by the average population in this time period at the 100,000 people level (population data supplied by the EIU). The SIPRI Arms Transfers Database covers all international sales and gifts of major conventional weapons and the technology necessary for their production. The transfer equipment or technology is from one country, rebel force or international organisation. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, 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 Ja	an 2012 to 31 March 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 2013. To assess the impact of terrorism between this date and 15 March 2015 GPI 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 tot	al index) 6.3%
Data source	International Institute for Strategic Studies (IISS) Armed Conflict Database (ACD)
Measurement period	2015-2016

Alternative Source: EIU. When no data was provided by the IISS ACD, then EIU analysts have scored the figures available for 2014 and 2015 according to the set bands of the actual data.

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

NUMBER AND DURATION OF INTERNAL CONFLICTS

Indicator type	Quantitative
Indicator weight	2.56
Indicator weight (% of to	tal index) 3.2%
Data sources	IEP; UCDP Battle-Related Deaths Dataset, Non-State Conflict Dataset and One-sided Violence Dataset
Measurement period	2011-2015

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%			
Strate	national Institute for egic Studies, Ailitary Balance 2017		
Measurement period	2016		

Alternative Source: When no data was provided, several alternative sources were used: National Public Expenditure Accounts, SIPRI information and the Military Balance 2015. Alternative data are from 2007 to 2015, 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 tot	l index) 2.8%	
Data source	International Institute for Strategic Studies, The Military Balance 2017	

Measurement period

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 in	dex) 2.8%
	P; United Nations Committee Contributions
Measurement period	2012-2015

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:

- 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.

5. 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 2016 indicator scores take into account a a weighted average from 2011 to 2014.

NUCLEAR AND HEAVY WEAPONS CAPABILITIES

Indicator type	Quantitative
Indicator weight	3
Indicator weight (% of tota	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	2012-2016

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. Major conventional weapons include: aircraft, armoured vehicles, artillery, radar systems, missiles, ships and engines.

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 tota	al index)	5.7%
Data source	Internat	Mid-Year Trends 2016; ional Displacement ing Centre (IDMC), 2016
Measurement period		2016

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 2016 to 15 March 2017

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 tot	al index) 3.2%
Data source	IEP; UCDP Battle-Related Deaths Dataset
Measurement period	2011-2015

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.

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".

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

APPENDIX C

CHARACTERISTICS OF PEACE

Peacefulness is not normally distributed across the three GPI domains. The majority of countries have low levels of Militarisation and Ongoing Conflict, however, the average Safety and Security score is much more normally distributed as shown in figure C.1.

The average score for the Safety and Security domain is 2.51, which is much higher than the 1.76 for Ongoing Conflict, and 1.89 for Militarisation. By dividing the domains into high, medium, and low levels of peacefulness, it is possible to look at the joint distribution of peacefulness, to see if countries that tend to be highly militarised are also more likely to be in conflict, and so on.

There are quite large differences in the distribution of countries within each domain: only three per cent of countries have high levels of Militarisation, compared to approximately nine per cent for both Ongoing Conflict and Safety and Security. Conversely, around 63 per cent of countries on the Militarisation domain and 74 per cent of countries on the Ongoing Conflict domain have high levels of peacefulness, compared to just 33.1 per cent of countries on the Safety and Security domain, as shown in table C.1.



BOX 1 WHAT ARE THE THREE GPI DOMAINS?

The GPI can be disaggregated into three different domains: Ongoing International and Domestic Conflict, Societal Safety and Security, and Militarisation. While all of the domains are correlated at a statistically significant level, they each capture a different aspect of what it means to be free from violence and the fear of violence.

THE GENERAL PURPOSE OF EACH DOMAIN IS AS FOLLOWS:

.....

- 1. Ongoing Domestic and International Conflict: This domain investigates the extent to which countries are involved in internal and external conflicts, as well as their role and duration of involvement in those conflicts.
- 2. Societal Safety and Security: This domain evaluates the level of harmony or discord within a society, as captured by the level of interpersonal violence, trust, and political stability.
- **3. Militarisation:** This domain measures the ability of a nation to project force both internally and externally, as well as providing a snapshot of the prominence of the military within the country, and the level of involvement with formal international peacekeeping processes.

Each of the three domains is correlated at a statistically significant level with the other domains, as shown in figure C.2 and table C.2. The strongest association is between the Ongoing Conflict and the Safety and Security domain, which correlates with an r value of 0.75.

The strong relationship between the two domains is not unexpected, as a decline in safety and security is likely to accompany the rise of political violence and the onset of a serious conflict.

The breakdown of order from a serious conflict is likely to lead to decreased trust, increased interpersonal violence, and higher levels of state sponsored violence against citizens.

TABLE C.1

MILITARISATION

% OF COUNTRIES WITH LOW, MEDIUM, AND HIGH LEVELS OF PEACE BY DOMAIN, 2017 GPI Only three per cent of countries have high levels of Militarisation.

	ONGOING CONFLICT	SAFETY AND SECURITY	MILITARISATION
Low Peace	9.20%	9.82%	3.07%
Medium Peace	17.18%	57.06%	34.36%
High Peace	73.62%	33.13%	62.58%

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Only three per cent of countries have high levels of Militarisation.

TABLE C.2 CORRELAT		GPI DOMAINS	, 2017
_	ONGOING CONFLICT	SAFETY AND SECURITY	MILITARISATION
ONGOING CONFLICT	1.000	0.747	0.521
SAFETY AND SECURITY	0.747	1.000	0.416

0.416

1.000

0.521



Whilst there is still a statistically significant relationship between Militarisation and the other two domains, it is much lower than the correlation between Ongoing Conflict and Safety and Security. While most countries with high levels of Ongoing Conflict are highly militarised, the converse is not necessarily true. Most of the countries with the highest scores on the Militarisation domain have very low levels of internal conflict, and are instead much more likely to be involved in 'internationalised internal conflicts', that is, conflicts between parties within a country in which one or more parties are receiving assistance from external countries. The conflict in Syria is the most notable recent example, with four of the five countries with the highest levels of militarisation currently being involved in the conflict in Syria, either directly or indirectly.

There are also significant regional differences between levels of Militarisation and Safety and Security. The Middle East and North Africa and sub-Saharan Africa have similar regional GPI scores at 2.56 and 2.24 respectively. However, they have vastly different average scores on the three domains, with the Middle East and North Africa having an average Militarisation score of 2.36, compared to 1.86 in sub-Saharan Africa. Generally speaking, more peaceful countries have higher levels of Safety and Security and lower levels of Ongoing Conflict than less peaceful countries, however, they may not necessarily be less militarized.

The EIU Democracy Index classifies countries as being one of four government types: full democracies, flawed democracies, hybrid regimes, or authoritarian regimes. As might be expected, full democracies are generally more peaceful, with noticeable differences between government types on both the Safety and Security and Ongoing Conflict domains. However, there is much less difference between full democracies, flawed democracies, and hybrid regimes on the Militarisation domain.

Most countries tend to have fairly balanced scores across the three domains, although there are some exceptions. Of the 163 countries in the index, 39 have high levels of peace for all three domains, with an additional 61 countries having high levels of peace on two domains, and medium levels of peace on the remaining domain.

Surprisingly, only one country has low levels of peacefulness for all three domains. Syria is ranked amongst the five least peaceful countries for Ongoing Conflict, Safety and Security, and Militarisation.



FIGURE C.3 AVERAGE GPI DOMAIN SCORE BY GOVERNMENT TYPE, 2017

Authoritarian regimes have the lowest level of peace on every domain.

APPENDIX D

ECONOMIC COST OF MOLENCE BY COUNTRY

TABLE D.1 ECONOMIC COST OF VIOLENCE BY COUNTRY, TOTAL IN MILLIONS OF 2016 PPP, PER CAPITA IN2016 PPP AND AS A PERCENTAGE OF GDP

1 Syria 58,925 2,754 66.9% 2 Iraq 280,324 7,72 57.6% 3 Afghanistan 31,068 949 52.1% 4 Colombia 230,936 4,737 36.9% 5 South Sudan 11,605 928 36.2% 6 Honduras 14,076 1,716 33.4% 7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaija	ECONOMIC COST OF VIOLENCE RANK BY % OF GDP	COUNTRY	ECONOMIC COST OF VIOLENCE (MILLIONS, 2016 PPP)	PER CAPITA (2016, PPP)	AS PERCENTAGE OF GDP
3 Afghanistan 31,068 949 52.1% 4 Colombia 230,936 4,737 36.9% 5 South Sudan 11,605 928 36.2% 6 Honduras 14,076 1,716 33.4% 7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 361,30 912 21.1% 20	1	Syria	58,925	2,754	66.9%
4 Colombia 230,936 4,737 36.9% 5 South Sudan 11,605 928 36.2% 6 Honduras 14,076 1,716 33.4% 7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 361,30 912 21.1% 20 Sudan 36,130 912 21.1% 21 V	2	Iraq	280,324	7,772	57.6%
5 South Sudan 11,605 928 36.2% 6 Honduras 14,076 1,716 33.4% 7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 361.30 912 21.1% 20 Sudan 36,130 912 21.1% 21	3	Afghanistan	31,068	949	52.1%
6 Honduras 14,076 1,716 33.4% 7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.8% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 3,6130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 <	4	Colombia	230,936	4,737	36.9%
7 Somalia 4,255 402 33.0% 8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 3,6130 912 21.1% 21 Venezuela 97,546 3,144 19.6% <	5	South Sudan	11,605	928	36.2%
8 Yemen 17,948 616 28.6% 9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2%	6	Honduras	14,076	1,716	33.4%
9 Lesotho 1,629 841 32.6% 10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4%	7	Somalia	4,255	402	33.0%
10 North Korea 9,593 381 32.4% 11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26	8	Yemen	17,948	616	28.6%
11 El Salvador 16,115 2,622 29.6% 12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27	9	Lesotho	1,629	841	32.6%
12 Central African Republic 1,012 207 29.7% 13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28	10	North Korea	9,593	381	32.4%
13 Libya 21,887 3,428 27.8% 14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinid	11	El Salvador	16,115	2,622	29.6%
14 Cyprus 7,321 8,603 26.9% 15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30	12	Central African Republic	1,012	207	29.7%
15 Botswana 6,364 2,954 23.3% 16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1%	13	Libya	21,887	3,428	27.8%
16 South Africa 144,237 2,582 22.3% 17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2%	14	Cyprus	7,321	8,603	26.9%
17 Azerbaijan 26,300 2,771 22.8% 18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 <td>15</td> <td>Botswana</td> <td>6,364</td> <td>2,954</td> <td>23.3%</td>	15	Botswana	6,364	2,954	23.3%
18 Saudi Arabia 363,347 11,350 21.8% 19 Ukraine 66,749 1,571 20.4% 20 Sudan 361,30 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34	16	South Africa	144,237	2,582	22.3%
19 Ukraine 66,749 1,571 20.4% 20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	17	Azerbaijan	26,300	2,771	22.8%
20 Sudan 36,130 912 21.1% 21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	18	Saudi Arabia	363,347	11,350	21.8%
21 Venezuela 97,546 3,144 19.6% 22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	19	Ukraine	66,749	1,571	20.4%
22 Mauritania 2,570 677 19.2% 23 Namibia 4,183 1,818 18.4% 24 Jamaica 4,306 1,522 18.0% 25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	20	Sudan	36,130	912	21.1%
23Namibia4,1831,81818.4%24Jamaica4,3061,52218.0%25Oman28,0757,09518.3%26Swaziland1,6401,44917.7%27Palestine3,99192417.9%28Guatemala20,8041,24815.4%29Trinidad and Tobago6,5434,79714.9%30Republic of the Congo4,5851,02815.1%31Russia517,5583,60815.2%32Burundi1,04510814.5%33Mexico264,4462,16313.2%34Guyana8201,06613.0%	21	Venezuela	97,546	3,144	19.6%
24Jamaica4,3061,52218.0%25Oman28,0757,09518.3%26Swaziland1,6401,44917.7%27Palestine3,99192417.9%28Guatemala20,8041,24815.4%29Trinidad and Tobago6,5434,79714.9%30Republic of the Congo4,5851,02815.1%31Russia517,5583,60815.2%32Burundi1,04510814.5%33Mexico264,4462,16313.2%34Guyana8201,06613.0%	22	Mauritania	2,570	677	19.2%
25 Oman 28,075 7,095 18.3% 26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	23	Namibia	4,183	1,818	18.4%
26 Swaziland 1,640 1,449 17.7% 27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	24	Jamaica	4,306	1,522	18.0%
27 Palestine 3,991 924 17.9% 28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	25	Oman	28,075	7,095	18.3%
28 Guatemala 20,804 1,248 15.4% 29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	26	Swaziland	1,640	1,449	17.7%
29 Trinidad and Tobago 6,543 4,797 14.9% 30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	27	Palestine	3,991	924	17.9%
30 Republic of the Congo 4,585 1,028 15.1% 31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	28	Guatemala	20,804	1,248	15.4%
31 Russia 517,558 3,608 15.2% 32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	29	Trinidad and Tobago	6,543	4,797	14.9%
32 Burundi 1,045 108 14.5% 33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	30	Republic of the Congo	4,585	1,028	15.1%
33 Mexico 264,446 2,163 13.2% 34 Guyana 820 1,066 13.0%	31	Russia	517,558	3,608	15.2%
34 Guyana 820 1,066 13.0%	32	Burundi	1,045	108	14.5%
· · · · · · · · · · · · · · · · · · ·	33	Mexico	264,446	2,163	13.2%
35 Eritrea 1,844 266 13.3%	34	Guyana	820	1,066	13.0%
	35	Eritrea	1,844	266	13.3%

ECONOMIC COST OF VIOLENCE RANK BY % OF GDP	COUNTRY	ECONOMIC COST OF VIOLENCE (MILLIONS, 2016 PPP)	PER CAPITA (2016, PPP)	AS PERCENTAGE OF GDP
36	Pakistan	122,370	634	12.9%
37	Brazil	402,280	1,952	12.6%
38	Mali	5,025	299	12.7%
39	Georgia	4,677	1,264	12.7%
40	Turkey	197,388	2,500	12.2%
41	Cuba	27,896	2,449	11.9%
42	Chad	3,473	293	11.9%
43	Nigeria	109,508	596	11.6%
44	The Gambia	361	178	11.5%
45	Democratic Republic of the Congo	7,688	91	11.2%
46	Uganda	7,396	180	11.0%
47	Serbia	11,086	1,554	10.9%
48	Rwanda	2,258	196	10.7%
49	Algeria	62,595	1,536	10.6%
50	Panama	9,425	2,307	10.2%
51	Bahrain	6,686	5,069	10.2%
52	Dominican Republic	15,540	1,540	9.9%
53	Mongolia	3,360	1,115	9.8%
54	Philippines	78,003	749	9.8%
55	Cote d'Ivoire	8,595	353	9.9%
56	Kuwait	28,145	6,662	10.0%
57	Bolivia	7,774	713	9.6%
58	Nicaragua	3,147	496	9.4%
59	Haiti	1,693	156	9.5%
60	Angola	15,736	575	9.5%
61	Jordan	8,279	1,068	9.5%
62	Guinea-Bissau	276	152	9.3%
63	Liberia	378	86	9.5%
64	Zimbabwe	2,503	173	9.1%
65	Kosovo	1,639	892	9.1%
66	Montenegro	973	1,562	9.2%
67	Egypt	87,738	964	8.8%
68	Lebanon	7,989	1,738	8.9%
69	Gabon	3,169	1,685	9.0%
70	India	741,906	566	8.6%

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ECONOMIC COST OF VIOLENCE RANK BY % OF GDP		ENC		
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ECONOMIC COST C RANK BY % OF GDP	COUNTRY	ECONOMIC COST OF VIOLENCE (MILLIONS, 2016 PPP)	PER CAPITA (2016, PPP)	AS PERCENTAGE OF GDP
71	Armenia	2,250	752	8.7%
72	Tanzania	12,023	247	8.5%
73	Myanmar	20,062	384	8.4%
74	Uzbekistan	16,202	517	8.5%
75	Israel	26,672	3,128	8.4%
76	Peru	31,287	994	8.3%
77	Kazakhstan	25,552	1,424	8.4%
78	United States	1,604,983	4,954	8.6%
79	Bosnia and Herzegovina	3,455	897	8.2%
80 81	Paraguay Ethiopia	4,917 14 450	717 158	8.0%
81 82	Ethiopia Costa Rica	14,450 6,243	158	7.9% 7.8%
82 83	Tunisia	10,243	912	7.8% 8.1%
84	Turkmenistan	7,134	1,306	7.9%
85	Niger	1,574	87	7.8%
86	Senegal	3,147	204	7.9%
87	Iran	103,629	1,288	7.9%
88	Benin	1,883	169	7.8%
89	Macedonia	2,395	1,156	7.9%
90	Ecuador	14,117	854	7.7%
91	Cambodia	4,522	287	7.8%
92	Qatar	22,647	8,785	7.5%
93	Kenya	11,640	256	7.5%
94	Bulgaria	9,883	1,389	7.5%
95	Sri Lanka	17,495	823	7.1%
96	Viet Nam	41,818	451	7.3%
97	Kyrgyz Republic	1,305	215	7.2%
98	United Arab Emirates	46,346	4,702	7.1%
99 100	Togo	829	110	7.0%
100	Albania	2,447	848	6.9%
101 102	Zambia Laos	4,245 2,886	254 403	7.0%
102	Sierra Leone	684	106	6.7% 6.6%
105	Lithuania	5,866	2,043	6.8%
101	Morocco	18,885	558	6.6%
106	Argentina	52,772	1,210	6.4%
107	Tajikistan	1,328	153	6.6%
108	Chile	26,206	1,440	6.4%
109	Belarus	9,621	1,018	6.5%
110	Cameroon	5,071	214	6.4%
111	Djibouti	213	214	6.3%
112	Moldova	1,152	324	6.3%
113	Nepal	4,288	149	6.1%
114	Estonia	2,401	1,830	6.0%
115	Mauritius	1,533	1,218	6.0%
116	Portugal	19,100	1,833	6.0%
117	Croatia	5,865	1,395	6.1%
118	Guinea	907	72	5.9%
119	Latvia	3,041	1,539	6.0%
120	Bhutan	388	491	5.9%

ECONOMIC COST OF VIOLENCE RANK BY % OF GDP		ECONOMIC COST OF VIOLENCE (MILLIONS, 2016 PPP)		GDP
ECONOMIC COST OF RANK BY % OF GDP		ECONOMIC COST OF (MILLIONS, 2016 PPP)	A (AS PERCENTAGE OF GDP
ECONOM RANK BY	COUNTRY	ECONOM	PER CAPITA (2016, PPP)	AS PERCE
121	Thailand	63,609	922	5.8%
122	Poland	57,721	1,520	5.8%
123	Uruguay	4,250	1,240	5.7%
124	Greece	17,057	1,574	5.9%
125	Mozambique	1,545	54	5.7%
126	Papua New Guinea	1,369	173	5.4%
127	France	152,986	2,369	5.4%
128	Sweden	25,385	2,532	5.2%
129	Hungary	13,693	1,392	5.5%
130	Belgium	27,587	2,434	5.2%
131	United Kingdom	134,042	2,044	5.3%
132	Burkina Faso	1,837	100	5.3%
133	Romania	24,261	1,228	5.3%
134	Germany	160,268	1,941	3.9%
135	Australia	51,075	2,097	4.9%
136	Taiwan	44,069	1,871	5.0%
137	Slovakia	8,300	1,531	4.9%
138	Czech Republic	17,612	1,668	4.7%
139	Singapore	22,446	4,015	4.7%
140	Italy	108,481	1,774	4.7%
141	Finland	10,662	1,939	4.5%
142	Netherlands	37,744	2,216	4.4%
143	South Korea	79,779	1,570	4.5%
144	Spain	72,976	1,574	4.3%
145	Malaysia	36,605	1,154	4.4%
146	Bangladesh	25,364	157	4.1%
147	New Zealand	7,122	1,511	4.0%
148	Timor-Leste	181	152	3.7%
149	Slovenia	2,585	1,252	3.8%
150	Malawi	640	34	3.7%
151	China	712,647	517	3.5%
152	Norway	10,318	1,961	3.3%
153	Ireland	10,770	2,304	3.1%
154	Denmark	8,253	1,452	2.9%
155	Madagascar	1,102	44	3.1%
156	Austria	11,896	1369	2.7%
157	Japan	153,701	1212	2.8%
158	Canada	39,162	1082	2.5%
159	Ghana	3,193	116	2.4%
160	Equatorial Guinea	811	988	2.5%
161	Iceland	437	1,301	2.4%
162	Indonesia	64,143	248	2.1%
163	Switzerland	7,613	915	1.5%

APPENDIX E

2017 GPV DOMAIN SCORES

TABLE E.1 ONGOING DOMESTIC AND INTERNATIONAL CONFLICT DOMAIN, MOST PEACEFUL TO LEAST

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SCORE

2.286

2.298

2.299

2.321

2.439

2.51

2.547

2.547

2.604

2.61

2.62

2.7

2.709

2.787

2.788

2.815

2.9043.053

3.062

3.121

3.153

3.199

3.213

3.218

3.235

3.3553.565

3.592

3.599

3.658 3.827

COUNTRY	SCORE
Botswana	1.000
Chile	1.000
Mauritius	1.000
Uruguay	1.000
Switzerland	1.008
Singapore	1.021
Bulgaria	1.028
Iceland	1.028
New Zealand	1.028
Spain	1.028
Austria	1.035
Czech Republic	1.035
Portugal	1.035
Italy	1.043
Romania	1.045
Germany	1.052
Brazil	1.055
Malaysia	1.057
Australia	1.076
Netherlands	1.084
Canada	1.085
Belgium	1.092
United Kingdom	1.109
France	1.137
Costa Rica	1.201
Jamaica	1.201
Panama	1.201
Qatar	1.201
Trinidad and Tobago	1.201
Zambia	1.201
Albania	1.229
Ireland	1.229
Mongolia	1.229

COUNTRY	SCORE
Finland	1.244
Norway	1.244
Sweden	1.244
Namibia	1.252
Denmark	1.286
Argentina	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
Bhutan	1.41
Benin	1.418
Burkina Faso	1.418
Togo	1.418
Croatia	1.43
Hungary	1.43
Lithuania	1.43
Montenegro	1.43
Poland	1.43
Slovakia	1.43
Slovenia	1.43

COUNTRY	SCORE
Papua New Guinea	1.432
Madagascar	1.436
El Salvador	1.438
Latvia	1.438
Estonia	1.445
Kuwait	1.445
Cambodia	1.448
Ghana	1.468
Sierra Leone	1.468
Guinea	1.477
United Arab Emirates	1.479
Liberia	1.494
Nepal	1.494
Angola	1.504
Cyprus	1.604
Gabon	1.604
Haiti	1.604
Kazakhstan	1.604
Lesotho	1.604
Paraguay	1.604
Serbia	1.604
South Africa	1.604
Sri Lanka	1.604
Taiwan	1.604
Guinea-Bissau	1.619
Indonesia	1.622
Guatemala	1.634
Mozambique	1.634
Mauritania	1.649
Tunisia	1.654
Republic of the Congo	1.655
Djibouti	1.666
Jordan	1.679

COUNTRY	SCORE	COUNTRY
Bangladesh	1.691	Iran
United States	1.793	Armenia
Belarus	1.805	Saudi Arabia
Cuba	1.805	Azerbaijan
Eritrea	1.805	Myanmar
Kosovo	1.805	Mali
Moldova	1.805	Egypt
Morocco	1.805	Kenya
Turkmenistan	1.805	Israel
Uzbekistan	1.805	North Korea
Venezuela	1.805	Mexico
Zimbabwe	1.805	Turkey
Uganda	1.809	Russia
Bosnia & Herzegovina	1.833	Palestine
Greece	1.833	Lebanon
Macedonia (FYR)	1.833	Philippines
South Korea	1.833	Ethiopia
Georgia	1.841	India
Senegal	1.876	Nigeria
Cote d' Ivoire	1.887	Democratic Republic of the Congo
China	1.942	Yemen
Rwanda	1.965	Libya
The Gambia	2.014	Iraq
Kyrgyz Republic	2.033	Ukraine
Niger	2.087	Central African
Algeria	2.089	Republic Sudan
Bahrain	2.091	Somalia
Thailand	2.11	South Sudan
Tajikistan	2.15	Pakistan
Chad	2.165	
Burundi	2.228	Afghanistan Syria
Colombia	2.241	Syria
Cameroon	2.251	

TABLE E.2 SOCIETAL SAFETY AND SECURITY DOMAIN, MOST PEACEFUL TO LEAST



COUNTRY	SCORE
Iceland	1.232
Norway	1.249
Switzerland	1.305
Denmark	1.347
Sweden	1.373
New Zealand	1.38
Japan	1.384
Austria	1.39
Slovenia	1.411
Portugal	1.431
Finland	1.468
Canada	1.491
Netherlands	1.545
Australia	1.587
Ireland	1.604
Singapore	1.612
Germany	1.646
Czech Republic	1.651
Bhutan	1.658
South Korea	1.673
Hungary	1.743
Spain	1.834
Belgium	1.844
Slovakia	1.848
Croatia	1.855
Qatar	1.861
United Kingdom	1.864
Taiwan	1.873
Romania	1.923
France	1.934
Poland	1.948
Latvia	2.011
Lithuania	2.012
Estonia	2.036
Mauritius	2.049
Greece	2.072
Chile	2.074
Oman	2.075
United Arab Emirates	2.089
Bulgaria	2.098
Costa Rica	2.105
Botswana	2.113

United States2.137Ghana2.137Sherra Leone2.168Malawi2.171Sterbia2.104Carbia2.203Vietnam2.203Madagascar2.203Madayai2.203Stenegal2.203Sareal2.204Marania2.203Stenegal2.204Marania2.203Marania2.204Marania2.204Marania2.204Marania2.204Marania2.204Marania2.303Manania2.303Mandaia2.303Manania2.304Manibia2.404Madora2.404Marania2.404Marania2.404Marania2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.403Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404Maranibia2.404 <th>COUNTRY</th> <th>SCORE</th>	COUNTRY	SCORE
Sierra Leone2.139Haly2.166Malawi2.171Serbia2.016Laos2.205Vietnam2.233Madagascar2.243Malaysia2.253Sanegal2.273Zambia2.273Kuwait2.274Morocco2.295Cyprus2.333Orogolia2.378Mayanmar2.378Mangolia2.378Mangolia2.378Mangolia2.378Manibia2.404Mongolia2.404Marifica2.404Manibia2.404Angentina2.404Maganar2.427Jordan2.427Jordan2.426Aigentina2.427Georgia2.427Kasakhstan2.428Kasakhstan2.426Jiron-Leste2.426Kasakhstan2.426Jironia2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhstan2.426Kasakhsta	United States	2.117
Italy2.166Malawi2.17Serbia2.194Laos2.205Vietnam2.232Malaysia2.253Indonesia2.258Zambia2.274Karael2.274Marocco2.295Zarmenia2.274Marogalia2.274Marayai2.274Morocco2.303Zurguay2.335Sri Lanka2.344Mongolia2.447Mongolia2.447Mondova2.447Maribia2.447Jordan2.427Jordan2.427Jordan2.427Jordan2.447Kagahistan2.447Georgia2.447Georgia2.447Kosovo2.458Kazakhstan2.468Benin2.458Mozambique2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Benin2.458Kazakhstan2.458Benin2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458Kazakhstan2.458 </td <td>Ghana</td> <td>2.13</td>	Ghana	2.13
Malawi2.17Serbia2.104Laos2.205Vietnam2.233Malagascar2.253Malaysia2.253Senegal2.273Jarabia2.274Kuwait2.274Moroco2.333Oryrus2.333Grigal2.374Mayanmar2.378Mangolia2.378Mangolia2.378Mangolia2.378Mangolia2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.378Margangan2.404Margangan2.404Margangan2.404Kasakhan2.404Kasakhan2.405Kasakhan2.405Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania2.404Marania <td< td=""><td>Sierra Leone</td><td>2.139</td></td<>	Sierra Leone	2.139
Serbia2.194Laos2.205Vietnam2.232Madagascar2.243Malaysia2.253Indonesia2.253Senegal2.273Jarael2.274Kuwait2.295Armenia2.295Orypus2.333Uruguay2.335Mangolia2.394Monocol2.395Si Lanka2.394Mongolia2.394Mongolia2.394Moldova2.494Namibia2.494Si danka2.494Mongolia2.494Georgia2.447Jordan2.497Jordan2.497Kagakhstan2.497Kasakhstan2.493Kasakhstan2.493Kasakhstan2.494Junisia2.494Mozambique2.494Kasakhstan2.494Senia & Herzegovia2.494Mozambique2.494Mozambique2.494Senia & Lanza2.494	Italy	2.166
Laos2.205Vietnam2.232Madagascar2.243Madaysia2.253Sanegal2.258Sanegal2.274Kuwait2.274Maocco2.295Armenia2.297Cyprus2.335Sri Lanka2.344Mongolia2.344Mongolia2.344Mongolia2.447Mamibia2.447Armenia2.447Marganga2.427Jordan2.447Ageria2.447Gorgia2.447Gorgia2.447Gorgia2.447Gosoi2.453Kisakhstan2.453Kazakhstan2.453Beinin2.454Mozambique2.454Matagania2.454Kasakhstan2.454Kasakhstan2.454Senia2.454Mozambique </td <td>Malawi</td> <td>2.17</td>	Malawi	2.17
Anticipant2.143Vietnam2.232Madagascar2.243Malaysia2.253Indonesia2.253Senegal2.253Zambia2.274Kuwait2.274Morocco2.295Armenia2.297Cyprus2.333Uruguay2.378Mongolia2.378Mongolia2.404Modova2.404Modova2.404Maribia2.404Argentina2.427Jordan2.427Jordan2.427Argentina2.428Argentina2.428Kasakhstan2.426Kasakhstan2.458Benin2.458Kanabique2.458Benina2.458Mozambique2.458Combique2.458Senia & Herzegovina2.458Herzegovina2.458Senia & Lerzegovina2.458Senia & Lerzegovina </td <td>Serbia</td> <td>2.194</td>	Serbia	2.194
Madagascar2.243Malaysia2.253Indonesia2.258Senegal2.259Zambia2.273Israel2.274Morocco2.295Zamenia2.295Cyprus2.333Uruguay2.335Monocoi2.394Magania2.394Manara2.394Monogolia2.394Moldova2.404Moldova2.404Moldova2.404Querta Calquay2.427Jordan2.427Jordan2.426Argentina2.404Algeria2.427Goorgia2.427Timor-Leste2.426Kasakhstan2.458Benin2.458Mozambique2.484Tunisia2.484Selarus2.484Selarus2.484Mozambique2.484M	Laos	2.205
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Morocco2.297Armenia2.297Cyprus2.333Uruguay2.334Manmar2.343Mangolia2.343Mangolia2.343Mangolia2.344Manibia2.404Moldova2.416Equatorial Guinea2.429Argentina2.429Algeria2.427Georgia2.427Timor-Leste2.428Kosovo2.453Kosova2.453Benin2.428Mozambique2.484Tunisia2.484Belarus2.484Tanzania2.454	Israel	2.274
Armenia2.297Cyprus2.333Uruguay2.335Sri Lanka2.343Myanmar2.378Mongolia2.394India2.4Namibia2.404Moldova2.416Equatorial Guinea2.427Jordan2.427Argentina2.427Georgia2.447Timor-Leste2.453Kosovo2.453Bosnia & Herzegovina2.463Bosnia & Herzegovina2.484Tunisia2.484Harasnia2.484Argantia2.484	Kuwait	2.274
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Uruguay2.335Sri Lanka2.343Myanmar2.378Mongolia2.394India2.4Namibia2.404Moldova2.416Equatorial Guinea2.424Paraguay2.427Jordan2.439Algeria2.447Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.463Benin2.484Tunisia2.484Belarus2.494	Armenia	2.297
Sri Lanka2.343Myanmar2.378Mongolia2.394India2.4Namibia2.404Moldova2.416Equatorial Guinea2.427Jordan2.429Argentina2.439Algeria2.447Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.484Tunisia2.484Belarus2.494	Cyprus	2.333
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Mongolia2.394India2.4Namibia2.404Moldova2.416Equatorial Guinea2.427Jordan2.429Argentina2.439Algeria2.447Togo2.452Timor-Leste2.453Kazakhstan2.463Benin2.452Mozambique2.484Elarus2.494Tanzania2.454	Sri Lanka	2.343
India2.4Namibia2.404Moldova2.416Equatorial Guinea2.427Jordan2.427Jordan2.427Argentina2.439Algeria2.447Togo2.452Timor-Leste2.453Kosovo2.458Bosnia & Herzegovina2.468Benin2.452Tunisia2.454Belarus2.454Tunisia2.454	Myanmar	2.378
Namibia2.404Moldova2.416Equatorial Guinea2.427Jordan2.429Argentina2.439Algeria2.447Togo2.452Timor-Leste2.453Kosovo2.458Bosnia & Herzegovina2.468Benin2.452Tunisia2.454Belarus2.454Substrational Science2.454Constrational Science2.454Constrational Science2.454Constrational Science2.454Constrational Science2.454Constrational Science2.454	Mongolia	2.394
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Paraguay2.427Jordan2.429Argentina2.439Algeria2.447Georgia2.447Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.468Benin2.468Mozambique2.484Tunisia2.494Tanzania2.5	Moldova	2.416
Jordan 2.429 Argentina 2.439 Algeria 2.447 Georgia 2.447 Togo 2.452 Timor-Leste 2.453 Kosovo 2.459 Kazakhstan 2.463 Bosnia & Herzegovina 2.463 Benin 2.484 Benin 2.484 Mozambique 2.484 Belarus 2.494	Equatorial Guinea	2.424
Argentina2.439Algeria2.447Georgia2.447Togo2.452Timor-Leste2.453Kosovo2.453Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.484Mozambique2.484Belarus2.494Tanzania2.5	Paraguay	2.427
Algeria2.447Georgia2.447Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Tunisia2.494Tanzania2.5	Jordan	2.429
Georgia2.447Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Belarus2.494Tanzania2.5	Argentina	2.439
Togo2.452Timor-Leste2.453Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Tunisia2.494Belarus2.494Tanzania2.5	Algeria	2.447
Timor-Leste2.453Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Tunisia2.484Belarus2.494Tanzania2.5	Georgia	2.447
Kosovo2.459Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Belarus2.494Tanzania2.5	Togo	2.452
Kazakhstan2.463Bosnia & Herzegovina2.468Benin2.482Mozambique2.484Tunisia2.484Belarus2.494Tanzania2.5	Timor-Leste	2.453
Bosnia & Herzegovina 2.468 Benin 2.482 Mozambique 2.484 Tunisia 2.484 Belarus 2.494 Tanzania 2.5	Kosovo	2.459
Benin2.482Mozambique2.484Tunisia2.484Belarus2.494Tanzania2.5	Kazakhstan	2.463
Mozambique 2.484 Tunisia 2.484 Belarus 2.494 Tanzania 2.5	Bosnia & Herzegovina	2.468
Tunisia 2.484 Belarus 2.494 Tanzania 2.5	Benin	2.482
Belarus 2.494 Tanzania 2.5	Mozambique	2.484
Tanzania 2.5	Tunisia	2.484
	Belarus	2.494
China 2.513	Tanzania	2.5
	China	2.513

COUNTRY	SCORE
Panama	2.522
Cuba	2.537
Albania	2.54
Gabon	2.544
Saudi Arabia	2.554
Tajikistan	2.555
Uzbekistan	2.559
Kyrgyz Republic	2.567
Liberia	2.568
Macedonia (FYR)	2.582
Bolivia	2.587
Ecuador	2.593
Azerbaijan	2.596
Djibouti	2.596
Cambodia	2.599
Guinea	2.607
Lesotho	2.607
Bangladesh	2.617
Montenegro	2.618
Peru	2.651
Iran	2.656
Nicaragua	2.658
Haiti	2.672
The Gambia	2.675
Burkina Faso	2.687
Nepal	2.7
Ethiopia	2.704
Uganda	2.709
Swaziland	2.74
Turkmenistan	2.759
Rwanda	2.774
Egypt	2.779
Papua New Guinea	2.788
Guyana	2.793
Dominican Republic	2.81
Kenya	2.821
Angola	2.831
Bahrain	2.866
Niger	2.884
Thailand	2.912
Cote d' Ivoire	0.000
	2.922

COUNTRY	SCORE
Republic of the Congo	2.945
Trinidad and Tobago	2.948
Cameroon	2.953
Guinea-Bissau	2.957
Zimbabwe	2.963
Philippines	2.997
Chad	3.036
Mali	3.046
Guatemala	3.049
Palestine	3.071
Mauritania	3.086
Pakistan	3.09
Honduras	3.093
Lebanon	3.101
Turkey	3.102
North Korea	3.109
Brazil	3.118
El Salvador	3.147
Russia	3.219
South Africa	3.264
Mexico	3.266
Ukraine	3.34
Nigeria	3.376
Eritrea	3.393
Burundi	3.494
Colombia	3.561
Venezuela	3.574
Democratic Republic of the Congo	3.682
Sudan	3.709
Libya	3.798
Somalia	3.95
Central African Republic	3.976
Yemen	4.013
Afghanistan	4.178
South Sudan	4.207
Syria	4.237
Iraq	4.318

TABLE E.3 MILITARISATION DOMAIN, MOST PEACEFUL TO LEAST

COUNTRY	SCORE
Iceland	1.009
Hungary	1.131
Slovenia	1.185
Bhutan	1.233
Portugal	1.253
Moldova	1.28
Czech Republic	1.283
New Zealand	1.294
Ireland	1.34
Malaysia	1.355
Latvia	1.368
Austria	1.375
Denmark	1.379
Indonesia	1.398
Japan	1.425
Mauritius	1.43
Slovakia	1.45
Tanzania	1.451
Senegal	1.481
Estonia	1.481
Timor-Leste	1.494
Haiti	1.5
Thailand	1.502
Montenegro	1.504
Panama	1.504
Guyana	1.527
Kosovo	1.53
Sierra Leone	1.536
Mongolia	1.539
Bosnia & Herzegovina	1.544
Poland	1.548
Madagascar	1.55
Cuba	1.556
Canada	1.567
Bangladesh	1.57
Argentina	1.572
Swaziland	1.575
Ecuador	1.583
Belgium	1.587
Tunisia	1.595
Cyprus	1.599
Chile	1.601

COUNTRY	SCORE	
Uruguay	1.607	
Lithuania	1.636	
Botswana	1.641	
Peru	1.641	
Philippines	1.644	
Australia	1.646	
Croatia	1.649	
Bulgaria	1.662	
The Gambia	1.663	
Laos	1.676	
Honduras	1.677	
Paraguay	1.691	
Rwanda	1.691	
Myanmar	1.704	
Costa Rica	1.705	
South Africa	1.707	
Ghana	1.711	
Nicaragua	1.714	
Mexico	1.716	
Serbia	1.721	
Kenya	1.724	
Namibia	1.724	
Guatemala	1.727	
Albania	1.751	
Ethiopia	1.761	
Kazakhstan	1.765	
Cameroon	1.767	
El Salvador	1.771	
Lesotho	1.771	
Georgia	1.772	
Nigeria	1.774	
Zambia	1.777	
Morocco	1.78	
Mozambique	1.782	
Eritrea	1.785	
Angola	1.788	
Macedonia (FYR)	1.791	
Togo	1.792	
Jamaica	1.804	
Uganda	1.816	
Romania	1.823	
Gabon	1.84	

Equatorial Guinea1.849Spain1.856Tajikistan1.858Nepal1.864Uzbekistan1.871Germany1.872Kyrgyz Republic1.884Dominican Republic1.886Taiwan1.886Trinidad and Tobago1.887Burkina Faso1.917Armenia1.903Italy1.965Kuwait1.996Qatar2.014Bolivia2.015Bolivia2.013South Korea2.038Cote d' Ivoire2.038Jordan2.05Benin2.05Bainain2.05Si Lanka2.074Koradi2.038Jordan2.05Bainain2.05Bainain2.063Si Lanka2.074Kusain2.05Si Lanka2.05Bainain2.05Bainain2.06Mauritania2.05Bainain2.05Bainain2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai	COUNTRY	SCORE
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Equatorial Guinea1.849Spain1.856Tajikistan1.858Nepal1.864Uzbekistan1.871Germany1.872Kyrgyz Republic1.884Dominican Republic1.886Taiwan1.886Trinidad and Tobago1.887Burkina Faso1.917Armenia1.903Italy1.965Kuwait1.996Qatar2.014Bolivia2.015Bolivia2.013South Korea2.038Cote d' Ivoire2.038Jordan2.05Benin2.05Bainain2.05Si Lanka2.074Koradi2.038Jordan2.05Bainain2.05Bainain2.063Si Lanka2.074Kusain2.05Si Lanka2.05Bainain2.05Bainain2.06Mauritania2.05Bainain2.05Bainain2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai2.06Mai	Papua New Guinea	1.845
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Tajikistan1.858Tajikistan1.858Nepal1.864Uzbekistan1.871Germany1.872Kyrgyz Republic1.878Liberia1.886Taiwan1.886Trinidad and Tobago1.889Niger1.917Armenia1.955Italy1.965Kuwait1.993Iran1.906Qatar2.015Bolivia2.015Bolivia2.015Softzerland2.015Bolivia2.013Cote d' Ivoire2.038Cotha2.048Jordan2.052Zimbabwe2.063Sri Lanka2.074Egypt2.08Nirekraina2.015Bahrain2.016Mauritania2.105Mair2.016Mauritania2.105Mater2.016Mater2.016Mater2.017Sti Lanka2.016Mauritania2.016Mauritania2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Mater2.016Ma	Equatorial Guinea	1.849
Nepal1.864Uzbekistan1.871Germany1.872Kyrgyz Republic1.878Liberia1.884Dominican Republic1.886Trinidad and Tobago1.889Niger1.817Burkina Faso1.917Armenia1.953Italy1.965Kuwait1.993Iran2.004Belarus2.012Switzerland2.013Gotth Korea2.038Cote d' Ivoire2.038Jordan2.052Jordan2.052Jordan2.052Svitzerland2.053South Korea2.054Jordan2.052Zimbabwe2.052Zinbaita2.054Svitzerland2.054Jordan2.054Belarus2.052Jordan2.054Jordan2.054South Korea2.054Jordan2.054Si Lanka2.074Egypt2.08Mauritania2.104Colombia2.105Mauritania2.104Mauritania2.105Mater Lanka2.105Mauritania2.105Mauritania2.105Mater Lanka2.106Mater Lanka2.106Mauritania2.107	Spain	1.856
Uzbekistan1.871Germany1.872Kyrgyz Republic1.878Liberia1.884Dominican Republic1.886Taiwan1.886Taiwan1.887Niger1.897Burkina Faso1.917Armenia1.955Italy1.965Kuwait1.993Iran1.996Qatar2.012Switzerland2.015Bolivia2.013Cote d' Ivoire2.034Cote d' Ivoire2.034Jordan2.043Jordan2.052Zimbabwe2.063Sri Lanka2.074Egypt2.08Vietnam2.08Bahrain2.091Mauritania2.105Mai2.105Mai2.105	Tajikistan	1.858
Germany1.872Kyrgyz Republic1.878Liberia1.886Taiwan1.886Trinidad and Tobago1.887Niger1.897Burkina Faso1.917Armenia1.955Italy1.963Kuwait1.993Iran2.004Belarus2.015Bolivia2.034Cote d' Ivoire2.038Cote d' Ivoire2.034Jordan2.052Benin2.052Si Lanka2.074Syntaeriand2.053Benin2.054Jordan2.054Jordan2.054Jordan2.054Si Lanka2.074Limbabwe2.074Limbai2.074	Nepal	1.864
Kyrgyz Republic 1.878 Liberia 1.884 Dominican Republic 1.886 Taiwan 1.889 Niger 1.889 Burkina Faso 1.917 Armenia 1.953 Italy 1.965 Kuwait 1.993 Iran 1.996 Qatar 2.004 Belarus 2.012 Switzerland 2.013 Gouth Korea 2.038 Jordan 2.043 South Korea 2.043 Jordan 2.052 Zimbabwe 2.052 Zimbabwe 2.053 Sri Lanka 2.074 Egypt 2.08 Mauritania 2.074 Kuesi 2.075 Ginbabwe 2.052 Zimbabwe 2.058 Bahrain 2.094 Mauritania 2.105 Mai 2.106	Uzbekistan	1.871
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Cote d' Ivoire2.038China2.043South Korea2.048Jordan2.05Benin2.052Zimbabwe2.063Sri Lanka2.074Egypt2.08Vietnam2.088Bahrain2.091Mauritania2.104Colombia2.106Mali2.106Netherlands2.115	Bolivia	2.018
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South Korea 2.048 Jordan 2.05 Benin 2.052 Zimbabwe 2.063 Sri Lanka 2.074 Egypt 2.08 Vietnam 2.08 Turkey 2.088 Bahrain 2.091 Mauritania 2.104 Colombia 2.106 Mali 2.106	Cote d' Ivoire	2.038
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Zimbabwe2.063Sri Lanka2.074Egypt2.08Vietnam2.08Turkey2.088Bahrain2.091Mauritania2.104Colombia2.106Mali2.106Netherlands2.115	Jordan	2.05
Sri Lanka 2.074 Egypt 2.08 Vietnam 2.08 Turkey 2.088 Bahrain 2.091 Mauritania 2.104 Colombia 2.106 Mali 2.106	Benin	2.052
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Vietnam 2.08 Turkey 2.088 Bahrain 2.091 Mauritania 2.104 Colombia 2.106 Mali 2.106 Netherlands 2.115	Sri Lanka	2.074
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Mauritania 2.104 Colombia 2.106 Mali 2.106 Netherlands 2.115	Turkey	2.088
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Mali 2.106 Netherlands 2.115	Mauritania	2.104
Netherlands 2.115	Colombia	2.106
	Mali	2.106
Turkmenistan 2.118	Netherlands	2.115
	Turkmenistan	2.118

COUNTRY	SCORE
Guinea	2.119
Central African Republic	2.142
Greece	2.144
Singapore	2.15
Sweden	2.152
Algeria	2.176
Guinea-Bissau	2.187
Democratic Republic of the Congo	2.196
Chad	2.211
Brazil	2.229
Venezuela	2.234
Norway	2.258
Palestine	2.265
Azerbaijan	2.27
Somalia	2.275
Republic of the Congo	2.28
Sudan	2.289
Lebanon	2.296
Djibouti	2.308
South Sudan	2.344
United Arab Emirates	2.386
Afghanistan	2.425
Yemen	2.44
India	2.447
Pakistan	2.511
Ukraine	2.534
United Kingdom	2.594
Iraq	2.625
Libya	2.674
France	2.676
Saudi Arabia	2.68
Oman	2.721
United States	3.045
Syria	3.1
North Korea	3.231
Russia	3.277
Israel	3.94

APPENDIX F POSITIVE PEACE INDEX INDICATORS

TABLE F.1 POSITIVE PEACE PILLARS AND INDICATORS

The Positive Peace Index (PPI) measures the level of Positive Peace in 162 countries from 2005 to 2015. The index has been constructed based on IEP's statistical analysis of over 4,700 variable to identify the attitudes, institutions and structures characteristic of the world's most peaceful countries. Table F.1 gives the indicators used for the overall PPI score and each of the eight Pillars of Positive Peace.

POSITIVE PEACE FACTORS	INDICATOR	DESCRIPTION	SOURCE
Well-Functioning Government	Democratic political culture	Measures whether the electoral process, civil liberties, functioning of government, political participation and culture support secular democracy.	EIU
	Judicial independence	Measures the extent to which the judiciary is independent from influences of members of government, citizen or firms.	WEF
	Revenue collection and service delivery	Measures the efficiency of the national tax system and the territorial coverage of public services and utilities.	IPD
Sound Business Environment	Ease of Doing Business Index	Measures the degree to which the regulatory environment is more conducive to the starting and operation of a local firm.	World Bank
	Index of Economic Freedom	Measures individual freedoms to and protection of freedoms to work, produce, consume, and invest unconstrained by the state.	Heritage Foundation
	GDP per capita	GDP per capita	World Bank
	Factionalised elites	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fund for Peace
Low Levels of Corruption	Corruption Perceptions Index	Scores countries based on how corrupt the public sector is perceived to be.	Transparency International
	Control of corruption	Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption.	World Bank
High Levels of Human Capital	Secondary school enrolment	The ratio of children of official school age who are enrolled in school to the population of the corresponding official school age.	World Bank
	Scientific publications	Number of scientific publications per 100,000 people.	World Bank, IEP calculation
	Youth Development Index	YDI measures the status of 15-29 year-olds in according to five key domains: Education, Health and Well-being, Employment, Civic Participation and Political Participation.	Commonwealth Secreteriat
	Freedom of the Press Index	A composite measure of the degree of print, broadcast, and internet freedom.	Freedom House
Free flow of information	Mobile phone subscription rate	Number of mobile phone subscriptions per 100 inhabitants.	ITU
	World Press Freedom Index	Ranks countries based on media pluralism and independence, respect for the safety and freedom of journalists, and the legislative, institutional and infrastructural environment in which the media operate.	Reporters Without Borders
	Hostility to foreigners	Measures social attitudes toward foreigners and private property.	EIU
Good Relations with Neighbours	Number of visitors	Number of visitors as per cent of the domestic population.	EIU
	Regional integration	Measures the extent of a nation's trade-based integration with other states.	EIU
Equitable Distribution of Resources Acceptance of the Rights of Others	Inequality-adjusted life expectancy	The HDI life expectancy index adjusted for inequality scores countries based on both average life expectancy and the degree of inequality in life expectance between groups.	UNDP HDI
	Social mobility	Measures the potential for upward social mobility based on the degree to which either merit or social networks determine an individual's success.	IDP
	Poverty gap	The mean shortfall from the poverty line at \$2 per day PPP (counting the nonpoor as having zero shortfall), expressed as a % of the poverty line.	World Bank
	Empowerment Index	An additive index using indicators of freedom of movement, freedom of speech, workers' rights, political participation, and freedom of religion.	CIRI
	Group grievance rating	Measures the extent and severity of grievances between groups in society, including religious, ethnic, sectarian and political discrimination and division.	Fund For Peace
	Gender Inequality Index	The Gender Inequality Index (GII) reflects women's disadvantage in three dimensions: reproductive health, empowerment and the labour market.	UNDP HDI

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Section 3 Economic Impact of Violence

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NOTES

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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 and 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 and 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 and 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 and 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.



2015 Positive Peace Report

Institute for Economics and Peace, Oct 2015

This report introduces new thinking and evidence about Positive Peace. It includes the Positive Peace Index, which measures Positive Peace in 162 countries, covering 99 per cent of the world's population.



Radical Realism Institute for Economics and Peace, Sept 2015

Twelve interviews with peacebuilders on developing the attitudes, institutions and structures of Positive Peace in Mexico.



2015 Global Peace Index

Institute for Economics and Peace, June 2015

A statistical analysis of the state of peace in 162 countries and an assessment of the attitudes, structures and institutions that sustain peaceful societies.





Institute for Economics and Peace, May 2015

The relationship between peace and corruption is statistically significant, as corruption is a leading indicator of peace.



2015 Mexico Peace Index Institute for Economics and Peace, Mar 2014

The Mexico Peace Index measures the state of peace in all 32 Mexican states analysing trends and drivers of peace over the last decade.



2014 Global Terrorism Index Report Institute for Economics and Peace, Nov 2014

The 2014 Global Terrorism Index Report analyses the impact of terrorism in 162 countries and identifies the social, economic and political factors associated with it.

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