

POSITIVE PEACE REPORT

2016



**A COMPILATION OF THE LEADING RESEARCH
ON POSITIVE PEACE AND RESILIENCE**

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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.

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

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

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WHY POSITIVE PEACE IS TRANSFORMATIONAL

Humanity is now facing unprecedented challenges. Some of the most urgent of these are climate change, decreasing biodiversity, increasing migration and over-population. All of these issues are global in nature and transcend national boundaries. These issues call for international cooperation on a scale unparalleled in history.

Furthermore, the sources of these challenges are multidimensional and increasingly complex. For these reasons, finding solutions requires fundamentally new ways of thinking.

Peace is an essential prerequisite to resolve these challenges, because 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 required to help address them.

Without an understanding of the systemic nature of peace and the factors that support it, it is impossible to determine what policies actually work and what programmes need to be implemented to support them. Humanity needs new paradigms to shift the deadlock in our thinking and the combination of Positive Peace and systems thinking provides a factual framework that describes our interdependence and an approach from which humanity's potential can flourish.

Positive Peace is transformational in that it is a cross-cutting facilitator for improving 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 societal characteristics that are considered desirable, including better economic outcomes, measures of wellbeing, levels of gender equality and environmental performance. In this way, Positive Peace can be thought of as creating 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 violence is different than the study of peace.

Systems thinking originated in the study of organisms, but can be extended into sociology and also into countries or nation states. When combined with Positive Peace, systems thinking provides new ways of conceptualising and explaining societal change. In systems thinking, the system is more than the sum of its parts and therefore cannot be understood merely by breaking it down. This contradicts the notion of linear causality in understanding the way a country operates and opens up new fields to understand international relations and how to develop the nation state. This is why it is important to look at the multidimensional concept of Positive Peace as a holistic, systemic framework.

Systems are also self-regulating and self-modifying, and each system is encased within or encases other systems upon which it is interdependent. Understanding interdependence is essential to meet the global challenges of our age.

Societies, like organisms, have intent; different societies have different intents and will therefore react differently to the same stimulus. Countries also have encoded norms that aim to regulate not only what is in the system but also responses to what comes into it, creating what is known as mutual feedback loops. This can be observed in many societal processes, such as when a government stimulates the economy in responses to a drop in GDP or applies more policing resources to a rise in crime. Tipping points also occur within systems because of lagged and non-linear relationships, again contradicting simple ideas of causality. The Institute for Economics and Peace (IEP)'s research has found effects of tipping points in relation to peace and corruption and peace and per capita income, to name some. In the past, societies may have been understood through causality, but in the future embodying these more holistic approaches will leap-frog our current understanding.

Seen in this light, Positive Peace and systems thinking can be used as an overarching framework for understanding and achieving progress not only in the level of global peacefulness, but in the many other interrelated areas, including better economic progress and social advancement.

EXECUTIVE SUMMARY

This report introduces new thinking and evidence about Positive Peace. Positive Peace is defined as the attitudes, institutions and structures that create and sustain peaceful societies. These same factors also lead to many other positive outcomes that support an optimum environment in which human potential can flourish.

Without a better understanding of how societies operate, it will not be possible to solve humanity's major challenges. Positive Peace combined with systems thinking provides a unique framework from which to better manage human affairs.

The 2016 Positive Peace Report presents IEP's latest research on the *attitudes, institutions and structures* that create and sustain peaceful societies. This report places a special emphasis on the systemic nature of peace, societal development and resilience, pulling together IEP's best work to-date on systems thinking and Positive Peace and how it may operate at the country level to affect change. New research also supports how the factors of Positive Peace allow societies to better withstand and adapt to change when confronted with major shocks or disasters.

Positive Peace provides a new way of conceptualising development as the emphasis is placed on what creates a thriving society, and as such is applicable to developed societies as well as developing societies. Through placing the emphasis on the positive, it reframes our conceptualisation towards what works. Positive Peace not only creates peace, but also creates the optimal conditions for thriving economies, better inclusion, more resilience and societies that are more capable of adapting to change.

Violence and conflict continue to thwart efforts to meet humanitarian goals and tackle major challenges, such as climate change or poverty reduction. In 2015, the economic impact of containing or dealing with the consequences of violence was 13.3 per cent of the world GDP, yet in comparison far less is devoted to supporting the underlying conditions that lead to peace. 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. As mentioned, Positive Peace provides the appropriate environment for many other things that are considered important, such as better economic performance, more inclusive societies, including gender equality, and better measures on ecological sustainability.

This report presents IEP's latest research, which conceptualises systems thinking and its relationship to Positive Peace. Many of the challenges facing humanity are fundamentally global in nature, such as climate change, decreasing biodiversity, continued economic instability and increasing migration. All of these challenges are interconnected and multifaceted, requiring new ways of conceptualising the relations between countries and the larger systems upon which humanity depends. **Section 1** of this report contains an analysis of systems thinking and how it applies to nation states, describing concepts of national intent, their encoded norms, national homeostasis, self-modification and mutual feedback loops to provide a new interdependent framework and more holistic approach to understanding peace and development. This work is still in its early stages of development and will evolve rapidly in coming years.

Section 2 provides an analysis of countries' resilience to shocks and how levels of Positive Peace affect the likelihood and impact of shocks and hazards. Countries with high Positive Peace are more likely to maintain their stability and adapt and recover from both internal and external shocks. Low Positive Peace systems are more likely to generate internal shocks, with 84 per cent of major political shocks occurring in these countries. Similarly, there are 13 times more lives lost from natural disasters in nations with low Positive Peace as opposed to those with high Positive Peace, a disproportionately high number when compared to the distribution of incidents.

Countries with stronger Positive Peace have restorative capacities and as such are more resilient in the face of civil resistance campaigns. Movements tend to be smaller, exist for a shorter period, have more moderate aims, are more likely to achieve their goals and are far less violent. The

differences between countries can be striking: 91 per cent of all civil resistant campaigns that were primarily violent have been waged in countries with weaker Positive Peace.

Section 3 of this report summarizes the findings from the 2015 Positive Peace Index. For the first time in 2015, IEP was able to produce a full time series of Positive Peace data from 2005 to 2015, allowing for a more nuanced analysis of changes in the attitudes, institutions and structures that underpin peaceful societies. Globally, Positive Peace has been improving since 2005, with 118 of the 162 countries ranked in the PPI, or 73 per cent, having improved over this period. Six of the eight domains of Positive Peace have also improved, while North America is the only region in the world that did not have an improvement in Positive Peace. In fact the US is the country which had the third largest drop in Positive Peace.

Positive Peace consists of eight domains, or Pillars, discussed in **Section 4**. These domains work interdependently. As an example, *high levels of human capital* can act as a driver of economic growth, while a *strong business environment* can be a driver of improved education. Analysis of corruption demonstrates that 80 per cent of countries scoring poorly in *low levels of corruption* also score poorly in *high levels of human capital*, again highlighting the interconnected nature of the Pillars.

The shift in global development circles to understanding fragility, resilience and peace is underscored by the inclusion of Goal 16, the peace, justice and governance goal, in the Sustainable Development Goals (SDGs). However, there is little prevailing guidance about how to conceptualise, measure and ultimately support the key factors that develop peace. The research presented in this report is aimed at helping to address this need. When comparing the factors of Positive Peace to all the SDGs, it is clear that two domains are under-represented in the SDGs: *low levels of corruption* and the *free flow of information*. These two areas are important to achieving high levels of peace.

The report offers two recommendations for enhancing Positive Peace. A systems view of Positive Peace appropriately recognizes complexity, but that complexity itself can make entry points for change seem difficult. IEP has identified two approaches catalysing systemic change in complex systems – one which emphasizes depth and one which emphasizes breadth. The first approach is to focus on society's weakest Pillar. This approach is illustrated by a short case study of post-conflict improvements in both Negative and Positive Peace in Nepal, where improvements in the *free flow of information* lead the way.

The second approach involves stimulating the entire system. This approach looks at each of the eight Pillars of Positive Peace with an action for each Pillar which is substantial, can be achieved in the current political environment and will have impact within a reasonable amount of time.

Each Pillar of Positive Peace represents a complex set of social dynamics. Overhauling all aspects of corruption, for example, or governance in a county at one time will never be politically feasible. Through stimulating the whole system it is possible start to or enhance a virtuous cycle, whereby conditions act in a reinforcing manner, continually improving each other. IEP has piloted this approach in Zimbabwe, and **Section 5** of this report includes a summary of the Positive Peace workshop held there by the National Peace Trust with support from IEP. Government, civil society and business representatives worked together to identify practical efforts within each Pillar and these proposed actions are briefly summarized in the concluding section on building Positive Peace.

KEY FINDINGS

- Positive Peace has been improving steadily since 2005. One-hundred and eighteen of 162 countries ranked in the Positive Peace index, or 73 per cent, have shown an improvement to 2015.
- Twice as many high Positive Peace countries improved in peace between 2008 and 2016 when compared to countries with low Positive Peace.
- The best-performing countries in the Positive Peace Index have recorded smaller variations in changes in peace.
- Democracies consistently have the strongest level of Positive Peace and along with high-income countries, dominate the top 30 countries in the Positive Peace index.
- Ninety-one per cent of all violent resistance movements took place in countries with low levels of Positive Peace.
- The United States and over half of the countries in Europe experienced a deterioration in their levels of Positive Peace, mainly due to increases in perceptions of corruption and limits to press freedoms.
- Eighty-four per cent of major political shocks occurred in low Positive Peace countries.
- Numbers of lives lost from natural disasters between 2005 and 2015 were 13 times larger in low Positive Peace countries than in high Positive Peace countries, a disproportionately high ratio when compared to the distribution of incidents.
- Countries with high levels of Positive Peace have fewer civil resistance campaigns, campaigns are less violent, more limited in their goals and more likely to achieve some of their aims.
- The Positive Peace factor that deteriorated the most is *low levels of corruption*, with 99 countries recording a deterioration compared to 62 that improved between 2005 and 2015.
- The largest Global Peace Index deteriorations since 2008 occurred in countries with a deficit in the civil and political domains of Positive Peace. Countries with deficits in the economic and social domains have experienced deteriorations of a lesser magnitude.
- Poland, Saudi Arabia, Uruguay, Nepal and the United Arab Emirates recorded the largest improvements. Each improved by at least seven per cent.
- Hungary, Greece, the United States and Iceland recorded the largest deteriorations. All by more than five per cent.
- Nearly one third of the 162 countries had Positive Peace scores higher than their actual peace levels, indicating a strong potential to become more peaceful.
- Many low-income countries have Positive Peace scores lower than their actual peace levels, indicating a potential for peace to deteriorate. The majority of these countries are in sub-Saharan Africa.

POSITIVE PEACE & SYSTEMS THINKING

WHAT IS POSITIVE PEACE?

NEGATIVE PEACE

... is the absence of violence or fear of violence

POSITIVE PEACE

... is the presence of 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 which 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 have a statistically significant association with Negative Peace.
- 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's capabilities to build and maintain peace. It also provides a measure for policymakers, researchers and corporations to use for effective monitoring and evaluation.
- Positive Peace can be used as the basis for empirically measuring a country's resilience, or 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.
- There is a close relationship between Positive Peace and violence as measured by the internal peace score of the GPI.

POSITIVE PEACE FACTORS

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.

THE PILLARS OF PEACE



Sound business environment



Good relations with neighbours



High levels of human capital



Acceptance of the rights of others



Low levels of corruption



Well functioning government



Free flow of information



Equitable distribution of resources

UNDERSTANDING POSITIVE PEACE

Positive Peace represents an ambitious and forward looking conceptualisation of peace that moves beyond conflict and violence. Well-developed Positive Peace represents the capacity for a society to thrive. It creates better economic and societal outcomes as well as lessening the number of grievances and the levels of violence associated with them.

The distinguishing feature of IEP's work on Positive Peace is that it is empirically derived through quantitative analysis. There are few known empirical and quantitative 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 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.

“ Conflict provides the opportunity to negotiate or renegotiate to improve mutual outcomes, and as such can be constructive providing it is nonviolent.

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. Conflict provides the opportunity to negotiate or renegotiate to improve mutual outcomes, and as such can be constructive providing it is nonviolent.¹ Most of the time individuals and groups can resolve their differences without resorting to violence. There are aspects of society that enable this, such as attitudes that discourage violence or legal structures designed to reconcile grievances. High levels of Positive Peace facilitate change and adaptation to new dynamics.

BOX 1 MEASURING PEACE: THE POSITIVE PEACE INDEX & THE GLOBAL PEACE INDEX

The Global Peace Index (GPI), produced annually by IEP, ranks 163 independent states and territories according to their level of peacefulness and stands as the world's leading measure of global peacefulness. The GPI is composed of 23 qualitative and quantitative indicators from highly respected sources and now ranks 163 independent states and territories, covering 99.7 per cent of the world's population. The index gauges global peace using three broad themes: the level of safety and security in society; the extent of domestic or international conflict; and the degree of militarisation. For the full 2016 report and to explore the interactive map of global peace, visit www.visionofhumanity.org.

The Positive Peace Index (PPI) measures the level of Positive Peace in 162 countries. 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, as measured by the GPI. For more information and the latest results of the PPI, refer to Section 3 of this report.

POSITIVE PEACE FACTORS

IEP has identified eight key domains, or Pillars, that comprise Positive Peace:



Well-Functioning Government

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



Sound Business Environment

The strength of economic conditions as well as the formal institutions that support the operation of the private sector and determine the soundness of the business environment. Business competitiveness and economic productivity are both associated with the most peaceful countries, as is the presence of regulatory systems that are conducive to business operations.



Equitable Distribution of Resources

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



Acceptance of the Rights of Others

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



Good Relations with Neighbours

Peaceful relations with other countries are as important as good relations between groups within a country. Countries with positive external relations are more peaceful and tend to be more politically stable, have better functioning governments, are regionally integrated and have lower levels of organised internal conflict. This factor is also beneficial for business and supports foreign direct investment, tourism and human capital inflows.



Free Flow of Information

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



High levels of Human Capital

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



Low levels of Corruption

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

This section describes how Positive Peace can instruct us to build and reinforce the *attitudes, institutions and structures* that either pre-empt conflict or help societies channel disagreements productively. Findings from the Global Partnership for the Prevention of Armed Conflict's (GPPAC) review of civil society and conflict conclude that, "When tensions escalate into armed conflict, it almost always reflects the break down or underdevelopment of routine systems for managing competing interests and values and the failure to satisfy basic human needs."² Thus, the Positive Peace framework draws out the aspects of societies that prevent these breakdowns, based on their statistical association with the absence of violence.

The pillars on page 10 capture the *attitudes, institutions and structures* present in the world's most peaceful societies. 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.

IEP does not attempt to determine the specific *attitudes, institutions and structures* necessary for Positive Peace, as these will very much be dependent on cultural norms and specific situations. What is appropriate in one country may not be appropriate in another. The ways in which *high levels of human capital* or *acceptance of the rights of others*, for example, manifest in each society will be unique to some degree. However, the composite scores for each domain capture the dynamics at play in each society. The indicators chosen to measure each domain are based on the factors with the strongest statistically significant relationship with peacefulness and as such form both a holistic and empiric framework.³

BOX 2 UNDERSTANDING POSITIVE PEACE: KEY TERMS

› Positive Peace

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

› Negative Peace

the absence of direct violence or the fear of violence.

› Direct violence

the intentional use of physical force that results in injury, death, psychological harm or deprivation.

› Conflict

a disagreement between two or more individuals or groups. Conflict can either be nonviolent or violent, and, depending on how it is dealt with, can be either constructive or destructive.

› Resilience

the ability to absorb and recover from shocks. High levels of Positive Peace enhance resilience in situations like natural disasters or economic shocks. See page 21 for more discussion on Positive Peace and resilience.

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 by the institutions and structures that society creates.

INSTITUTIONS

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

STRUCTURES

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

FIGURE 1 THE PILLARS OF POSITIVE PEACE

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



CHARACTERISTICS OF POSITIVE PEACE

- **Systemic and complex**
It is complex; progress occurs in non-linear ways and can be better understood through systems thinking.
- **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 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 the possibility 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 where development goals are more likely to be achieved.

HOW QUICKLY DOES POSITIVE PEACE CHANGE?

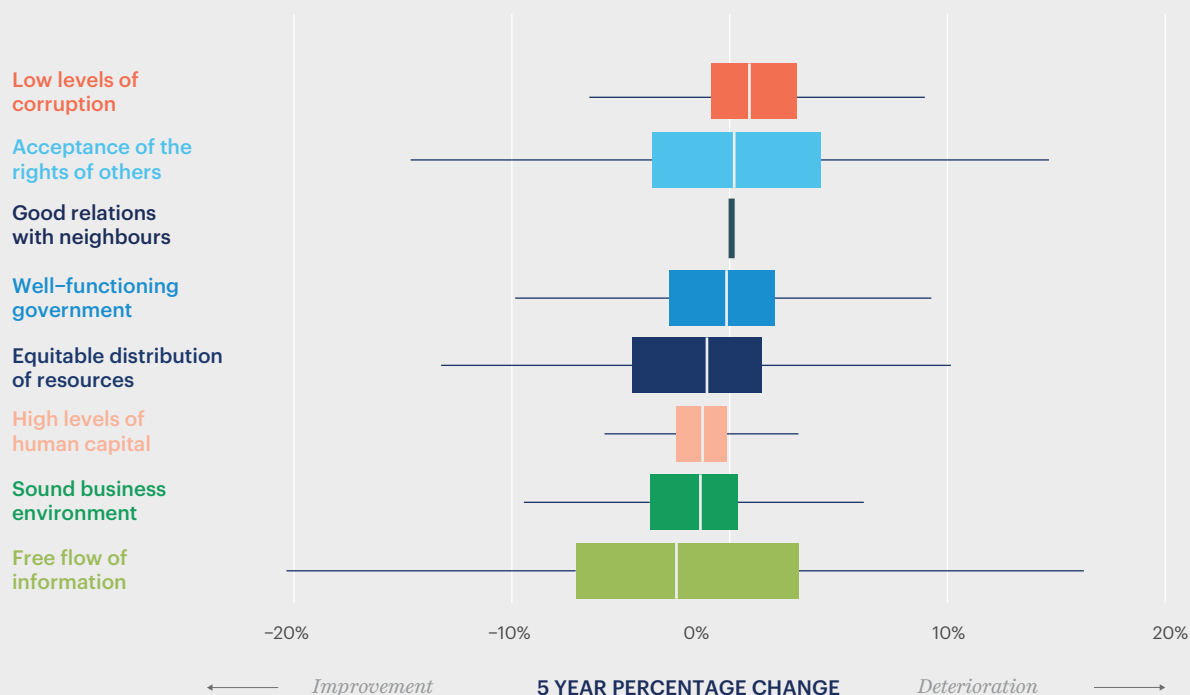
Over the last decade, overall Positive Peace scores have changed slowly within nearly all countries measured. There are, however, cases where levels of Positive Peace have improved quickly. For example, Albania, Bulgaria, Croatia, Estonia, Latvia and Slovakia improved in Positive Peace by between 17 and 25 per cent in the second half of the decade after the fall of the Soviet Union in 1991. There are also cases where particular Positive Peace factors have changed quickly. Positive Peace factors do not change at the same rate, with some changing much faster than others. Figure 2 highlights country level changes. *Acceptance of the rights of others* and *free flow of information* are the pillars that have changed the most.

Furthermore, countries that do manage to make substantial improvements in Positive Peace reap other benefits as well. Figure 3 shows that countries that have improved in Positive Peace since 1996, on average, have had higher GDP per capita growth rates than those that have deteriorated.⁷

“ Progress occurs in non-linear ways and can be better understood through systems thinking.

FIGURE 2 FIVE-YEAR PERCENTAGE CHANGE IN THE FACTORS OF POSITIVE PEACE

Factors of Positive Peace change at different rates. *High levels of human capital* and *good relations with neighbours* shows the least variance over five year time frames. *Acceptance of the rights of others* and *free flow of information* on the other hand can have big movements in the same time span.



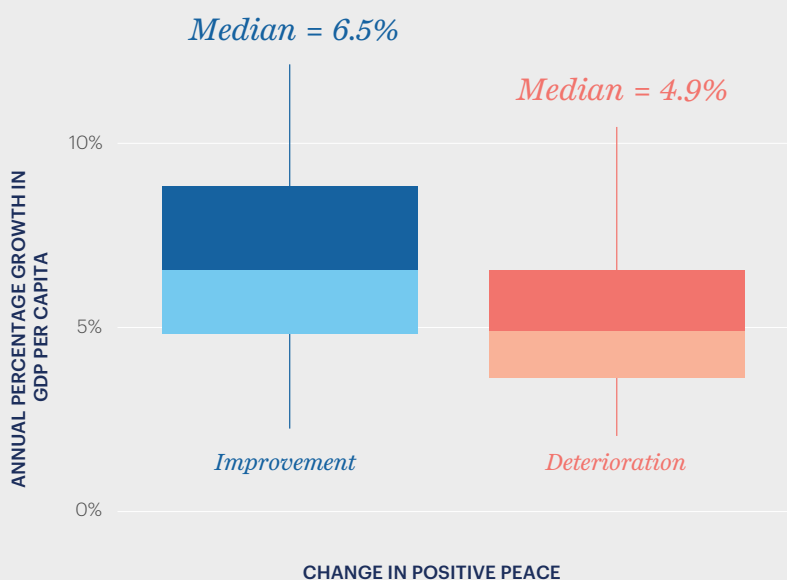
Source: IEP

NOTE: Coloured boxes represent the range of the second and third quartile of observations. Larger boxes indicate greater variation among change in country scores. This chart helps to identify the pillars that are likely to show large improvements or deteriorations versus those that move more slowly.

FIGURE 3

POSITIVE PEACE AND GROWTH IN GDP PER CAPITA, 1996-2003

Countries that improved in positive peace since 1996 have had larger GDP per capita growth than countries that have deteriorated.



Source: IEP

“

Positive Peace is associated with many development priorities, including strong economic growth and employment, environmental sustainability, greater food security, gender equality and improved access to water and energy resources.

POSITIVE PEACE, THE SDGs AND DEVELOPMENT

To determine how Positive Peace is associated with developmental outcomes other than peace, the PPI was compared to a large range of developmental variables. It was found that many developmental factors are closely correlated and empirically linked to Positive Peace.

Positive Peace is associated with many aspects that are priorities for the Sustainable Development Goals (SDGs), such as strong economic growth and employment, environmental sustainability, greater food security, gender equality and development objectives such as improving access to water and energy resources. Simply put, Positive Peace, as measured by the Positive Peace Index, correlates with many other measures of progress. Figure 4 shows that countries with stronger Positive Peace have progressed further in their achievement of the

Millennium Development Goals (MDGs). Table 1 gives the correlation coefficients between PPI scores and some of the most common development goals. Furthermore, table 2 maps the eight Positive Peace factors to the SDGs, which will replace the MDGs, and to the Peacebuilding and Statebuilding Goals (PSGs). This highlights the ongoing importance of Positive Peace in the post-2015 agenda.

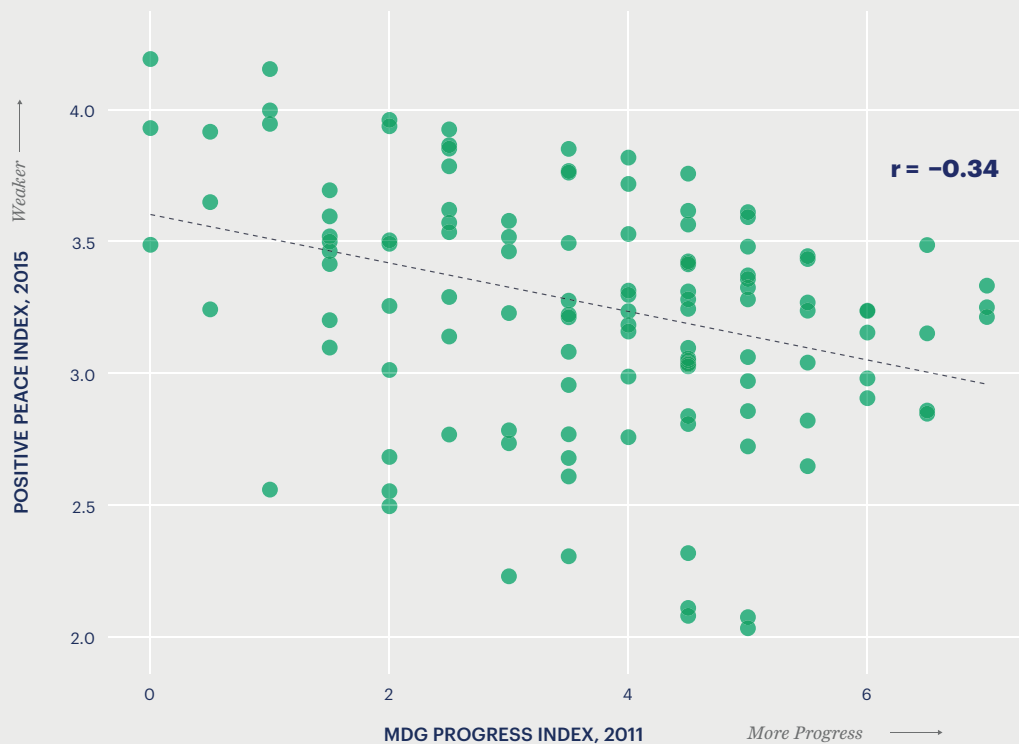
TABLE 1 CORRELATION TO COMMON DEVELOPMENT GOALS

There are many strong correlations between the PPI and other global measurements of development. This holds true also using subsets of the PPI.

SOURCE	INDEX	INDICATOR	PPI CORRELATION	SUBSET CORRELATION
ECONOMIST INTELLIGENCE UNIT	Global Food Security Index	Overall	-0.93	—
THE SOCIAL PROGRESS IMPERATIVE	Social Progress Index	Foundations of wellbeing	-0.83	-0.81
WORLD ECONOMIC FORUM	Global Competitiveness Report	Business sophistication	-0.79	-0.76
WORLD ECONOMIC FORUM	Global Competitiveness Report	Business impact of tuberculosis	-0.79	—
INTERNATIONAL INSTITUTE OF SOCIAL SCIENCES	Indices of Social Development	Gender equality	-0.7	-0.69
YALE CENTER FOR ENVIRONMENTAL LAW AND POLICY	Environmental Performance Index	Overall	-0.7	—
SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK	World Happiness Index	Overall	-0.67	—
THE SOCIAL PROGRESS IMPERATIVE	Social Progress Index	Rural urban access to improved water source	-0.64	—
MILLENNIUM DEVELOPMENT GOALS	—	Proportion of the population using improved sanitation facilities, urban	-0.62	—

FIGURE 4 POSITIVE PEACE AND THE MILLENNIUM DEVELOPMENT GOALS

Higher levels of Positive Peace correlate with the achievement of a country's MDGs.



Source: Centre for Global Development, IEP

TABLE 2 POSITIVE PEACE, THE SUSTAINABLE DEVELOPMENT GOALS (SDGs) AND THE PEACEBUILDING AND STATEBUILDING GOALS (PSGs)

Positive Peace factors measured by IEP cover all of the proposed SDGs as well the PSGs.

GOALS	ACCEPTANCE OF THE RIGHTS OF OTHERS	EQUITABLE DISTRIBUTION OF RESOURCES	FREE FLOW OF INFORMATION	GOOD RELATIONS WITH NEIGHBOURS	HIGH LEVEL OF HUMAN CAPITAL	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	WELL-FUNCTIONING GOVERNMENT
End poverty in all its forms everywhere		✓						
End hunger, achieve food security and improved nutrition and promote sustainable agriculture		✓					✓	
Ensure healthy lives and promote well-being for all at all ages	✓	✓			✓			✓
Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	✓	✓			✓			✓
Achieve gender equality and empower all women and girls	✓				✓			✓
Ensure availability and sustainable management of water and sanitation for all		✓			✓			✓
Ensure access to affordable, reliable, sustainable, and modern energy for all					✓		✓	
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	✓	✓	✓	✓	✓		✓	✓
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation					✓		✓	✓
Reduce inequality within and among countries	✓	✓		✓	✓			✓
Make cities and human settlements inclusive, safe, resilient and sustainable	✓	✓			✓			✓
Ensure sustainable consumption and production patterns					✓			✓
Take urgent action to combat climate change and its impacts		✓		✓	✓			✓
Conserve and sustainably use the oceans, seas and marine resources for sustainable development		✓						✓
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt		✓		✓				✓
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	✓	✓	✓	✓	✓	✓	✓	✓
Strengthen the means of implementation and revitalize the global partnership for sustainable development	✓			✓	✓		✓	✓
Economic foundations	✓	✓	✓	✓	✓		✓	✓
Justice	✓				✓	✓		✓
Legitimate politics	✓		✓			✓		✓
Revenues and services	✓	✓	✓	✓	✓		✓	✓
Security	✓			✓				✓

SYSTEMS THINKING: THE NATION STATE & POSITIVE PEACE

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 overall well-being.

The approach presented here is still in its early stages of development but aims to provide a fundamentally new framework for envisioning societies. There is a clear need to better understand how countries can make institutions more relevant to their citizens, be better able to adapt to global challenges, as well as be more certain about how to effectively increase economic wealth and human fulfillment. In an age when serious threats to humanity are posed by our interactions with the natural world through changes in the atmosphere, oceans and biodiversity, systems thinking can help us better understand our collective interdependence on these systems and the interdependence between nations.

Positive Peace is the framework developed by IEP that describes the factors associated with peaceful societies. It consists of eight domains that interact in multi-faceted ways, where the importance of each domain and direction of causality will vary, depending on individual circumstances. Systems thinking provides a mechanism with which to understand how Positive Peace operates and how to better apply it in developing policy.

Systems theory first originated while attempting to better understand the workings of organic organisms, such as cells or the human body. Through such studies, it became clear that merely understanding the individual characteristics of parts of a system was inadequate to describe a system as a whole, which functions as much more than the sum of its parts. When applied to the nation state, this approach offers alternatives to traditional or reductionist techniques of understanding change.

All systems are considered open, interacting with both the sub-systems within it, other similar systems and the super-system within which it is contained. The nation state is made up of many actors, units and organisations spanning the family, local communities and public and private sectors. As all of these operate both individually and interact with other institutions and organisations, each can be thought of as their own open system

There are four major properties associated with systems thinking:

1. The system 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.
4. 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. These 'systems-of-systems' adapt together.

within the nation state. Some examples are companies, families, unions, armies or public institutions. Similarly, nation states interact with other nations through trading relations, regional body membership, diplomatic exchanges or through war.

There is one clear distinction between organisms and societies. Organisms have very clear physical boundaries. The boundaries of societies are less clear and can be somewhat arbitrary.

However, the nation works well as a system. Most nations have a concept of self-identity, where citizens see themselves as belonging to it, it has control over its territory, and it can regulate and enforce laws.

Figure 5 illustrates different system levels that are relevant to the nation state. It shows that the nation state itself is made up of many sub-systems, including the individual, civil society and business communities. Scaling up the view, the nation state is a sub-system of the international community, in which it builds and maintains relationships with other nation states and international organisations. Finally, the international community forms a sub-system of the biosphere. It should be noted that any sub-system within the following diagram can interact with a super system at any level. For example, the individual can interact with the nation state, other nation states, the international community and the natural environment.

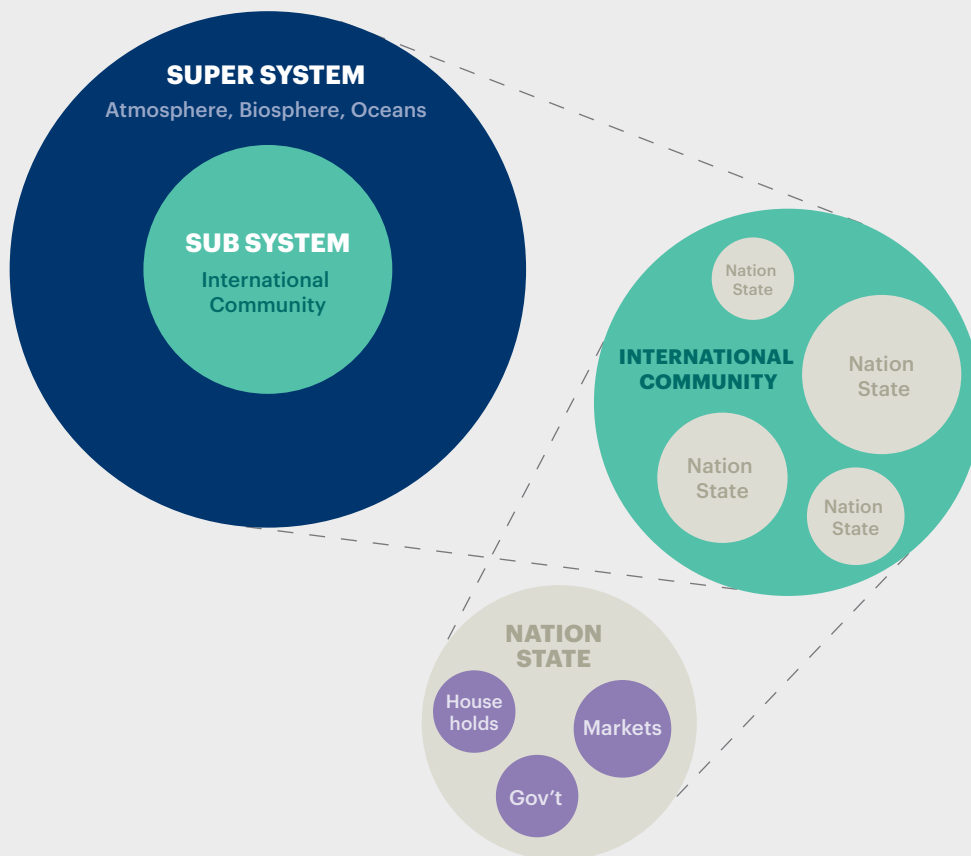
CAUSALITY

Inherent in our understanding of the world and the way we interact within it is the concept of causality. We take an action and expect an outcome. We are so attuned to this concept that it is built into our subconscious. We needn't think twice about each step we take when we walk down the street because of this built in understanding. In every-day life, physical actions have an effect that always results in the same outcome. The repeatability of certain scientific laws in terms of causality has enabled great strides in human progress, and is no better expressed than in the engineering marvels of today.

Assumptions of linear causality, however, imply that all outcomes can be tracked back in a linear fashion to an initial condition. The idea that things are predetermined by a set of initial conditions leaves no room for genuine novelty, standing in contradiction to our experience of reality. Linear causality is useful for explaining discrete and well-isolated physical phenomena but when multiple variables are involved it becomes increasingly difficult to truly understand the cause.

FIGURE 5 SYSTEMS AND THE NATION STATE

The nation state is both a super and sub system depending on the field of view. The smallest sub system can interact directly with the largest super system.



Source: IEP

The difficulty in applying linear causality to human beings, and by extension societies, is best explained through an example. In a conversation, linear causality would imply that the same words would have the same effect on whomever they are spoken to. However, this is clearly not the case. Take, for example, the words that are written here. Read by three different people, each could interpret them differently due to a number of factors, including their background knowledge, what they may think of the writer, or even their moods on the day. This will naturally affect their interpretation of the text and any subsequent actions related to the text.

This simple example clearly shows how individual human reactions can be unpredictable. The problem of linear causality is compounded when it is extended to social systems. In terms of the nation state, similar actions will result in very different outcomes in the various countries. Due to the differences in cultural norms, a speech given at a political rally in America and the same speech delivered in North Korea would garner different reactions.

To account for this, systems thinking offers a more complex view of causality through the mechanics of mutual feedback loops. In such a view, the separation between cause and effect is blurred. A mutual feedback loop is where two interacting entities modify each other through their feedback. A conversation or negotiation are good examples of mutual feedback loops. A further example can be observed in the relation between the free flow of information and a well-functioning government. Governments can regulate what information is available; however, information can also change governments. Both will respond to the action of the other. In systems thinking, a “cause” is seen not as an independent force but as an input to a system which then reacts, producing the effect. The difference in reaction is due to different encoded norms, or values by which society self-organises.

The concept of mutual feedback loops gives rise to the notion of causeless correlations and forms the basis of Positive Peace. Statistically significant correlations describe macro relationships, but the interactions within the dynamics of the system and the causal relationships will vary depending on the particular circumstances.

Furthermore, from a systems perspective, each “causal” factor does not need to be understood. Rather, multiple interactions that stimulate the system in a particular way negate the need to understand all the causes. Processes can also be mutually causal. For example, as corruption increases, business reacts, which in turn changes the way corruption is undertaken. Similarly, improved health services provide for a more productive workforce, which in turn provides the government with revenue and more money to invest in health.

Systems are also susceptible to tipping points in which a small action can change the structure of the whole system. The Arab Spring began when a Tunisian street vendor set himself alight

because he couldn't earn enough money to support himself. The relationship between corruption and peace follows a similar pattern. IEP research has found that increases in corruption have little effect until a certain point, after which small increases in corruption can result in large deteriorations in peace.

HOMEOSTASIS

Homeostasis is where the system aims to maintain a certain state or equilibrium. An example of this is the self-regulation of the body temperature of a mammal. If the body starts to overheat then it begins to sweat; if the body becomes cold then the metabolism will adjust. The system attempts to make small adjustments based on the way inputs are interpreted by its encoded norms. The same model of understanding can be applied to the nation state. Nation states maintain homeostasis through encoded norms.

Encoded norms create reactions to inputs. For example, the desire to seek food when hungry or the release of T-cells in response to infection are encoded reactions to inputs. For the nation state, as inflation increases, interest rates are raised to dampen demand and when an infectious disease outbreak occurs, medical resources are deployed to fix it. Systems have the ability to modify their behaviour based on the input that they receive from their environment.

One of the key differences between natural systems, such as the weather or the oceans, and biological systems is that biological systems have intent. Analogously, countries or nation states also have intent. For example, when Costa Rica abolished its military in 1948 the government at the time had a clear intent not to go to war. In contrast, other nations with large armies can use these in serving their perceived national interests.

Encoded norms are used to maintain homeostasis. They allow adjustments to be made to match performance with intent. These adjustments or actions can also affect the inputs. This, as mentioned, is called a mutual feedback loop. For instance, in a hypothetical event whereby two animals face off to fight over a scrap of food, the movement of the first animal serves as an input for the second, which in turn responds in a novel way. This alters the memory of the first and future responses will take this into account. In relation to a democratic nation state, this is analogous to the continuous interactions between two political parties or the discourse between the media and the public.

These feedback loops provide the system with knowledge of its performance or non-performance in relation to pre-established goals. Given this, it may be possible to analyse political systems through their feedback loops to better understand how “healthy” they may be. Measuring how much political organisations within a society respond to inputs may be one way of tracking this. Similarly, social values can also be viewed and better recognised by using the mutual feedback model through, for example, understanding what behaviours are shunned and what behaviours are encouraged within a society.

SELF-MODIFICATION

When unchecked or operating in isolation, feedback loops can lead to runaway growth or collapse. In cultures, their role can be constructive or destructive. However, feedback loops are fundamental in promoting self-modification, which allows the nation state to evolve to a higher level of complexity. The effect of mutual feedback loops can be the accumulation of capital, the intensification of poverty or the spread of either disease or new ideas.

If the external or internal factors of the nation state pressure the system into persistent imbalance, then a new level of complexity needs to be developed to maintain stability. In terms of organisms, an example might be genes that are switched on in response to changing environmental factors. Within the biosphere, it could be the mutation of species so their offspring are better adapted to their environment. For the nation, it may take the form of major shifts within the system. For example, increases in the population of a country place stress on agricultural resources. The nation state responds by implementing measures which improve the yield of the available land while building an export industry to produce

capital for the importation of food. Without new responses to over-population, the system would slowly degrade. Responses that are inadequate to meet changed needs can lead the system to collapse. Other examples that increase complexity for the nation state could include the movement from an authoritarian system to democracy. But adaptation is more likely when the nation has higher levels of Positive Peace, as demonstrated through the relationship between high Positive Peace and the reduced impact of shocks.

Figure 6 shows the process for homeostasis and self-modification. Encoded norms and intent set the goals for the nation state. The performance of the nation in relation to its intent and encoded norms are then assessed by receiving either internal or external input. When the nation is performing acceptably with respect to its goals and intent, the feedback loops make minor adjustments to maintain homeostasis. However, when the system's performance is persistently mismatched to its intent, then it can begin a process of self-modification. This process allows the system to adjust its encoded norms or intent so that it can adapt to the new conditions, increasing the complexity of its internal structure and adapting to the new

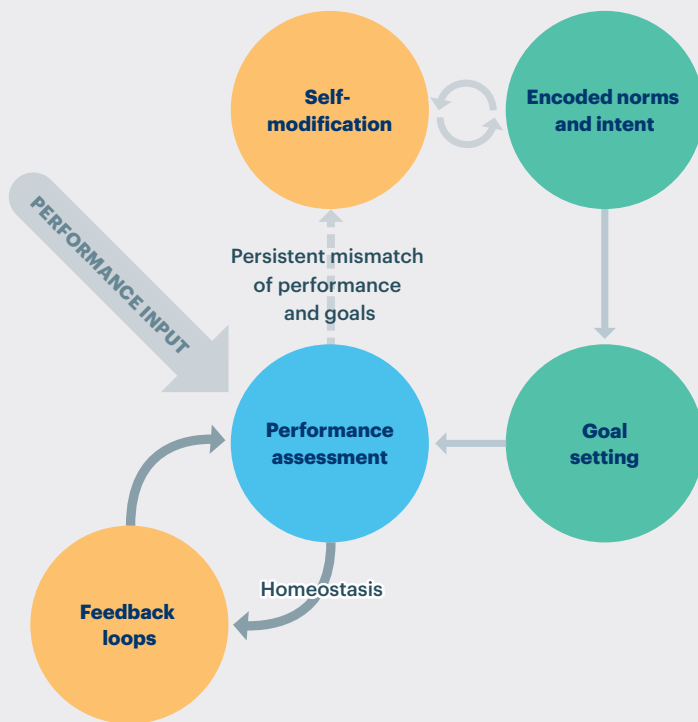
challenge. Though figure 6 depicts this process using a simple process diagram, in reality, these mechanisms are complex and dynamic.

The relationship between the nation state and other systems, such as the biosphere and atmosphere, is key to the future survival of humanity. If these systems become incapacitated the nation states also weaken. Similarly, the interdependence between nations, when viewed holistically, fundamentally alters the way they are seen to interact.

When applying systems thinking to the nation state it's important not to over-complicate the analysis. What is important is to view the system as a set of relationships rather than events and to understand the most important feedback loops. Positive Peace provides a framework from which to understand and approach change, moving from simple causality to holistic action.

FIGURE 6 HOMEOSTASIS AND SELF-MODIFICATION

Homeostasis occurs when there is balance between a system's internal goals and its performance. If performance persistently is not matched to a nation state's goals, it will self-modify and adapt. Once this change has occurred, the nation state will redefine its goals and attempt to maintain the new homeostasis.



Source: IEP

RESILIENCE & POSITIVE PEACE

KEY FINDINGS

- High Positive Peace countries are more likely to maintain stability, adapt and recover from shocks as they overcome challenges.
- Countries that are high in Positive peace are more likely to maintain high levels of peace.
- Twice as many high Positive Peace countries improved in peace between 2008 and 2016 when compared to countries with low Positive Peace.
- Eighty-four per cent of major political shocks occurred in low Positive Peace countries.
- Numbers of lives lost from natural disasters between 2005 and 2015 were 13 times larger in low Positive Peace countries than in high Positive Peace countries, a disproportionately high ratio when compared to the distribution of incidents.
- Countries with high levels of Positive Peace have fewer civil resistance movements and those campaigns tend to be less violent, more limited in their goals and more likely to achieve some of their aims.
- Ninety-one percent of all primarily violent resistance campaigns have been waged in countries with weaker Positive Peace.

Positive Peace not only provides a framework for assessing a country's potential for peace, but also a proxy for a country's ability to plan for and respond to change or shocks. A key reason for this is the mutually reinforcing nature of the societal structures underpinning the Pillars. For instance, when a country has strong formal institutions, such as a well-functioning legal system, in combination with strong informal institutions, such as cohesive communities, it will theoretically respond or adapt to specific shocks more effectively, as depicted in figure 7.

This section explains the key concepts associated with resilience and explores the interaction between Negative and Positive Peace. The term resilience is often used with two meanings:

1. the ability to withstand a shock and maintain the current social system, such as high levels of health, wealth, peace, etc., and/or
2. the characteristic of adaptability, whereby society changes for the better in response to a shock.

IEP's research has found an empirical link between Positive Peace and the characteristics that make social systems stabilising and adaptive. Additionally, it uses empirical data to show that large shocks tend to have more severe impacts in low Positive Peace countries than in high Positive Peace countries.

Showing this link empirically is complex. Firstly, proving causality from one event to another, in this case a shock that leads to a deterioration in peace, is difficult due to the systemic nature of societies. Few, if any, deteriorations in peace can be traced back to one source, as shown by the

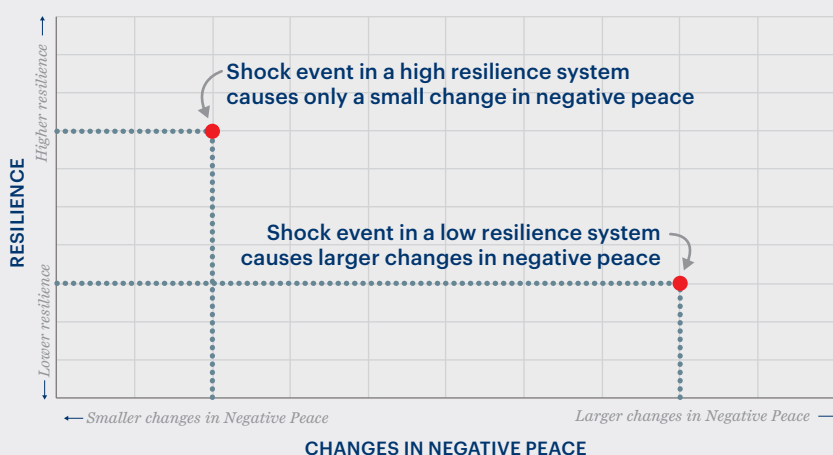
continued debate over the cause of World War I. Secondly, the impact of shocks are non-linear and have unpredictable effects on systems. While the impact of Hurricane Katrina was proportional to its size, the triggering of the Arab Spring from the self-immolation of Mohammad Bouazizi was not. Given these factors, the aim is not to predict when a shock will happen or how a country will fare after a shock, but how well equipped it is to rebound and adapt to the shocks it faces.

Resilience is generally understood to have two properties: stability and adaptability. The following research looks at these properties from three different perspectives.

1. The maintenance of homeostasis and the enablement of adaptability is shown through examining trends in the GPI.
2. It is demonstrated that the relative impact of exogenous shocks, such as natural disasters, in low Positive Peace countries tends to be larger.
3. It is shown that the types of endogenous shocks that can occur from within a nation tend to be more severe in countries where Positive Peace is weaker.

From these observations a taxonomy of shocks based on Positive Peace has been developed, detailed on page 30.

FIGURE 7
IMPACT OF AN IDENTICAL SHOCK ON A HIGH AND LOW RESILIENCE SYSTEM
An identical event may have starkly different impacts depending on the resilience of a system.



Source: IEP

POSITIVE PEACE & TRENDS IN THE GPI

This section presents research on the link between Positive Peace and a nation’s ability to, firstly, maintain homeostasis and, secondly, self-modify so as to adapt to the new environment. This section uses the Positive Peace Index (PPI), discussed in detail in Section 3 of this report, as a basis for the analysis. This index covers 162 countries and is built from 24 indicators across all eight Pillars of Positive Peace to measure the strength of the attitudes, institutions and structures that create and sustain peaceful societies.

Figure 9 graphs PPI and GPI internal scores for 162 countries in 2005 and 2008 respectively and visualizes the changes in GPI scores from 2008 to 2016.⁵ A country’s score in Positive Peace is represented on the vertical axis, while both the score and change in score in the GPI is represented on the horizontal axis. Blue arrows indicate an improvement in the GPI while red arrows indicate a deterioration in the GPI.

This figure clearly illustrates that system volatility increases as Positive Peace deteriorates. Countries with higher levels of Positive Peace have less variability in their changes in peace, resulting in a more predictable environment and demonstrating their resilience.

What is apparent is that countries that score well in the PPI also score well in the GPI and vice versa; this is partly due to the construction of the two indices. What is of interest is that countries that scored well in Positive Peace in 2005 had much smaller deteriorations in their GPI scores. It also highlights that the countries with the strongest Positive Peace scores in 2005 experienced smaller changes on average in their internal peace scores. What is also apparent is that there are far more countries that have experienced large deteriorations in their internal

peace than there are that improved. Of all countries that had a change in internal peace of greater than 10 per cent from 2008 to 2016, 72 per cent (34 out of 47) were deteriorations. Furthermore, the ten largest changes in internal peace from 2005 to 2016 were all deteriorations; the countries that deteriorated in peace did so by more than the countries that improved.

Large deteriorations can happen quickly but improvements happen more slowly.

Figure 8 further illustrates changes in the internal GPI score from 2008 to 2016 for three equal groups of countries based on PPI scores. This shows that countries with high levels of Positive Peace are by far the most stable, with around 13 per cent experiencing a deterioration in internal peace of greater than 10 per cent compared to 27 per cent for the group with the lowest levels of peace.

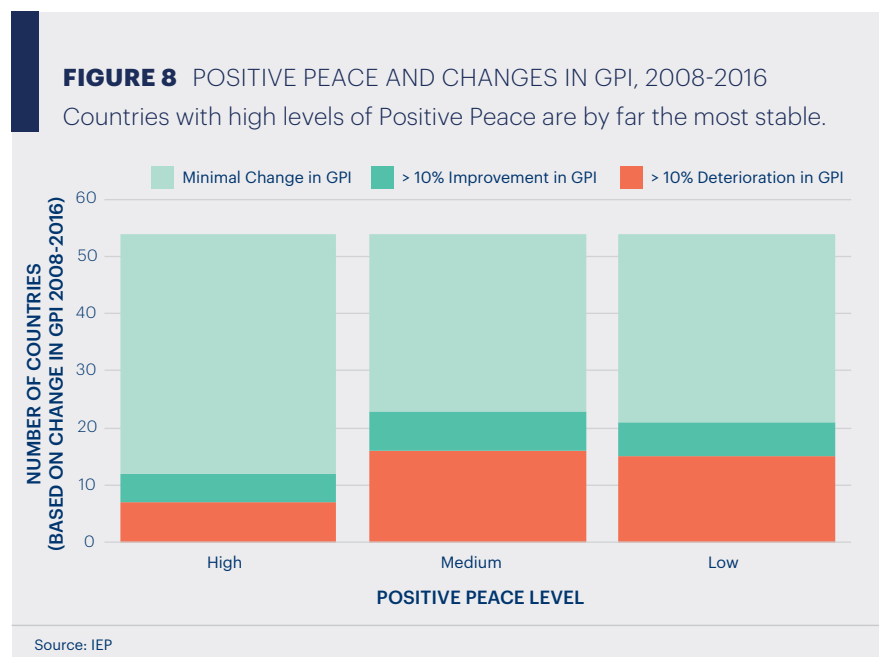
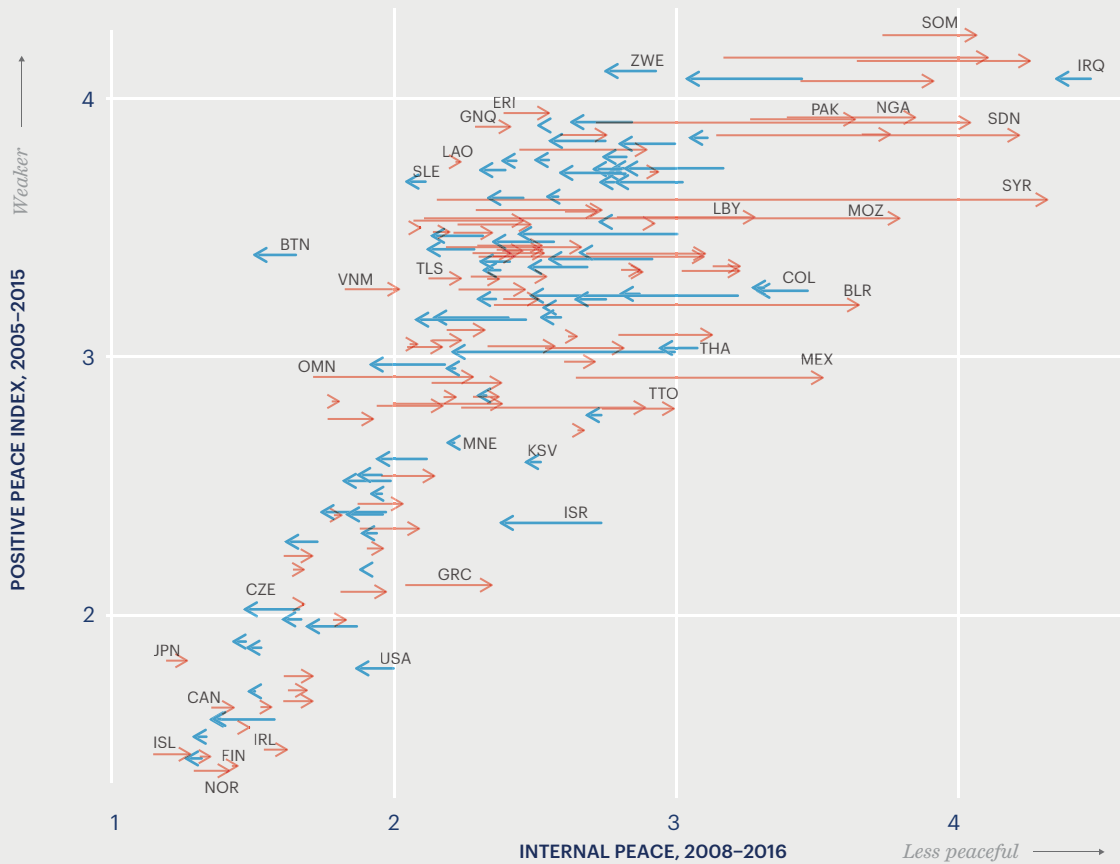


FIGURE 9 CHANGE IN INTERNAL GPI COMPARED TO POSITIVE PEACE

Countries with higher levels of Positive Peace have less variability in their changes in peace, resulting in a more predictable environment and demonstrating resilience. Arrows indicate changes in internal peace, with blue indicating an improvement and red indicating a deterioration.



Source: IEP

Figure 9 analyses changes in scores for internal peace, highlighting the size of improvements and deteriorations from 2008 to 2016 for four different country groupings.

These are:

1. all 162 countries
2. the 40 countries with the highest levels of Positive Peace in 2005
3. the middle 82 countries
4. the 40 countries with the lowest levels of Positive Peace in 2005

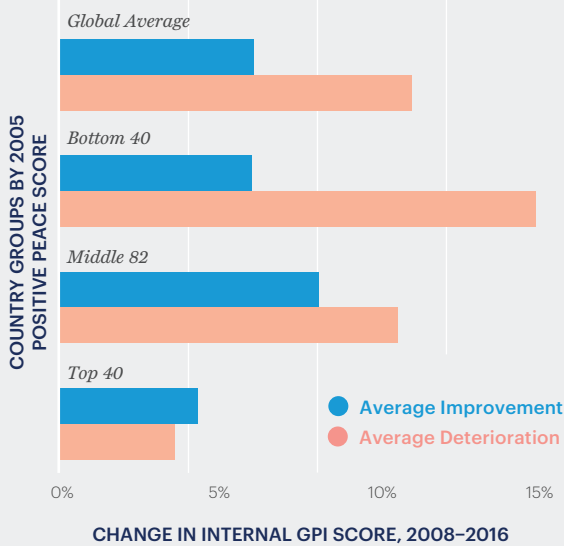
“ Countries that scored well in Positive Peace in 2005 had much smaller deteriorations in their GPI scores.

In most cases, deteriorations in peacefulness are larger than improvements. When looking at the world as a whole, the average deterioration is 44 per cent larger than the average improvement. However, in the 40 countries with the strongest PPI scores in 2005, improvements actually outpaced deteriorations. For high Positive Peace countries, the average improvement was 19 per cent larger than the average deterioration. Figure 10 reiterates the finding the high levels of Positive Peace support both high levels of and improvements in peacefulness.

FIGURE 10

IMPROVEMENTS AND DETERIORATIONS IN INTERNAL PEACE SCORES, 2008-2015

Only the countries with the highest levels of Positive Peace had larger improvements than deteriorations in their internal peace scores, on average.



Source: IEP

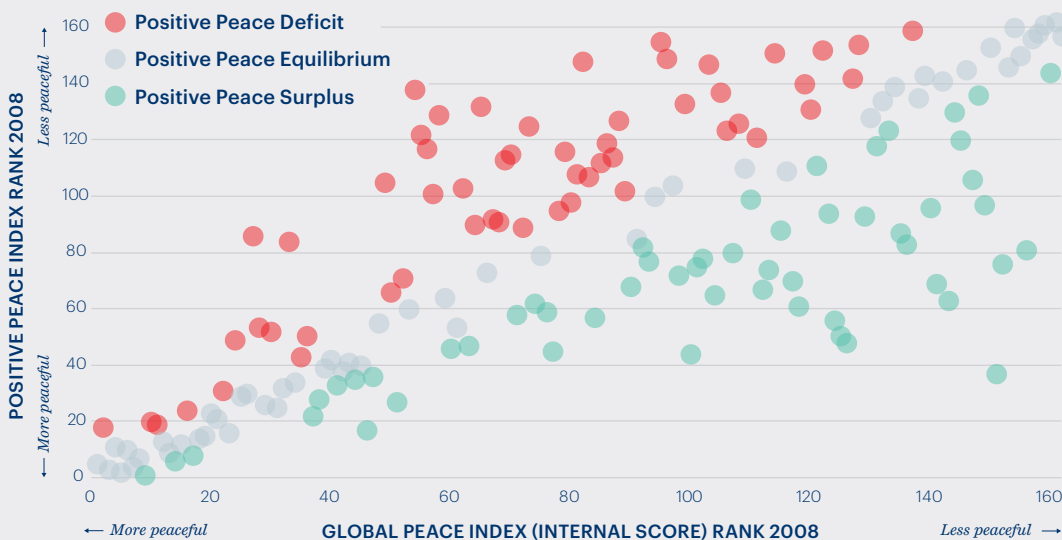
When a country ranks higher in the PPI than in the GPI it is said to have a Positive Peace surplus, indicating a high level of institutional capacity to support lower levels of violence. Conversely, countries that rank higher in the GPI than in the PPI will have a Positive Peace deficit and are comparatively more vulnerable to external shocks and run a higher risk of increased levels of violence.

On average, the majority of the world's Positive Peace deficit countries are in sub-Saharan Africa, with the peace gap being greatest for low-income countries. The highly peaceful countries are very tightly clustered in both the PPI and the GPI, demonstrating the resilience of these countries, most of which show only small changes in scores over the period.

Figure 11 shows changes in the GPI based on Positive Peace deficit or surplus. In this figure it can be seen that nations with a surplus of Positive Peace had the greatest number of countries *improving* in internal peace. Conversely, the group of countries with a deficit of Positive Peace had the fewest improvements. High levels of Positive Peace help countries reduce violence, whereas insufficient levels of Positive Peace leave societies weak in the *attitudes, institutions and structures* that prevent violence.

FIGURE 11 POSITIVE PEACE AND THE GPI, 2008

The Positive Peace deficit is a measure of the difference between the GPI and Positive Peace. The higher the GPI rank is in relation to Positive Peace, the more likely a deterioration in peace.



Source: IEP

Table 3 lists the 30 countries with the largest Positive Peace deficits in 2008. By 2016, 77 per cent (23 countries) deteriorated while 20 per cent (6 countries) improved. One country stayed the same. Furthermore 13 countries had deteriorations of larger than ten per cent while only two had improvements of a similar size.

Bhutan and Senegal are the two countries with large Positive Peace deficits that also recorded large percentage improvements. It is interesting to note that Bhutan already scored fairly well in the GPI, ranking 22 in internal peace in 2008. Bhutan's improvement is consistent with the fact that high levels of peace are steadier over time and the country has a unique set of social dynamics in play. It is also useful to note that scores closer to 1 require smaller changes to constitute larger percentage improvements.

“ Positive Peace must be strong in all domains to provide resilience and support high levels of internal peace.

However, the combination of an already poor level of peace and a large Positive Peace deficit can represent serious vulnerability for a country. This can be seen in the example of Libya, which had a similar Positive Peace deficit to Bhutan but started with a worse internal peace score and then faced the shocks of the Arab Spring and the outbreak of civil war in neighbouring Syria, among other factors. Libya had the second largest deterioration in internal peace measured by raw change in score after Syria.

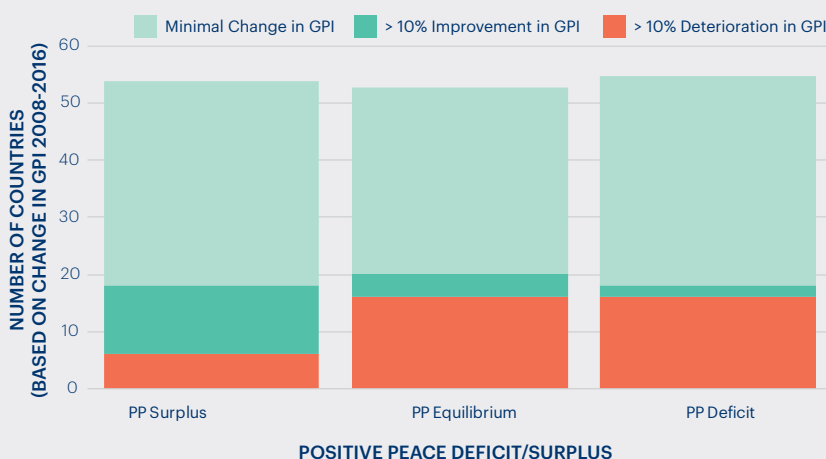
The most dramatic deteriorations in levels of violence typically occur in countries with very low Positive Peace scores. Countries with low levels of Positive Peace are more likely to see protest movements develop, for example, and these movements are more likely to become violent. IEP used principal components analysis (PCA) to identify the Positive Peace characteristics that are common among different groups of countries in order to help explain these deteriorations. PCA is a multivariate statistical technique used to determine the indicators that best explain the variance of the data. It is used here to explain the variation in changes in the internal GPI based on different Positive Peace factors.

An interesting trend emerges when looking at the differences in scores in the Positive Peace factors. There are many countries which perform equally well or poorly in all Positive Peace factors. Other countries perform well on some factors but poorly on others. The main characteristic of highly peaceful and highly resilient countries is their high performance in all domains of Positive Peace, which indicates two things:

Positive Peace must be strong in all domains to provide resilience and support high levels of internal peace.

Countries that have particular Positive Peace strengths and weaknesses can identify key opportunities for improvement as a pathway to higher levels of both Positive Peace and Negative Peace.

FIGURE 12
POSITIVE PEACE SURPLUS AND DEFICIT AND CHANGES IN THE GPI, 2008-2016
High Positive Peace enables countries to improve their levels of peace over time.



Source: IEP

TABLE 3**CHANGES IN PEACE FOR THE 30 LARGEST PEACE DEFICITS IN 2008**

Seventy seven per cent (23 out of 30) of Positive Peace deficit countries deteriorated from 2008 to 2016. A negative change in score indicates an improvement.

COUNTRY	PEACE DEFICIT (PPI RANK MINUS INTERNAL GPI RANK), 2008	RAW CHANGE IN INTERNAL PEACE SCORE, 2008 TO 2016	GROUP BY PERCENTAGE CHANGE
Laos	84	-0.013	Minimal change in GPI
Syria	71	1.042	> 10% deterioration in GPI
Mozambique	67	0.225	> 10% deterioration in GPI
Sierra Leone	67	0.052	Minimal change in GPI
Equatorial Guinea	66	0.101	> 10% deterioration in GPI
Madagascar	61	0.149	> 10% deterioration in GPI
Eritrea	60	0.051	Minimal change in GPI
Bhutan	59	-0.101	> 10% improvement in GPI
Libya	56	0.696	> 10% deterioration in GPI
Angola	53	0.022	Minimal change in GPI
Djibouti	52	0.164	> 10% deterioration in GPI
Viet Nam	51	0.133	> 10% deterioration in GPI
Tanzania	45	0.099	Minimal change in GPI
Rwanda	44	0.402	> 10% deterioration in GPI
Cameroon	44	0.154	> 10% deterioration in GPI
Zambia	44	0.059	Minimal change in GPI
Gabon	41	0.105	> 10% deterioration in GPI
Nepal	39	-0.015	Minimal change in GPI
Guinea	37	0.053	Minimal change in GPI
Malawi	37	0	No Change in GPI
Togo	34	-0.033	Minimal change in GPI
Burkina Faso	33	0.088	Minimal change in GPI
Bangladesh	32	-0.025	Minimal change in GPI
Yemen	30	0.279	> 10% deterioration in GPI
The Gambia	27	0.122	> 10% deterioration in GPI
Bolivia	27	0.066	Minimal change in GPI
Senegal	27	-0.105	> 10% improvement in GPI
China	26	0.208	> 10% deterioration in GPI
Niger	26	0.055	Minimal change in GPI
Romania	25.5	0.049	Minimal change in GPI

“

The combination of an already poor level of peace and a large Positive Peace deficit can represent serious vulnerability for a country.

“ When a country ranks higher in the PPI than in the GPI it is said to have a Positive Peace surplus, indicating a high level of institutional capacity to support lower levels of violence.

Variation in the PPI can, in some part, be explained by how a country scores in two domain groupings:

➤ Economic and Social Positive Peace Domains

- High levels of human capital
- Equitable distribution of resources

➤ Civil and Political Positive Peace Domains

- Free flow of information
- Good relations with neighbours

The largest deteriorations between 2008 and 2015 occurred in countries with a deficit in civil and political domains.

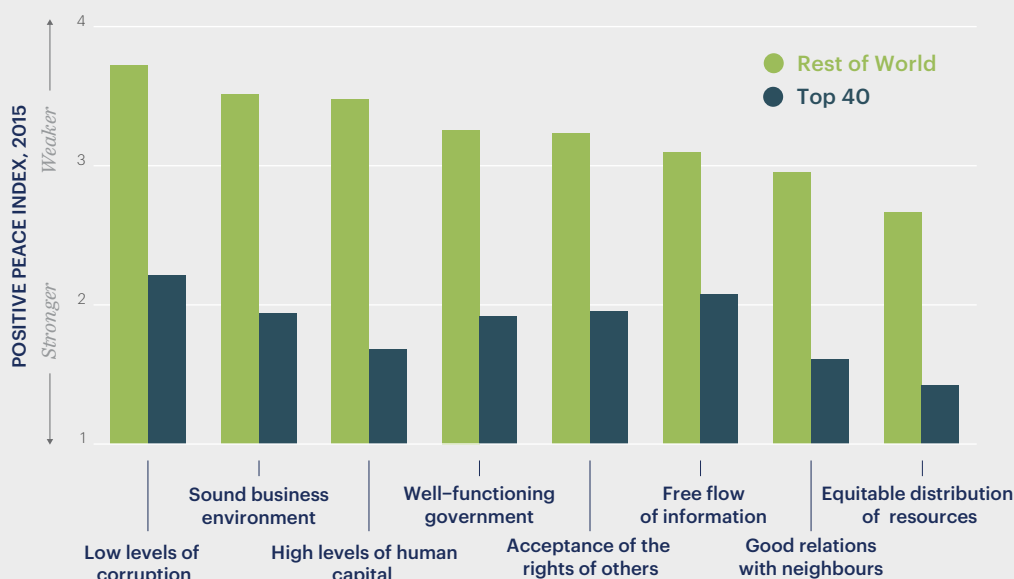
Countries with deficits in the economic and social domains have experienced deteriorations of a lesser magnitude. While many more years of data are needed to establish a general rule, this does highlight the importance of systems thinking when conceptualising Positive Peace.

The best-performing countries in the PPI have seen smaller variations in changes in peace on the whole. Figure 13 shows that the 40 countries with the highest overall PPI scores perform best, on average, in *equitable distribution of resources*, *good relations with neighbours* and *high levels of human capital* when compared to the global average.

The other key characteristic of highly peaceful countries is that they score consistently well on all eight factors of Positive Peace.

FIGURE 13 AVERAGE POSITIVE PEACE SCORES OF THE BEST PERFORMING COUNTRIES VS THE REST OF THE WORLD, 2015

The best 40 countries in the PPI on average score substantially better on all Pillars than the global average.



Source: IEP

POSITIVE PEACE & SHOCKS

The term ‘shock’ is used to describe a sudden change in some aspect of a system. In terms of the nation state, shocks are sudden onset events that have potential to “cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, or other types of harm or loss.”⁵

As explained on page 30, there are three mechanisms that a country uses to stabilise and evolve:

1. Homeostasis is a persistent state of self-regulating and balanced stability.
2. Feedback loops are used to restore balance when homeostasis becomes imbalanced, threatened by forces from inside or outside the system.
3. Self-modification is when the system modifies itself to accommodate new situations and challenges. This tends to increase complexity in the system, often allowing the system to become more adaptive.

Shocks can be catastrophic events that directly cause loss of life and/or events that trigger the outbreak of violence. Some shocks can be positive events, such as democratic elections, the introduction of a new technology or the discovery of a new mineral resource deposit.

Feedback loops allow countries to be resilient in the aftermath of shocks. The process of this is depicted in figure 14 using a hypothetical scenario between 2008 and 2016. How a country is operating today is its current homeostasis. In the case outlined, there is a period of homeostasis between 2008 and 2011 when a shock occurs. If feedback loops are enacted then the country returns to the level of performance prior to the shock within a short period, as shown by case A. However, in case B the system

is able to self-modify and improve its level of performance in the aftermath, benefiting from the shock in the long run. In case C, the same mechanism restores stability but at a lower level of performance. If feedback loops fail to restore some form of stability, the system will deteriorate into dysfunction (case D).

Shocks are useful phenomena with which to better understand resilience and peace. When they occur, they affect many aspects of an otherwise stable society and their flow-on effects can be long term and unpredictable. Shocks can, therefore, create tense situations that can lead to violence.

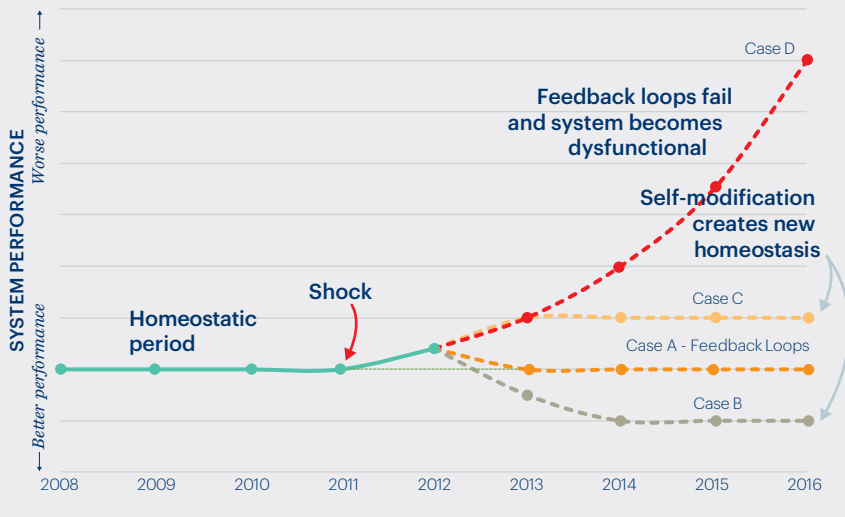
The 2010 earthquake in Port-au-Prince, Haiti, is an example of a shock that triggered violence. During the earthquake, the National Penitentiary in Port-au-Prince was severely damaged, allowing over 5,000 prisoners to escape.⁷ At the same time, police officers were immediately engaged in disaster response, reducing their capacity to respond to crime and violence, and police resources were also damaged in the earthquake.⁸ Chaotic conditions facilitated the regrouping of formerly dispersed or imprisoned gang members and, combined with general post-disaster lawlessness, the city saw an escalation of turf wars and a rise in homicide, assault and rape.⁹ The intersection of a severe shock and existing vulnerabilities in the system, such as weak infrastructure and an under-resourced police force, led to a deterioration in peacefulness.

However, not all shocks trigger violence.

Countries with high levels of Positive Peace have the attitudes, institutions and structures that are associated with the absence of violence. These can be understood as drivers of *nonviolence*. The social characteristics that make up Positive Peace give people access to methods of resolving conflicts and addressing change without falling into violence.

FIGURE 14 SYSTEM RESPONSES TO A SHOCK

Homeostasis occurs when there is balance between a system’s internal goals and its performance. In the aftermath of a shock the system’s feedback loops are enacted to avoid dysfunction and restore homeostasis.



Source: IEP

TAXONOMY OF SHOCKS

Social systems can experience two types of shocks: exogenous shocks or endogenous shocks.

Many shocks are exogenous: a sudden change in a variable outside the system that impacts variables within the system. In this case, it is useful to think of exogenous as meaning “outside of the control of policy makers.” For example, natural disasters may occur inside a country but are largely unexpected and outside of the control of policy makers. However, other shocks such as food and currency price shocks can be within the realm of domestic policy and/or be caused by factors outside of the control of country governments.

On the other hand, social systems can also produce endogenous shocks. Social unrest, protests, labour strikes or political assassinations, for example, occur when people are responding to something inherent within a system. Economic shocks typically arise from characteristics of the economic and governance system within a country.

There are a host of sudden events that can disrupt a society, potentially resulting in violence. Some can even be caused by violence itself, such as the refugee crises affecting Europe

and Syria’s neighbours in the wake of the Syrian civil war. In Lebanon, the influx of refugees has put downward pressure on wages, causing economic disruption. In Europe, the influx of refugees poses a challenge to social services.

Different types of shocks arise in different types of systems. Political shocks, such as coups d’etat, occur more frequently in low Positive Peace environments, while economic shocks, such as stock market crashes, happen more often in high Positive Peace environments.

Table 4 lists a variety of types of shocks in terms of their primary levels of exogeneity or endogeneity. Events such as natural disasters lie largely outside of the control of countries while crises such as economic shocks arise because of the conditions within society. Alternatively, some events can arise from either external or internal conditions – or, most likely, a combination of the two.

TABLE 4 TAXONOMY OF ENDOGENOUS AND EXOGENOUS SHOCKS

While shocks are often classified as exogenous or endogenous, in reality most arise from a range of exogenous or endogenous factors.

PRIMARILY EXOGENOUS	CAN BE BOTH EXOGENOUS AND/OR ENDOGENOUS	PRIMARILY ENDOGENOUS
> Natural Disasters	> Incoming Refugees	> Economic Shock
> Price Shocks	> Post-conflict reintegration	> Social Unrest
> Invasion from a Foreign Power	> Epidemic	> Industrial Accident
	> Pandemic	> Political Crisis
	> Terrorism	> Revolution
		> Civil War

EXOGENOUS SHOCKS

Natural disasters are the most prevalent and least predictable type of shock. Between 2005 and 2015, there were over 2,400 natural disasters in 196 countries affecting more than 1.8 billion people.¹⁰

They occur all over the world, and their frequency has historically been outside the control of policy makers. Importantly, as the effect of climate change accelerates so too may the frequency and impact of natural disasters.

Figure 17 shows that natural disasters kill more people in low Positive Peace countries even though the number of events are approximately the same, with a ratio of 5:6. Likewise, population densities are similar. Societies' *attitudes, institutions and structures*, such as social cohesion, economic conditions, and the quality of infrastructure also impact the outcome of natural shocks, especially in terms of lives lost.¹¹ However, there are other factors that are not covered in the study, such other as measures of severity, i.e. the Richter or Beaufort scales, or geographical propensity.

To explore the link between Positive Peace and the reduction of impacts from natural disasters it is necessary to examine the distributions of frequency, severity and population density across different levels of Positive Peace. While there will undoubtedly be other factors that determine the impact of a natural disaster in a country, for brevity this report will look at these three major areas.

BOX 3 EMERGENCY EVENTS DATABASE

IEP used data from the Emergency Events Database (EM-DAT) to explore the relationship between resilience and positive peace. EM-DAT captures basic data on the occurrence and effects of natural and technological disasters for the years 1900 to 2015. Events are included in the database if they meet one of the following criteria:

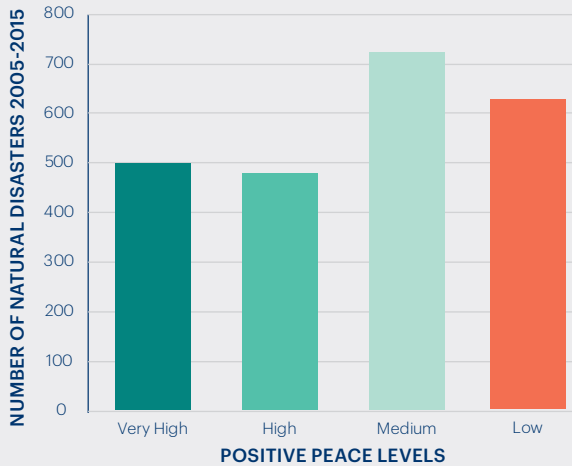
- > 10 or more people reported killed
- > 100 or more people reported affected
- > declaration of a state of emergency
- > call for international assistance.

Information on events is sourced from a variety of sources, with preference given to data from UN agencies and country governments.¹²

FIGURE 15

FREQUENCY OF NATURAL DISASTERS, 2005-2015

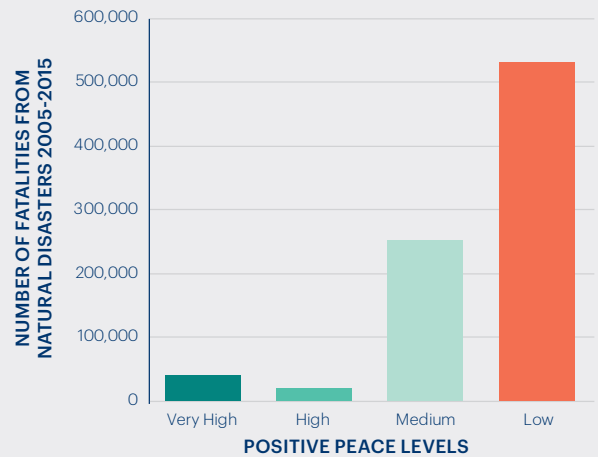
Natural disasters are only slightly more frequent in low Positive Peace countries, yet they have a fatality ratio of 13:1 compared to high Positive Peace environments.



Source: EMDAT, IEP

FIGURE 16 TOTAL NUMBER OF DEATHS FROM NATURAL DISASTERS, 2005-2015

More people are killed by natural disasters in low Positive Peace countries than high Positive Peace countries.



Source: EMDAT, IEP

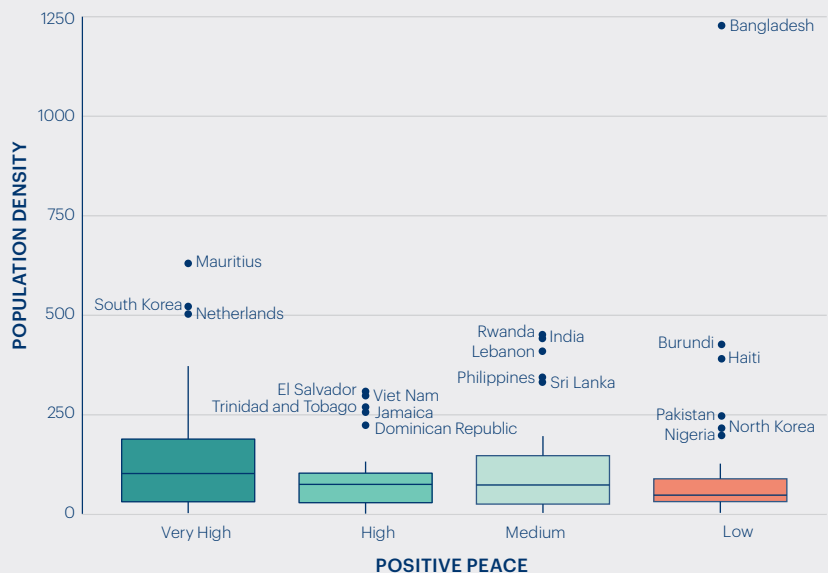
Figure 15 shows the frequency of natural disasters by level of Positive Peace, showing that these types of shocks occur roughly as often across the different groups of countries.

Figure 16 shows that countries at lower levels of Positive Peace experience far more fatalities as a result of natural disasters, despite a similar number of events. Countries with weak Positive Peace have a fatality ratio of 13:1 compared to high Positive Peace environments, while the frequency of natural disasters is much closer at 6:5. Figure 17 highlights that population densities in lower Positive Peace countries are not significantly larger than higher Positive Peace countries.

Figure 18 depicts the density of total numbers of people affected by natural disasters by levels of Positive Peace.¹³ Figure 18 shows only minor differences in the number of people affected in low and high Positive Peace countries. Even whilst the numbers of people affected are similar across countries, low Positive Peace countries see more fatalities.

FIGURE 17 POPULATION DENSITIES AND POSITIVE PEACE, 2014

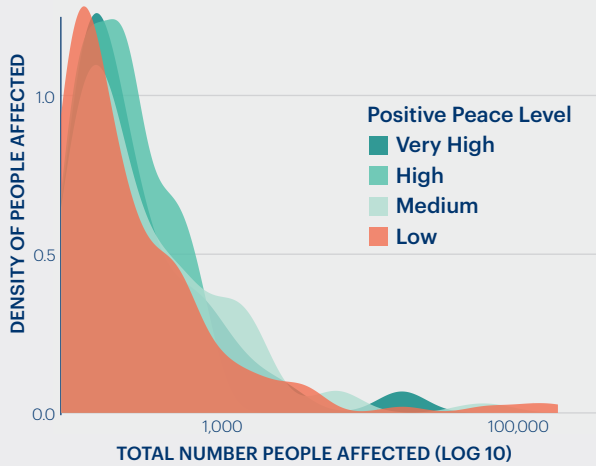
Population density is not significantly greater in low Positive Peace countries and so does not account for the larger loss of life in these nations.



Source: WORLD BANK, IEP

FIGURE 18 NUMBER OF PEOPLE AFFECTED BY NATURAL DISASTERS, BY POSITIVE PEACE, 2005-2015

The severity of natural disasters as indicated by numbers of people affected do not significantly differ depending on Positive Peace.¹⁴



Source: EMDAT, IEP

“ Natural disasters kill more people in low Positive Peace countries even though the number of events are approximately the same.

ENDOGENOUS SHOCKS

Endogenous shocks are sudden onset events that arise from conditions inside society.

Particular conditions may change rapidly or build up over time and result in unexpected events that have the potential to spark violence. Civil unrest is a good example as there can be months or years of ongoing conflict without violence that quickly turns violent because of a sudden, destabilising event. Economic shocks are similar. Economic conditions can be misaligned for a long time before resulting in a sudden crash or crisis that has the potential to spark riots or other types of violence.

Despite being engendered by the system, endogenous shocks are still unpredictable. It is often impossible to know when, where or how they will arise. But the data does show that different types of shocks occur in low versus high Positive Peace settings and that more shocks overall take place in low Positive Peace countries.

This suggests that it is possible to reduce the impact of shocks by proactively building resilience and Positive Peace. Additionally, countries with high levels of Positive Peace are less likely to deteriorate in Negative Peace post-shock. The onset of different types of shocks is shown in figure 19.

BOX 3 ENDOGENOUS SHOCKS DATA

IEP has sourced the following data for creating a database of endogenous shocks:

- Infrastructure accidents are from EMDAT and include transport, industrial and technological disasters.
- Economic shocks and crises are from Reinhart and Rogoff (2010) and include incidence of crises in banking, currency, inflation crises, sovereign debt and stock markets.
- Political shocks are from Polity IV and include regime changes, coups d'état and revolutions.
- Violent conflict is from the UCDP Battle deaths dataset.

Figure 19 highlights that twice as many infrastructure accidents occur in countries with low Positive Peace than those with high levels. This is intuitive, as higher Positive Peace countries will generally have better infrastructure due to an efficient *well-functioning government, a sound business environment* and higher levels of income. Furthermore, economic shocks and crises are far more prevalent in very high Positive Peace countries. Again, this is intuitive as the risk of financial shocks increases as financial institutions proliferate and become more and more integral to a country's economy.

Violent shocks such as regime changes, coups d'état and revolutions have been more prevalent in countries with lower Positive Peace, with 84 per cent of these occurring in medium to low Positive Peace countries. Genocide, being *jus cogens* in international law, is the largest endogenous systemic breakdown investigated and since 2005 has occurred in three countries. Offensives by the state during the Sri Lankan civil war in 2008 have been classified as genocide against the Tamils. In the Central African Republic, following the

forcible displacement of the President Bozizé regime on 24 March 2013, the government engaged in predatory actions against the population.¹⁵ The Sunni extremists organized under the banner of the Islamic State in Iraq since 2014 have targeted Yazidis and Christians in their controlled territories. It is estimated that these operations have killed around 5,000 people.¹⁶

CIVIL RESISTANCE CAMPAIGNS AND POSITIVE PEACE

Episodes of social unrest are more frequent than other types of political shocks and their characteristics vary distinctly according to the level of Positive Peace in the country where they take place. One way in which Positive Peace helps to build resilience is by creating an environment conducive to nonviolent alternatives for conflict resolution. This sub-section explores the link between Positive Peace and whether civil resistance movements are violent or nonviolent in attempting to address their grievances.

Countries with higher Positive Peace have historically had fewer civil resistance movements, whether violent or nonviolent.

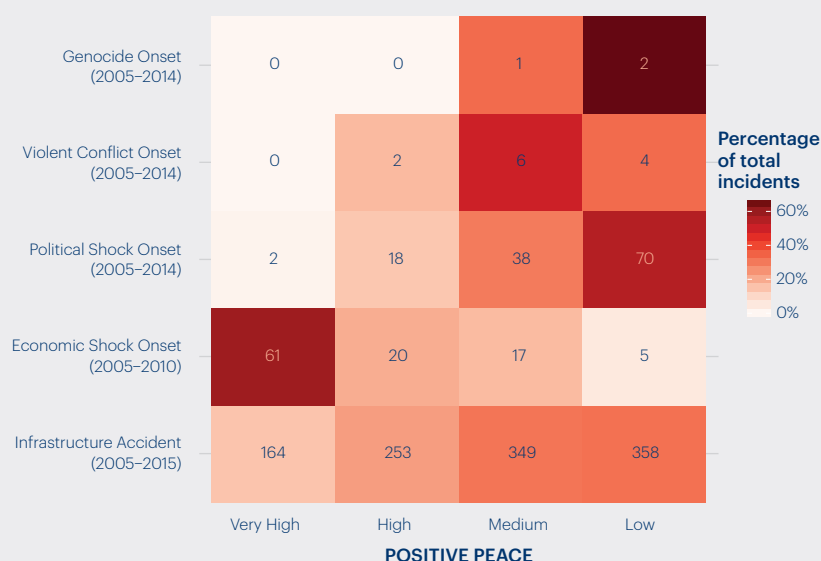
IEP used the Nonviolent and Violent Campaigns and Outcomes (NAVCO) Data Project for the analysis, a multi-level data collection effort that catalogues major violent and nonviolent resistance campaigns around the world. NAVCO was compared to Positive Peace to determine the breakdown of conflicts by their Positive Peace profile. The database only includes movements of more than 1,000 participants. It should be noted that the majority of these resistance movements have been violent.

Positive Peace translates into more opportunities for nonviolent conflict resolution. Highly peaceful countries have strong institutions with *low levels of corruption* that offer such nonviolent alternatives.

The nature of a resistance campaign is influenced by the strength of Positive Peace. Table 5 lists the statistically significant differences¹⁷ between campaigns in countries with high and low levels of Positive Peace.

FIGURE 19 DISTRIBUTION OF ENDOGENOUS SHOCKS, 2005-2015

Lower Positive Peace countries experience more industrial and political shocks while higher Positive Peace countries suffer more economic shocks.



Source: EMDAT, INSCR, Reinhart and Rogoff, UCDP, IEP

“ Violent shocks such as regime changes, coups d'état and revolutions have been more prevalent in countries with lower Positive Peace, with 84 per cent of these occurring in medium to low Positive Peace countries.

TABLE 5 CHARACTERISTICS OF RESISTANCE CAMPAIGNS BY LEVELS OF POSITIVE PEACE

Violent civil resistance movements in countries with strong Positive Peace only occur in extreme circumstances.

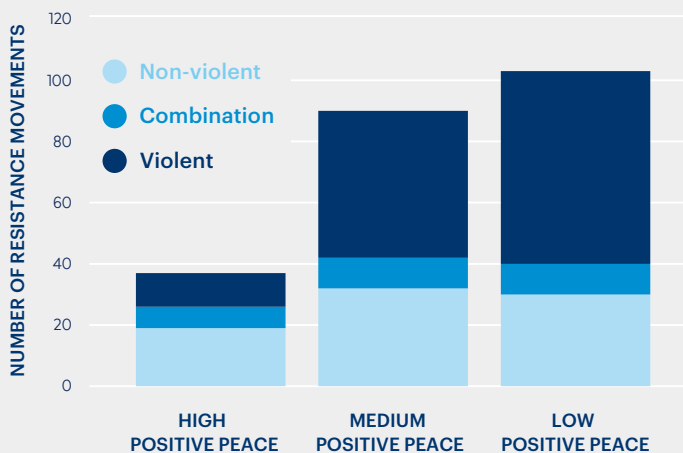
	WEAKER POSITIVE PEACE	STRONGER POSITIVE PEACE
GOAL OF THE CAMPAIGN	Goals are typically major structural or regime change.	Goals are typically aimed at policy or in some circumstances territorial independence.
SIZE	Weaker Positive Peace countries tend to have larger violent campaigns but smaller nonviolent campaigns	Stronger Positive Peace countries tend to have smaller violent but larger nonviolent campaigns.
PROPENSITY FOR VIOLENCE	Campaigns tend to use violence more.	Campaigns have more of a tendency to use nonviolence.
PROGRESS	On average, violent and nonviolent campaigns can achieve some gains but fall short of major concessions without regime change.	Violent campaigns are less successful. Nonviolent campaigns tend to achieve more concessions.
STATE RESPONSE	Repression occurs. In nonviolent cases, state repression aims to demobilise the movement.	Repression of nonviolent campaigns tends to be condemned.
INTERNATIONAL RESPONSE	State repression of nonviolent campaigns is more likely to result in international condemnation and sanctions.	There is generally stronger overt international support for the state. Diasporas living overseas tend to be more supportive of the campaign.

Therefore, when Positive Peace in a country is strong, the social and structural system itself is less likely to generate large violent movements, which in turn increases stability. The system rewards and therefore incentivises nonviolence more than is the case when Positive Peace is low, evidenced by the relative success of nonviolent campaigns. In addition, other coping mechanisms come into play as well when Positive Peace is strong.

Figure 20 highlights the distribution of violent, nonviolent and mixed tactic movements in countries of high and low Positive Peace. Figure 21 shows that in countries with strong Positive Peace, violent movements last three years less on average.

FIGURE 20
PREVALENCE AND NATURE OF RESISTANCE CAMPAIGNS

Between 1945 and 2006, 91 per cent of violent resistance campaigns have occurred in countries with weaker Positive Peace. The proportion of resistance movements that are non-violent is higher in countries with stronger Positive Peace.¹⁸

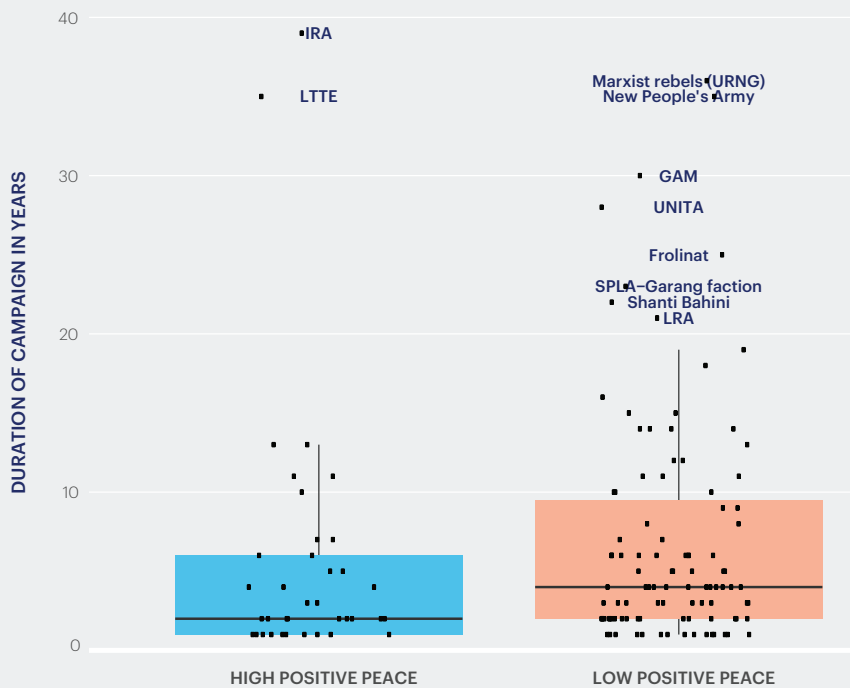


Source: University of Denver, IEP

FIGURE 21

DURATION OF VIOLENT CIVIL MOVEMENTS AND POSITIVE PEACE

In high Positive Peace countries violent resistance movements last 3 to 4 years less than in countries with low Positive Peace. In low Positive Peace environments many violent campaigns last more than 10 years.



Source: University of Denver, IEP

“ When Positive Peace in a country is strong, the social and structural system itself is less likely to generate large violent movements, which in turn increases stability.

SYSTEMS MAP OF POSITIVE PEACE & RESILIENCE

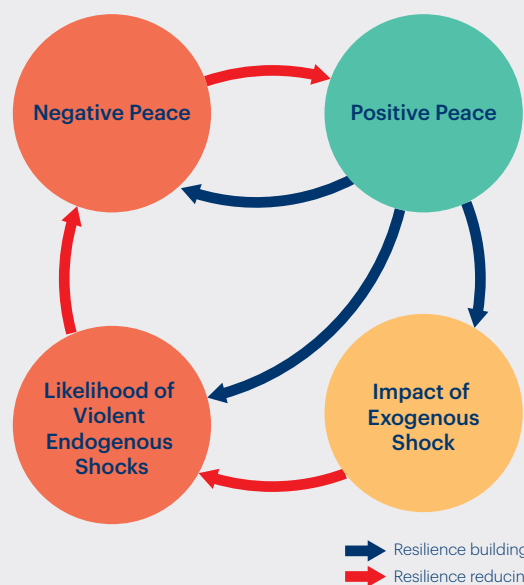
As has been discussed, Positive Peace allows a nation state to build resilience in order to maintain stability while also being able to recover from shocks. Additionally, high Positive Peace countries improve through adaptation to new challenges.

Figure 22 explains the links between exogenous and endogenous shocks and Positive and Negative Peace. Countries can reduce the *impact* of exogenous shocks but not the *likelihood*. Conversely, they mitigate endogenous shocks by reducing the *likelihood and impact*. This depiction shows that building Positive Peace assists in reducing the risk of violent exogenous and endogenous shocks in two ways. The first is that it directly reduces the potential for violent conflict within a country. The second is an indirect relationship, in that Positive Peace minimises the potential for shocks interacting with existing negative drivers, which could create a more volatile situation.

These observations highlight two important aspects of resilience. The first is that building resilience does not have to be direct, using systems thinking it is easy to see how improvements in one area can strengthen resilience in another. Secondly, by building Positive Peace a country can shift the types of shocks it is vulnerable to from violent ones, such as revolutions and regime changes, to non-violent ones, such as infrastructural and economic. By reducing the risk of internal threats, a country will be able to maintain homeostasis more easily.

FIGURE 22
RESILIENCE BUILDING IN A POSITIVE PEACE SYSTEM

Positive Peace can be used to not only build resilience directly but also to shift the shocks a country is exposed to from violent to nonviolent.



Source: IEP

RESULTS & FINDINGS

FROM THE POSITIVE PEACE INDEX 2015

The Positive Peace Index (PPI) measures the Positive Peace of 162 countries covering over 99 per cent of the world's population. The PPI is the only known global quantitative approach to defining and measuring Positive Peace. This work provides a foundation for researchers to deepen their understanding of the empirical relationships between peace, cultural factors, governance and economic development. It stands as one of the few holistic and empirical studies to identify the positive factors which create and sustain peaceful societies.

IEP takes a systems approach to peace, drawing on a range of recent research. In order to construct the PPI, IEP analysed 4,700 different indices, datasets and attitudinal surveys in conjunction with current thinking about the drivers of violent conflict, resilience and peacefulness. The result of this research is an eight-part taxonomy of the factors associated with peaceful societies. These eight factors were derived from the datasets which had the strongest correlation with internal peacefulness as measured by the Global Peace Index (GPI), an index of Negative Peace. The PPI measures the eight factors, also referred to as pillars, using three indicators for each factor that represent the best available globally-comparable data with the strongest statistically significant relationship to internal peace. The 24 indicators that make up the complete PPI are listed in table 5.

KEY FINDINGS

- Positive Peace has been improving steadily since 2005. One-hundred and eighteen of 162 countries ranked in the Positive Peace index, or 73 per cent, have shown an improvement to 2015.
- Democracies consistently have the strongest level of Positive Peace, but represent the minority of countries. Similarly, high-income countries dominate the top 30 countries in the Positive Peace index.
- Countries with high levels of Positive Peace have fewer civil resistance campaigns and campaigns are less violent, more limited in their goals and more likely to achieve some of their aims.
- Ninety-one per cent of all violent movements took place in countries with low levels of Positive Peace.
- The Positive Peace factor that deteriorated the most is low levels of corruption, with 99 countries recording a deterioration compared to 62 that improved.
- The United States and more than 50 per cent of the countries in Europe experienced a deterioration in their levels of Positive Peace, mainly due to increases in corruption and limits to press freedoms.
- Hungary, Greece, the United States and Iceland recorded the largest deteriorations, all by more than five per cent.
- Poland, Saudi Arabia, Uruguay, Nepal and the United Arab Emirates recorded the largest improvements. Each improved by at least seven per cent.
- Mobile phone subscriptions, poverty rates, per capita income and gender inequality improved the most, with mobile phone subscriptions increasing by 30 per cent.
- Press freedom, corruption and group grievances all deteriorated, including in Europe.
- Nearly one third of the 162 countries had Positive Peace scores higher than their Negative Peace levels indicating a strong potential to become more peaceful.
- Many low-income countries have Positive Peace scores lower than their Negative Peace levels indicating a potential for peace to deteriorate. The majority of these countries are in sub-Saharan Africa.

TABLE 6 POSITIVE PEACE INDEX DOMAINS AND INDICATORS

Each year, IEP updates the 24 indicators in the PPI to reflect the best available measurements 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
Low levels of corruption	Factionalised elites	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fund for Peace
	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 Secretariat
Free flow of information	Freedom of the Press Index	A composite measure of the degree of print, broadcast, and internet freedom.	Freedom House
	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
Good relations with neighbours	Hostility to foreigners	Measures social attitudes toward foreigners and private property.	EIU
	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	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 expectancy 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.	IPD
	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
Acceptance of the rights of others	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

RANK	COUNTRY	SCORE
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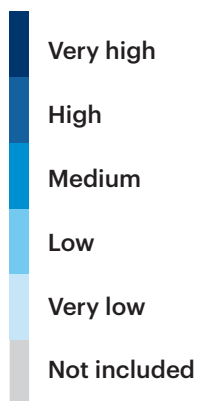
1	Denmark	1.361
1	Finland	1.361
3	Sweden	1.396
4	Norway	1.408
5	Ireland	1.448
5	Switzerland	1.488
7	Iceland	1.5
8	New Zealand	1.533
9	Netherlands	1.535
10	Austria	1.589

11	Germany	1.608
12	Canada	1.614
13	Australia	1.616
14	United Kingdom	1.624
15	Belgium	1.666
16	France	1.769
17	Japan	1.824
18	Singapore	1.829
19	United States	1.853
20	Estonia	1.862

21	Portugal	1.889
22	Slovenia	1.921
23	Czech Republic	1.999
24	Spain	2.002
25	Poland	2.032
26	Chile	2.074
27	Lithuania	2.079
28	Italy	2.095
29	Uruguay	2.109
30	South Korea	2.131

31	Cyprus	2.169
32	Slovakia	2.171
33	Hungary	2.175
34	Greece	2.214
35	Mauritius	2.229
36	Croatia	2.268
37	Israel	2.283
38	Latvia	2.305
39	Costa Rica	2.317

THE STATE OF POSITIVE PEACE



2015 POSITIVE PEACE INDEX

GLOBAL LEVELS OF POSITIVE PEACE

RANK	COUNTRY	SCORE
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80	Moldova	3.081
81	Kazakhstan	3.096
82	Ukraine	3.097
83	Timor-Leste	3.139
84	Viet Nam	3.151
85	China	3.154
86	Bhutan	3.158
87	Cuba	3.183
88	Gabon	3.201
89	Guatemala	3.212
90	Ecuador	3.213

91	Rwanda	3.222
92	Lesotho	3.228
93	Russia	3.235
94	Philippines	3.236
95	Sri Lanka	3.237
95	Nicaragua	3.237
97	Papua New Guinea	3.242
98	Indonesia	3.244
99	Honduras	3.25
100	Swaziland	3.255
101	Azerbaijan	3.268

102	Senegal	3.275
103	Kyrgyz Republic	3.28
103	Paraguay	3.28
105	Zambia	3.289
106	Benin	3.297
107	India	3.31
108	Algeria	3.313
109	Bolivia	3.325
110	Egypt	3.332
111	The Gambia	3.357
112	Lebanon	3.371

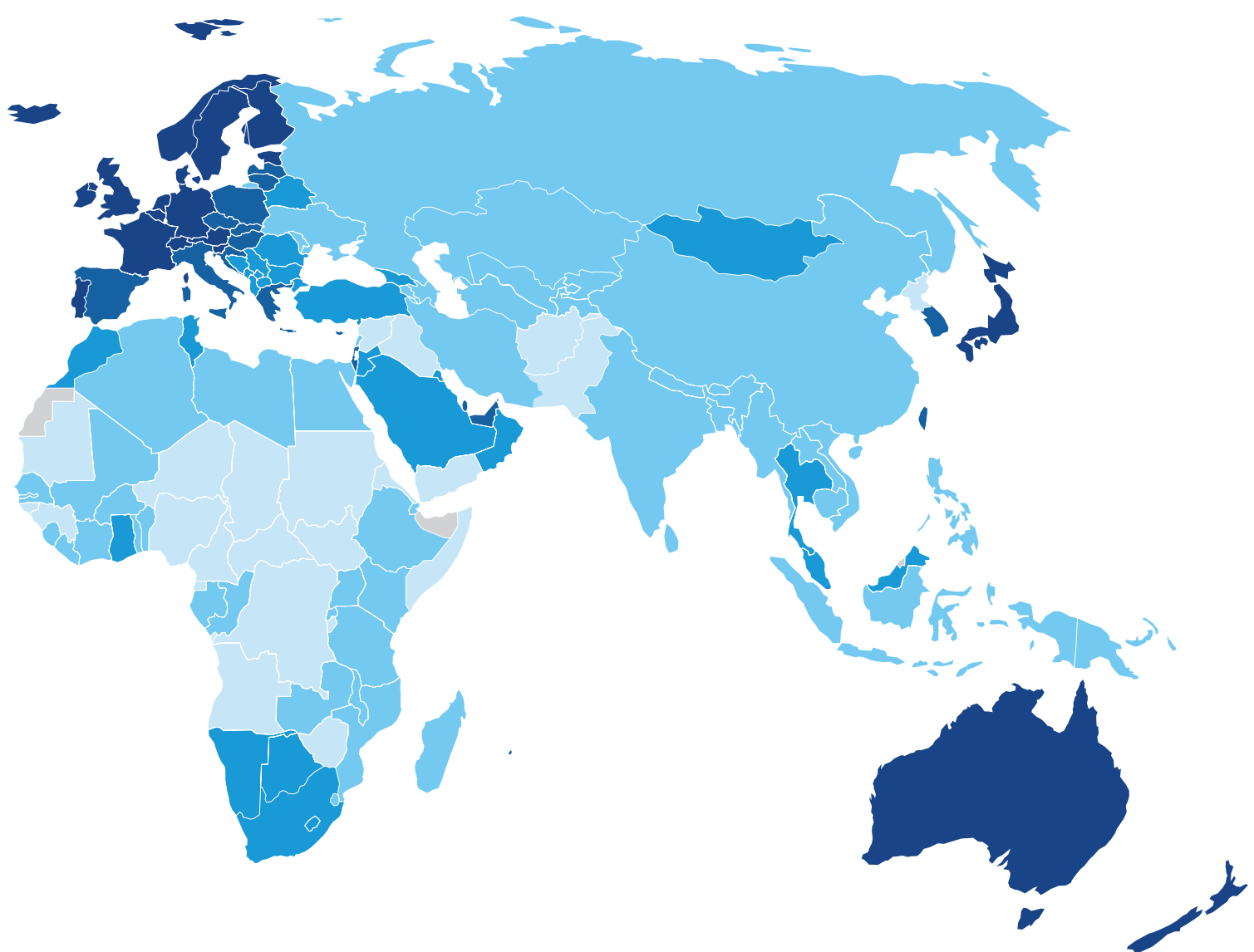
113	Malawi	3.413
114	Tanzania	3.414
115	Venezuela	3.418
116	Mali	3.424
117	Burkina Faso	3.433
118	Nepal	3.444
119	Tajikistan	3.462
120	Libya	3.463
121	Uganda	3.48
122	Cambodia	3.486
123	Cote d'Ivoire	3.487

40	United Arab Emirates	2.329
41	Qatar	2.375
42	Taiwan	2.431
43	Bulgaria	2.495
44	Botswana	2.552
45	Montenegro	2.558
46	Kosovo	2.564
47	Jamaica	2.608
48	Malaysia	2.647
49	Romania	2.678

50	Trinidad and Tobago	2.682
51	Kuwait	2.698
52	Oman	2.701
53	Panama	2.722
54	Macedonia	2.734
55	Namibia	2.757
56	South Africa	2.767
57	Argentina	2.768
58	Bahrain	2.77
59	Serbia	2.783

60	Georgia	2.807
61	Tunisia	2.82
62	Albania	2.837
63	Brazil	2.846
64	Ghana	2.856
65	Mexico	2.858
66	El Salvador	2.905
67	Saudi Arabia	2.919
68	Bosnia and Herzegovina	2.955
69	Morocco	2.97

70	Peru	2.98
71	Thailand	2.987
72	Dominican Republic	3.012
73	Jordan	3.026
74	Guyana	3.033
75	Turkey	3.036
76	Mongolia	3.04
77	Belarus	3.048
78	Colombia	3.056
79	Armenia	3.061



124	Sierra Leone	3.491
125	Mozambique	3.494
126	Liberia	3.499
127	Djibouti	3.504
128	Togo	3.517
129	Kenya	3.519
130	Myanmar	3.528
131	Madagascar	3.535
132	Bangladesh	3.564
133	Uzbekistan	3.571
134	Turkmenistan	3.578

135	Laos	3.592
136	Haiti	3.595
137	Iran	3.611
138	Ethiopia	3.616
139	Republic of the Congo	3.62
140	Guinea-Bissau	3.649
141	North Korea	3.686
142	Burundi	3.694
143	Niger	3.718
144	Syria	3.757

145	Cameroon	3.761
146	Mauritania	3.767
147	Sudan	3.785
148	Pakistan	3.818
149	South Sudan	3.82
150	Equatorial Guinea	3.84
151	Guinea	3.851
152	Angola	3.852
153	Nigeria	3.865
154	Iraq	3.916
155	Eritrea	3.925

156	Democratic Republic of the Congo	3.93
157	Yemen	3.937
158	Zimbabwe	3.946
159	Chad	3.961
160	Afghanistan	3.997
161	Central African Republic	4.154
162	Somalia	4.192

GLOBAL TRENDS IN POSITIVE PEACE

- The global trend over the past decade shows that Positive Peace has improved, especially in the developing world.
- *Free flow of information* has improved the most, led by a rapidly rising rate of mobile phone subscriptions.
- However, press freedom and corruption deteriorated over the same period.
- Fifty per cent of the countries in Europe experienced a deterioration in Positive Peace scores.

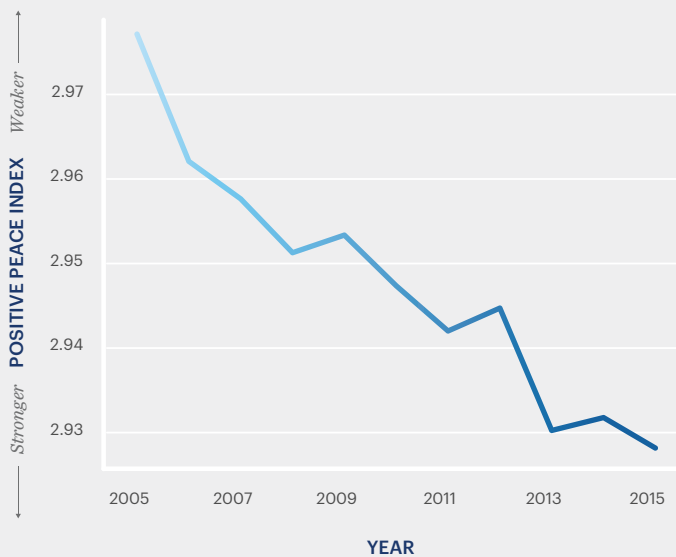
Positive Peace can be used to measure and track how the world has improved or regressed in terms of building institutional capacity and resilience.

In the years between 2005 and 2015, the average country score moved from 2.98 to 2.93, recording a 1.7 per cent improvement, as shown in figure 23. Some pillars such as *free flow of information* and *sound business environment* improved more strongly than others.

The improving trend holds true for six of the eight pillars, with *free flow of information* showing the greatest improvement. Scores for *low levels of corruption* and *acceptance of the rights of others* were the only two to deteriorate between 2005 and 2015.

FIGURE 23 TREND IN POSITIVE PEACE, 2005-2015

There has been a 1.7% improvement in the average PPI score between 2005 and 2015.



Number of countries where Positive Peace score deteriorated



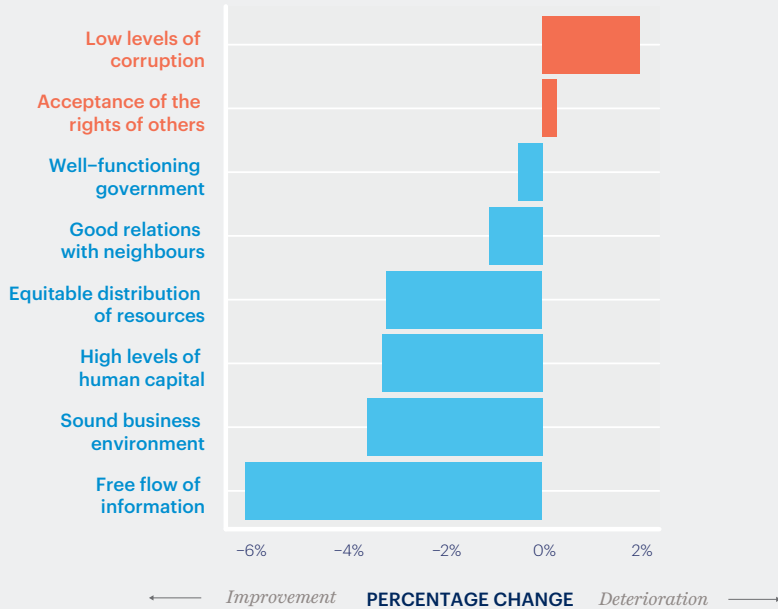
Number of countries where Positive Peace score improved



Source: IEP

FIGURE 24 SCORE CHANGES IN THE PILLARS OF POSITIVE PEACE

Six of eight Positive Peace factors have improved between 2005 and 2015.

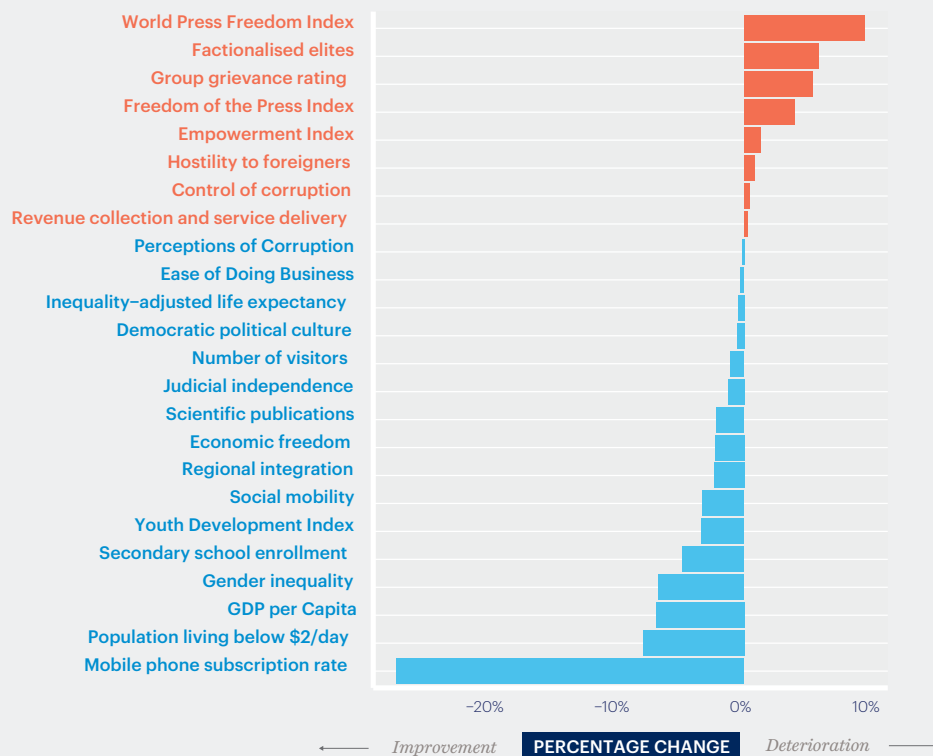


Source: IEP

Figure 24 shows the percentage change from 2005 to 2015 for all eight Positive Peace factors. Because institution-building and changes in social norms are long-term processes, global changes in the PPI domains happen relatively slowly. The overall score and the domain scores represent composite indicators of several attitudes, institutions and structures in society. As a result, they show the gradual change of a complex social system. However, some individual indicators within the domains register change more quickly. This is especially true for the rate of mobile phone subscriptions, which exemplifies rapid developments in new ways of sharing information. In much of the developing world, technological advances are leap-frogging the trajectories of other places, with mobile phones representing the first telephone and internet-enabled device in many households. As a result, the world has seen a significant increase in access to information in recent years.

FIGURE 25 PER CENT CHANGE IN PPI INDICATORS, 2005-2015

The indicators with the greatest improvements since 2005 are mobile phone subscriptions and the proportion of the population living on below US\$2 a day, while the largest declines were in the World Press Freedom Index and factionalised elites.



Source: IEP

Figure 25 indicates that 16 out of the 24 PPI indicators have improved since 2005.

The majority of countries in the PPI – 73 per cent – demonstrated an improvement in Positive Peace from 2005 to 2015. The countries which experienced the greatest shifts in PPI scores, either positively or negatively, were spread across many regions, income groups and starting levels of Positive Peace.

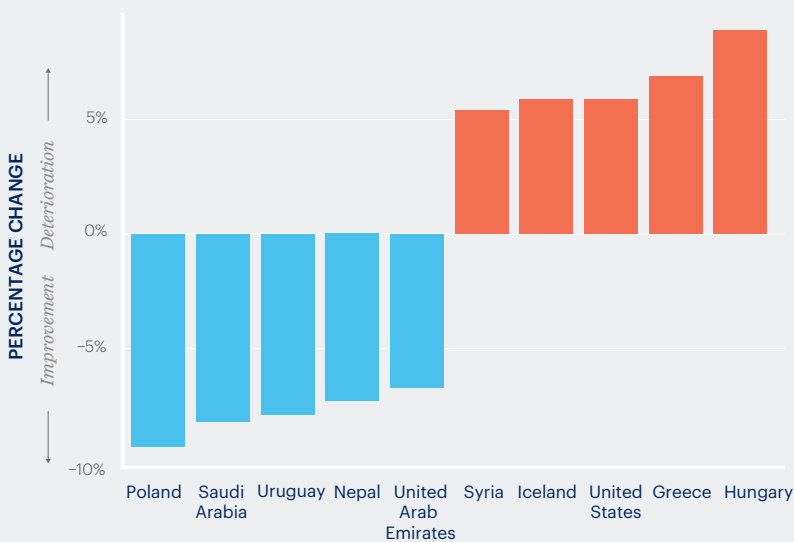
The countries that experienced the largest improvements in PPI scores between 2005 and 2015 were Poland, Uruguay, Saudi Arabia, Nepal and the UAE, each improving by at least seven per cent. This is quite notable given that PPI country-scores typically change slowly over time. Positive Peace in Saudi Arabia improved due to a large increase in mobile phone subscriptions and an improvement in gender equality, albeit from a very low base

Hungary, Greece, the United States, Iceland and Syria were the countries with the largest deteriorations. Hungary’s score deteriorated by over nine per cent. The deterioration in the US was the result of increased group grievances, an increase in factionalised elites and a deterioration in the World Press Freedom Index. The US group grievance rating has deteriorated every year since 2007, with recent protests and riots over issues such as immigration reform and police brutality affecting its score.¹⁹

The last three years have seen fluctuations in Iceland’s score for *free flow of information*, driven by deteriorations in freedom of the press as measured by the World Press Freedom Index and all three indicators for *low levels of corruption*. Although Iceland’s scores have deteriorated and the country is now ranked 7th on the PPI, it remains very high in Positive Peace.

FIGURE 26 PERCENTAGE CHANGE IN SCORES FOR COUNTRIES WITH THE GREATEST PERCENTAGE CHANGE, 2005-2015

Poland recorded the largest percentage improvement in PPI between 2005 and 2015, while Hungary had the largest deterioration.



Source: IEP

REGIONAL TRENDS

As a region, North America has the highest level of Positive Peace, closely followed by Europe.

In these two regions all countries but one, Turkey, scored better than the global average. The North America region consists of two countries, the United States and Canada.

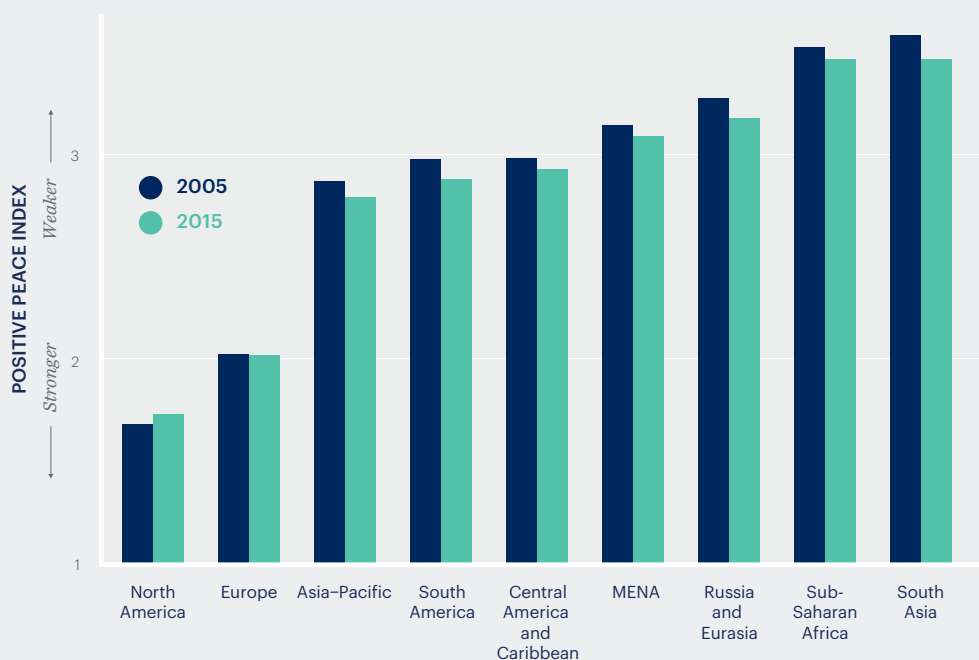
None of the countries in South America recorded a deterioration in their scores from 2005 to 2015. This bodes well for future gains in peace, as the region has faced many economic and political challenges in recent years

South Asian and sub-Saharan African countries have the worst average Positive Peace scores. Although South Asia had the largest percentage increase in Positive Peace since 2005, it still has no countries scoring better than the global average in 2015.

Georgia was the only country in the Russia and Eurasia region that scored better than the global average, quite an achievement for a country that experienced armed conflict with Russia and separatists in 2008. Since 2012, its score for *good relations with neighbours* has improved by 68 per cent. *Acceptance of the rights of others* has remained fairly flat and the conflict between the Government of Georgia and the separatists has not yet been fully resolved.²⁰

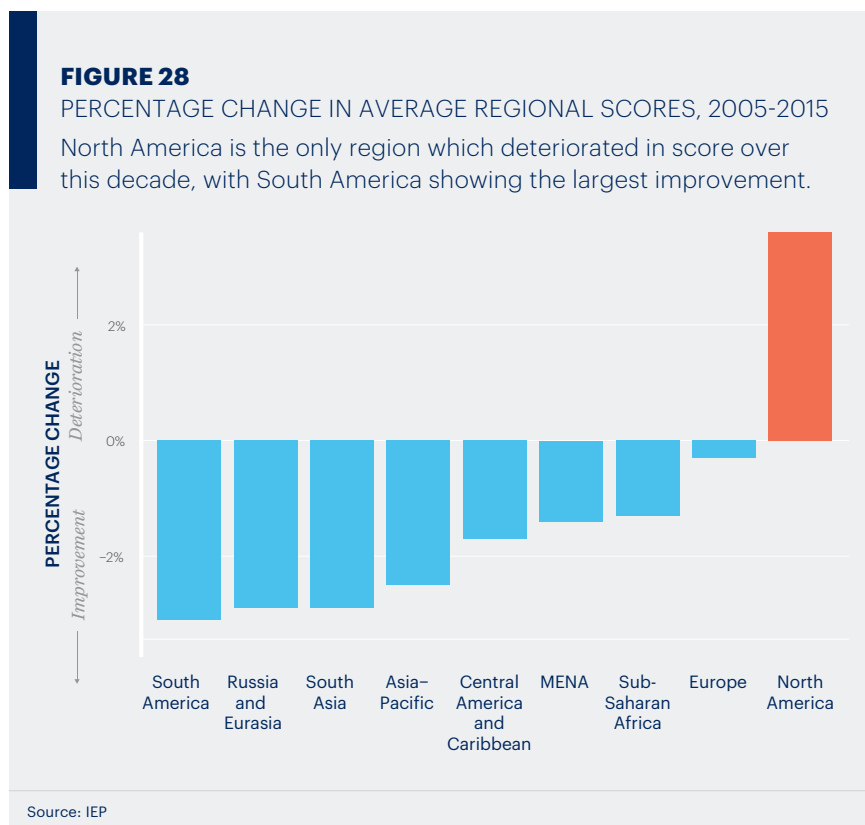
FIGURE 27 AVERAGE PPI SCORE BY REGION, 2005 AND 2015

North America and Europe are the more peaceful regions.



Source: IEP

From 2005 to 2015 more countries improved than deteriorated and, on average, improvements were larger in magnitude than deteriorations. As a result, regional average scores improved for all regions aside from North America, as shown in figure 27. Figure 28 gives the percentage change in average country scores by region from 2005 to 2015.



POSITIVE PEACE IN EUROPE FROM 2005 TO 2015

Half of the countries in Europe deteriorated in the PPI between 2005 and 2015, representing the second highest proportion of countries deteriorating for any region. These deteriorations, however, were very small, with only six countries worsening by more than four per cent. All of the European countries had high levels of Positive Peace in both 2005 and in 2015, apart from Turkey. Similarly, only six European countries improved by more than the four per cent. A decline in Positive Peace brings the risk of being less resilient in the face of the shocks, such as the 2015 refugee crisis.

The movement of indicators among Europe's most improved countries and those that saw the greatest deterioration highlights regional issues and variation. The indicators which stand out as having impacted the change in the six countries with the biggest rises and the six countries with the biggest falls are listed in table 7.

The indicators that deteriorated the most from the countries with the six biggest falls were factionalised elites, inequality-adjusted life expectancy and World Press Freedom Index. For both the Freedom of the Press Index and group grievance rating, five out of six countries deteriorated and the remaining one showed no movement (Norway and Iceland respectively). Mobile phone subscriptions is the only indicator which saw improvement in all six deteriorating countries.

All of the six most improved European countries recorded increased GDP per capita, decreased gender inequality and higher mobile phone subscriptions. Control of corruption also improved in all of the six countries except Croatia. The only indicator which uniformly deteriorated in these six countries was inequality-adjusted life expectancy. The World Press Freedom Index only improved in Poland and deteriorated in the other five countries.

Inequality-adjusted life expectancy deteriorated in all of the countries with the six largest falls and largest rises, suggesting that this indicator of human development is a challenge for the region.

Only Estonia and Romania improved in the Freedom of the Press Index and only Poland improved in World Press Freedom. Over all, Europe deteriorated by 39 per cent in the World Press Freedom Index and by 11 per cent in the Freedom of the Press Index between 2005 and 2015. Global deteriorations were nine and four per cent, respectively. Freedom House still reports Europe as the region with the highest press freedom in the world but noted that hate speech has not been regulated without damaging freedom of expression, impacting its index scores.²¹ Notably, Greece had an issue with transparency, as the public broadcaster and the government refused to issue new broadcasting licences. Hungary was affected by an advertising tax, while across the region expansive national security and surveillance laws are a concern.

TABLE 7 INDICATOR PERCENTAGE CHANGES FOR EUROPE'S RISERS AND FALLERS, 2005–2015

All three *free flow of information* indicators stand out as having notable movement between 2005 and 2015, mobile phones positively while both press indices have largely declined.

	POLAND	SERBIA	CYPRUS	ESTONIA	ROMANIA	CROATIA	SLOVENIA	NORWAY	SPAIN	ICELAND	GREECE	HUNGARY
Control of corruption	-9%	-3%	-12%	-5%	0%	1%	7%	-16%	19%	30%	14%	10%
Factionalised elites	15%	0%	-5%	-5%	17%	8%	11%	3%	5%	30%	50%	35%
Freedom of the Press Index	13%	2%	6%	-2%	-7%	5%	14%	0%	13%	21%	43%	35%
GDP per capita	-13%	-6%	-15%	-21%	-11%	-9%	-13%	0%	-14%	0%	-1%	-4%
Gender inequality	-5%	-10%	-4%	-18%	-2%	-5%	-31%	-5%	-5%	-9%	-8%	3%
Group grievance rating	20%	3%	-13%	30%	18%	-12%	2%	120%	4%	0%	34%	33%
Inequality-adjusted life expectancy	4%	6%	4%	5%	3%	3%	5%	4%	3%	5%	1%	3%
Mobile phone subscription rate	-42%	-27%	-11%	-32%	-22%	-11%	-13%	-8%	-6%	-9%	-13%	-15%
World Press Freedom Index	-4%	23%	29%	31%	18%	37%	75%	24%	37%	31%	94%	92%

HIGHEST AND LOWEST POSITIVE PEACE COUNTRIES

TABLE 8 TEN BEST-PERFORMING COUNTRIES, 2015 COMPARED TO 2005

Nordic countries dominate the top-scoring countries and have consistently done so since 2005.

COUNTRY	2005		2015	
	SCORE	RANK	SCORE	RANK
Denmark	1.4	4	1.361	1
Finland	1.371	2	1.361	1
Sweden	1.407	5	1.396	3
Norway	1.352	1	1.408	4
Ireland	1.434	6	1.448	5
Switzerland	1.484	7	1.488	5
Iceland	1.416	3	1.5	7
New Zealand	1.553	10	1.533	8
Netherlands	1.52	9	1.535	9
Austria	1.551	8	1.589	10

TABLE 9 TEN WORST-PERFORMING COUNTRIES, 2015 COMPARED TO 2005

Sub-Saharan African countries dominate the list of the countries scoring poorest in the PPI and have consistently done so since 2005.

COUNTRY	2005		2015	
	SCORE	RANK	SCORE	RANK
Nigeria	3.885	155	3.865	153
Iraq	4.064	159	3.916	154
Eritrea	3.902	154	3.925	155
Democratic Republic of the Congo	4.026	156	3.93	156
Yemen	3.865	151	3.937	157
Zimbabwe	4.065	158	3.946	158
Chad	4.035	157	3.961	159
Afghanistan	4.104	160	3.997	160
Central African Republic	4.117	161	4.154	161
Somalia	4.204	162	4.192	162

Understanding the attributes of countries with the best PPI scores improves the understanding of Positive Peace and the ability to apply knowledge in building peace. Nordic countries remain at the top of the PPI rankings from 2005 through to 2015. Tables 8 and 9 list the 10 best-performing and worst-performing countries in the 2015 PPI, with their scores and ranks for 2005 and 2015.

Sub-Saharan Africa has seen volatility, and in many cases deterioration, in Positive Peace scores. Countries from this region dominate the bottom of the PPI. Somalia has ranked last every year since 2005, but the country has seen a 10 per cent improvement in *free flow of information* since 2012. This was largely driven by increased mobile phone access, but Freedom of the Press has improved by 4.6 per cent as well.

Analysing the scores across the best and worst 10 countries highlights how these groups are changing. The average PPI score in the best 10 countries improved in 10 indicators and fell in 12, while two indicators remained the same. In contrast, the average score in the bottom 10 countries improved across 14

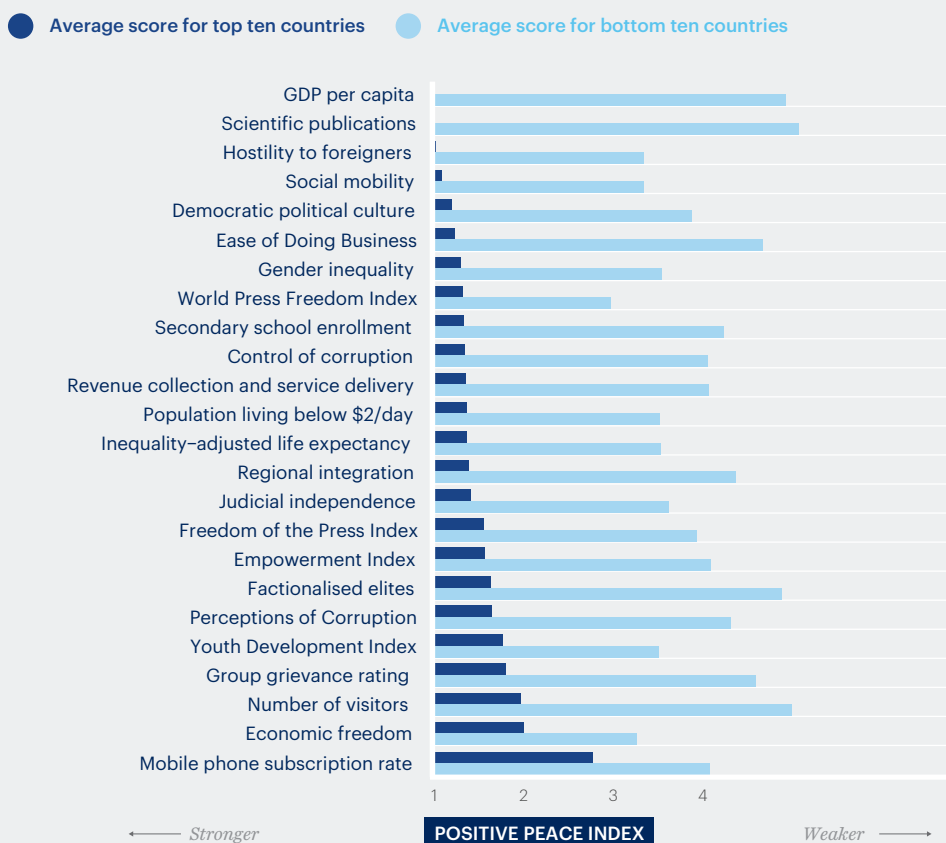
indicators, deteriorated against eight indicators and two indicators remained the same. This would indicate that the gap between the bottom and the top is narrowing and would point to the prospects of improvement in the lives of many people, as the pillars not only capture the prospects for peace but more broadly they are measures of social development as well.

Comparing the pillar scores for these groups also helps to reveal the characteristics of the world's most peaceful countries. Notably, the top 10 Positive Peace countries score well across all the pillars and scores are more evenly spread across the pillars. This reiterates the systemic nature of Positive Peace.

The indicators that the top 10 countries score the best in, GDP per capita and scientific publications, represent the *sound business environment* and *high levels of human capital* pillars, as shown in figure 29.

FIGURE 29 AVERAGE PPI INDICATOR SCORES FOR 10 COUNTRIES WITH THE HIGHEST AND LOWEST SCORES, 2015

A consistent feature of the most peaceful countries is that they score highly across every PPI domain.



Source: IEP

RESULTS BY INCOME & GOVERNMENT TYPE

The income level of a country can affect many of the factors of Positive Peace, as there is a graduated relationship between Positive Peace and income as shown in Figure 31.

This analysis uses the OECD classification of income type, which groups countries into four levels of per capita gross national income (GNI): high income, upper-middle income, lower-middle income and low income. High-income countries tend to be the most peaceful and low-income countries tend to be the least peaceful. Only three countries in the PPI top 30 are not also high-income. These are Chile, Lithuania and Uruguay – all upper-middle income countries. A significant proportion of low-income countries – 24 per cent – experienced a decline in their PPI score between 2005 and 2015.

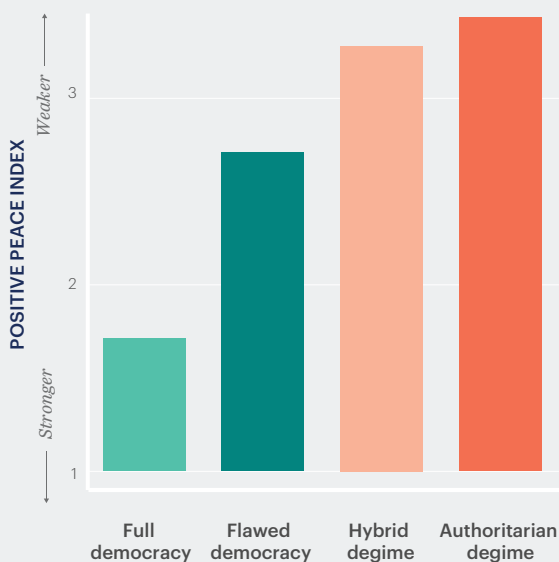
Government type has a clear relationship with Positive Peace, with full democracies scoring the best in the PPI, as shown in figure 30. Authoritarian regimes recorded the worst average PPI score in 2015. These results are reflective of the importance

of social and governmental structures. The democratic political culture indicator represents a society’s attitudes toward and mechanisms for citizen participation in government. It should be noted that this indicator does not score whether or not a government is in fact a democracy. Rather, these findings suggest that democracy is often conducive to the relevant aspects of a *well-functioning government*: an independent judiciary, effective service delivery and participation and accountability. Where government is responsive to the needs of citizens, it is better able to support a sound business environment, facilitate the free flow of information, support high levels of human capital and positively impact a variety of other Positive Peace factors.

FIGURE 30

POSITIVE PEACE BY GOVERNMENT TYPE, 2015

Full democracies have the highest levels of Positive Peace, as measured by the PPI.

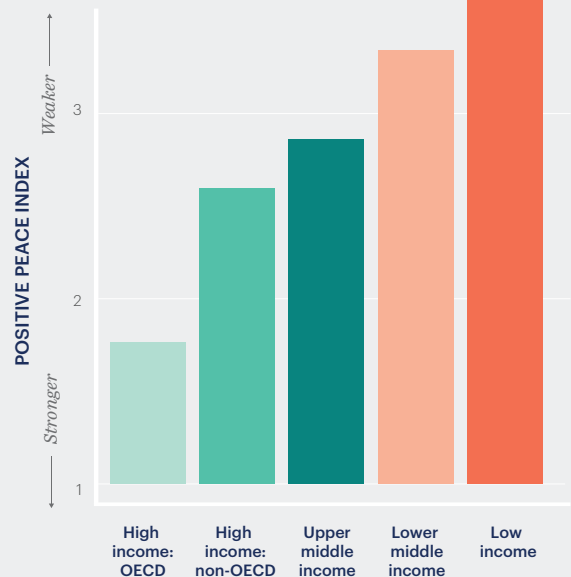


Source: IEP

FIGURE 31

POSITIVE PEACE BY INCOME GROUP, 2015

High income countries have the highest levels of Positive Peace, as measured by the PPI.



Source: IEP

POST-CONFLICT RISERS

As countries progress through and out of conflict, their institutions can either support or impede the successful transition to a peaceful society.

Five countries that have recently experienced conflict —

Cote d'Ivoire

Georgia

Myanmar

Rwanda

Indonesia

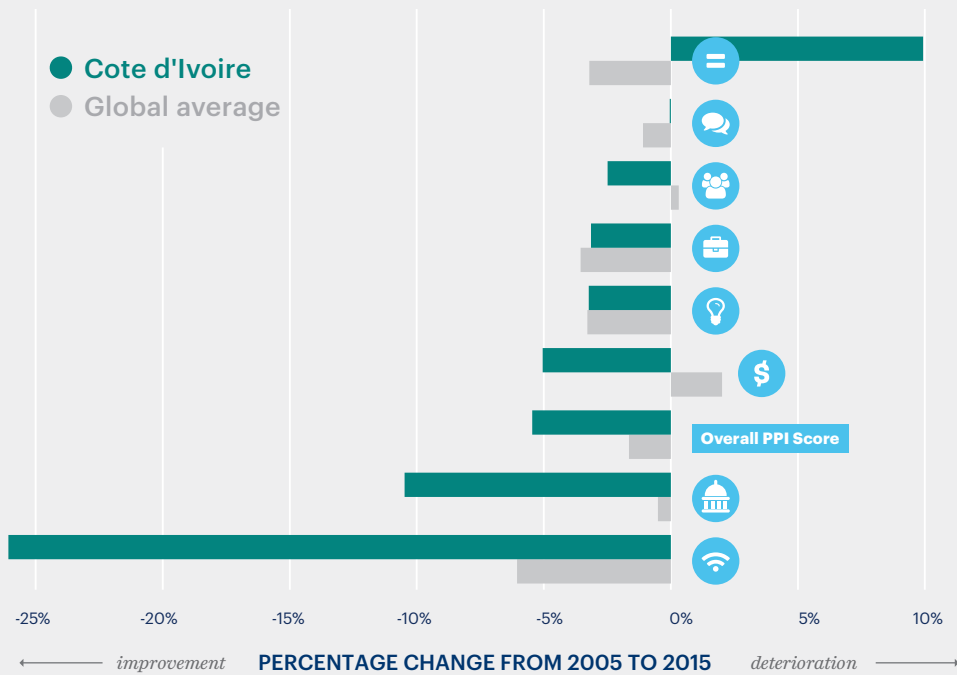
— have all made notable improvements in their Positive Peace scores. The Positive Peace factors for each of these countries is set out below, highlighting how each of the countries has performed in all of the factors compared to the global averages. For all factors other than *acceptance of the rights of others*, the majority of these five countries have shown improvements at a faster rate than the global average.

POSITIVE PEACE DOMAINS:

- Well-functioning government
- Sound business environment
- Equitable distribution of resources
- Acceptance of the rights of others
- Good relations with neighbours
- Free flow of information
- High levels of human capital
- Low levels of corruption

FIGURE 32 CHANGE IN POSITIVE PEACE DOMAINS IN COTE D'IVOIRE COMPARED TO THE GLOBAL AVERAGE

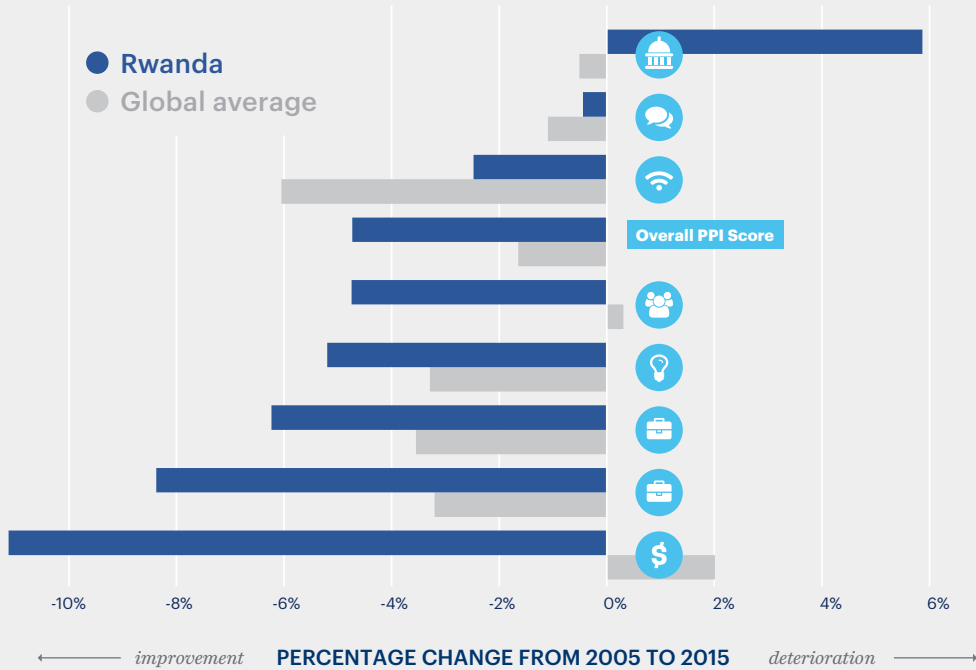
Cote d'Ivoire improved in Positive Peace overall and deteriorated in only *equitable distribution of resources* since 2005.



Source: IEP

FIGURE 33 CHANGE IN POSITIVE PEACE DOMAINS IN RWANDA COMPARED TO THE GLOBAL AVERAGE

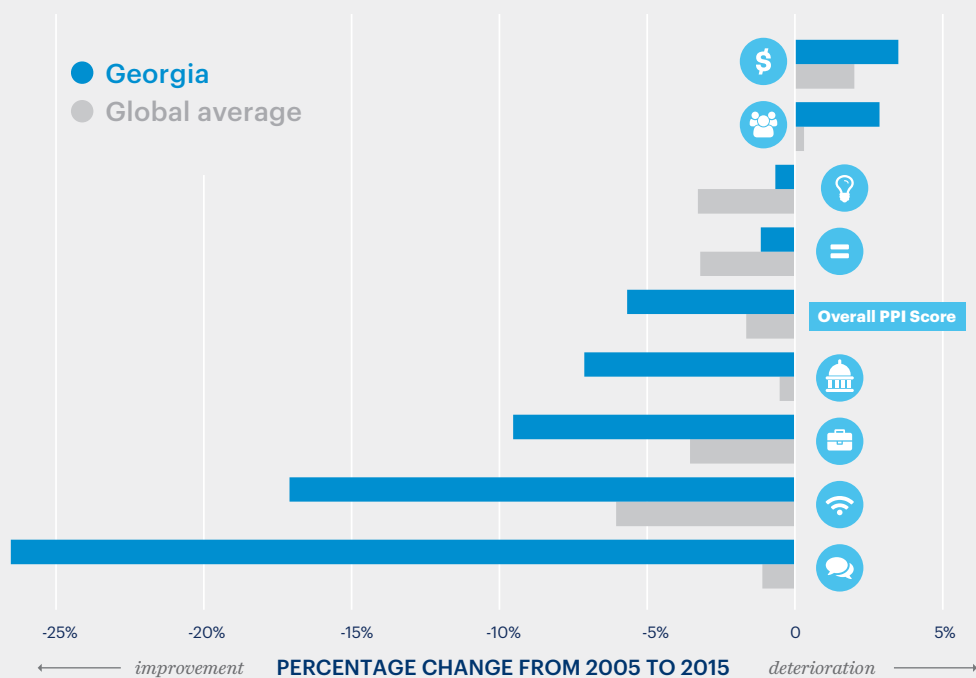
Rwanda improved in Positive Peace overall and deteriorated only in *well-functioning government* since 2005.



Source: IEP

FIGURE 34 CHANGE IN POSITIVE PEACE DOMAINS IN GEORGIA COMPARED TO THE GLOBAL AVERAGE

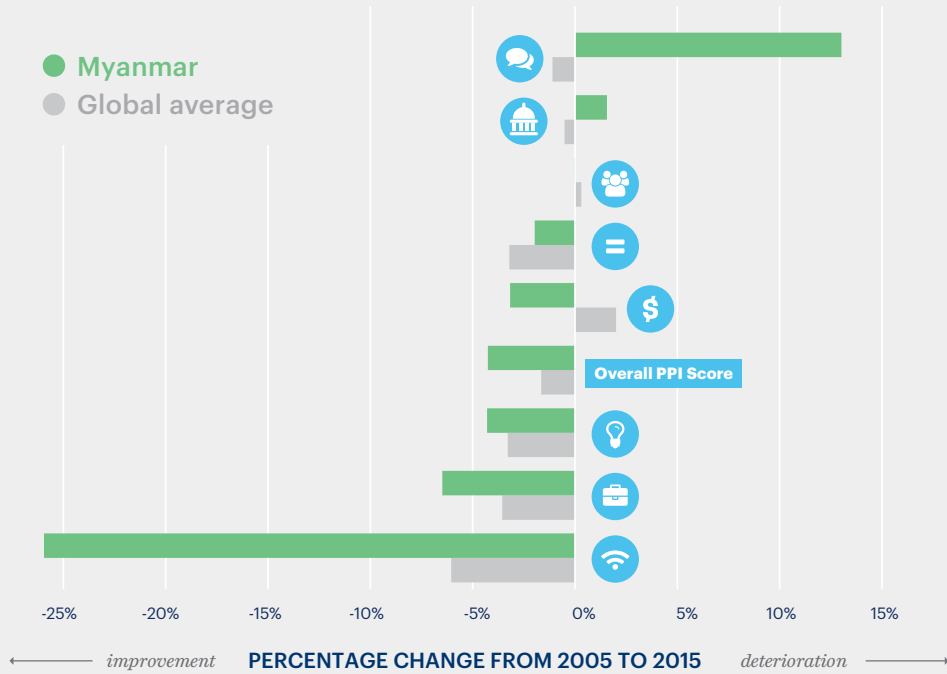
Georgia improved in Positive Peace overall and six domains since 2005.



Source: IEP

FIGURE 35 CHANGE IN POSITIVE PEACE DOMAINS IN MYANMAR COMPARED TO THE GLOBAL AVERAGE

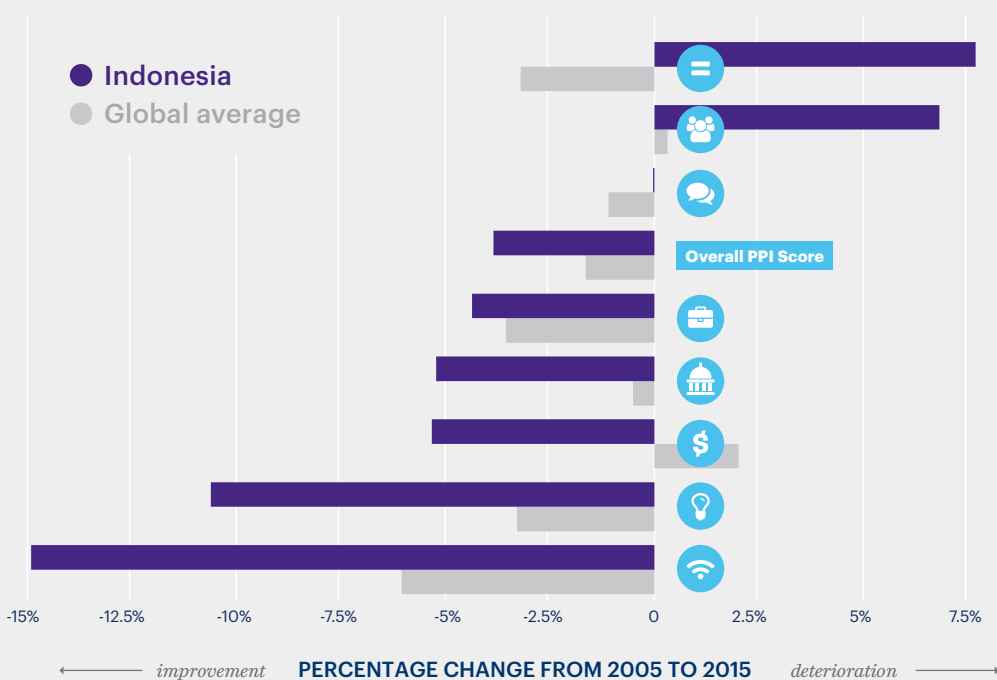
Myanmar has outpaced global progress in *free flow of information, sound business environment* and Positive Peace overall since 2005.



Source: IEP

FIGURE 36 CHANGE IN POSITIVE PEACE DOMAINS IN INDONESIA COMPARED TO THE GLOBAL AVERAGE

Indonesia has improved in Positive Peace overall and five domains since 2005.



Source: IEP

THE PILLARS OF POSITIVE PEACE

The Pillars of Positive Peace is an eight part taxonomy that describes the factors of Positive Peace. These factors were derived through statistical analysis by identifying which measures had the strongest statistically significant relationship with peace and then grouping them according to what the measures represent.

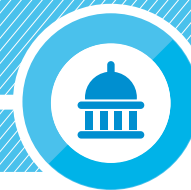
These factors capture the complex social characteristics that are associated with highly peaceful societies. They are also statistically associated with many societal features that are considered important. Therefore, the Pillars of Positive Peace can be described as creating an optimum environment for human potential to flourish.

The Pillars should not be viewed as discrete or individual entities. All Pillars affect each other, therefore changes in one Pillar will have knock-on effects in others. Because the systemic nature of peace makes isolating causality very difficult, IEP has taken a systems approach to understanding what constitutes a highly peaceful society. It is more important to focus on the system, rather than individual Pillars. Individual casual relationships will be different under different conditions and may even work in opposite directions depending on the circumstances.

This section sets out each of the eight Pillars and describes the characteristics of and how IEP measures each of the eight Pillars.



WELL-FUNCTIONING GOVERNMENT



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

Such a government legitimately represents society, is responsive to its needs and effectively engages with citizens, regardless of their affiliation with or identity as part of a particular group. This Pillar emphasises the capability of the government to function rather than any one model of ‘good or bad governance.’

The PPI includes three indicators of a well-functioning government, listed with their correlation coefficients in table 10.

The Economist Intelligence Unit’s (EIU) measure of democratic political culture uses a variety of survey questions and expert assessments to measure citizen attitudes toward government and the ability to participate in government. For example, the indicator includes societal perceptions of whether or not the government should be run by the military or the perceived importance of parliament. This variable serves as a proxy for participation, transparency and accountability.

The measures of judicial independence and revenue collection and service delivery come from the Institutional Profiles Database (IPD), which is a database of 130 indicators of institutional characteristics.

The later measure captures several aspects of the functions of an effective government, including tax collection and delivery of essential government services, such as public schools, basic healthcare services, drinking water and sanitation networks, the electricity grid, transport infrastructure and waste services. IEP calculates this indicator using two measures from the original database in order to have a composite measure of a government’s ability to collect revenue and deliver services.

Taken together, these three indicators effectively proxy the three aspects of governance that show a statistical relationship with peacefulness:

- Transparency, accountability and mechanisms for participation
- Effectiveness of the judiciary
- Capacity for and quality of revenue collection and service provision.

TABLE 10 INDICATORS OF A WELL-FUNCTIONING GOVERNMENT

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
DEMOCRATIC POLITICAL CULTURE	Measures whether the electoral process, civil liberties, functioning of government, political participation and culture support secular democracy.	Economist Intelligence Unit	0.66
JUDICIAL INDEPENDENCE	Measures the extent to which the judiciary is independent from influences of members of government, citizen or firms.	Institutional Profiles Database	0.59
REVENUE COLLECTION AND SERVICE DELIVERY	Measures the efficiency of the national tax system and the territorial coverage of public services and utilities.	Institutional Profiles Database	0.71

FIGURE 37
PEACE AND A WELL-FUNCTIONING GOVERNMENT, 2015

There is a clear relationship between *Internal Peace* and a *well-functioning government*.

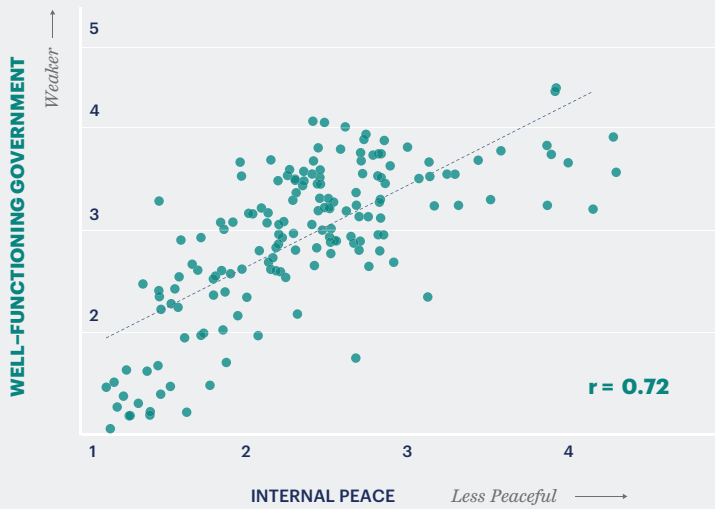


FIGURE 38
DEMOCRATIC POLITICAL CULTURE AND INTERNAL PEACE, 2015

Peace is strongly correlated to a political cultures that support citizen participation, accountability and checks and balances.

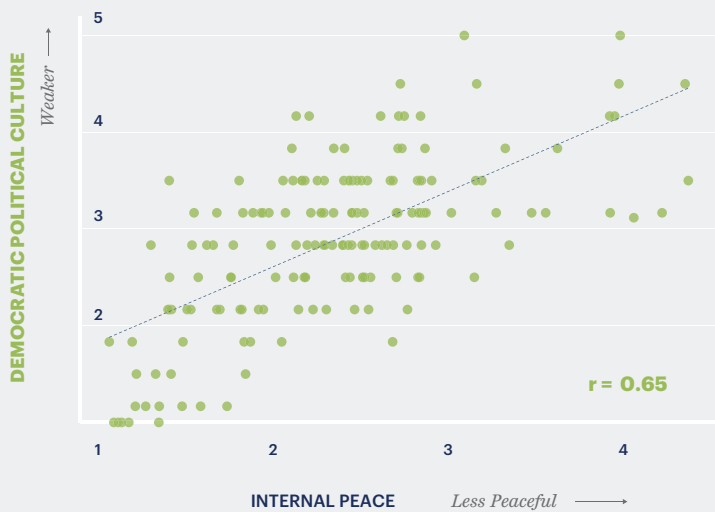


FIGURE 39 INTERNAL PEACE AND REVENUE COLLECTION AND SERVICE DELIVERY, 2015

Countries where the government is effective at delivering services to citizens tend to be more peaceful.

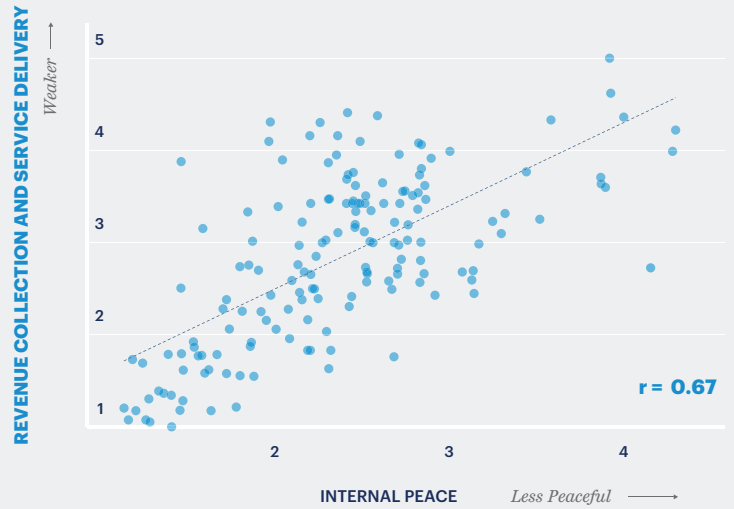
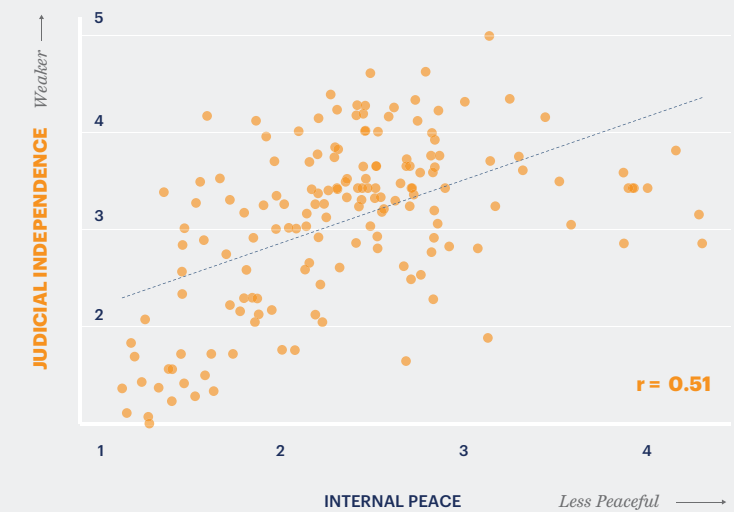


FIGURE 40
JUDICIAL INDEPENDENCE AND INTERNAL PEACE, 2015

Effective and independent justice and dispute resolution mechanisms support high levels of peacefulness within society.



Source: IEP

These three key – service provision, participation and an effective justice system – reflect the government’s dual role as arbiter and provider. A well-functioning government should provide robust structures and institutions to support the collective pursuits of the society and provide mechanisms to reconcile grievances and disputes. Underpinning this is the formal justice system, which may be supported by alternative dispute-resolution (ADR) programs. Where culturally appropriate or if the formal system has not been fully developed, it is often complemented by community tribunals and truth and reconciliation commissions.

Effective interactions between citizens and government are more relevant to the levels of peacefulness than macro-indicators like broadly defined concepts of democracy. It is important that individuals and groups within society feel that the government is responsive to their needs and can protect them from violence.

Well-functioning government is an important Pillar and is pivotal in its intersections with other Pillars such as low levels of corruption or sound business environment. Improvements or deteriorations in this Pillar are likely to affect all other Pillars.

SOUND BUSINESS ENVIRONMENT



A sound business environment refers to the conditions that enable businesses to perform well and to operate efficiently. The strength of the 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 robust business operation.

The PPI includes three indicators of a sound business environment, listed with their correlation coefficients in table 11.

There are several ways to measure business outcomes and the business environment as it relates to peace. IEP has chosen these variables because they have a strong statistical relationship with peacefulness, they have the necessary time and country coverage to be useful in the PPI and, although they are somewhat interrelated, they capture diverse aspects of a *sound business environment*.

The Index of Economic Freedom (IEF) measures economic freedom, or the right to control one's own labour and property. The IEF score includes a variety of measures related to government management of the economy, but the notable concept captured by this indicator is the security of property rights.

Ease of Doing Business, an index produced by the World Bank, measures the environment for local firms across several dimensions. The variables included are largely quantitative measures and range from the very practical, such as the time, cost and number of procedures required to set up an electricity connection for a business, to more complex issues like the extent of protections for minority investors.

The Ease of Doing Business indicator captures only the formal structures of the business environment. It does not account for whether the laws on the books are enforced.²²

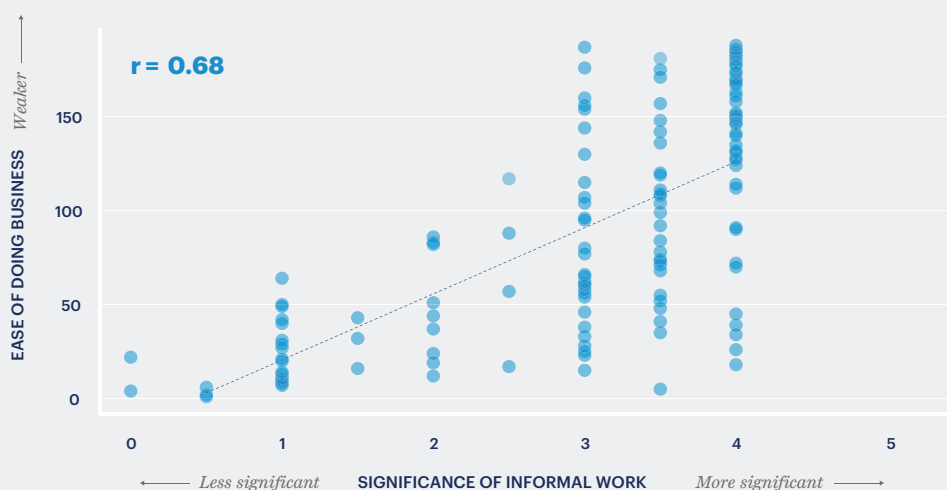
TABLE 11 INDICATORS OF A SOUND BUSINESS ENVIRONMENT

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
INDEX OF ECONOMIC FREEDOM	Measures individuals' freedom to work, produce, consume, and invest, with that freedom both protected by and unconstrained by the state.	Index of Economic Freedom, Heritage Foundation	0.65
EASE OF DOING BUSINESS INDEX RANK	Measures the degree to which the regulatory environment is more conducive to the starting and operation of a local firm.	World Bank	0.63
GDP PER CAPITA	GDP per capita	World Bank	0.59

FIGURE 41

EASE OF DOING BUSINESS AND THE SIGNIFICANCE OF INFORMAL WORK, 2015

Most of the economies that rely primarily on formal work rank highly on the Ease of Doing Business index. However, the formal structures of the business environment can vary significantly among the economies where informal work is more prevalent.



Source: IDP, World Bank

Noting the potential discrepancy between business regulations and actual business practice in some countries, the PPI includes the Ease of Doing Business measure for two reasons. Firstly, because of its high level of correlation with peace and that it is the most comprehensive variable of the practical aspects of the business environment available. Second, despite some differences between law and practice, the Ease of Doing Business Index is indicative of the business framework that has been created. This measure represents many of the *attitudes, institutions and structures* that are important for a *sound business environment*.

Finally, GDP per capita serves as an indicator of the long-term strength and output of the economy. Although high levels of wealth do not guarantee high levels of peacefulness, per capita GDP does correlate with peacefulness at $r = 0.59$. This variable measures actual economic performance, complementing the other measures.

The *sound business environment* pillar has a crucial, cyclical relationship with peace: improvements in one strengthen the other. A sound business environment represents one of the principal ways that members of society routinely solve conflicts without violence. The challenge of distributing resources in human societies is universal and ongoing. An effective combination of a market-based economy and appropriate regulation can facilitate efficient and effective resource distribution.

Markets and profitable businesses do not automatically lead to peace, even when they produce other positive social outcomes. Other factors interact with markets and together propel a society towards or away from peace and a better business environment. For example, everyone can benefit from a sound business environment when barriers to entry are manageable and all groups have adequate access to employment. Where conditions are reversed, the benefits of economic development are unlikely to be evenly distributed and growing disparities can reinforce grievances between groups and fuel conflict that may escalate to violence. This may manifest as a lack of affordable healthcare facilities or arduous regulations that encourage corruption.

In order to reveal more about the specific dynamics of a sound business environment, IEP examined two datasets pertaining to the formalisation of the economy:

- > the measure of “significance of informal work” from the Institutional Profiles Database, and
- > the measure of “property rights” from the Index of Economic Freedom, which captures the strength or weakness of the laws that protect private property and their enforcement.

The significance of informal work in the economy correlates strongly with Internal Peace at $r = 0.56$. Countries in which a

larger share of employment and economic activity take place in informal markets also tend to be less peaceful.

Property rights are one measure of economic formalisation which consistently show a strong relationship with peacefulness. Economies that operate with clear and secure property rights will be more formalised, with a strong legal system supporting stability.

Figure 42 highlights the relationship between peacefulness and the measure of property rights used in the Index of Economic Freedom, as well as the opposite relationship between peacefulness and the significance of informal work.

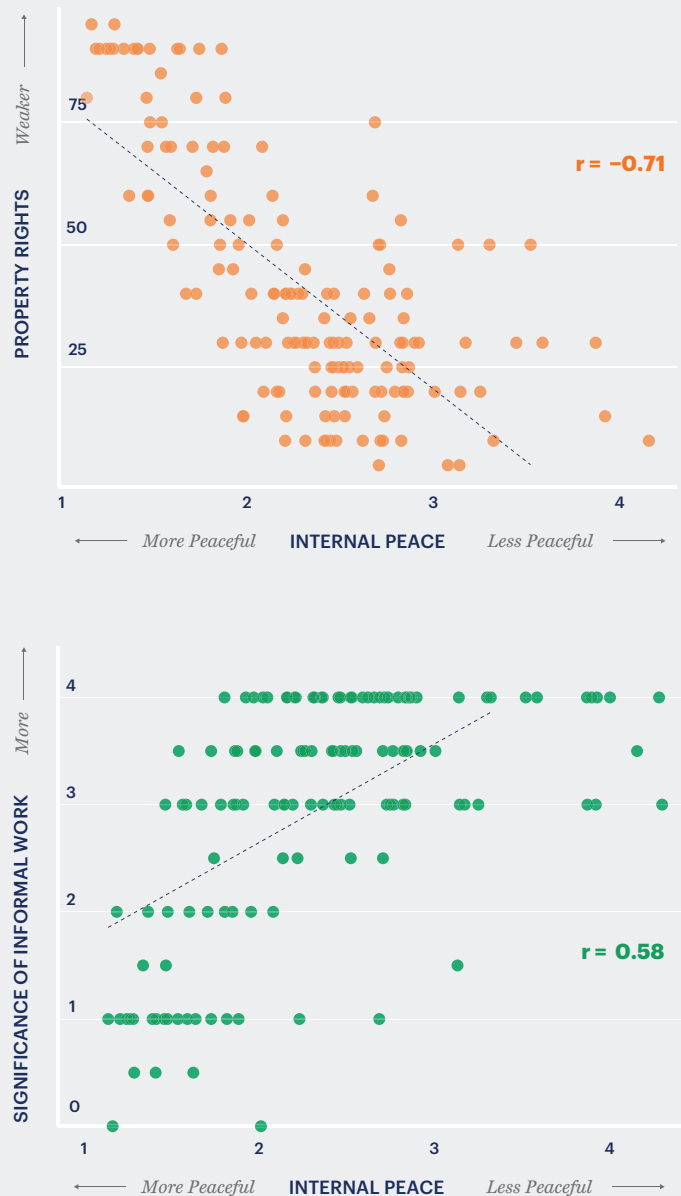
The relationship between formal markets and peace highlights the role of government as well. Governments at all levels are involved in formalising markets and facilitating the transparency and accountability that is necessary for robust economic activity. Governments also rely on formal markets to collect tax revenue. And yet it is simultaneously the role of government to ensure that business operations are not over-regulated, thus hampering economic development. Therefore it's important to find simple, context-appropriate solutions that provide the right level of formality and regulation.

There can be a role for informal economic activity in a sound business environment – such as easily-started microenterprises. At the same time, the business environment benefits from formal organisations in the following ways:

- Activities are more likely to be documented, transparent and regulated, making corruption more difficult to conceal.
- Incorporated organisations have formalised structures that are less likely to change based on the preferences of individuals or external pressures, such as the political climate.²³
- Formalised businesses contribute to tax revenue, which supports investments in other dimensions of the business environment, such as infrastructure.
- Formal organisations carry credibility, which can increase trust with the investment community.

FIGURE 42 INTERNAL PEACEFULNESS VS. INFORMAL WORK AND PROPERTY RIGHTS, 2015

The top scatterplot demonstrates that countries with stronger property rights also tend to be more peaceful. The bottom plot shows that countries reliant on informal work tend to be less peaceful.



Source: IEP, IEF

EQUITABLE DISTRIBUTION OF RESOURCES



Equitable distribution of resources measures how society distributes essential resources and opportunities. Peaceful countries tend to ensure equity in access to resources like education and health, as well as adequate access to opportunity.

The PPI includes three indicators of an *equitable distribution of resources*, listed with their correlation coefficients in table 12.

The *equitable distribution of resources* domain is built using the measures of inequality that show the strongest relationship to peacefulness. These are inequality-adjusted life expectancy, social mobility and the poverty gap.

Inequality-adjusted life expectancy is measured by the United Nations Development Program (UNDP) as part of the Human Development Index project. This indicator reflects the difference in life expectancy that results from inequalities between groups in society. The measure of social mobility captures the degree to which upward mobility is independent of one's family background, ethnic group or social network. In more peaceful societies, opportunities are available to everyone rather than only those in a particular group.

The poverty gap is an assessment of how poverty is spread out over society. The World Bank calculates the average difference between actual incomes and a local income that would offer the purchasing power of US\$2 per day, referred to as the poverty line. When this average is calculated, those that are at or above the poverty line have an effective difference of zero. Then this average difference between actual income and the poverty line is expressed as a percentage of the poverty line. Thus countries which have a larger poverty gap have a larger proportion of their population living below US\$2 PPP per day.

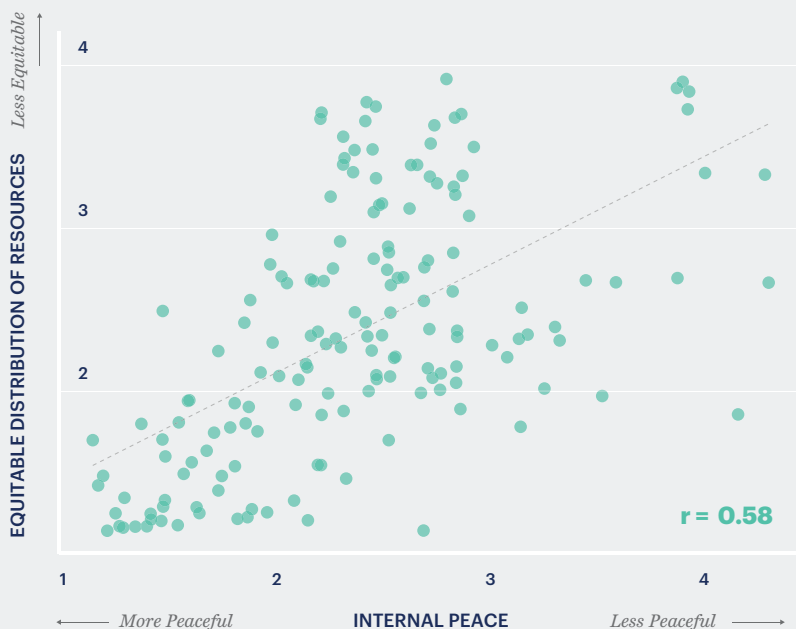
By using these three measures, the *equitable distribution of resources* domain captures a robust measurement of the forms of equity that have the strongest statistical relationship with peacefulness.

TABLE 12 INDICATORS OF AN EQUITABLE DISTRIBUTION OF RESOURCE

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
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.	Human Development Index, UNDP	0.58
SOCIAL MOBILITY	Measures the opportunity for upward social mobility based on the degree to which either merit or social networks determine an individual's success.	Institutional Profiles Database	0.53
POVERTY GAP	The mean shortfall from the poverty line at \$2 per day PPP (counting the non-poor as having zero shortfall), expressed as a % of the poverty line.	World Bank	0.34

FIGURE 43 EQUITABLE DISTRIBUTION OF RESOURCES AND INTERNAL PEACE, 2015

There is a clear relationship between peacefulness and the *equitable distribution of resources*, with more peaceful countries also scoring better on the three indicators of this domain.



Source: IEP, FFP

Equitable distribution does not mean equal distribution or that absolute equality is best. Different countries have very different views on what is equitable. What is important is that the social contract is considered fair. Access to health, education and opportunity also create an environment that is conducive to higher levels of human capital and more robust business environments.

Several measures of an *equitable distribution of resources* have a quantitative relationship with peacefulness. Figure 43 shows the relationship between the *equitable distribution of resources* domain of the PPI and society's internal peacefulness as measured by the GPI.

“ It is useful to look for the intersections between inequality and other social divides, especially along ethnic and religious lines.

ACCEPTANCE OF THE RIGHTS OF OTHERS



Acceptance of the rights of others is designed to capture the attitudes, institutions and structures that facilitate tolerance and respect between groups within a society.

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

The PPI includes three indicators of the *acceptance of the rights of others*, listed with their correlation coefficients in table 13.

The measurements that go into the *acceptance of the rights of others* domain construct a well-rounded and holistic indicator of society’s *attitudes, institutions and structures* to care for different groups in society. The Empowerment Index measures many of the formal institutions and structures of this Pillar, such as whether or not citizens have the right to free speech or the opportunity to join groups that protect their best interests, such as unions and political parties.

The group grievance rating is a qualitative expert assessment of the severity of divisions between groups in society. It is not only important to have formal structures in place that protect the rights of different groups, but also to assess the level of grievance that exists between groups. This indicator acts as a reflection of whether the *attitudes, institutions and structures* that support *acceptance of the rights of others* are present and functioning.

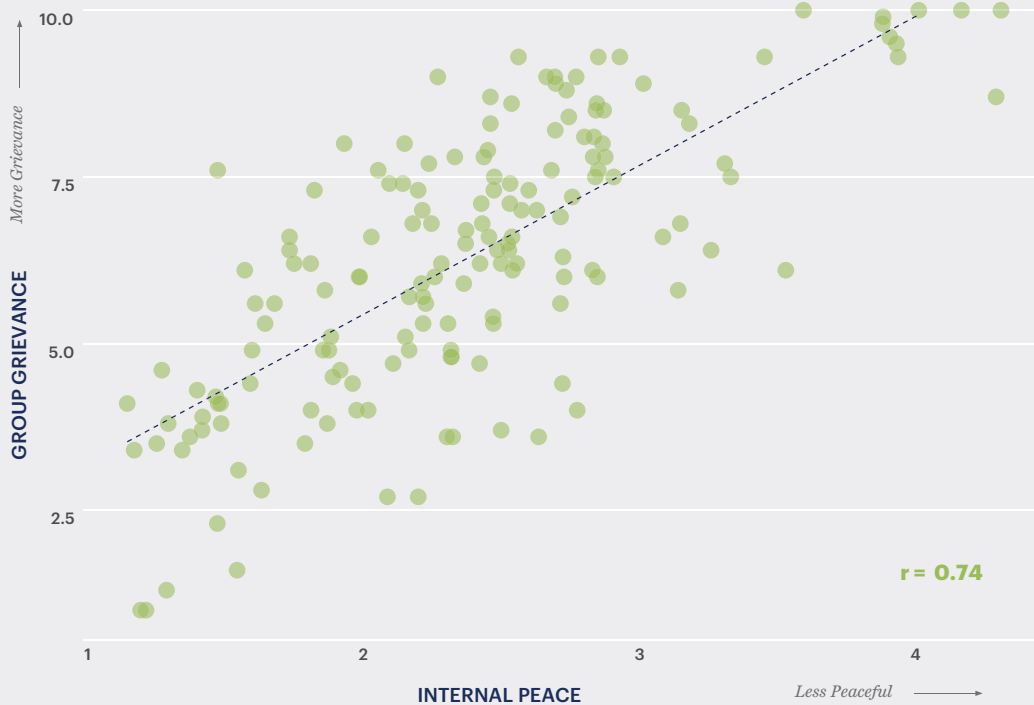
Finally, the Gender Inequality Index assesses the level of acceptance and development between society’s most basic two groups: men and women. Gender equality has a consistent and demonstrable relationship with peacefulness across many studies and data sources.²⁴ Countries that perform well in gender equality create participatory communities and facilitate high levels of opportunity and engagement, and as a result consistently have higher levels of internal and external peacefulness.

TABLE 13 INDICATORS OF THE ACCEPTANCE OF THE RIGHTS OF OTHERS

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
EMPOWERMENT INDEX	An additive index using indicators of freedom of movement, freedom of speech, workers’ rights, political participation, and freedom of religion.	Human Rights Data Project, CIRI	0.47
GROUP GRIEVANCE RATING	Measures the extent and severity of grievances between groups in society, including religious, ethnic, sectarian and political discrimination and division.	Fragile States Index, Fund for Peace	0.74
GENDER INEQUALITY INDEX	The Gender Inequality Index (GII) reflects women’s disadvantage in three dimensions: reproductive health, empowerment and the labour market.	Human Development Index, UNDP	0.68

FIGURE 44 GROUP GRIEVANCE RATING AND GPI SCORE, 2015

Countries with a lower level of intergroup grievance in 2010 typically had a higher level of peacefulness in 2015.



Source: IEP, FFP

It is often observed that homogenous societies are far less prone to conflict and violence. This observation has problematic implications for a world where globalization and migration increasingly integrate cultures. But it is possible to cultivate societies that value diversity and thrive. Figure 44 demonstrates that where groups in society get along well, levels of peacefulness are consistently higher.

While the relationship between the *acceptance of the rights of others* and peacefulness seems intuitive, it can be difficult to deal with the practicalities of a diverse society. However, there are many examples of success in this area.

IEP's recent research on religion and peace demonstrates that societies with diverse religious practices and societies with high levels of religiosity can also be highly peaceful. Similarly, the rate at which people identify as a member

of a religious group does not have a statistically significant relationship with peacefulness. Societies in which a high portion of the population reports being a member of a religion can be highly peaceful and societies with low levels of

others heavily impacts how individuals and groups will respond when a conflict arises. As such, this pillar can serve as the antidote to what Galtung (1998) terms 'cultural violence', or a culture that facilitates violence towards certain

“ While the relationship between the acceptance of the rights of others and peacefulness seems intuitive, it can be difficult to deal with the practicalities of a diverse society.

religious practice or identification can have low levels of peace.²⁵

Full democracies have the best average performance in peace. They also have the lowest levels of religious restrictions and religious hostilities. Less regulation reduces the grievances of religious groups and decreases the ability of any single group to wield undue political power.²⁶ The level of *acceptance of the rights of*

groups by portraying and normalizing it in media, literature, art and other cultural spaces.²⁷ In societies with a high level of *acceptance of the rights of others*, violence becomes less acceptable.

GOOD RELATIONS WITH NEIGHBOURS



Good relations with neighbours describes a country's capacity and proclivity for using diplomacy and negotiation to pre-emptively manage disagreements before they become violent. It also describes a country's ability to manage positive relationships with other countries, such as trade relations.

The PPI includes three indicators of *good relations with neighbours*, listed with their correlation coefficients in table 14.

While many different attributes, both formal and informal, are necessary to establish *good relations with neighbours*, the indicators used in this Pillar indicate whether a society has positive attitudes toward foreigners and their property, whether tourists visit the country and the level of integration of its trade with other states.

The extent to which foreigners feel safe, directly relates to tourist numbers which have wider economic flow on effects. Formal interactions are complex to measure, particularly closed door diplomacy. Trade and tourism data however is publicly available and shows patterns and working relationship between parties.

Having peaceful relations with other countries is as important as good relations between groups within a country. Countries with positive external relations are more peaceful and tend to be more politically stable, have better functioning governments, are regionally integrated and have low levels of organised internal conflict. This is also beneficial for business and supports foreign direct investment, tourism and human capital inflows. Figure 45 highlights the clear relationship between good relations with *neighbours and internal peacefulness*.

“ Positive international relationships occur when internal differences are well-managed.

TABLE 14 INDICATORS OF GOOD RELATIONS WITH NEIGHBOURS

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
HOSTILITY TO FOREIGNERS	Measures social attitudes toward foreigners and private property.	Economist Intelligence Unit	0.68
NUMBER OF VISITORS	Number of visitors as per cent of the domestic population.	Economist Intelligence Unit	0.4
REGIONAL INTEGRATION	Measures the extent of a nation's trade-based integration with other states.	Economist Intelligence Unit	0.61

FIGURE 45 GOOD RELATIONS WITH NEIGHBOURS AND PEACE, 2015

The strength of a country's relationships with neighbours correlates strongly with both internal and external peace.



Source: IEP

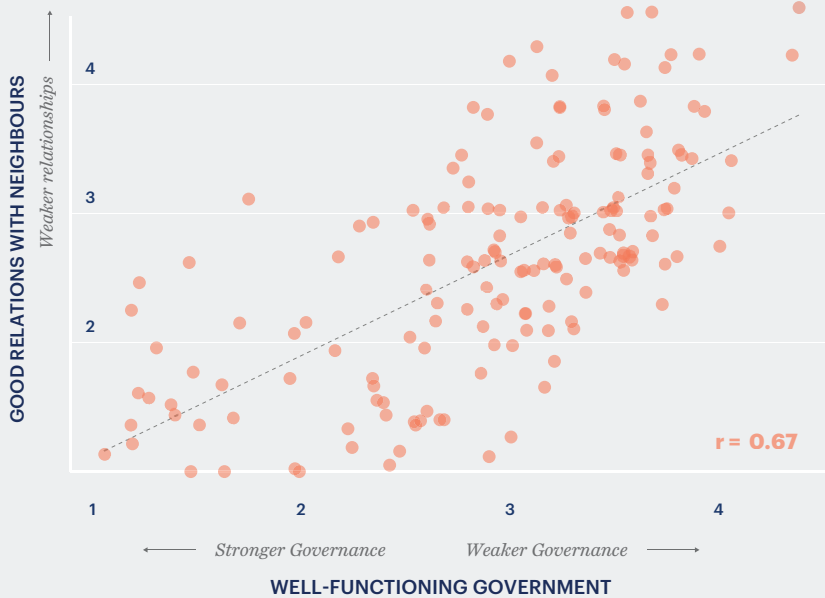
Good relations with neighbours is a unique pillar in the Positive Peace framework because it is the only outwardly looking pillar. The rest deal with the internal state of the society. Since the active processes of relations between states are often the domain of a small portion of a country's government, to understand it within the PPI framework it is important to view relations between states systemically.

Representatives of countries require predictability and credibility from each other. If two countries are entering into an agreement, they are both taking a risk that the other country may not hold up its end of the bargain. This risk is mitigated when we think of diplomacy and good relations between neighbours as the outcome of the other PPI factors.

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

FIGURE 46 GOOD RELATIONS WITH NEIGHBOURS AND WELL-FUNCTIONING GOVERNMENT, 2015

Formal relations between states need a stable base as shown by the strong correlation with *well-functioning government*.



Source: IEP

Good governance is crucial, as seen in figure 46. When entering into an agreement with another country, one needs to know that the other country's government can reconcile domestic political issues within its international agreements, treaties and international law. Government continuity also requires citizen support, so the *free flow of information* is another critical factor that can affect good relations between countries.

FIGURE 47 GOOD RELATIONS WITH NEIGHBOURS AND ACCEPTANCE OF THE RIGHTS OF OTHERS, 2015

Having a community culture of *accepting the rights of others* strongly correlates with country scores in *good relations with neighbours*.



Source: IEP

Acceptance of the rights of others is also crucial to *good relations with neighbours*. There is a strong correlation between these two pillars, as seen in figure 47. This implies that positive international relationships occur when internal differences are better managed. Furthermore, cultivating a high level of *Acceptance of the rights of others* likely aids in approaching international relationships in a manner conducive to compromise and seeking mutual benefit.

FREE FLOW OF INFORMATION



The *free flow of information* domain explores the degree to which citizens can easily access and exchange information while being free from restrictions or censorship.

Peaceful countries tend to have free and independent media that disseminates information in a way that leads to greater openness and helps individuals and 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.

The PPI includes three indicators of the *free flow of information*, listed with their correlation coefficients in table 15.

Freedom House’s Freedom of the Press Index and Reporters Without Borders’ World Press Freedom Index measure freedom of the press based on the economic, political and legal framework that a country’s press operates within. Measurements include formal structures such as laws that protect freedom and informal constraints, such as self-censorship or diversity of content. Both indices account for freedom of content online as well as offline.

The mobile phone subscription rate serves as a proxy for what portion of the population has access to information. The rate accounts for all types of mobile phones because information

access can include access to the internet as well as information received via word-of-mouth and SMS.

Access to quality and reliable information is essential to a well-informed society capable of making considered decisions. Information can be from a range of sources including media, government, civil society and academia. Information can be disseminated through many means including books, schools, family and friends, public forums, the internet, television and radio.

Freedom of information can have many flow-on effects for society, as the open and unbiased dissemination of information plays a key role in keeping governments accountable, driving economic efficiency and enabling civil society to better participate in political processes and express opinions without fear or prejudice.²⁸

Media is also an important driver of community perceptions, with research suggesting that the way in which information is presented can have a powerful impact on community perceptions of reality.²⁹ In addition, because media can potentially be dominated by government, the elite or other interest groups, *free flow of information* requires sufficient competition in the supply of information in order to ensure the quantity of information available to communities is also matched with quality.³⁰

Peaceful countries tend to have free and independent media that disseminates information in a way that leads to greater openness

TABLE 15 INDICATORS OF THE FREE FLOW OF INFORMATION

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
FREEDOM OF THE PRESS INDEX	A composite measure of the degree of print, broadcast, and internet freedom.	Freedom House	0.6
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	0.54
MOBILE PHONE SUBSCRIPTION RATE	Number of mobile phone subscriptions per 100 inhabitants.	International Telecommunications Union	0.39

and helps individuals and society work together. This leads to better decision making and more rational responses in times of crisis. In particular Freedom House's Freedom of the Press Index was found to be strongly associated with how peaceful a country is. The correlation with internal peace can be seen in figure 48.

Technology in recent years has successfully increased both the speed and amount of information that can be shared across the globe. While these changes make it possible to spread both sound information and misinformation more readily, these new technologies have the potential to reduce and prevent violence, promote better accountability and improve transparency in both government and business.

Mobile phones are an example of a new technology that is expanding quickly throughout the world. Companies like Safaricom and its parent Vodafone are using their cellular infrastructure and transmission capacity to better support business, civil society and governments to improve transaction efficiencies. The Safaricom product M-Pesa, an SMS text message-based money transfer system, allows rural communities to participate in the formal economy. The system helps farmers access information – like crop prices in the surrounding villages – and has the added effect of reducing the



impact of shocks such as natural disasters and health crises, since people can easily send money to where it is needed. Safaricom, in cooperation with the UNDP and the Kenyan government, has also been instrumental in disseminating information to prevent violence in the recent Kenyan elections.³¹ This example underscores how mobile phone technology

and information access contribute to Positive Peace by empowering individuals with new ways of communicating and trading.

Like the other pillars, *free flow of information* has an interdependent relationship with each aspect of Positive Peace. Table 16 shows the correlation between *free flow of information* and *well-functioning government*, *low levels of corruption* and *high levels of human capital*. Human capital is a contributing factor to the effective use of information, as high levels of education allow people to produce and to collate, understand and critically analyse information that can contribute to a better society.

TABLE 16

CORRELATION MATRIX FOR SELECT DOMAINS OF POSITIVE PEACE

The relationship between these domains of positive peace is evidenced by their strong correlation coefficients.

FREE FLOW OF INFORMATION	1	0.66	0.76	0.63
WELL-FUNCTIONING GOVERNMENT	0.66	1	0.89	0.8
LOW LEVELS OF CORRUPTION	0.76	0.89	1	0.78
HIGH LEVELS OF HUMAN CAPITAL	0.63	0.8	0.78	1

HIGH LEVELS OF HUMAN CAPITAL



Human capital refers to society’s “stock” of human potential and represents an economic value to society that comes from increased education, health and the state of youth.

The PPI includes three indicators of a *high levels of human capital*, listed with their correlation coefficients in table 17.

The Youth Development Index includes a range of related variables: both measures of wellbeing such as deaths from violence, self-harm, drug use and prevalence of HIV and the social norms which can have a significant effect on increasing human capital, such as levels of employment, political participation and civic participation. This indicator also captures how well society prepares and empowers its young people for the coming decades of economic and social progress.

As a high level of education is arguably the most significant factor leading to innovation and technical change within the labour force, IEP has placed significant importance on it within the human capital measurement. In particular, secondary school enrolment and scientific publications per 100,000 people

have been used. High levels across these areas in society can foster the required skills and social cohesion to increase a country’s level of stability, peace and economic development.

A skilled human capital base is reflected in the extent to which societies educate citizens and promote the development of knowledge. This improves economic productivity, care for the young, enables better political understanding and increases social capital. Education is a fundamental building block through which societies can build resilience and develop mechanisms to learn and adapt.

A high level of human capital which is equitably spread through society can be a significant determinant of economic progression and growth. By increasing the overall skill base, an economy can significantly decrease its level of poverty and social exclusion, increase its stability and improve its levels of peace.

Increased levels of human capital can assist the development of new innovative sectors. Notably, there is a strong relationship between innovation and peace, likely reflecting society’s ability to engineer solutions and be adaptable. Being able to progress into more advanced sectors is integral for economic and social stability. To reflect this process, the PPI includes an indicator of advanced research and skill development,

TABLE 17 INDICATORS OF HIGH LEVELS OF HUMAN CAPITAL

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
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	0.53
SCIENTIFIC PUBLICATIONS	Number of scientific publications per 100,000 people.	World Bank, IEP calculation	0.62
YOUTH DEVELOPMENT INDEX	The YDI measures the status of 15-29 year-olds according to five key domains: education, health and well-being, employment, civic participation and political participation.	Commonwealth Secretariat	0.7

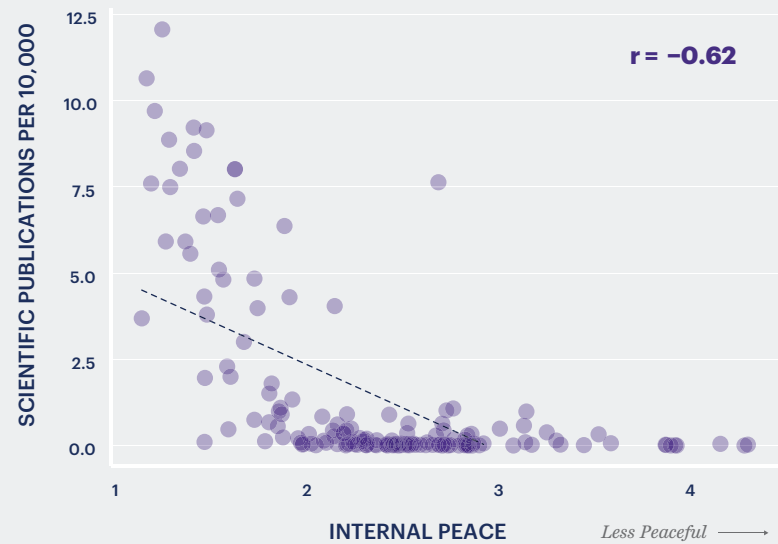
“ Increased levels of human capital can assist the development of new innovative sectors. Notably, there is a strong relationship between innovation and peace, likely reflecting society’s ability to engineer solutions and be adaptable.

captured in the number of scientific and technical publications each year relative to the population. Figure 49 shows the correlation between scientific publications and internal peace.

Increased levels of human capital can build the institutions that foster peace. In Rwanda, significant investment was placed in education and health following the civil war which ended in 1994. By 2005 the primary school enrolment rate had reached 95 per cent, up from 67 per cent, while the percentage of the population living in poverty had decreased from 78 per cent to 57 per cent.³² Economic development and peacefulness substantially improved in the years following the end of the armed conflict. In 2008 Rwanda ranked 67th on the Global Peace Index, higher than most African countries.

Societies which encourage the development of human capital show higher levels of peace compared to those which do not. The 20 most peaceful countries on average place nine per cent more government expenditure in health than the 20 least peaceful countries, as well as around two per cent more on education. Internal peace correlates significantly with levels of infant mortality, as seen in Figure 50. This conveys how societies that place emphasis on health tend to be more peaceful.

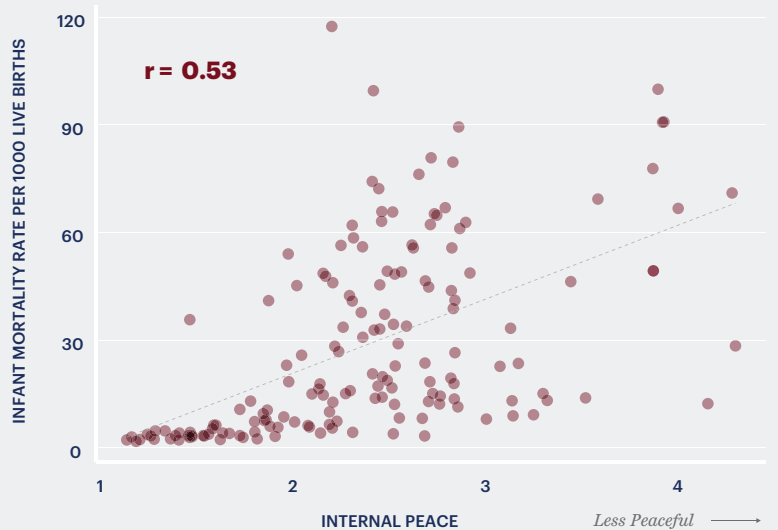
FIGURE 49 SCIENTIFIC PUBLICATIONS AND INTERNAL PEACE, 2015
Increased investment into high level education and innovative research is significantly correlated with high levels of peace.



Source: IEP; World Bank

FIGURE 50 INFANT MORTALITY AND INTERNAL PEACE

There is a significant correlation between increased access to health and increased levels of peace. Infant mortality rates are a good proxy measurement of the accessible health resources of an economy.



Source: IDP, World Bank

LOW LEVELS OF CORRUPTION



Low levels of corruption captures the extent to which society's attitudes, institutions and structures prevent corruption or hold individuals and organizations accountable when corruption does occur. Levels of corruption have a very close statistical relationship with levels of peacefulness, and high levels of corruption can misdirect resources, compound inequities and undermine trust throughout society. The resulting inequities can lead to civil unrest and in extreme situations can be the catalyst for more serious violence. Low levels of corruption, by contrast, can enhance confidence and trust in institutions. Managing corruption is one of the most important factors for peaceful societies.

The PPI includes three indicators for *low levels of corruption*, they are listed with their correlation coefficients in table 18.

Transparency International's Corruption Perceptions Index aggregates the best available data to create a measure of perceived corruption across the world. It should be noted that individual concepts of corruption are greatly influenced by social norms and what citizens believe to constitute corrupt behaviour will differ across cultures and societies. Globally-comparable measures of corruption are typically based on

surveys that measure individual perceptions of the severity and pervasiveness of corruption.

The World Bank's control of corruption indicator and the Corruption Perceptions Index use a variety of data sources to produce an estimate of corruption at the national level. However, the control of corruption measure, which is part of the World Bank's World Governance Indicators, has a stronger focus on government mechanisms in place to address corruption. Taken together, these two indicators provide a picture of the formal

TABLE 18 INDICATORS OF LOW LEVELS OF CORRUPTION

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH INTERNAL PEACE
PERCEPTIONS OF CORRUPTION INDEX	Scores countries based on how corrupt the public sector is perceived to be.	Transparency International	0.73
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 Governance Indicators, World Bank	0.78
FACTIONALISED ELITES	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fragile States Index, Fund for Peace	0.76

institutions and structures in place to combat corruption and the perception among citizens of how widespread and severe corruption is.

Factionalised elites is an indicator of a problematic outcome of pervasive corruption: the tendency for bribery, favours and social privileges to result in factions and schisms between the elite of different social groups. This variable is particularly relevant to peace because it can be a channel for destructive conflict. Factionalisation can facilitate corruption, exacerbate group grievances, prevent trust-building and undermine peacebuilding.³³

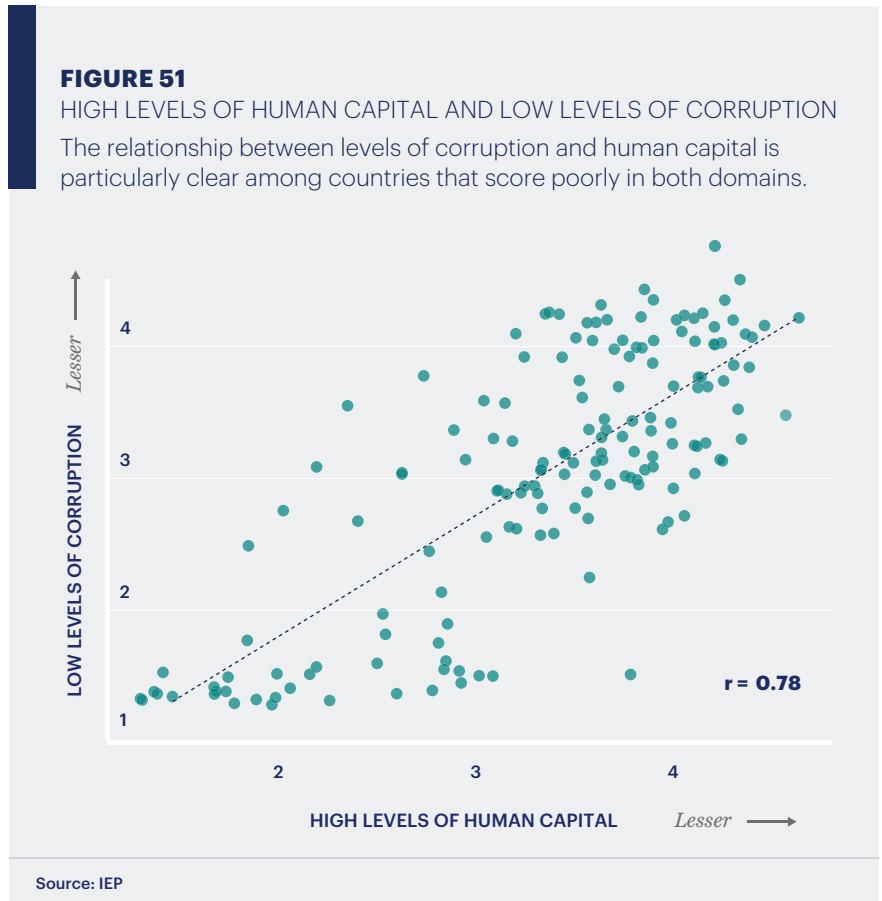
The Pillars of Positive Peace are all highly interrelated, and this is especially true for *low levels of corruption*. This indicator has a statistically significant relationship with both internal peace and with the other Pillars of Positive Peace. Previous research by IEP, using regression analysis, indicated that *low levels of corruption* were a precursor to high levels of negative peace, whereas changes in negative peace did not seem to affect corruption in the short term.

The relationship with other aspects of Positive Peace can be partially explained by endogeneity: *low levels of corruption* and a *sound business environment* will both impact upon each other.

Nonetheless, it is important to note the mutually reinforcing relationship between the absence of corruption, the absence of violence and the presence of several other desirable social characteristics. *Low levels of corruption* and *high levels of human capital* have a very strong statistical relationship, as seen in figure 51.

The relationship between levels of corruption and human capital is particularly clear among countries that score poorly in both domains. Countries that score well on *low levels of corruption* seem to have varying levels of human capital. But among the countries with poor scores in corruption, scores are also consistently poor in human capital.

This implies that tackling corruption and building human capital are



“ Factionalised elites is an indicator of a problematic outcome of pervasive corruption: the tendency for bribery, favours and social privileges to result in factions and schisms between the elite of different social groups.

twin challenges. High-performing, transparent institutions require *high levels of human capital* to operate effectively. Institutional accountability requires a well-educated population prepared to take action in changing corrupt institutions. Furthermore, corruption in the police and judiciary are particularly detrimental to peace³⁴ – two institutions which require professional, well-educated human capital with highly specialized training. Of the 98 countries with below average scores on *low levels of corruption*, 80 per cent of those countries also score below average on *high levels of human capital*.

Globally, corruption has increased slightly over the last ten years, with the average *low levels of corruption*

score deteriorating from 3.28 to 3.35, which is just over two per cent. Ninety-nine countries had increasing levels of corruption from 2005 to 2015, with 63 recording a decrease in corruption over the same period. Of the three components of the *low levels of corruption* pillar, the factionalised elites indicator deteriorated the most. This change was consistent across every government type and region, although the largest changes occurred in Europe, the Middle East and North Africa and the Russia and Eurasia regions.

BUILDING POSITIVE PEACE

RECOMMENDATIONS FOR CATALYSING SYSTEMIC CHANGE

Violence and conflict continue to thwart efforts to meet humanitarian goals and tackle major challenges, such as climate change or poverty reduction. In 2015, the economic impact of containing or dealing with the consequences of violence was 13.3 per cent of world GDP, yet in comparison far less is devoted to addressing the underlying conditions that lead to violence or conflict.

IEP's analysis demonstrates that building resilience in a preventative manner, by building high levels of Positive Peace, is an effective way to reduce the potential for violence. But how should countries go about doing this?

IEP offers two recommendations as entry points to changing peace systems:

1. FOCUS ON THE WEAKEST PILLAR

This intervention aims at targeting the weakest pillar and then building the appropriate actions to stimulate it. This should have the benefit of not only improving the Pillar but due to interdependencies, also have a positive flow on effect to the other pillars of Positive Peace.

Nepal, one of the top five risers in the PPI, is an example of a country where change was driven by progress in its weakest Pillar. Nepal was one of the five countries with the greatest improvement in the Positive Peace Index from 2005 to 2015. In 2005, Nepal's weakest pillar of Positive Peace was *free flow of information* and this Pillar showed the largest improvement from 2005 to 2015, as shown in figure 32.

Between 1996 and 2006, over 13,000 people died as a result of internal conflict between the Government of Nepal and the Community Party of Nepal-Maoist (CPN-M).³⁵ On the 4th February 1996, the CPN-M submitted a 40-point set of demands to the government and stated that if these demands were not met, a military struggle would follow. The next week, the CPN-M started an armed insurgency that would last for a decade.³⁶

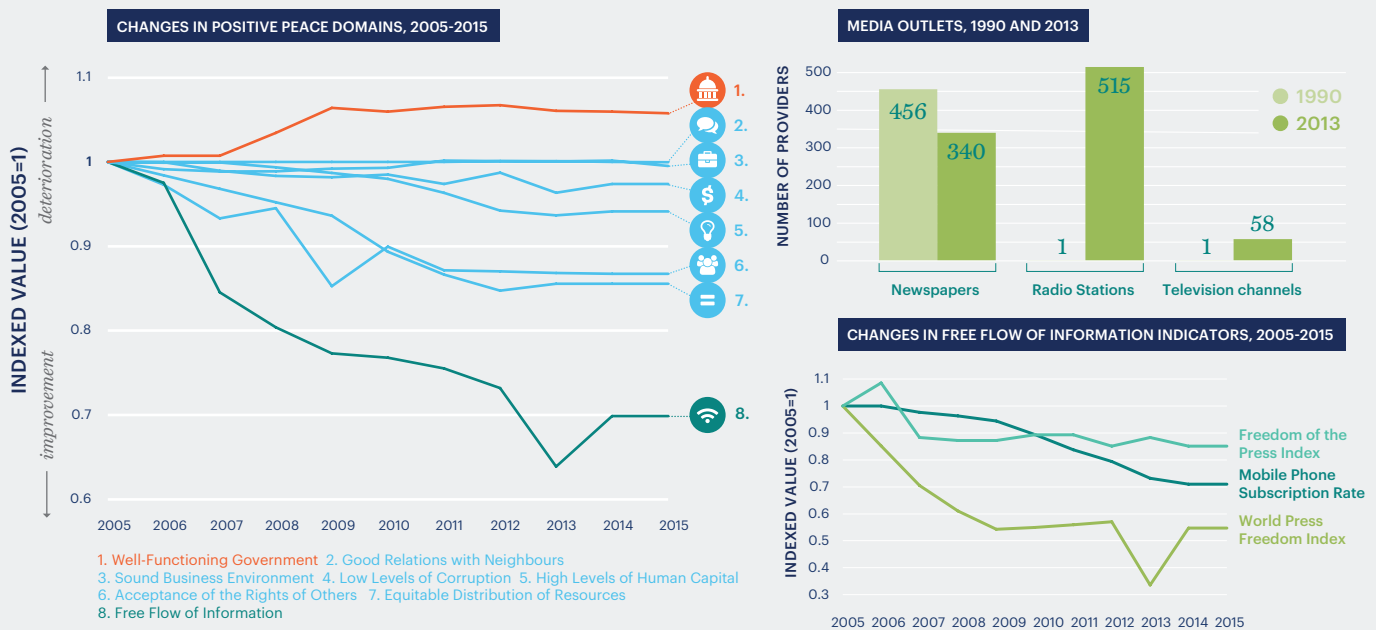
Conflict-related killings were recorded in nearly all of Nepal's districts. As the violence went on, human rights violations and abuses were committed by both the Government of Nepal and the CPN-M. Nepal's instability was further exacerbated when the nation was put in a state of emergency in 2001 and 2005, both times due to increased violence between the government and the CPN-M. However, a Comprehensive Peace Agreement was signed in 2006, bringing a cessation of the majority of violence. Although the majority of the violence has stopped, the government still needs to address a number of challenges in order to reach stability.

In the decade following the peace agreement, Nepal has enacted reform to tackle various issues. It has been able to improve its score for *free flow of information* by 30 per cent, almost five times faster than the global average change. This has most likely been driven by the increase in mobile phone penetration in the country. By 2014, Nepal's mobile phone subscription rate reached 83 per 100 people, a 59 per cent increase over the previous five years. Nepal also improved its *free flow of information* score by growing the media sector. Nepal had 515 radio stations and 58 television channels in operation in 2013, compared to just one television station and one radio station in 1990.³⁷ The increased number of news sources, coupled with the increased access to the internet and communication, facilitates greater diversity in and wider reach of information.³⁸

Following these improvements in *free flow of information*, the country began to show improvement in other areas of Positive Peace. Between 2007 and 2011, Nepal made significant gains in *acceptance of the rights of others* and *equitable distribution of resources*.

FIGURE 52 POSITIVE PEACE PROGRESS IN NEPAL, 2005 – 2015

Nepal's progress in Positive Peace followed improvements in the free flow of information, which improved by 30 per cent from 2005 to 2015. All three indicators in this Pillar registered an improvement and the number of media outlets doubled from 1990 to 2013.



Source: IEP

Nepal has also made gains in Negative Peace. In 2016, Nepal's internal peace score was two per cent better than 2008 and its Positive Peace score was seven per cent better in 2015 than in 2005. In particular, Nepal has improved in the *internal conflicts fought*, *political terror scale* and *deaths from internal conflict* indicator scores. This change has most likely stemmed from the end of the civil war with the CPN-M once the Comprehensive Peace Agreement was signed. Nepal's progress in Negative Peace has been slower. The country has faced frequent natural disasters, which may be a driver of the deterioration seen in *political instability*. However, progress in Positive Peace will build the *attitudes, institutions and structures* needed to continue to progress in Negative Peace.

2. STIMULATE THE WHOLE SYSTEM

The aim of this approach is to stimulate the system from many different angles and involves finding an intervention for each pillar which has the following characteristics:

- The intervention is practical and can be implemented in the current political dynamics.
- The intervention will have an impact that is substantial.
- The intervention will have an effect over the shorter term as well as the longer term.

This kind of system-wide improvement can create the environment for a virtuous cycle of peacebuilding.

IEP has piloted a program to develop conversations around practical, measurable and impactful investments in the key drivers of peace. IEP's Positive Peace workshops are designed to bring together key stakeholders at the national and local level. Workshops seek to meet two main goals. The first is to ground the globally derived factors of Positive Peace in a more localised context, which includes reality-testing whether workshop participants see the factors as salient within their country or community. The second is to identify concrete investments that can be made in the Positive Peace factors themselves.

Existing practice suggests this approach can be very effective. One of the main challenges to peacebuilding can be getting the many people or groups in society to agree on both the nature of and the solution to large scale problems. Focusing on specific aspects of society in a positive and future-orientated frame can bring about a different type of discussion. The future orientation of the process means that the process does not get bogged down in recriminations about the causes of past failures. Focusing on practical and achievable opportunities within the current political environment and level of capacities has proved to be effective in building consensus.³⁹

ZIMBABWE POSITIVE PEACE WORKSHOP CASE STUDY

IEP coordinated a workshop on Positive Peace in November 2015 in Harare, Zimbabwe, in partnership with the National Peace Trust, a Zimbabwean organisation. The workshop was supported by IEP and led by the National Peace Trust. Over 50 participants attended, including senior government officials, including Zimbabwe's Vice President, the Honourable ED Mnangagwa, who made introductory remarks, followed by civil society leaders, church leaders, academics and NGO representatives. The workshop took place over two days and included presentations by identified experts in each of the eight Positive Peace factors.

The workshop brought together representatives of the ruling party, opposition parties and civil society aligned with both sides of politics. One of the tangible outcomes of the workshop is follow-up discussions, planned for later in 2016, about how civil society and government can work together more effectively around the eight Positive Peace pillars.

BACKGROUND TO THE WORKSHOP

The relative peace of a society is underpinned by the material and cultural circumstances of that society. Thus, the overall objective of the workshop was to set up an action-orientated steering group to identify and analyse possible initiatives on the pillars of peace, as well as support efforts to bring those initiatives to fruition.

The most profound observations from an analysis of the Global Peace Index, which forms an important background for this project, show that those countries with stronger levels of Positive Peace also tend to be those that experience more virtuous cycles of peace. Viable initiatives are needed to strengthen the Positive Peace domains and in the process build consensual approaches to address the social, economic and political issues necessary for durable peace.

To understand the concept of Positive Peace in a southern African context, there has to be an understanding of local, regional and national historical and social factors. This lays the groundwork for developing locally relevant conceptualisations of the Positive Peace pillars, which can then be put to use in formal processes of governance.

In southern Africa, the spiritual relationship between people and groups is fundamental in creating peace. Workshop participants emphasized that the collective nature of many African cultures value *Ubuntu* and *Hunhu*, the connective social tenets that give emphasis to the collective through which individuals are connected. These principles create the social equilibrium that maintain peace and the capacity to resolve conflict in African communities. When this equilibrium is lost, conflict is often the outcome.

To maintain this equilibrium, Negative Peace is only a starting point. The cultural heritage of southern African communities needs to be taken into account when crafting locally relevant approaches to Positive Peace. While tangible and material needs identified in the Pillars of Peace need to be met to help maintain peace in society, the spiritual and communal side of African culture also needs to be included. The lessons from this communal history can then inform deeper processes of peacebuilding in the West, balancing the preference for formal statebuilding and peacebuilding processes.

To fully engage in the development of Positive Peace, there has to be a shift away from the accusatory approaches to one that focuses on the shared processes of developing peace. While respecting the cultural and spiritual aspects of African societies, there also needs to be a basis for agreement on definitions of peace. A key question that underpins this is: what is the definitive outcome peace is intended to achieve? Is it peace for its own sake, peace for economic and political development, or a value-free programme meant to achieve stable technocracy?

Through a shared understanding of peace in the wider southern Africa region, complex systems and social processes can be explored using innovative tools and methods to find patterns of Positive Peace across communities.

INITIATIVES RELATED TO POSITIVE PEACE IN SOUTHERN AFRICA

The outcome of the National Peace Trust and IEP's Positive Peace workshop was a plan for one practical initiative to address each of the eight pillars of Positive Peace.



Sound Business Environment

Strengthening the Links between Government and Business

Commercial Arbitration Centre

This initiative develops government and business rapport and ability to work together to develop regulatory and social structures that make the most of human capital, while attracting foreign investment. Governments and businesses are not competitors but must be aware of the inter-relatedness between effective regulation and positive business practices.



Equitable Distribution of Resources

Designing and Testing Land Conflict Resolution Models and Equitable Distribution of Resources

Institute of Agro Studies

This initiative develops conflict resolution processes to manage conflicts related to land use and access issues. Follows on from land reforms during the 2000s, tying in local mediation processes with official legal processes.



Well-Functioning Government

Community Participation in the Local Authority Budgetary Processes: Strengthening Local Government Institutions for Effective Service Delivery

Africa Bureau of Strategic Studies

This project aims to increase the quality and relevance of government services. It proposes making the budgeting process at the local and national level open to citizen consultation and participation so their needs are encoded into the spending processes that fund public services.



Good Relations with Neighbours

Promoting a Regional Citizen Ethic

Zimbabwe Electoral Commission

The Southern African Development Community (SADC) regional body has an official position on promoting good relations between neighbouring states but this does not extend into shared notions of civil ethic and participation at the citizen level. This project is designed to encourage greater cooperation between the SADC bodies, governments and civil society organisations. It would build trust between government leaders and civil society, improving the relations between neighbouring states.



Free Flow of Information

Words Are Not Stones Campaign

Media Institute of Southern Africa

A campaign to decriminalise free expression and restructure defamation laws to increase free flows of information in the media. Free flow of information is key to democracy, and this can be further enshrined in the SADC Protocol on Culture, Information and Sport.



Acceptance of the Rights of Others

Training Women's Clubs for Engagement with Traditional Leaders

Women's Bureau

This initiative has been developed to engage women's clubs in local settings, providing training on best practices for engaging with local and traditional leadership on youth, food and peacebuilding issues.



High Levels of Human Capital

Labs for Girls

Data Africa

This initiative addresses the need for girls to have increased opportunities to pursue education and careers in the sciences. It will set up special laboratory spaces to increase girls' participation in science at 50 secondary schools, increasing girls' and women's input into science and increasing their capacity to live independently.



Low Levels of Corruption

Mapping Of Informational Needs, Packaging and Dissemination of Information to Enhance Active Citizen Participation in Promoting Accountability

Zimbabwe Environmental Lawyers Association

This project will gather relevant legal and civil society data to empower citizens to check government corruption and demand their rights under the law. It will make this information manageable through data visualisation and infographics that people can easily digest and make use of.

APPENDIX A

2015 POSITIVE PEACE INDEX METHODOLOGY

The Positive Peace Index is the first known attempt to build a statistical index measuring the latent variables of positive peace, based on the definition of “the attitudes, institutions and structures which when strengthened, lead to a more peaceful society.” The PPI is similar to the GPI in that it is a composite index attempting to measure a latent multidimensional concept. It covers the same set of 162 countries included in the GPI, capturing over 99 per cent of the world’s population.

The starting point for developing the PPI was to correlate the Internal Peace score from the GPI against over 4,700 cross-country harmonized datasets measuring a variety of economic, governance, social, attitudinal and political factors. This aggregation of data attempted to cover every known quantitative and qualitative dataset measuring factors at the nation-state level. Each dataset which was significantly correlated was then organised under eight distinct factors,¹ collectively termed as the Pillars of Positive Peace and became the eight domains of the PPI. The pillars were derived by empirical inspection and from the large body of qualitative and quantitative literature highlighting the importance of these factors. Rather than attempting to isolate singular factors associated with peace, this approach is focused on identifying the broad and complex associations that exist between the drivers of violence and a multitude of formal and informal cultural, economic and political variables.

After identifying the eight pillars, three indicators were identified to measure each. Indicators were chosen first and foremost based on the strength of the relationship with Internal Peace. Then, where it was necessary to narrow down specific indicators of the same concept, variables were chosen based on country and time coverage, with the requirement that data sources cover at least three years and at least 95 countries, and measurement of distinct aspects of each domain, to the extent possible.

The 2015 PPI has the following key features:

- 24 indicators under eight domains
- 162 countries covered
- time series from 2005 to 2015.

INDICATOR WEIGHTINGS AND SCORING

All indicators are scored between one and five, with one being the most ‘positively peaceful’ score and five the least ‘positively peaceful’. This means countries which score closer to one are likely to have relatively more institutional capacity and resilience in comparison to nations which score closer to five.

The weightings are between 0.3 and 0.8 and have been derived by the strength of the indicator’s statistical correlation to the 2015 GPI score. The stronger the correlation to the Global Peace Index, the higher the weighting portioned in the PPI. The lowest weighting is given to the poverty gap indicator which accounts for 2.3 per cent of the index. This is in comparison to the most heavily weighted factor of perceptions of corruption which is weighted at 0.78 and accounts for 5.4 per cent of the PPI.

TABLE 19 POSITIVE PEACE INDEX PILLARS AND INDICATORS

IEP has used the following indicators and weights in the construction of the Positive Peace Index.

POSITIVE PEACE PILLARS	INDICATOR	DESCRIPTION	SOURCE	WEIGHT, AS A % OF TOTAL INDEX
WELL-FUNCTIONING GOVERNMENT	Democratic political culture	Measures whether the electoral process, civil liberties, functioning of government, political participation and culture support secular democracy.	Economist Intelligence Unit, Democracy Index	4.55%
	Judicial independence	Measures the extent to which the judiciary is independent from influences of members of government, citizen or firms.	World Economic Forum, Global Competitiveness Report	4.07%
	Revenue collection and service delivery	Measures the efficiency of the national tax system and the territorial coverage of public services and utilities.	Institutional Profiles Database	4.89%
SOUND BUSINESS ENVIRONMENT	Doing business rank	Measures the degree to which the regulatory environment is more conducive to the starting and operation of a local firm.	World Bank, Doing Business Index	4.48%
	Economic freedom overall score	Measures individual freedoms to and protection of freedoms to work, produce, consume, and invest unconstrained by the state.	Heritage Foundation, Index of Economic Freedom	4.34
	GDP per capita	GDP per capita	World Bank	4.07%
LOW LEVELS OF CORRUPTION	Factionalised elites	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fund For Peace, Fragile States Index	5.03%
	Perceptions of corruption score	Scores countries based on how corrupt the public sector is perceived to be.	Transparency International, Corruption Perceptions Index	5.38%
	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, World Governance Indicators	5.24%
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	3.65%
	Scientific publications	Number of scientific publications per 100,000 people.	World Bank	4.27%
	Youth Development Index overall score	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 Secretariat	4.82%
FREE FLOW OF INFORMATION	Freedom of the Press Index overall score	A composite measure of the degree of print, broadcast, and internet freedom.	Freedom House	4.14%
	Mobile phone subscription rate	Number of mobile phone subscriptions per 100 inhabitants.	ITU	2.69%
	World Press Freedom Index overall score	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	3.72%
GOOD RELATIONS WITH NEIGHBOURS	Hostility to foreigners	Measures social attitudes toward foreigners and private property.	Economist Intelligence Unit	4.69%
	Number of visitors	Number of visitors as per cent of the domestic population.	Economist Intelligence Unit	2.76%
	Regional integration	Measures the extent of a nation's trade-based integration with other states.	Economist Intelligence Unit	4.20%
EQUITABLE DISTRIBUTION OF RESOURCES	Inequality-adjusted life expectancy	The HDI life expectancy index adjusted for inequality score countries based on both average life expectancy and the degree of inequality in life expectancy between groups.	UNDP, Human Development Index	4.00%
	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.	Institutional Profiles Database	3.65%
	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	2.34%
ACCEPTANCE OF THE RIGHTS OF OTHERS	Empowerment Index	An additive index using indicators of freedom of movement, freedom of speech, workers' rights, political participation, and freedom of religion.	CIRI, Human Rights Dataset	3.24%
	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, Fragile States Index	5.10%
	Gender inequality	The Gender Inequality Index (GII) reflects women's disadvantage in three dimensions: reproductive health, empowerment and the labour market.	UNDP, Human Development Index	4.69%

DATA AVAILABILITY AND IMPUTATION METHODS

This methodology has been designed in line with other prominent global indicators, and substantial effort has been made to populate the index with the best existing country information. However, the major challenge to developing a harmonized peace index is in attempting to overcome the paucity of consistent and comprehensive data coverage across countries which vary significantly in terms of land mass, population, level of economic development and regional location. One of the major outputs of this process is a summary not only of the available data, but also of the data that cannot be currently sourced.

The issue of low availability for current or historical data has been a factor in a number of the methodological decisions made, from what indicators to include to how calculate the final scores. The smallest number of countries covered is the dataset for the poverty gap indicator, which includes 100 countries. All other datasets range from 106 countries to complete coverage of the 162 countries included in the index. However, there may still be cases where data points are missing for a particular country and year. There are many empirical and statistical techniques that can be employed to deal with these missing data issues when creating a composite index.² Table 20 lists these and how they are applied to the Positive Peace Index.

TABLE 20 DATA IMPUTATION METHODS IN ORDER OF APPLICATION

IEP used a number of different imputation techniques in the construction of the PPI.

IMPUTATION METHOD	DESCRIPTION	APPLICATION IN THE PPI
TIME SERIES IMPUTATION	Replace missing values using linear interpolation.	When at least two data points exist in time for an indicator-country pair, linear interpolation is used to estimate data for unreported years.
COLD DECK IMPUTATION	Replacing the missing value with a value from another source.	When only one data point exists for an indicator-country pair, this data is used for all years.
HOT DECK IMPUTATION	Assign missing data the value of a “similar” data point.	<p>Where time series and cold deck imputations fail, indicator-country pairs are assigned averages of other countries in the same year in the following order of preference:</p> <p>Where time series and cold deck imputations fail, indicator-country pairs are assigned averages of other countries in the same year in the following order of preference:</p> <ol style="list-style-type: none"> 1. The average of the country’s region. 2. The average of other countries in the same income bracket as the country as defined by the World Bank. 3. The average of all other countries with the same government type as the country as defined by the Economist Intelligence Unit. 4. Assign the global average. <p>Only the most preferable of the four hot deck imputation techniques listed is used for any single missing data instance.</p>

CONSTRUCTING THE REVENUE COLLECTION AND SERVICE DELIVERY FROM THE INSTITUTIONAL PROFILES DATABASE

The Institutional Profiles Database (IPD) offers expert evaluations of institutional capacity in 2001, 2006, 2009 and 2012.³ However as the database has progressed so has the country coverage. For example, in 2001 the IPD only covered 51 countries whereas this number increased to 143 by 2012. Furthermore, as the survey has progressed questions have also evolved and some evaluations do not cover the whole time period. Therefore, in order to measure the quality of revenue collection of service delivery over time, IEP has constructed an indicator by aggregating year snapshots of five different expert evaluations from the IPD. In order to do this, IEP has linearly imputed missing values of the following IPD indicators. In cases where countries only have one year of data, this value is taken as constant across the time period. Table 21 summarises the aggregation process for this indicator.

TABLE 21

CONSTRUCTION OF THE REVENUE COLLECTION AND SERVICE DELIVERY INDICATOR FOR THE PPI

IEP has constructed a measure of the quality of revenue collection of service delivery over time by aggregating five expert evaluations from the IPD.

	IPD EXPERT EVALUATION INDICATOR	YEAR WHERE IMPUTATION USED	SUB-INDICATOR AGGREGATION	INDICATOR AGGREGATION
REVENUE COLLECTION SUB-INDICATOR	A303 efficiency of the tax administration	2012	AVERAGE SCORE = REVENUE COLLECTION SUB-INDICATOR	REVENUE COLLECTION AND SERVICE DELIVERY INDICATOR = 60% X REVENUE COLLECTION SUB-INDICATOR +
	A303 effectiveness of the fiscal system	2009		
	A304 effectiveness of public action: tax system	2012		
SERVICE DELIVERY SUB-INDICATOR	A905 territorial coverage of public services	2012	AVERAGE SCORE = SERVICE DELIVERY SUB-INDICATOR	40% X SERVICE DELIVERY SUB-INDICATOR
	A905 geographic coverage of public services	2009		

APPENDIX B

2015 POSITIVE PEACE INDEX RANKINGS

TABLE 22 RESULTS OF THE 2015 POSITIVE PEACE INDEX

Sixteen of the top 20 countries in the PPI all score in the strongest quartile in each of the eight pillars globally. This shows the importance of all eight domains in achieving low levels of violence and fear of violence.

COUNTRY	RANK	PPI OVERALL SCORE	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	EQUITABLE DISTRIBUTION OF RESOURCES	ACCEPTANCE OF THE RIGHTS OF OTHERS	FREE FLOW OF INFORMATION	HIGH LEVELS OF HUMAN CAPITAL	GOOD RELATIONS WITH NEIGHBOURS
Denmark	1	1.361	1.060	1.314	1.341	1.421	1.640	1.732	1.324	1.134
Finland	1	1.361	1.186	1.375	1.417	1.162	1.373	1.635	1.387	1.360
Sweden	3	1.396	1.272	1.468	1.441	1.143	1.220	1.713	1.350	1.569
Norway	4	1.408	1.193	1.391	1.417	1.247	1.710	1.734	1.371	1.215
Ireland	5	1.448	1.473	1.782	1.404	1.177	1.412	1.949	1.299	1.000
Switzerland	5	1.488	1.378	1.420	1.403	1.250	1.691	1.720	1.533	1.518
Iceland	7	1.500	1.514	1.681	1.458	1.480	1.269	1.882	1.369	1.361
New Zealand	8	1.533	1.188	1.306	1.249	1.345	1.825	1.925	1.334	2.251
Netherlands	9	1.535	1.397	1.690	1.546	1.331	1.693	1.749	1.389	1.437
Austria	10	1.589	1.634	1.998	1.535	1.171	1.849	1.799	1.522	1.000
Germany	11	1.608	1.622	1.739	1.449	1.170	1.854	1.893	1.389	1.673
Canada	12	1.614	1.308	1.750	1.392	1.168	1.755	2.085	1.497	1.959
Australia	13	1.616	1.226	1.679	1.317	1.212	1.667	1.997	1.422	2.465
United Kingdom	14	1.624	1.221	1.972	1.382	1.251	2.097	2.108	1.288	1.607
Belgium	15	1.666	1.676	2.065	1.722	1.203	1.797	1.849	1.413	1.415
France	16	1.769	1.972	1.991	1.726	1.390	2.339	2.233	1.342	1.022
Japan	17	1.824	1.465	1.893	1.598	1.699	1.880	2.226	1.328	2.621
Singapore	18	1.829	1.948	1.847	1.143	1.287	2.011	2.959	1.775	1.722
United States	19	1.853	1.707	2.198	1.365	1.275	2.199	2.249	1.574	2.152
Estonia	20	1.862	1.993	2.506	2.106	1.479	2.198	1.657	1.601	1.000
Portugal	21	1.889	2.409	2.164	2.238	1.703	1.464	2.040	1.519	1.438
Slovenia	22	1.921	2.474	2.265	2.463	1.799	1.554	2.186	1.320	1.158

COUNTRY	RANK	PPI OVERALL SCORE	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	EQUITABLE DISTRIBUTION OF RESOURCES	ACCEPTANCE OF THE RIGHTS OF OTHERS	FREE FLOW OF INFORMATION	HIGH LEVELS OF HUMAN CAPITAL	GOOD RELATIONS WITH NEIGHBOURS
Czech Republic	23	1.999	2.226	2.845	2.350	1.599	1.826	1.891	1.556	1.332
Spain	24	2.002	2.426	2.786	2.006	1.492	2.245	2.257	1.396	1.050
Poland	25	2.032	2.350	2.548	2.489	1.291	1.882	1.854	1.821	1.664
Chile	26	2.074	2.025	1.853	2.348	1.226	2.140	2.254	2.491	2.156
Lithuania	27	2.079	2.365	2.535	2.324	1.539	2.044	2.000	1.975	1.553
Italy	28	2.095	2.574	3.093	2.078	1.753	1.865	2.123	1.505	1.394
Uruguay	29	2.109	1.969	2.030	2.763	1.328	1.891	1.873	2.757	2.071
South Korea	30	2.131	2.281	2.605	1.848	1.808	1.795	2.369	1.372	2.904
Cyprus	31	2.169	2.551	2.863	2.318	1.216	2.505	2.179	1.900	1.361
Slovakia	32	2.171	2.903	2.817	2.433	1.563	2.321	2.020	1.756	1.116
Hungary	33	2.175	2.246	2.855	2.703	1.940	2.160	2.435	1.619	1.187
Greece	34	2.214	2.687	2.932	2.626	1.207	2.279	2.735	1.453	1.402
Mauritius	35	2.229	1.484	2.632	2.490	1.777	2.188	2.270	3.034	1.771
Croatia	36	2.268	2.667	2.922	2.824	1.634	2.261	2.550	1.544	1.402
Israel	37	2.283	1.750	3.023	1.792	1.144	3.248	2.372	1.508	3.113
Latvia	38	2.305	2.605	2.770	2.391	1.802	2.439	2.185	2.450	1.468
Costa Rica	39	2.317	2.164	2.632	2.987	1.256	2.300	1.792	3.044	1.938
United Arab Emirates	40	2.329	2.344	2.199	1.526	2.093	2.797	2.887	3.088	1.722
Qatar	41	2.375	2.544	2.408	1.754	1.944	3.285	2.878	2.678	1.386
Taiwan	42	2.431	2.609	2.832	2.196	1.745	2.546	2.178	2.140	2.957
Bulgaria	43	2.495	3.008	3.213	2.754	1.903	2.332	2.422	2.620	1.268
Botswana	44	2.552	2.396	2.356	2.978	2.559	2.697	2.252	3.551	1.535
Montenegro	45	2.558	2.863	3.343	2.773	1.546	2.519	2.362	2.774	1.763
Kosovo	46	2.564	2.180	3.791	3.116	1.463	2.658	2.639	1.517	2.665
Jamaica	47	2.608	2.646	3.096	2.954	2.109	2.251	1.971	3.303	2.166
Malaysia	48	2.647	2.523	3.121	2.450	1.926	2.989	2.951	2.911	2.042
Romania	49	2.678	2.927	3.176	2.760	2.246	2.861	2.527	2.634	1.983
Trinidad and Tobago	50	2.682	2.892	3.336	2.736	2.381	2.196	2.087	3.062	2.429
Kuwait	51	2.698	3.076	3.510	2.131	2.420	2.733	2.359	2.776	2.225
Oman	52	2.701	2.603	3.254	2.483	2.365	2.436	2.946	2.942	2.411
Panama	53	2.722	2.968	2.954	2.774	2.269	2.619	2.478	3.143	2.334
Macedonia	54	2.734	2.829	3.320	2.770	1.547	2.614	2.945	2.888	2.587
Namibia	55	2.757	2.593	2.742	3.278	2.676	2.661	2.192	3.777	1.958
South Africa	56	2.767	2.347	3.192	2.870	2.321	2.712	2.232	3.283	2.933
Argentina	57	2.768	3.055	3.060	3.453	1.854	2.439	2.437	2.557	2.974
Bahrain	58	2.770	2.873	3.163	2.219	1.989	3.294	3.396	2.882	2.124

COUNTRY	RANK	PPI OVERALL SCORE	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	EQUITABLE DISTRIBUTION OF RESOURCES	ACCEPTANCE OF THE RIGHTS OF OTHERS	FREE FLOW OF INFORMATION	HIGH LEVELS OF HUMAN CAPITAL	GOOD RELATIONS WITH NEIGHBOURS
Serbia	59	2.783	3.078	3.583	3.280	2.115	2.835	2.439	2.251	2.226
Georgia	60	2.807	3.169	3.456	2.620	2.146	3.307	2.617	3.032	1.654
Tunisia	61	2.820	2.654	3.576	3.134	2.000	3.062	2.726	2.698	2.305
Albania	62	2.837	3.216	3.580	3.075	2.070	2.352	2.729	3.371	1.855
Brazil	63	2.846	2.804	3.114	3.369	2.140	2.577	2.562	2.907	3.050
Ghana	64	2.856	2.617	3.047	3.216	2.685	2.682	2.162	3.589	2.640
Mexico	65	2.858	3.298	3.347	2.670	1.970	2.713	3.274	3.120	2.162
El Salvador	66	2.905	3.118	3.154	3.403	2.151	2.647	2.267	3.571	2.559
Saudi Arabia	67	2.919	2.926	3.402	2.302	2.289	3.623	3.304	2.584	2.719
Bosnia and Herzegovina	68	2.955	2.799	3.687	3.452	1.916	2.971	2.787	2.956	2.627
Morocco	69	2.970	3.083	3.452	3.222	1.986	3.311	3.007	3.197	2.096
Peru	70	2.980	3.588	3.501	2.741	2.098	3.009	2.736	3.119	2.640
Thailand	71	2.987	2.954	3.832	2.774	1.890	3.168	3.061	2.954	2.828
Dominican Republic	72	3.012	3.015	3.667	3.218	2.651	3.112	2.710	3.370	1.977
Jordan	73	3.026	3.071	3.235	3.369	2.166	3.669	2.939	2.892	2.562
Guyana	74	3.033	3.274	3.460	3.643	2.204	2.943	2.655	3.186	2.494
Turkey	75	3.036	3.131	3.334	2.811	2.008	3.408	3.258	2.571	3.549
Mongolia	76	3.040	3.664	3.339	3.211	2.778	2.196	2.549	3.071	3.311
Belarus	77	3.048	2.933	3.824	3.114	1.699	3.133	3.590	2.990	2.701
Colombia	78	3.056	3.546	3.643	2.642	2.394	3.112	2.882	3.192	2.675
Armenia	79	3.061	3.686	3.612	2.924	2.340	2.854	2.855	3.026	2.829
Moldova	80	3.081	3.591	3.764	3.226	2.323	2.837	2.747	3.019	2.708
Kazakhstan	81	3.096	3.309	3.864	2.900	2.745	3.132	3.341	3.066	2.107
Ukraine	82	3.097	3.547	4.008	3.558	2.016	2.693	2.782	2.926	2.696
Timor-Leste	83	3.139	2.730	3.953	4.218	2.675	2.533	2.724	2.615	3.353
Viet Nam	84	3.151	2.619	3.649	3.425	2.298	3.257	3.707	3.141	2.916
China	85	3.154	2.882	3.570	3.343	2.090	3.608	3.981	2.896	2.637
Bhutan	86	3.158	3.284	2.895	3.675	2.492	3.429	3.011	3.367	2.964
Cuba	87	3.183	2.805	3.305	3.672	1.878	3.160	4.370	2.943	3.246
Gabon	88	3.201	3.292	3.598	3.511	2.919	2.539	2.569	4.044	2.849
Guatemala	89	3.212	3.746	3.531	3.221	2.371	3.114	2.991	3.742	2.609
Ecuador	90	3.213	3.450	3.809	3.609	2.074	3.104	2.990	3.204	3.010
Rwanda	91	3.222	2.797	3.252	3.054	3.206	3.535	3.778	3.920	2.257
Lesotho	92	3.228	3.055	3.209	3.848	3.658	2.659	2.709	4.096	2.550
Russia	93	3.235	3.524	3.981	2.894	2.512	3.610	3.203	2.671	3.128
Philippines	94	3.236	3.237	3.658	3.381	2.347	3.210	2.818	3.450	3.443

COUNTRY	RANK	PPI OVERALL SCORE	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	EQUITABLE DISTRIBUTION OF RESOURCES	ACCEPTANCE OF THE RIGHTS OF OTHERS	FREE FLOW OF INFORMATION	HIGH LEVELS OF HUMAN CAPITAL	GOOD RELATIONS WITH NEIGHBOURS
Nicaragua	95	3.237	3.548	3.730	3.649	2.422	3.132	2.701	3.695	2.560
Sri Lanka	95	3.237	2.898	3.792	3.443	2.211	3.635	3.577	3.007	3.037
Papua New Guinea	97	3.242	2.771	3.892	3.805	2.482	3.076	2.619	3.461	3.454
Indonesia	98	3.244	3.159	3.644	3.554	2.663	3.508	2.745	3.311	3.047
Honduras	99	3.250	3.530	3.800	3.527	2.612	2.936	3.187	3.436	2.631
Swaziland	100	3.255	3.187	3.444	3.514	3.388	2.853	3.599	3.918	2.093
Azerbaijan	101	3.268	3.480	3.903	3.125	2.484	3.192	3.623	3.168	2.877
Senegal	102	3.275	3.164	3.378	3.981	2.704	3.103	2.700	4.258	2.611
Kyrgyz Republic	103	3.280	3.367	4.003	3.493	2.554	3.322	3.417	3.263	2.390
Paraguay	103	3.280	4.052	3.996	3.321	2.343	2.705	2.912	3.421	3.006
Zambia	105	3.289	2.538	3.359	3.586	3.194	3.184	3.132	4.246	3.026
Benin	106	3.297	3.365	3.514	3.902	3.430	2.691	2.560	4.065	2.652
India	107	3.310	2.955	3.546	3.870	2.849	3.491	2.886	3.613	3.026
Algeria	108	3.313	2.827	3.617	3.911	2.249	3.594	3.066	3.131	3.824
Bolivia	109	3.325	3.676	3.750	4.042	2.336	2.902	2.758	3.318	3.394
Egypt	110	3.332	3.300	3.905	3.583	2.051	3.939	3.373	3.089	2.973
The Gambia	111	3.357	3.220	3.708	3.834	3.152	2.794	3.396	3.979	2.606
Lebanon	112	3.371	3.811	4.117	3.256	2.282	3.537	2.935	3.038	3.493
Malawi	113	3.413	2.959	3.751	4.070	3.710	2.953	3.071	4.046	2.633
Tanzania	114	3.414	3.435	3.571	3.776	3.344	3.146	2.978	4.179	2.694
Venezuela	115	3.418	3.665	4.115	4.023	1.781	3.174	3.340	3.251	3.455
Mali	116	3.424	3.273	3.429	3.901	3.679	3.242	2.420	4.244	3.065
Burkina Faso	117	3.433	3.514	3.616	4.026	3.307	2.835	2.738	4.182	3.019
Nepal	118	3.444	3.534	3.895	3.690	2.753	3.508	3.023	3.361	3.454
Tajikistan	119	3.462	2.895	4.128	4.087	2.695	3.235	3.367	3.244	3.770
Libya	120	3.463	3.242	4.245	4.118	2.311	3.364	2.976	3.144	3.830
Uganda	121	3.480	3.190	4.113	3.890	3.099	3.529	3.144	4.213	2.282
Cambodia	122	3.486	3.791	4.133	3.795	2.699	3.178	2.958	3.688	3.198
Cote d'Ivoire	123	3.487	2.938	4.024	3.854	3.389	4.031	2.813	4.201	2.298
Sierra Leone	124	3.491	3.483	3.849	3.917	3.672	3.275	2.861	3.989	2.661
Mozambique	125	3.494	3.311	3.641	3.786	3.747	3.209	2.816	4.314	3.005
Liberia	126	3.499	3.574	3.785	4.165	3.480	3.113	3.068	3.924	2.669
Djibouti	127	3.504	3.226	3.672	3.921	2.887	3.336	4.063	4.202	2.586
Togo	128	3.517	3.498	3.903	3.971	3.391	3.134	3.098	3.873	3.046
Kenya	129	3.519	2.686	4.182	3.829	3.499	3.943	3.020	3.695	3.045
Myanmar	130	3.528	3.513	4.148	3.548	2.333	3.513	3.540	3.766	3.465

COUNTRY	RANK	PPI OVERALL SCORE	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	SOUND BUSINESS ENVIRONMENT	EQUITABLE DISTRIBUTION OF RESOURCES	ACCEPTANCE OF THE RIGHTS OF OTHERS	FREE FLOW OF INFORMATION	HIGH LEVELS OF HUMAN CAPITAL	GOOD RELATIONS WITH NEIGHBOURS
Madagascar	131	3.535	3.487	3.821	3.962	3.562	3.074	3.205	3.993	3.021
Bangladesh	132	3.564	3.804	4.135	4.129	2.813	3.599	3.130	3.768	2.667
Uzbekistan	133	3.571	3.211	4.257	3.953	2.852	3.487	4.044	3.134	3.406
Turkmenistan	134	3.578	3.132	4.172	3.400	2.802	3.400	4.022	3.269	4.295
Laos	135	3.592	3.528	4.009	3.953	2.960	3.491	4.048	3.699	2.834
Haiti	136	3.595	4.009	4.263	4.216	3.121	3.332	2.853	3.739	2.747
Iran	137	3.611	3.552	4.064	3.850	2.082	4.086	4.057	2.718	4.160
Ethiopia	138	3.616	3.243	3.844	3.871	2.760	3.943	3.772	4.223	3.025
Republic of the Congo	139	3.620	3.756	3.908	4.242	3.317	3.094	3.330	4.044	3.038
Guinea-Bissau	140	3.649	3.677	4.374	4.209	3.520	2.911	3.092	4.093	2.979
North Korea	141	3.686	3.504	4.353	3.592	2.208	3.422	4.675	3.298	4.195
Burundi	142	3.694	3.733	4.157	3.995	3.916	3.383	3.635	4.251	2.296
Niger	143	3.718	3.628	3.861	4.096	3.076	3.527	2.968	4.431	3.872
Syria	144	3.757	3.205	4.336	4.141	1.857	4.290	4.205	3.524	4.072
Cameroon	145	3.761	3.456	4.214	4.030	3.322	3.718	3.257	4.017	3.807
Mauritania	146	3.767	3.936	3.907	4.152	3.276	3.645	2.752	4.352	3.793
Sudan	147	3.785	3.242	4.578	3.961	2.694	4.163	3.985	3.479	3.823
Pakistan	148	3.818	3.775	4.118	3.760	2.668	4.158	3.441	4.039	4.233
South Sudan	149	3.820	3.658	4.251	4.203	3.339	3.678	3.507	4.027	3.633
Equatorial Guinea	150	3.840	3.452	4.269	3.618	3.484	3.512	4.099	4.350	3.834
Guinea	151	3.851	3.886	4.219	4.134	3.632	3.684	3.152	4.013	3.832
Angola	152	3.852	4.064	4.064	4.113	3.774	3.599	3.356	4.235	3.411
Nigeria	153	3.865	3.827	4.216	4.014	3.861	4.140	2.987	4.148	3.453
Iraq	154	3.916	3.565	4.393	4.333	2.666	4.199	3.361	3.842	4.560
Eritrea	155	3.925	3.000	4.051	4.458	3.142	3.762	4.692	4.113	4.182
Democratic Republic of the Congo	156	3.930	3.740	4.311	4.401	3.899	4.241	3.347	4.199	3.028
Yemen	157	3.937	3.683	4.314	3.846	2.680	4.352	3.891	3.858	4.563
Zimbabwe	158	3.946	3.746	4.407	4.332	3.255	3.973	3.309	4.070	4.133
Chad	159	3.961	3.876	4.346	4.318	3.701	3.678	3.586	4.505	3.427
Afghanistan	160	3.997	3.910	4.470	4.190	3.329	4.065	3.261	4.158	4.237
Central African Republic	161	4.154	4.356	4.241	4.356	3.730	4.131	3.310	4.618	4.229
Somalia	162	4.192	4.389	4.645	3.853	3.839	3.758	4.076	4.216	4.598

ENDNOTES

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NOTES

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Other publications from the Institute for Economics and Peace



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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.



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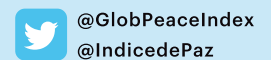
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