POSITIVE PEACE REPORT

2015



CONCEPTUALISING AND MEASURING THE ATTITUDES, INSTITUTIONS AND STRUCTURES THAT BUILD A MORE PEACEFUL SOCIETY





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 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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POSITIVE PEACE REPORT 2015 — 1

WHY POSITIVE PEACE IS TRANSFORMATIONAL

Humanity is now facing challenges unparalleled in its history. The most urgent challenges are global in nature, such as climate change, ever decreasing biodiversity, increasing migration and over-population. These global challenges call for global solutions and these solutions require cooperation on a scale unprecedented in human history. In a globalised world, the sources of many of these challenges are multidimensional, increasingly complex and span national borders. For this reason, finding solutions to these unprecedented challenges fundamentally requires new thinking.

Peace is an essential prerequisite 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 necessary to help address them.

Without the appropriate measures and understanding of the factors that support peace, it is not possible to know what policies work, what programmes need to be implemented, when, how, and where. Practically identifying what resources this effort requires is complex and calls for a shift to new ways of thinking about peace.

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

The Positive Peace factors associated with the absence of violence are also associated with many other social characteristics that are considered desirable. Positive Peace correlates strongly with better economic outcomes, measures of well-being, levels of gender equality and environmental performance. Positive Peace can be thought of as creating an optimal environment for human potential to flourish.

Furthermore, understanding what creates sustainable peace cannot be found in the study of violence.

A parallel can be drawn here 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 need to do to stay healthy: the correct physical exercise, a good mental disposition and a balanced diet. This could only be learnt by studying what was working. In the same way the study of conflict is different than the study of peace.

The research in this report shows that resistance movements in countries high in Positive Peace are less violent, last for a shorter period of time and are more likely to be successful. Ninety-one per cent of all violent resistance movements are in countries low in Positive Peace. Positive Peace creates the resilience so that societies can better adapt to change, whether planned or unplanned.

Seen in this light, Positive Peace can be used as an overarching framework for understanding and achieving progress in many other areas of economic and social advancement.

EXECUTIVE SUMMARY

This report introduces new thinking and evidence about Positive Peace, defined as the attitudes, institutions and structures which create and sustain peaceful societies. These same factors also lead to many other positive outcomes, such as strong business environments, higher levels of well-being and gender equality. Therefore, Positive Peace describes an optimal environment under which human potential can flourish.

This report is broken into three parts. Section One presents an overview of IEP's framework of Positive Peace. Analysis in this section discusses the systems approach to peace and the resilience provided by high levels of Positive Peace. The 40 best performing countries in the Positive Peace Index (PPI) demonstrate greater resilience in terms of Negative Peace: they are less likely to fall into violence and when they do, their deteriorations in Negative Peace are on average smaller. Section 1 goes into detail about the magnitude and pace of changes in Positive and Negative Peace for various groups of countries.

Section 2 summarizes the findings from the 2015 Positive Peace Index. For the first time, IEP has produced a full time series of Positive Peace data from 2005 to 2015, allowing for more nuanced analysis of changes in the attitudes, institutions and structures that underpin peaceful societies. Globally, Positive Peace has been improving since 2005, with the average country score 1.7 per cent better in 2015. One-hundred and eighteen of the 162 countries ranked in the PPI, or 73 per cent, have improved in Positive Peace over the period. Six of the eight domains of Positive Peace have improved, and North America is the only region in the world that did not show an improvement in Positive Peace.

Finally, section 3 presents a detailed discussion of each of the eight pillars of Positive Peace. Each pillar plays an important role in reducing the number of grievances societies face and in helping to solve conflicts nonviolently. The pillar-specific subsections discuss how each pillar supports this process, some of the challenges societies face in developing these social characteristics, and how they are measured in the PPI.

Understanding how to prevent conflict and violence is one of the key challenges for society. It is critical for business, as the economic cost of violence is large. The small increases in violence and conflict recorded by the Global Peace Index (GPI) over the last eight years demonstrate how expensive this has been to the global economy, with the economic impact of violence reaching \$14.3 trillion in 2014.

The approach adopted by IEP in the analysis presented in this report is unique, as the factors that constitute Positive Peace have been derived by empirical observation and statistical analysis. This body of work could only be undertaken because of IEP's prior work in developing measures of global peacefulness through the GPI.

The shift in global development circles to understanding fragility, resilience and peace is underscored by the inclusion of peace and governance in the Sustainable Development Goals (SDGs), which will replace the Millennium Development Goals (MDGs) after 2015. This reflects the growing recognition of the importance of identifying the drivers of peace. However, in spite of this, 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.

Without better understanding how to conceptualise and measure the factors that support peace, it is difficult to develop programs that holistically address peace. The best programs start from a conceptually sound base and utilize as much evidence as possible. This then provides a framework from which the programmatic questions of when, how, and where can better be answered.

Cositive Peace acts as a system, therefore the sum of the parts is more than the constituent parts and the system must be addressed as a whole.

Positive Peace also provides a framework for risk analysis, as historical research has shown that countries which have low levels of violence but weak Positive Peace tend to experience falls in peacefulness over time. In 2008, IEP identified 30 countries that fit this profile which were at risk of deteriorating and becoming more violent. By 2015, 22 of the countries had fallen in the GPI, four had stayed the same and four had seen their levels of peace increase. Countries that were high in positive peace experienced less civil resistance movements, and when they experience them, the movements lasted for a shorter duration, had less ambitious goals, were more likely to achieve some of their aims and much less likely to resort to violence. Positive Peace creates the resilience needed for societies to better adapt to change, whether planned or unplanned. Countries that perform well on measures of Positive Peace recover better from shocks, as demonstrated by Iceland's response during and after the Global Financial Crisis or Japan's recovery after the 2011 tsunami.

Positive Peace acts as a system, therefore the sum of the parts is more than the constituent parts and the system must be addressed as a whole. The attitudes, institutions, and structures, or Positive Peace factors, which build peace are complex, multidimensional, non-linear in their progress, hard to observe and multi-causal depending on their context.

This report identifies how systems thinking can be applied to Positive Peace and what other indicators of progress are empirically related to it, including lower levels of violence.

IEP developed the framework presented in this report based on an empirically-focused and data-driven approach designed to understand what works, where the sources of resilience are within a society and how to positively build up the attitudes, institutions and structures that make peace possible. This approach contrasts with most research in the field which is focused on what does not work and why systems or institutions fail. Understanding what creates sustainable peace cannot be found in the study of violence as the factors that are associated with resilient societies are not present in states that are failing, highly corrupt or have large group grievances.

Both Negative and Positive Peace can be seen as the producer and product of forms of societal trust and cohesion that are a pre-requisite for well-functioning and prosperous societies. Countries higher in Positive Peace also tend to have many other fundamentally positive social and economic outcomes. Seen in this light, Positive Peace can be used as an overarching framework for understanding development. Positive Peace is also positively correlated with:

- business competitiveness and entrepreneurialism
- foundations of wellbeing
- social cohesion and capital
- gender equality
- youth development
- ecological performance
- progress in a range of Millennium
 Development Goals on poverty alleviation.

Furthermore, the Positive Peace framework presented in this report can be used to measure other development frameworks adopted by various multilateral organisations. Positive Peace can be used to better understand:

- resilience
- fragility
- institutional capacity and political economy
- Goal 16 of the Sustainable Development Goals
- other developmental outcomes
- country risk.

This report is a comprehensive summary of the concept of Positive Peace and its eight dimensions, describing how their attitudes, institutions and structures sustain peaceful societies. The report addresses the systemic nature of societal change through the lens of Positive Peace. Throughout, the research highlights the interdependent nature of the many facets of peace. IEP's Positive Peace framework represents new research into these interrelationships, and will continue to evolve over time as new measure, statistical relationships and theories of peace develop.

HIGHLIGHTS

- For the first time since its inception, IEP is now able to publish a complete time series of Positive Peace scores for 162 countries from 2005 to 2015.
- This version of the Positive Peace Index includes improved indicators that reflect better data availability and more precise measurements of the drivers of peace and violence.
- 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, those campaigns tend to be 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.
- 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 violence to increase. The majority of these countries are in sub-Saharan Africa.

- Countries that scored well in Positive Peace in 2005 had much smaller deteriorations in their internal GPI scores, on average, from 2008 to 2015. This underscores the resilience that highly peaceful countries have through their high levels of Positive Peace.
- Deteriorations in Negative Peace are typically larger than improvements but a high level of Positive Peace tempers these deteriorations, with falls in these countries being much smaller, on average, than in the rest of the world.
- The largest Negative Peace deteriorations since 2008 occurred in countries with a deficit in civil and political domains of Positive Peace. Countries with deficits in the economic and social domains have experienced deteriorations of a lesser magnitude.
- The best-performing countries in the PPI have seen smaller variations in changes in peace on the whole.
- New measurements of the equitable distribution of resources demonstrate that outcomes are more important than income: the fact that every group in society can meet its needs is most important, and income is one tool for achieving that goal.
- The discussion of the sound business environment highlights the negative relationship between informal markets and peacefulness. A reliance on informal economic activity undermines the development of Positive Peace.
- High levels of human capital, a driver of economic growth, marries the goals of peace and development. This domain shows a leading relationship with peacefulness and stands as a major goal for key development frameworks.
- 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, suggesting that these pillars can play into a vicious cycle.
- The best-performing countries demonstrate that Positive Peace requires strong and resilient systems. The strongest indicators amongst the highest ranking countries collectively represent each of the eight pillars of Positive peace.

ABOUT POSITIVE PEACE

Negative Peace is the absence of violence or fear of violence—an intuitive definition that many agree with and is more easily measured than other definitions of peace. Measures of Negative Peace are used to construct the Global Peace Index (GPI). The 23 GPI indicators are broken into three domains: ongoing conflict, societal safety and security and militarisation. Societal safety and security refers to internal aspects of violence such as homicides, incarceration or availability of small arms while ongoing conflict and militarisation capture the extent of current violent conflict and a county's military capacity.

A more ambitious conceptualisation of peace is Positive Peace, which IEP defines as the attitudes, institutions and structures that create and sustain peaceful societies. Well-developed Positive Peace represents the capacity for a society to meet the needs of citizens, reduce the number of grievances that arise and resolve remaining disagreements without the use of violence.

Peace can be defined in a variety of ways, and its definition will depend on the context in which it is used. Peace is often defined as the absence of war, a simple but limited definition. This is in contrast to other more widely used definitions such as 'peace with justice' or personal peace.

The analysis in this report is based on two simple but useful definitions of peace, both of which have a long history in peace studies — Negative Peace and Positive Peace. These two commonly referenced types of peace were defined by one of the founders of modern peace studies, Johan Galtung.

Human beings encounter conflict on a daily basis — whether at home, at work, amongst friends, or at a larger level between ethnic, religious or political groups. But the majority of these conflicts, be they large or small, do not result in violence. Most of the time individuals and groups can reconcile their differences without resorting to violence using mechanisms such as societal attitudes that curtail violence or legal systems for reconciling grievances. Conflict provides the opportunity to negotiate or renegotiate a social contract, and as such it is possible for constructive conflict to lead to nonviolence.¹ Positive Peace facilitates change and adaptation to new dynamics which may arise within these societies.

This report describes Positive Peace: the attitudes, institutions and structures that either pre-empt conflict or help societies channel disagreements into productive change rather than falling into violence. Findings from the Global Partnership for the Prevention of Armed Conflict's (GPPAC) review of civil

There are eight key factors, also referred to as pillars, which have been identified as comprising Positive Peace.

society and conflict conclude, "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." 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 factors that underlie Positive Peace also create the conditions to achieve other outcomes that many in society find desirable, such as economic development, environmental sustainability and gender equality. The same qualities that support the absence of violence also support progress in many other areas of society. Positive Peace can therefore be understood as a process which underpins an optimal environment for human potential to flourish.

The distinguishing feature of IEP's work on Positive Peace is that it has been empirically derived through quantitative analysis. There are few known empirical frameworks available to analyse Positive Peace; historically it has largely been understood qualitatively and based on idealistic concepts of a peaceful society. Instead, IEP's Positive Peace framework, including the

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POSITIVE PEACE

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

NEGATIVE PEACE

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

IEP measures Negative Peace using the Global Peace Index, which ranks the nations of the world according to their level of peacefulness. The GPI is composed of 23 qualitative and quantitative indicators and covers 162 states and 99.6 per cent of the world's population. For more information and the full 2015 GPI report, visit **visionofhumanity.org**

eight pillars and the Positive Peace Index described in this report, 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 utilised the time series of GPI data in combination with existing peace and development literature to statistically analyse what characteristics peaceful countries have in common. An important aspect of this approach is to derive the factors not through value judgement but by letting the statistical analysis, as best as possible, explain the key drivers of peace.

There are eight key factors, also referred to as pillars, which have been identified as comprising Positive Peace.

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

BOX 1 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 13 for more discussion on Positive Peace and resilience.

POSITIVE PEACE FACTORS



Well-Functioning Government

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



Sound Business Environment

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



Equitable Distribution of Resources

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



Acceptance of the Rights of Others

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



Good Relations with Neighbours

Having peaceful relations with other countries is as important as good relations between groups 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

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



High Levels of Human Capital

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



Low Levels of Corruption

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

From this framework IEP has developed a composite measurement of Positive Peace — the Positive Peace Index (PPI) — covering the same countries as the GPI. The methodology and indicators informing the PPI are detailed in Annex A of this report.

THE ATTITUDES, INSTITUTIONS AND STRUCTURES OF A PEACEFUL SOCIETY

It is becoming increasingly apparent that the most successful peacebuilding efforts use a holistic approach and harmonise interventions at various levels of society. To inform what works in peacebuilding, IEP describes eight pillars of Positive Peace. These pillars interact within society and thereby affect society's attitudes, as well as their institutions and structures. High levels of Positive Peace occur where attitudes make violence less tolerated, institutions are more responsive to society's needs and structures underpin the nonviolent resolution of grievances.

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

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. Rather, IEP's quantitative analysis has identified the eight broad factors of peaceful societies.

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.

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.

POSITIVE PEACE AND SYSTEMS THINKING

A system at its most simplistic level can be understood as a collection of components which interact together to perform a function.

A simple example of this is a forest, comprised of individual components such as trees, grass, soil and fauna. Each of these individual components interact and share varying degrees of dependence with each other. The collection of the individual components and their interactions form the system and together, the interdependent system is more than the sum of the component parts.

Positive Peace works as a system, therefore the whole is much more than the sum of the parts and cannot be fully understood by describing the eight factors individually; relationships and interactions also need to be described and can be very context specific.

When thinking of complex systems and how this idea pertains to peaceful environments, it is not possible to simply isolate cause from effect because of the multitudinous ways in which different variables react to each other. Consider the example of an increase in the incidence and perception of corruption. This will undoubtedly have an effect on business, the functioning of government and the free flow of information. But changes in corruption may also be in-part caused by negative or positive changes in the very same variables. Alternatively, consider restrictions on the free flow of information and its impact on financial transparency, thereby affecting business, the functioning of government and the ability for individuals to engage in corruption. It is not possible to say that when certain attributes reach a certain level we will see certain outcomes, but rather that when one variable changes, others are likely to as well.

Positive Peace factors are interdependent and mutually reinforcing, such that improvements in one factor have the capacity to strengthen others and vice versa. While the most peaceful countries are strong in all eight factors, most nations have different combinations of strengths and weaknesses within their pillars. The relative strength or weakness of any one pillar has the potential to positively or negatively influence the others, thereby influencing the overall levels of peacefulness. Understanding the mechanics of the systemic nature of peace allows for a multi-pronged approach to tackling specific problems, given that stimulating change in a system requires interacting with the system in multiple ways. Improvements and deteriorations in one factor can result in

simultaneous or lagged changes in another factor, the overall effects of which resonate in different ways over time. Compounding the problem, the net result of any single change in the system will not be limited to the change but will depend on many other factors.

Viewing Positive Peace as a system moves away from looking for causal links for the creation of peace. A peaceful environment is dependent on the strength of all pillars. This is analogous to a brick wall: take out one brick and the strength of the entire wall is materially impacted.

Systems thinking moves away from the notion of linear cause and effect and instead considers the evolution of the whole given the nature of its constituent parts. Many pertinent analogies can be found, such as a discussion between two people. It is possible to look at a discussion linearly, which implies the same or a similar conclusion each time. However, when other variables are brought in, such as background information, how the person is feeling on the day and even the specific location where the conversation is taking place, different outcomes are likely to occur from the same conversation. In such cases, looking for the linear cause and effect where it is not applicable can result in actions that do not produce the desired result. A key aspect of systems thinking is the recognition that similar situations can result in vastly different outcomes dependent on the initial state of the components.

Systemic change can best be managed by understanding the most relevant actions that can be taken in a given context. All contexts are different; therefore, a situational analysis is needed to best understand how to interact with the system. Long-term peacebuilding efforts should aim to enhance and build these Positive Peace factors as much as possible. This does not mean that traditional approaches to containing or dealing with the consequences of violence are not important, but that a balance between short and long term approaches is needed.

RESILIENCE AND VIOLENCE BY POSITIVE PEACE

Positive Peace is a concept that not only involves how a society sustains peace within its own sphere of influence but also how it can deal with unforeseen shocks, such as economic crises, natural disasters or epidemics. In 2011, the UN Development Programme (UNDP) defined resilience as the ability of a country to quickly recover from or withstand and absorb the impact of a shock.³

Analysing changes in the GPI since 2008 offers some interesting insights into the nature of the relationship between Positive Peace, Negative Peace and resilience. Figure 1 graphs the PPI and GPI for 162 countries in 2005 and 2008 respectively.⁵ Arrows on the graph indicate a country's movement in both Positive Peace along the vertical axis and Negative Peace along the horizontal axis from 2008 to 2015.

Resilient social systems have three broad characteristics:⁴

1. Coping capacities:

the ability of the system to cope with and overcome adversities or shocks.

2. Adaptive capacities:

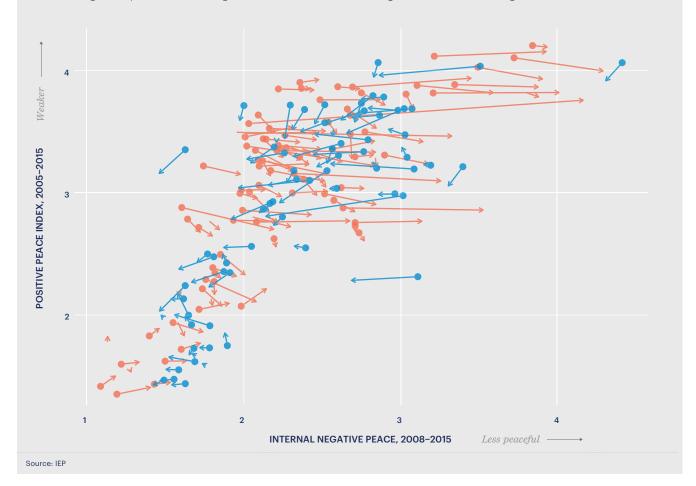
the ability to learn from past experiences and adjust for the future accordingly.

3. Transformative capacities:

the ability to build institutions to foster individual and societal robustness.



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. Arrows indicate changes in peace, with blue indicating an improvement in Negative Peace and red indicating a deterioration in Negative Peace.



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, on average, from 2008 to 2015.

Figure 1 highlights that the countries with the strongest Positive Peace scores in 2005 experienced smaller changes on average in internal peace between 2008 and 2015. What is also apparent from Figure 1 is that there are far more countries that have experienced large deteriorations in Negative Peace than have had large improvements. Of all countries that had a change in internal peace of greater than 10 per cent, 68 per cent were deteriorations. Large deteriorations can happen quickly but improvements happen more slowly.

Figure 2 looks more closely at the size of changes in Negative Peace, showing the size of improvements and deteriorations in Negative Peace from 2008 to 2015 for four different groups of countries.

These are:

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

It is useful to examine countries' 2005 PPI scores because they indicate the attitudes, institutions and structures in society prior to the period for which Negative Peace is analysed. This demonstrates the environment countries started with.

The global deterioration in Negative Peace from 2008 to 2015 has been quite small, at 2.4 per cent. In each country group by level of Positive Peace, about half of the countries deteriorated and about half improved. However, deteriorations in Negative

FIGURE 2 IMPROVEMENTS AND DETERIORATIONS IN NEGATIVE PEACE, 2008-2015 The countries with the highest levels of Positive Peace saw the smallest average deteriorations in Negative Peace of any group. Global Average Bottom 40 Middle 82 Top 40 Average Percentage Improvement Average Percentage Deterioration 0% ABSOLUTE PERCENTAGE CHANGE IN INTERNAL NEGATIVE PEACE, 2008-2015

Peace have tended to be larger than improvements. Notably, a high level of Positive Peace appears to temper these deteriorations, with falls in these countries being much smaller, on average, than in the rest of the world. This demonstrates the resilience provided by high levels of Positive Peace.

Source: IEP

The most dramatic deteriorations in levels of violence occurred in countries with 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. 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. A main characteristic of highly peaceful and highly resilient countries is high performance in each factor of Positive Peace, which indicates two things:

- Positive Peace must be strong in all factors to provide resilience and support high levels of Negative Peace.
- Countries that have particular Positive Peace profiles can identify key opportunities for improvement as a pathway to higher levels of both Positive Peace and Negative Peace.

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

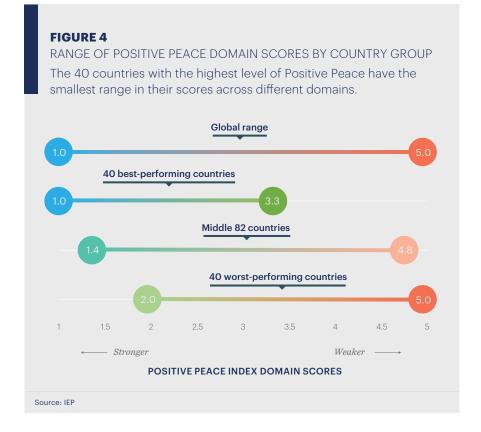
- > Free flow of information
- > Good relations with neighbours

The largest deteriorations since 2008 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 3 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 most dramatic deteriorations in levels of violence occurred in countries with low Positive Peace scores.





The other key characteristic of highly peaceful countries is that they score consistently well on all eight factors of Positive Peace. The range of domain scores for these highly peaceful countries is clustered in the top two thirds of the scoring range, compared to the 40 countries with the lowest Positive Peace score overall, where domain scores take up the bottom two thirds of the scoring range.

Figure 4 shows the best and worst domain scores across all the countries in each group. For countries with high levels of Positive Peace, the scores are much more tightly clustered towards high levels of Positive Peace than for the other two groups. Additionally, the difference between a country's score on its strongest pillar and its score on its weakest pillar for each of the 40 best-performing countries is, on average, 23 per cent smaller than for the rest of the world.⁶ Pillar scores are more tightly clustered in more peaceful countries. Less peaceful countries may score highly on a few pillars but will have comparatively large weaknesses in one or many other pillars, making the system as a whole more volatile.

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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.

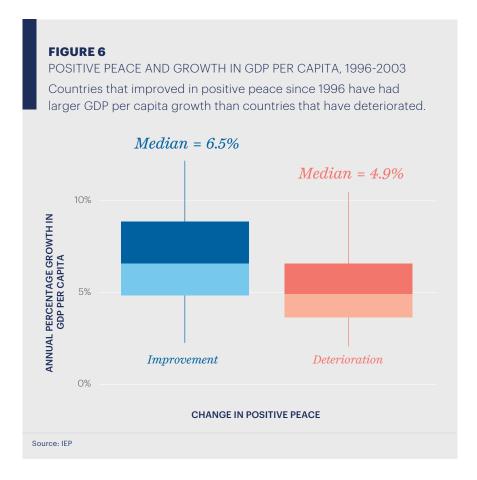
Figure 5 highlights country level changes. Acceptance of the rights of others and free flow of information are the pillars that have changed the most.

Furthermore, countries that do manage to make substantial improvements in Positive Peace reap other benefits as well. Figure 6 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

FIGURE 5 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. Low levels of corruption Acceptance of the rights of others **Good relations** with neighbours Well-functioning government **Equitable distribution** of resources **Sound business** environment Free flow of information -20% -10% 10% 20% **5 YEAR PERCENTAGE CHANGE** Deterioration 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.



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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, as demonstrated in figure 7, are closely correlated and empirically linked to Positive Peace.

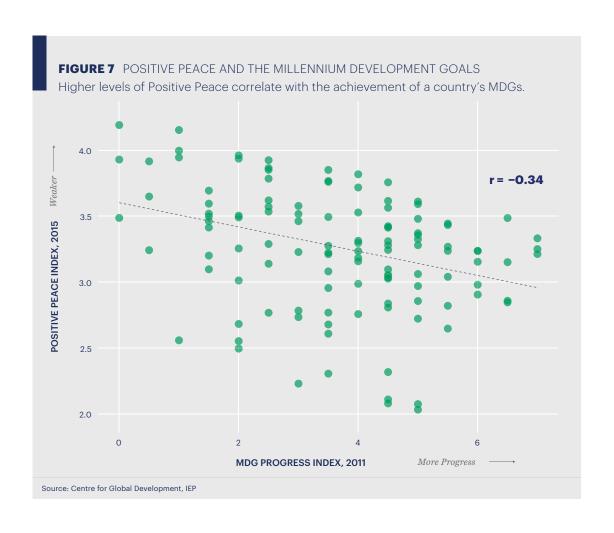
Positive Peace is associated with many aspects that are priorities for the Sustainable Development Goals (SDGs), such as strong economic growth and employment, environmental sustainability, greater food security, gender equality and development objectives such as improving access to water and energy resources. Simply put, Positive Peace, as measured by the Positive Peace Index, correlates with many other measures of progress. Figure xx 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.⁸

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	-



POSITIVE PEACE REPORT 2015 | About Positive Peace -----

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

	_							
GOALS	ACCEPTANCE OF THERIGHTS 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	~			~				~



RESULTS & FINDINGS

FROM THE POSITIVE PEACE INDEX

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 3.

For the full methodology, including indicator weights, please refer to Annex A.

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.

BOX 2 METHODOLOGY AT A GLANCE

The Positive Peace Index (PPI) measures the level of Positive Peace in 162 countries, covering over 99 per cent of the world's population. Positive Peace is defined as the attitudes, institutions and structures that create and sustain a peaceful society and provide an optimal environment for human potential to flourish. Positive Peace is conceptually similar to Negative Peace in that it is a multidimensional phenomenon that cannot be measured simply by one or two indicators.

IEP constructed the Positive Peace framework by reviewing the best available data on social characteristics and the current literature on drivers of violent conflict, resilience and peacefulness. Internal GPI scores were tested against 4,700 different indices, datasets and attitudinal surveys to identify the factors that had the strongest, statistically significant relationships with peacefulness. The eight domains, or pillars, categorise the relationships that were prominent in this analysis.

IEP identified three indicators for each domain to build the PPI. The 24 indicators that form the PPI were chosen based on the strength of their relationship with peacefulness as well as conceptual clarity and country and time coverage. Each of the indicators is weighted based on the correlation coefficient between the indicator and the internal GPI score, the most highly correlated indicators representing a greater share of PPI scores.

For the full, detailed methodology, please refer to Annex A on page 68.

TABLE 3 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
	Democratic political culture	Measures whether the electoral process, civil liberties, functioning of government, political participation and culture support secular democracy.	EIU
Well-functioning government	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
	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
Sound business environment	Index of Economic Freedom	Measures individual freedoms to and protection of freedoms to work, produce, consume, and invest unconstrained by the state.	Heritage Foundation
	GDP per capita	GDP per capita	World Bank
	Factionalised elites	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fund for Peace
Low levels of corruption	Corruption Perceptions Index	Scores countries based on how corrupt the public sector is perceived to be.	Transparency International
	Control of corruption	Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption.	World Bank
	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
High levels of human capital	Scientific publications	Number of scientific publications per 100,000 people.	World Bank, IEP calculation
	Youth Development Index	YDI measures the status of 15-29 year-olds in according to five key domains: Education, Health and Well-being, Employment, Civic Participation and Political Participation.	Commonwealth Secreteriat
	Freedom of the Press Index	A composite measure of the degree of print, broadcast, and internet freedom.	Freedom House
Free flow of information	Mobile phone subscription rate	Number of mobile phone subscriptions per 100 inhabitants.	ITU
	World Press Freedom Index	Ranks countries based on media pluralism and independence, respect for the safety and freedom of journalists, and the legislative, institutional and infrastructural environment in which the media operate.	Reporters Without Borders
	Hostility to foreigners	Measures social attitudes toward foreigners and private property.	EIU
Good relations with neighbours	Number of visitors	Number of visitors as per cent of the domestic population.	EIU
	Regional integration	Measures the extent of a nation's trade-based integration with other states.	EIU
	Inequality-adjusted life expectancy	The HDI life expectancy index adjusted for inequality scores countries based on both average life expectancy and the degree of inequality in life expectance between groups.	UNDP HDI
Equitable distribution of resources	Social mobility	Measures the potential for upward social mobility based on the degree to which either merit or social networks determine an individual's success.	IDP
	Poverty gap	The mean shortfall from the poverty line at \$2 per day PPP (counting the nonpoor as having zero shortfall), expressed as a % of the poverty line.	World Bank
	Empowerment Index	An additive index using indicators of freedom of movement, freedom of speech, workers' rights, political participation, and freedom of religion.	CIRI
Acceptance of the rights of others	Group grievance rating	Measures the extent and severity of grievances between groups in society, including religious, ethnic, sectarian and political discrimination and division.	Fund For Peace
	Gender Inequality Index	The Gender Inequality Index (GII) reflects women's disadvantage in three dimensions: reproductive health, empowerment and the labour market.	UNDP HDI

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RANK	COUNTRY	SCORE
1	Denmark	1.361
1	Finland	1.361
3	Sweden	1.396
4	Norway	1.408
5	Ireland	1.448
6	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

Very high

High

Medium

Low

Very low

Not included

2015 POSITIVE PEACE INDEX

GLOBAL LEVELS OF POSITIVE PEACE

RANK	COUNTRY	SCORE
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

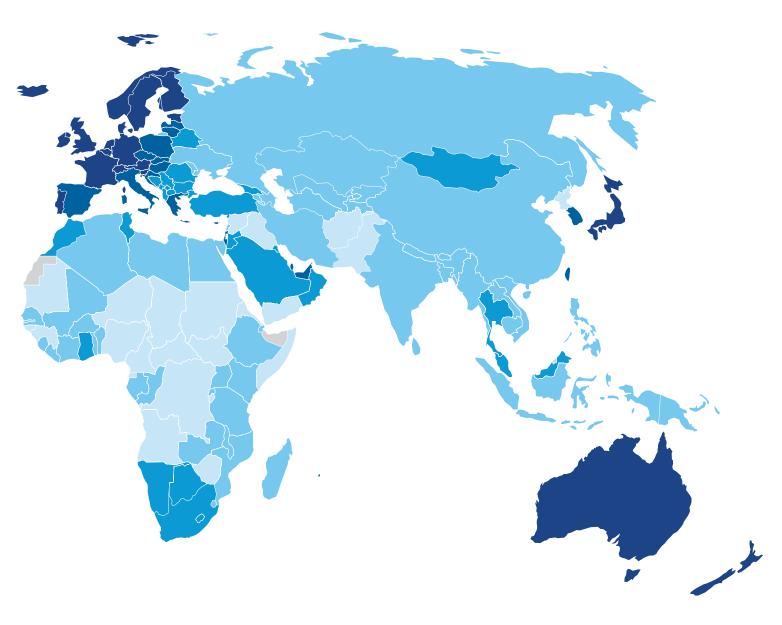
102	Senegal	3.275
103	Kygyz Republic	3.28
103	Paraguay	3.28
105	Zambia	3.289
106	Benin	3.297
107	India	3.31
108	Algeria	3.313
109	Bolivia	3.325
110	Egypt	3.332
111	The Gambia	3.357
112	Lebanon	3.371

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	50	Trinidad and Tobago	2.682
41	Qatar	2.375	51	Kuwait	2.698
42	Taiwan	2.431	52	Oman	2.701
43	Bulgaria	2.495	53	Panama	2.722
44	Botswana	2.552	54	Macedonia	2.734
45	Montenegro	2.558	55	Namibia	2.757
46	Kosovo	2.564	56	South Africa	2.767
47	Jamaica	2.608	57	Argentina	2.768
48	Malaysia	2.647	58	Bahrain	2.77
49	Romania	2.678	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 Salva	dor 2.905
67 Saudi A	rabia 2.919
68 Bosnia a Herzego	
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

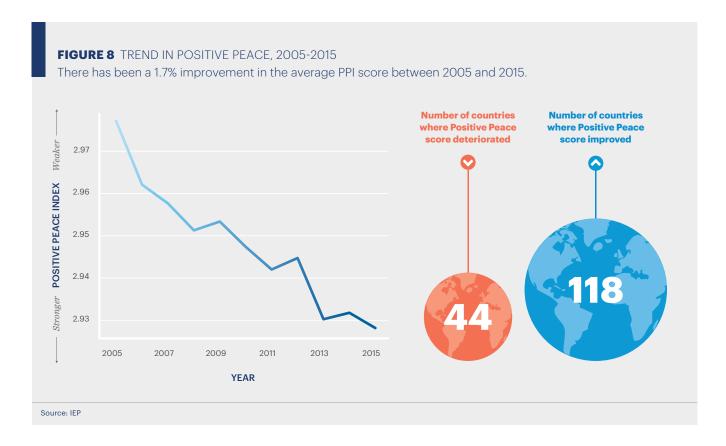
156	Democratic Republic of the Congo	3.93
157	Yemen	3.937
158	Zimbabwe	3.946
159	Chad	3.961
160	Afghanistan	3.997
161	Central African Republic	4.154
162	Somalia	4.192

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 8. 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.



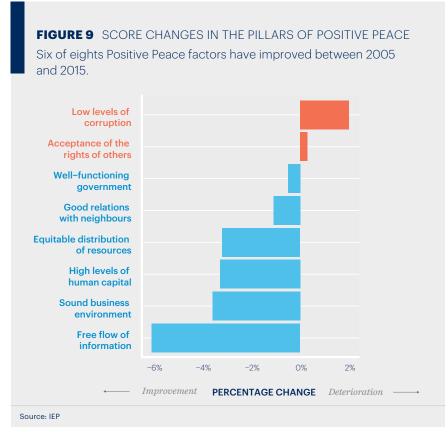


Figure 9 shows the percentage change from 2005 to 2015 for all eight Positive Peace factors. Because institutionbuilding and changes in social norms are long-term processes, global changes in the PPI domains happen relatively slowly. The overall score and the domain scores represent composite indicators 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.

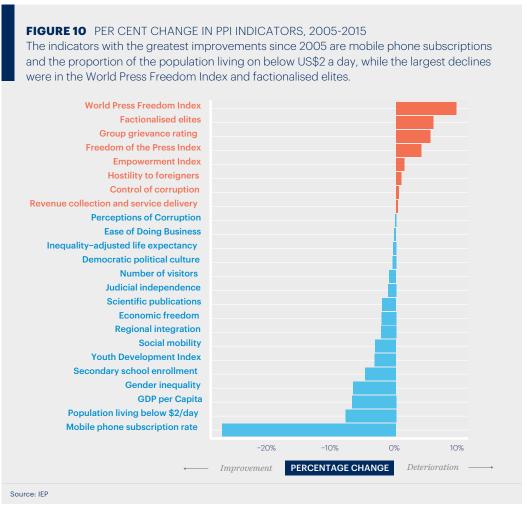


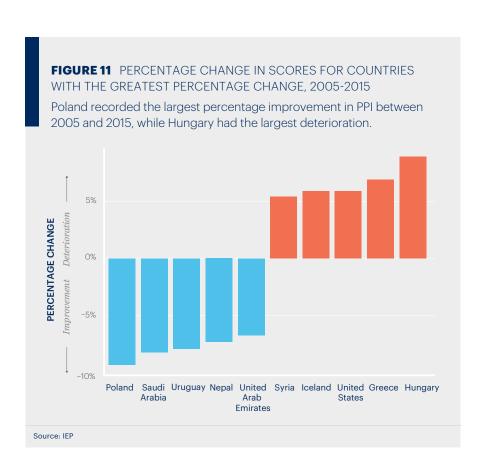
Figure 10 indicates that 16 out of the 24 PPI indicators have improved since 2005.

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.¹

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.



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REGIONAL TRENDS

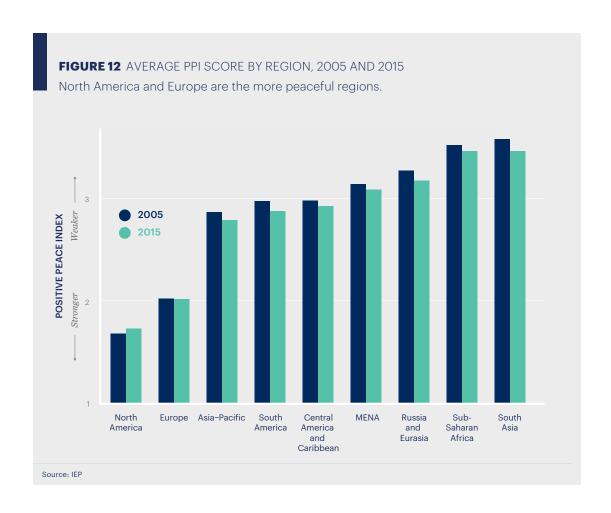
As a region, North America has the highest level of Positive Peace, closely followed by Europe.

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

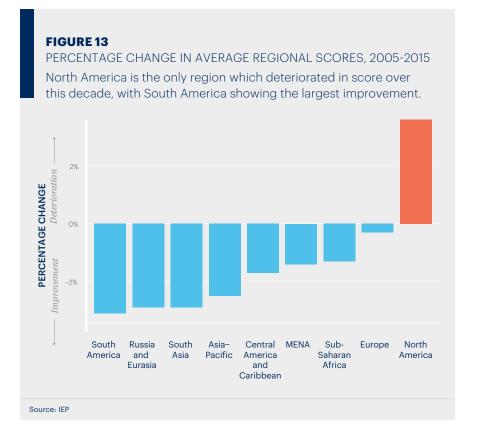
South Asian and sub-Saharan African countries have the worst average Positive Peace scores. Although South Asia had the largest percentage increase in Positive Peace since 2005, it still has no countries scoring better than the global average in 2015.

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.²



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As shown in figure 8, more countries improved than deteriorated and, on average, improvements were larger in magnitude than deteriorations. As a result, regional average scores improved from 2005 to 2015 for all regions aside from North America. Figure 13 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 the four percent. 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 in table 4.

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 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.³ 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.

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TABLE 4 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 5 TEN BEST-PERFORMING COUNTRIES, 2015 COMPARED TO 2005

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

COUNTRY	20	05	15	
	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	6
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 6 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	20	05	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 5 and 6 list the 10 best-performing and worst-performing countries in the 2015 PPI, with their scores and ranks for 2005 and 2015.

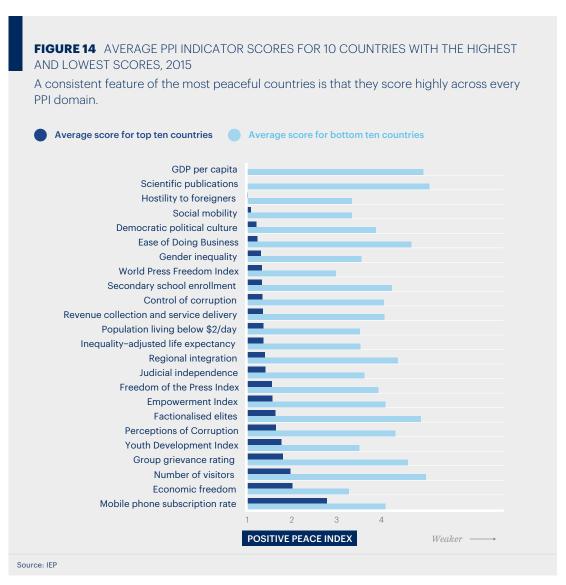
Sub-Saharan Africa has seen volatility, and in many cases deterioration, in Positive Peace scores. Countries from this region dominate the bottom of the PPI. Somalia has ranked last every year since 2005, but the country has seen a 10 per cent improvement in *free flow of information* since 2012. This 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 14.



66

Nordic countries remain at the top of the PPI rankings from 2005 through to 2015.

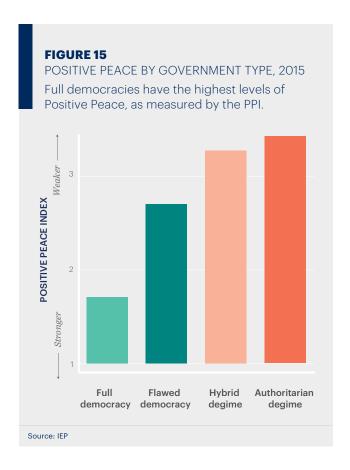
RESULTS BY **GOVERNMENT TYPE**

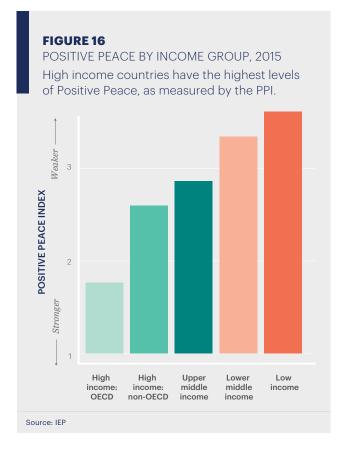
Government type has a clear relationship with Positive Peace, with full democracies scoring the best in the PPI, as shown in figure 15. Authoritarian regimes recorded the worst average PPI score in 2015. These results are reflective of the importance of social and governmental structures. The democratic 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.

RESULTS BY INCOME GROUP

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 16.

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.





POSITIVE PEACE & NEGATIVE PEACE

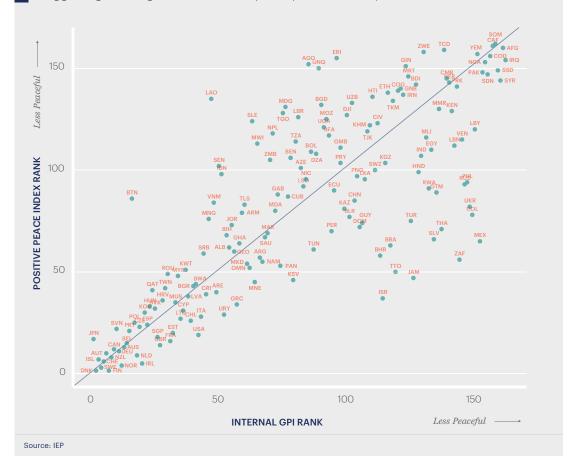
Using country rankings in the GPI and PPI, IEP also calculates a country's peace gap to explore the potential for improvement in Negative Peace. Negative Peace is measured by the GPI. Where Positive Peace is relatively higher than Negative Peace, a country is said to have a Positive Peace surplus, indicating a high level of institutional capacity to support lower levels of violence. For example, Mexico ranks 65th in Positive Peace, but 152nd in internal peace in the GPI. This suggests that Mexico has the capacity to move toward higher levels of peacefulness. Conversely, countries that rank higher in Negative Peace than Positive Peace have a Positive Peace deficit and are comparatively more vulnerable to external shocks and run a higher risk of an increased level 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 which all have a high probability of only small changes in score.

Figure 17 shows the relationship between Positive Peace and Negative Peace for the 162 countries in the PPI and GPI.

FIGURE 17 POSITIVE PEACE GAP, 2015

Countries above the line have a Positive Peace deficit, while countries below the line have a Positive Peace surplus. Eighty-seven countries in total have a surplus in Positive Peace, suggesting that Negative Peace is likely to improve in these places.



POSITIVE PEACE REPORT 2015 | Results & Findings -----

RESISTANCE MOVEMENTS

- Countries with stronger Positive Peace have restorative aspects and as such are more resilient in the face of civil resistance.
 Movements tend to be smaller, less violent, have less radical aims, last for shorter periods and are more likely to achieve their goals.
- In comparing major resistance campaigns,
 91 per cent of all primarily violent resistance campaigns have been waged in countries with weaker Positive Peace.
- In countries with high levels of Positive Peace, 51 per cent of campaigns have been primarily nonviolent in nature. This compares to only 30 per cent of campaigns being nonviolent in countries with weaker Positive Peace. In countries with weaker Positive Peace, violence is both more likely and more intense.
- Positive Peace determines other characteristics of violent resistance campaigns. In high Positive Peace countries violent resistance campaigns tend to be smaller in size and scope and more successful.

One way in which Positive Peace provides an optimal environment for human potential to flourish is to help build resilience and to create 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.

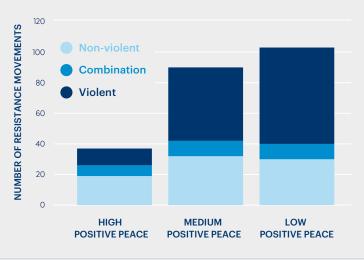
Positive Peace translates into more opportunities for nonviolent conflict resolution. Highly peaceful countries have strong institutions with low levels of corruption that offer such nonviolent alternatives.

The nature of a resistance campaign is influenced by the strength of Positive Peace. Table 7 lists the statistically significant differences⁴ between campaigns in countries with high and low levels of Positive Peace. Evidently, strong Positive Peace offers a number of coping mechanisms in times of crises. Resistance movements in high Positive Peace

FIGURE 18

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.⁵



Source: University of Denver, IEP

countries tend to seek more incremental change and are more likely to be supported by diasporas. In weaker Positive Peace countries, movements are more likely to seek significant structural or regime change. Where Positive Peace is strong, violence is far less effective at achieving concessions from the state than nonviolence. While the same is true in low Positive Peace countries, the difference is not as pronounced.

TABLE 7 CHARACTERISTICS OF RESISTANCE CAMPAIGNS BY LEVELS OF POSITIVE PEACE

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

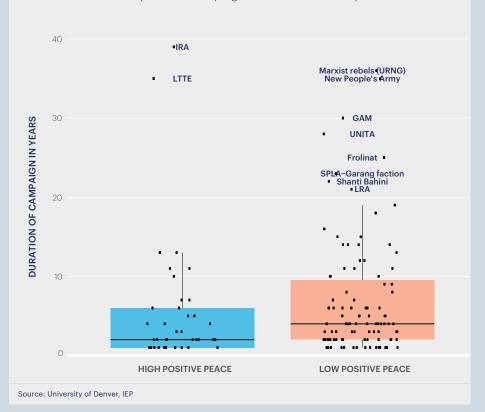
	WEAKER POSITIVE PEACE	STRONGER POSITIVE PEACE
GOAL OF THE CAMPAIGN	Goals are typically major structural or regime change.	Goals are typically aimed at policy or in some circumstances territorial independence.
SIZE	Weaker Positive Peace countries tend to have larger violent campaigns but smaller nonviolent 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.	$\label{thm:campaigns} \begin{tabular}{ll} Violent campaigns are less successful. Nonviolent campaigns tend to achieve more concessions. \end{tabular}$
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.

66 Positive Peace translates into more opportunities for nonviolent conflict resolution.

FIGURE 19

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.



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.

This comparison demonstrates that strong Positive Peace brings with it incentives for both the state and movements to use nonviolent strategies. Figure 18 shows the distribution of violent, nonviolent and mixed tactic movements in countries of high and low Positive Peace. Figure 19 shows that in countries with strong Positive Peace, violent movements last three years less on average.

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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.

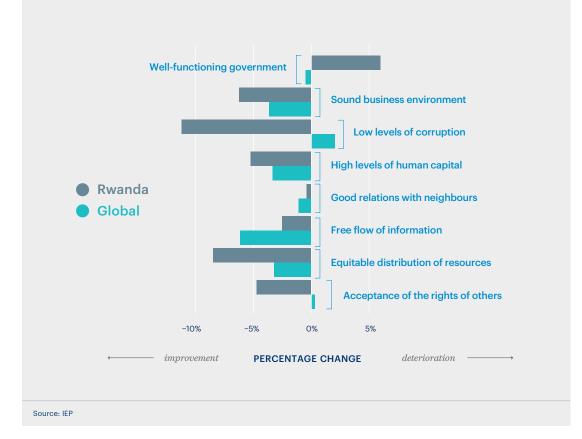
Five countries that have recently experienced conflict -

•	Nepal	Cote d'Ivoire
•	Rwanda	Georgia
•	Myanmar	

- 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.

FIGURE 20

CHANGE IN POSITIVE PEACE DOMAINS AMONGST POST-CONFLICT RISERS, 2005-2015 Nepal, Rwanda, Myanmar, Cote d'Ivoire, Georgia and Indonesia have all made major gains in Positive Peace since the cessation of hostilities.



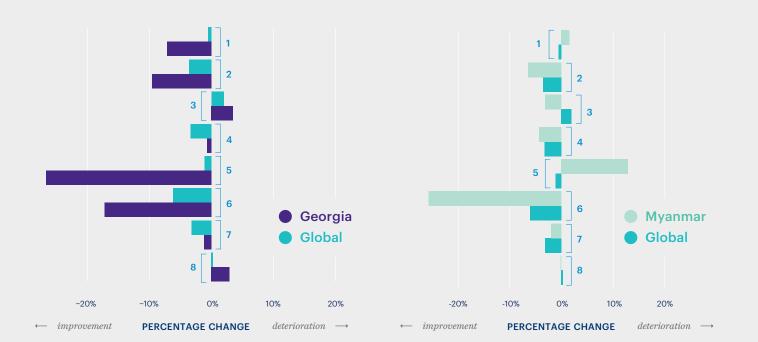
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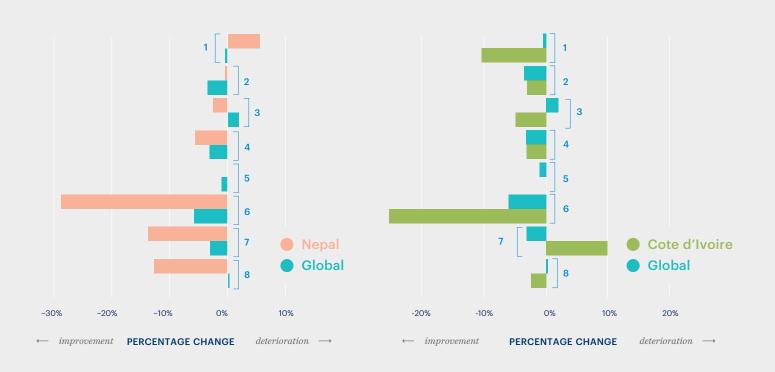
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FIGURE 20 CHANGE IN POSITIVE PEACE DOMAINS AMONGST POST-CONFLICT RISERS, 2005-2015

Nepal, Rwanda, Myanmar, Cote d'Ivoire, Georgia and Indonesia have all made major gains in Positive Peace since the cessation of hostilities.

1 Well-functioning government 3 Low levels of corruption 5 Good relations with neighbours 7 Equitable distribution of resources 2 Sound business environment 4 High levels of human capital 6 Free flow of information 8 Acceptance of the rights of others





THE PILLARS OF POSITIVE PEACE

The pillars of Positive Peace, also referred to as Positive Peace factors, is an eight part taxonomy that describes 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 of peace 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 this 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 each individual pillar. 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 following:

- > the main features of each domain
- > the key challenges policymakers face
- details of how IEP measures each pillar of the PPI

The eight factors that create Positive Peace are:



For a full explanation of IEP's systems approach to peace, see page 12.

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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.

Government is a reflection of how society organises itself, and as such reflects whether or not there are sufficient mechanisms for, first of all, avoiding disputes where possible, and second, resolving disputes without the use of violence. 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'.

It should be noted that governments can both produce violence and develop institutions which mitigate it. The use or potential use of force as a means of defence and for maintaining the rule of law is commonly accepted. Yet at the same time, human societies have become increasingly sophisticated at preempting the need for violence over the course of the last several centuries. The current trend is to rely more on high levels of development and less on the use of force.

Governments exist to achieve many aims, including but not limited to increasing levels of peacefulness and safety. There are many sets of criteria to use when evaluating the role and effectiveness of a government. The following discussion addresses the characteristics of a well-functioning government that can facilitate high levels of peace. Notably, the same mechanisms and characteristics also often facilitate high levels of economic growth, human development and environmental protection and can be the catalyst for virtuous cycles that further support these positive outcomes.

In order to assess the components of government that are most relevant to the outcome of improved levels of peacefulness, IEP examined two comprehensive datasets on governance in order to identify the most statistically relevant measures of effective government. The two datasets are the World Justice Project Rule of Law Index (WJP RLI) and the World Bank World Governance Indicators (WB WGI).

These two datasets include a total of 387 indicators from a variety of sources that capture a range of the elements and components of a *well-functioning government*. IEP examined each individual component of these datasets for statistical relationships. The WJP RLI uses original survey data and the WB WGI includes data from 19 different organisations and frameworks. IEP identified the indicators with the strongest, statistically significant relationships with internal peace and included them in the PPI.

There are consistent themes across the various relevant measurements of government effectiveness. Visualised in figure 21. these are:

- Capacity for and quality of revenue collection and service provision.
- Transparency, accountability and mechanisms for participation.
- Effectiveness of the judiciary, including independence of the judiciary, due process, respect for the rights of the accused, contract enforcement and impartial application of criminal justice.

POSITIVE PEACE REPORT 2015 | The Pillars of Peace -----

FIGURE 21 PEACE AND A WELL-FUNCTIONING GOVERNMENT, 2015

There is a clear relationship between Internal Peace and each aspect of a well-functioning government.



Source: IEP

These three key qualities — 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 macroindicators 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.

CHALLENGES TO BUILDING A WELL-FUNCTIONING GOVERNMENT

It is also useful to consider the consequences of a poorly functioning government. For example, where rule of law is weak and cannot be provided within the state's territory, the void may be filled by criminal or quasi-criminal elements who will provide services, offer protection and in doing so raise their own revenues.

These groups sometimes derive social and political legitimacy from their communities by building infrastructures, meeting other community needs and protecting local families. In these problematic scenarios, the government must compete with non-state organisations for control of territory and the respect

of the population. This can result in either high levels of interpersonal violence or conflict between the government and armed groups.

In better-functioning environments, the government is more inclusive of different groups in society and more responsive to the needs of the population. The tax base is stronger, with the government being capable of supporting more public services, particularly the rule of law which makes it more difficult for quasi-criminal elements to thrive. Effective social safety nets provide a mechanism to alleviate poverty and encourage higher productivity and less criminal activity.

MEASURING A WELL-FUNCTIONING GOVERNMENT

TABLE 8 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

The PPI includes three indicators of a *well-functioning government*, listed with their correlation coefficients in table 8.

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 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 important aspects of government discussed above:

- transparency, accountability and mechanisms for participation
- · effectiveness of the judiciary
- capacity for and quality of revenue collection and service provision.

SOUND BUSINESS ENVIRONMENT



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 business operation.

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.

Where economies are weak or failing, people may turn to violence to acquire resources, whether in the form of sanctioned monopolies, control of natural resources or forced labour. But markets distribute resources based on exchange: trading goods or wages for labour. Where exchange is profitable, efficient and effective, there is less and less benefit to appropriation, theft or violence. Where markets are operating safely and effectively, the opportunity cost of violence becomes very high, making people less likely to engage in it. The data demonstrates this: both the Ease of Doing Business Index and the Index of Economic Freedom correlate strongly with peace, at $\mathbf{r}=0.63$ and 0.65 respectively.

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 slightly less peaceful. Where economic activity is relegated to the grey and black markets, higher levels of violence are more likely. When economic exchange happens in the formal market, it is more easily regulated, taxed and individuals and firms can be more easily held accountable for any use of violence or corruption.

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 may be more formalised, with a strong legal system supporting stability.

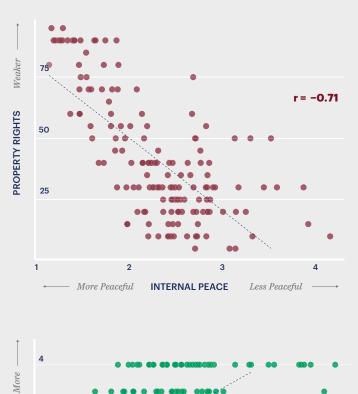
Figure 22 highlights the relationship between peacefulness and the measure of property rights used in the Index of Economic Freedom, as well as the opposite relationship between peacefulness and the significance of informal work.

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

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FIGURE 22 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.





transparency and accountability that is necessary for peaceful 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.

There can be a role for informal economic activity in a sound business environment - such as easily-started microenterprises that pull many families out of poverty. 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 violence and 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.2
- 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 throughout society.

Where exchange is profitable, efficient and effective, there is less and less benefit to appropriation, theft and violence.

CHALLENGES TO BUILDING A SOUND BUSINESS ENVIRONMENT

Business efficiency is dependent on robust transport, energy and communications infrastructure. Developing these types of infrastructure is expensive and poor countries have difficulty in making the appropriate investments in order to effectively compete in many global markets.

Small countries which are geographically isolated face especially tough conditions with accessing markets. The Pacific Islands are a good example — these small nations are thousands of miles from their nearest international markets. One of the major challenges for these countries is integration into the global supply chain. Being isolated from markets and having poor infrastructure are closely associated; by improving infrastructure, the time and cost to market can be greatly reduced, but lack of access to markets limits growth and thus capital accumulation for investment in infrastructure development. Isolation is also closely associated with poverty, as it reduces access to opportunity. Taken together, these challenges represent a hurdle for developing nations.

To attract capital and business investment, countries need predictable and easily understood legal and regulatory systems, without which new investments become more risky. Establishing and then enforcing these rules can become difficult because of the power of elites, corruption or past practices.

As economies develop, new industries emerge and existing ones change. Appropriate education systems and skills training is essential for societies to fully leverage the changing environment. The over-supply of labour in one sector and job shortages in a growth sector are common and experienced by both the developed and developing world.

Compromises between employers and employees are a classic example of how conflict can be channelled into society-wide benefits. When handled constructively, disputes in the marketplace can lead to acceptable agreements that have positive external effects. For example, wages act as a facilitator for the *equitable distribution of resources*. When wages are appropriate, they act to redistribute wealth throughout society through the flow on effects of their purchases. Similarly, labour protections contribute to higher levels of human capital, for example through reductions in injuries resulting in a more productive workforce and attraction and retention of quality staff.

MEASURING A SOUND BUSINESS ENVIRONMENT

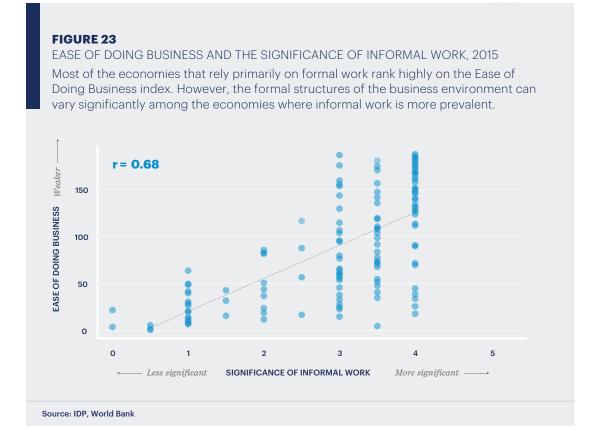
The PPI includes three indicators of a sound business environment, listed with their correlation coefficients in table 9.

	05 4 001 1115 51 1011 150	
TABLE 9 INDICATORS	OF A SOUND BUSINES	SS 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

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. In fact, measures of property rights scored by the IEF, the Global Competitiveness Report and IPD all correlate with



internal peacefulness at r>0.6, implying that regardless of how the security of property rights is measured, there is a statistically significant relationship with peacefulness. Given the potential for conflicts to arise around land tenure and other property issues, the structures and institutions that protect property rights are an important aspect of Positive Peace.

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. Scores are based on the "distance to frontier," or the difference between an individual country's metrics and measures of best practice.

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. As such, it may not be a complete picture of how business is actually done in many countries.³ The distribution of the data in Figure 23 demonstrates this. Countries where informal work is more important generally rank more poorly on the Ease of Doing Business Index, but there is a large spread of index ranks among countries with large informal economies.⁴ For example, Malaysia has a high level of informal work yet ranks 20 on Ease of Doing Business. This distribution implies that highly

formalised economies are generally consistent in their regulations, all scoring well on Ease of Doing Business, while economies with large informal sectors can vary significantly.

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 currently 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.

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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.

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 social contracts between the government and society are considered fair.

Several measures of an *equitable* distribution of resources have a quantitative relationship with peacefulness. Figure 24 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 commonly thought that countries with high levels of income inequality will have high levels of violence as a result. Globally, there is only a mild statistical relationship (r = 0.29) between income inequality and overall GPI score, as well as between income inequality and armed conflict. Although not as strong as many other relationships, it is still statistically significant. Income inequality partly explains poor levels of peacefulness and it becomes more relevant in some contexts compared to others. Income inequality shows a statistical relationship with interpersonal violence - the type of violence acted out by individuals rather than groups.5 However, individuals are less likely and less able to escalate their grievance into a large-scale violent conflict.

Looking across countries experiencing low levels of peacefulness, grievances related to resources are a common **FIGURE 24** 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.



theme. 6 And yet, the distribution of income — the most basic of economic indicators — explains relatively little of the variation in peace. IEP explored why that might be true.

There are two challenges to identifying income inequality as a driver of violence. First, it's difficult to collect income data in poor countries where people often meet their needs via the informal market. Second, the relationship is not strong enough to assume that deteriorations in income inequality always lead to deteriorations in peace.

The most common measurement of income inequality, the Gini coefficient, captures the dispersion of income across a country's population. It makes no assessment of the degree to which income inequality falls along group identity lines, such as ethnicity or religion.

Datasets that use a broader concept of inequality, like the social mobility indicator used in the PPI, show stronger relationships with peacefulness than income inequality. IEP's examination of various measures suggests that the reason for this is likely three-fold:

- Outcomes may be more important than income.⁷
- Inequalities between groups, rather than individuals, can be a more important driver of violent conflict.⁸
- The cumulative effect of several strong or several weak pillars will be more impactful than any single pillar score.

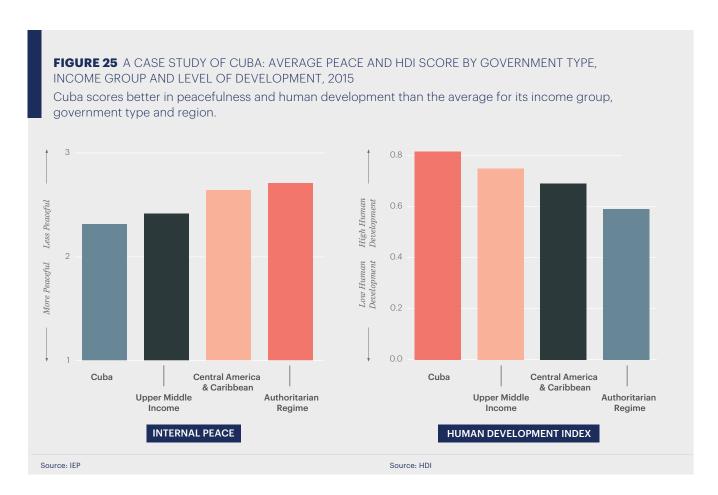
Income is a common and widely used economic indicator because it is straightforward to quantify and generally serves as a useful proxy for wellbeing. In most economies, a household's level of disposable income is a fairly good predictor of access to goods and services. Income operates as a means to an end; the value is in its use in acquiring those goods and services. When it comes to the most basic human needs, there are a variety of ways to ensure that people have access to food, shelter, education, essential medicines and clean water and sanitation through the public and private sectors.

Cuba is an example of a low-income country where a certain amount of basic foodstuffs, healthcare and education are provided to every citizen. Figure 25 shows that Cuba's peace and human development scores are above average compared to other countries with the same government type, regional location and level of development.

Assessing inequality in outcomes, rather than income, offers a more nuanced picture of the relationship between equity and peacefulness. As a result, when assessing the divisions in society that may contribute to violent conflict, it's useful to look for the intersections between inequalities and other social characteristics, especially along ethnic and religious lines.



Assessing inequality in outcomes, rather than income, offers a nuanced picture of the relationship between equity and peacefulness.



CHALLENGES TO THE EQUITABLE DISTRIBUTION OF RESOURCES

The primary challenges that come with encouraging an equitable distribution of resources are the tensions between competing groups within societies and how to accommodate their demands. The first aspect to consider is what a society considers equitable, which will vary at different stages of the country's development. This will provide a basis for benchmarking government and social services to understand the gap. An example might be the tensions that arise with large-scale investments in development of privately held land.

Another challenge with providing an equitable distribution of resources is that governments cannot provide all of the services that their citizens would like. Therefore there are trade-offs, and more developed countries have more capacity to meet their citizens' needs. Governments may also struggle with expectations because of the political dynamics, such as coalition governments

or minority governments that have restricted budgetary control. Political instability impacts the priorities of government, with greater focus placed on short-term stabilisation of power rather than distributing resources. Ideological perspectives, such as the role of government in providing particular services, may also influence a government's capacity.

High levels of Positive Peace in other pillars can mitigate these challenges. Free flows of information and participatory forums for interacting with government can help people understand the costs and benefits of various proposals. *Acceptance of the rights of others* fosters better respect between groups within society. This latter pillar also supports the formation of relationships, partnerships and coalitions, so that leaders from different groups can work together to align their interests and goals.

MEASURING THE EQUITABLE DISTRIBUTION OF RESOURCES

The PPI includes three indicators of an equitable distribution of resources, listed with their correlation coefficients in table 10.

TABLE 10 INDICATORS OF AN EQUITABLE DISTRIBUTION OF RESOURCE

INDICATOR	DEFINITION	SOURCE	CORRELATION WITH
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	
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

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 availability of health services

when adjusted by income is an excellent proxy for determining how well services are distributed throughout the system. The measure of inequality-adjusted life expectancy is used in the PPI to capture this.

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 inequality that have the strongest statistical relationship with peacefulness.

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.

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 by drawing out the best features of each group. Building the pillar acceptance of the rights of others enables this best-case scenario. Figure 26 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. Fortunately, there are many examples of success in this area.

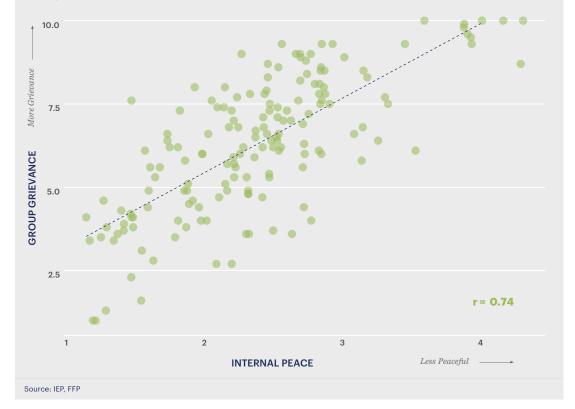
IEP's recent research on religion and peace demonstrates that societies with diverse religious practices and societies with high levels of religiosity can also be highly peaceful. Similarly, the rate at which people identify as a member of a religious group does not have a statistically significant relationship 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 religious practice or identification can have low levels of peace.9

What is more important in determining peacefulness is the strength of Positive Peace, including the acceptance of the rights of others.

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.¹⁰ The level of acceptance of the rights 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 faciltiates violence towards certain groups by portraying and normalizing it in media, literature, art and other cultural spaces.11 In societies with a high level of acceptance of the rights of others, violence becomes less acceptable.



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



BOX 3 THE ROLE OF RELATIONSHIPS IN BUILDING PEACE

IEP's Positive Peace framework describes an optimum environment for human potential to flourish, based on the measurable social characteristics that have a quantitative relationship with the absence of violence and the fear of violence. Each of the pillars of Positive Peace are aspects that policy makers can impact in order to build sustainable peace.

There are also some components to peacebuilding that fall outside this framework, and may be better understood as levers that act upon the pillars. Relationships are a key example — they are difficult to measure and largely outside the scope of policy but nonetheless a crucial ingredient for making changes in peacefulness.

Relationships can serve as the catalyst for bringing together diverse groups in society and lead to actions that help resolve conflicts and/or strengthen the pillars of Positive Peace.

Key people in leadership roles have the capacity to enact large scale change. Building strong relationships, whether between key people or among groups, sets the stage to take advantage of peacebuilding opportunities. When key people build relationships across groups they naturally build networks with strong ties, thereby indirectly improving peace. Societies often face pivotal moments, where several factors align, such that certain decisions can alter the course of a conflict. These are the moments where relationships can be a crucial factor for progress. Where intergroup relationships are strong, society's resilience is also strong, thereby facilitating better outcomes.

CHALLENGES TO BUILDING THE ACCEPTANCE OF THE RIGHTS OF OTHERS

Acceptance of the rights of others might be one of the most challenging pillars to develop and improve because it relies so heavily on attitudes and informal relationships. However, formal organisations can create structures and institutions that promote this pillar. Creating opportunities for different groups to interact constructively and implementing protections that prevent problematic interactions, such as hate crimes, can help inculcate attitudes of acceptance and respect. Challenges can arise, however, when groups feel coerced into these structures, such as laws that are imposed without buy-in from diverse sectors of society.

Entrenched power, especially when it is related to corruption, can be a barrier to societal change even where legislation may have been introduced to support the rights of marginalised individuals.¹²

Where ingrained hostilities have arisen, breaking down negative images or dealing with past violence and grievances is difficult. Behavioural and societal changes will happen gradually and will need careful cultivation from governments and community engagement.¹³

MEASURING THE ACCEPTANCE OF THE RIGHTS OF OTHERS

TABLE 11 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

The PPI includes three indicators of the *acceptance of the rights of others*, listed with their correlation coefficients in table 11.

The measurements that go into the *acceptance of the rights of others* domain construct a well-rounded and holistic indicator of society's attitude, 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: women and men. Gender equality has a consistent and demonstrable relationship with peacefulness across many studies and data sources. ¹⁴ 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.

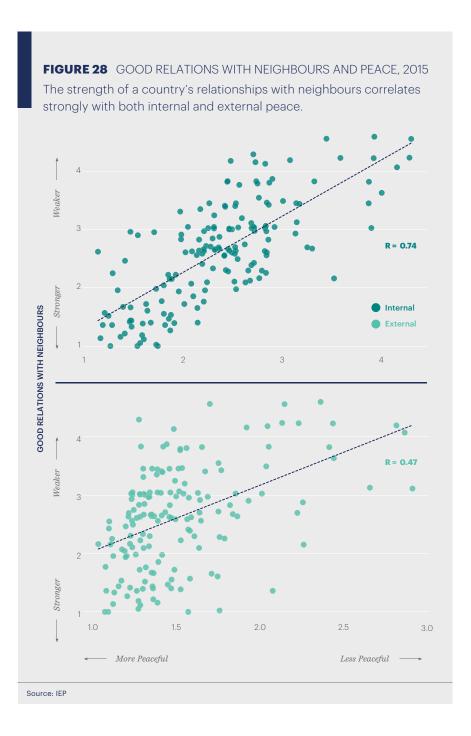
GOOD RELATIONS WITH NEIGHBOURS



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.

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 27 highlights the clear relationship between *good relations with neighbours* and peacefulness.

Good relations with neighbours is unique in the Positive Peace framework because it is the only outwardly-looking pillar. The rest deal with the internal state of the society. Because the active processes



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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.

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

Good governance is crucial, as seen in figure 27 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.

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 29. 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.

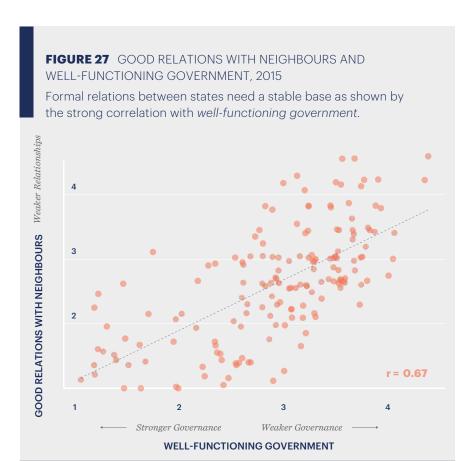
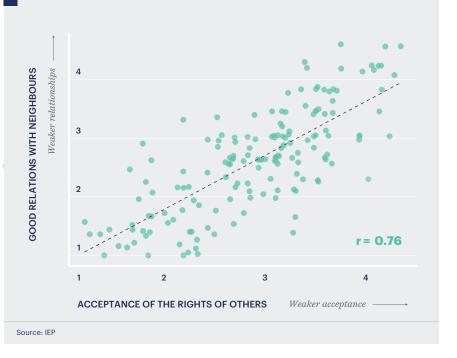


FIGURE 29 GOOD RELATIONS WITH NEIGHBOURS AND ACCEPTANCE OF THE RIGHTS OF OTHERS, 2015

Source: IEP

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



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CHALLENGES TO FOSTERING GOOD RELATIONS WITH NEIGHBOURS

66 Diplomatic relations hinge on good economic and political relations.

Diplomatic relations hinge on good economic and political relations. If a country lacks responsive, good government then it will be a challenge to have stable relations with neighbouring countries. This extends into the economic and business environment. If a country is inconsistent with trade rules and domestic economic policies, this affects its ability to have good trade relations with its neighbours. Because the elements of Positive Peace do not stand alone, but reinforce each other, peaceful relations between countries are dependent on strong internal peace factors.

Strong internal peace supports the projection of a country's foreign policy, which affects the way it relates to other countries. This can be a challenge in countries that face deficits in economic, governance or civil society factors.

For many countries, regional and inter-country tensions have spanned generations, straining diplomacy and trust. And yet, many states with historical tensions also have quite robust relations. For the entire Cold War the United States and the Soviet Union maintained strong diplomatic relations even though they were bitter enemies.

What is critically important to *good relations with neighbours* is not so much friendship, but rather common understanding and a certain level of trust. Two countries can deeply dislike one another, and as long as they both trust that the other will behave in a credible way for a specific set of issues they will have functional relations. A recent example demonstrating the importance of common understanding and trust is the ongoing tensions between Greece and the European Union regarding debt scheduling.

MEASURING GOOD RELATIONS WITH NEIGHBOURS

Because the elements of Positive Peace do not stand alone, but reinforce each other, peaceful relations between countries are dependent on strong internal peace factors.

TABLE 12 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

The PPI includes three indicators of *good relations with neighbours*, listed with their correlation coefficients in table 12.

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 publically available and shows patterns and working relationship between parties.

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.

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.¹⁵

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. ¹⁶ 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. ¹⁷

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 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 30.

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. It can reduce 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 UNDP and the Kenyan government, has also been instrumental in disseminating information to prevent violence in the recent Kenyan elections.¹⁸ This example underscores how mobile phone technology and information access contribute to Positive Peace by empowering individuals with new ways of communicating and trading.

Increased penetration of mobile technology can improve the business environment by generating sustainable employment, developing the workforce, increasing competitiveness through access to market prices and supply, demand, legal and commercial information, and increasing economic freedom by reducing individual and community reliance on intermediaries. TechChange, a leading organization in using technology for development, estimates that improved access

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to information leads to a 20 per cent increase in the sale of perishable crops by rural farmers.¹⁹

Like the other pillars, free flow of information has an interdependent relationship with the other factors of Positive Peace. Table 13 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.

Access to quality and reliable information is essential to a well-informed society capable of making considered decisions.

Source: IEP, Freedom House

TABLE 13 CORRELATION MATRIX FOR SELECT DOMAINS OF POSITIVE PEACE The relationship between these demains of positive peace is evidenced by their stre

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

	FREE FLOW OF INFORMATION	WELL-FUNCTIONING GOVERNMENT	LOW LEVELS OF CORRUPTION	HIGH LEVELS OF HUMAN CAPITAL
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

CHALLENGES TO ENABLING THE FREE FLOW OF INFORMATION

As new methods of accessing information become increasingly available, new challenges emerge.

Many countries are curtailing press freedoms and imposing restrictions on how they operate. Measures of press freedom in the PPI have deteriorated in the past decade. Russia and Egypt are examples of countries tightening press freedoms. Other countries such as Myanmar have passed laws liberating the press.

In some countries, censorship by the government, or another actor, can deny access to important information. The importance of free and unrestricted information access has been recognized by the United Nation's Human Rights Council with its declaration of internet access as a human right in May 2011. Importantly, this extends beyond just access and includes prohibitions on disconnection or filtering.²⁰

SMS networks can be important in sharing information, correcting rumours about conflict and building predictive early warning models. Similarly, the advent of social media helps to circulate information, but can also be used to propagate rumours and spur violence. ²¹ ISIL has relied on social media to recruit fighters from all over the world, demonstrating one risk of web based technologies. ²² Social media can play a role in supporting Positive Peace but it is important to address the enabling environment that leads to its use or misuse.

In addition, web and mobile security remain an issue, with new technology creating new opportunities for cyber-attacks, fraud and identity theft. Finally, although there have been excellent take-up rates of mobile technology in the developing world, maintenance can be expensive. For example, charging a smartphone in rural Kenya can cost 400 times more than charging the same phone in the US.²³ Low income countries still lag rich countries with half the mobile penetration.

As new methods of accessing information become increasingly available, new challenges emerge.

All of these challenges highlight the importance of good governance for information flows, as misinformation can be wielded powerfully to manipulate perceptions and therefore the actions of societies. There are certain difficult trade-offs. Censoring information can seem like a short-term solution to conflict, but restricting the *free flow of information* undermines Positive Peace in the long run. In contrast, freedom of information legislation balanced by defamation and slander laws can help strike a balance.

MEASURING THE FREE FLOW OF INFORMATION

TABLE 14 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

The PPI includes three indicators of the *free flow of information*, listed with their correlation coefficients in table 14.

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.

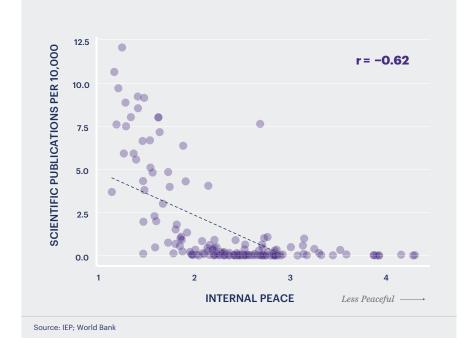
HIGH LEVELS OF HUMAN CAPITAL



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.

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 and 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.

FIGURE 31 SCIENTIFIC PUBLICATIONS AND INTERNAL PEACE, 2015 Increased investment into high level education and innovative research is significantly correlated with high levels of peace.



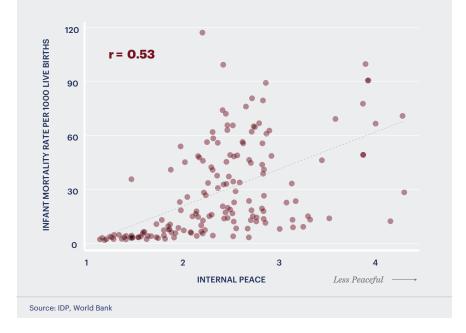
A high level of human capital which is equitably spread through society can be a significant determinant of economic progression and growth. By increasing the overall skill base, an economy can significantly decrease its level of poverty and social exclusion, increase its stability and improve its levels 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, captured in the number of scientific and technical publications each year relative to the population. Figure 31 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

FIGURE 32 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.



cent. 24 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 invest nine per cent more government expenditure in health than the 20 least peaceful countries, as well as around two per cent more in education. Internal peace correlates significantly with levels of infant mortality, as seen in Figure 31. This conveys how societies that place emphasis on health tend to be more peaceful.

CHALLENGES TO DEVELOPING HIGH LEVELS OF HUMAN CAPITAL

Many technologies are advancing at rapid rates. The retraining associated with these advancements can be costly to business and also render skills an individual possesses redundant quicker than in the past.²⁵ Governments need to proactively invest to be able to have the best mix of skills to meet society's future needs. Retraining can be a disincentive when the individual is financially responsible for their own upskilling.

For human capital to reach its potential, many factors need to come together. A healthy diet is necessary to provide the best physical and mental capacity to learn and perform throughout study and work.²⁶ The rate of brain development that occurs in the first few years of life making it a particularly important time for good nutrition. Where there are large numbers of people

living in poverty, a decline in the quality and access to food occurs which impedes human capital growth. Healthy diets are also problematic in many wealthier countries, with obesity and diabetes both growing problems. A balanced diet can increase concentration and help an individual to avoid physical and mental illnesses.²⁷

Where there are barriers to upward mobility due to wealth, ethnicity or religion, human capital can be stunted or wasted. When the opportunity to advance is dependent on coming from a small elite, many talented people will not be fully utilised, thereby creating the conditions for societal conflict.

Geography can also be a barrier to the development of human capital. Divides in the level of human capital development are often prominent between rural and urban communities. In India, high levels of human capital are concentrated in urban areas, while 70 per cent of the population is dependent upon the rural economy. To increase the productivity and innovation of the agricultural industry, India's Ministry of Labour and Employment has implemented a tenfold increase in industrial training facilities. The aim of the 45,000 new institutes is to provide adequate training, tools and skills for industry, agricultural and rural employment to increase development and productivity across sectors.²⁸

Developing the human capital needed to move from an agriculturally based economy to a more diversified economy is one of the great challenges for developing economies. This is a particular aim of the African Developmental Bank (AfDB), as

Africa's population is set to increase dramatically. Empowering this rapidly rising population with the necessary skills and facilities in order to progress into new, innovative industries is integral for the continent's progress. The AfDB has created a Human Capital Strategy in order to increase the level of health and advancement of skilled labour in the coming years.



Empowering Africa's rapidly rising population with the necessary skills to move into new, innovative industries is integral to the continent's progress.

MEASURING INDICATORS OF HIGH LEVELS OF HUMAN CAPITAL

The PPI includes three indicators of a high levels of human capital, listed with their correlation coefficients in table 15.

TARIF 15	INDICATORS	OF HIGH LEVE	ELS 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

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 high level of education is arguably the most significant factor leading to innovation and technical change within the labour force.

LOW LEVELS OF CORRUPTION

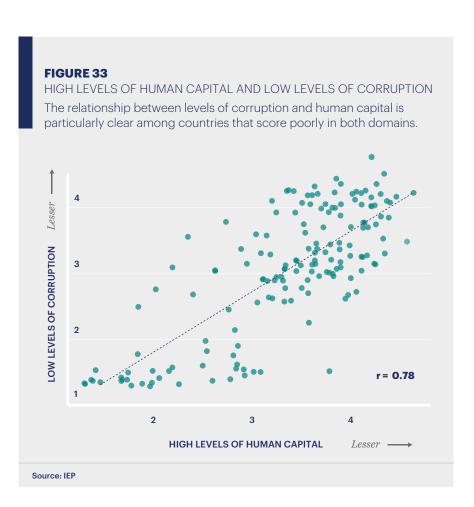


Low levels of corruption captures the extent to which society's attitudes, institutions and structures prevent corruption or hold individuals and organizations accountable when corruption does occur. Levels of corruption have a very close statistical relationship with levels of peacefulness, and high 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 pillars of Positive Peace are all highly interrelated, and this is especially true for *low levels of corruption*. This domain 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 between different aspects of Positive Peace can be partially explained by endogeneity: for example, low levels of corruption and a sound business environment will both impact and be impacted by one another.

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 33.



POSITIVE PEACE REPORT 2015 | The Pillars of Peace ————

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 twin challenges. High-performing, transparent institutions require high levels of human capital to operate effectively. Institutional accountability requires a welleducated population prepared to take action in changing corrupt institutions. Furthermore, corruption in the police and judiciary are particularly detrimental to peace²⁹ – two institutions which require professional, well-educated human capital with highly specialised 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 factionalized 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.

CHALLENGES TO FOSTERING LOW LEVELS OF CORRUPTION

A culture of general corruption leads to attempts to exploit formal institutions for personal gain. This creates opportunity for the rule of law to be undermined, circumvented or granted to others, thereby leading to opportunities for violence and conflict.



Entrenched corruption can thwart efforts to reduce violence.

Entrenched corruption can thwart efforts to reduce violence. For example, in Mexico over the past ten years, many citizens have been forced to alter their day-to-day lives as a result of increased violence, with an economic impact of at least 37.5 billion pesos in 2014.30 The particular violence that manifests in Mexico is directly linked to corruption in the police and judicial systems. Mexico is in the process of attempting to implement reforms to address these problems but the dynamics of the problem make this difficult.

As corruption increases, the incentives to engage in corruption may get worse as transparency and accountability deteriorates. Corruption moves resources away from legitimate investment, further increasing the need and the opportunity for individuals to engage in corrupt behaviour. Additionally, those who are benefiting from a corrupt system have an incentive to resist or undermine change. As a result, corruption can be one of the most challenging factors of peacefulness to address. In places where it may be difficult to tackle corruption head-on, enhancing the other pillars can be seen as a long-term step toward undermining the environment that enables corruption.

Direct anti-corruption strategies are important. Transparency laws, fact-finding commissions and audits, among other tools, can be effective in reducing corruption. However, these efforts are always challenging, and so it is important to consider the context and use strength in other pillars where possible to contribute to improvements elsewhere in the social system.

MEASURING LOW LEVELS OF CORRUPTION

The PPI includes three indicators for low levels of corruption, they are listed with their correlation coefficients in table 16.

TABLE 16 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 s tate institutions along ethnic, class, clan, racial or religious lines.	Fragile States Index, Fund for Peace	0.76

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 may differ across cultures and societies. Globallycomparable 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 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 trustbuilding and undermine peacebuilding.31



Corruption in the police and judiciary are particularly detrimental to peace – two institutions which require professional, well-educated human capital with highly specialised training.

ANNEXES

ANNEX 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 crosscountry 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 factors¹ 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 17 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 expectance 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%

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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. Table 18 lists these and how they are applied to the Positive Peace Index.

TABLE 18 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.	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: 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: 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.
		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.
		Only the most preferable of the four hot deck imputation techniques listed is used for any single missing data instance.

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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 19 summarises the aggregation process for this indicator.

TABLE 19

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

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ANNEX B 2015 POSITIVE PEACE INDEX RANKINGS

TABLE 20 RESULTS OF THE POSITIVE PEACE PILLARS

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

Denmark											
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 1.792 1.404 1.177 1.412 1.949 1.299 1.000 Switzerland 6 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	COUNTRY	RANK	OVERALL	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
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 6 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 Austrial 10 1.589 1.634 1.998 1.535 <td>Denmark</td> <td>1</td> <td>1.361</td> <td>1.060</td> <td>1.314</td> <td>1.341</td> <td>1.421</td> <td>1.640</td> <td>1.732</td> <td>1.324</td> <td>1.134</td>	Denmark	1	1.361	1.060	1.314	1.341	1.421	1.640	1.732	1.324	1.134
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 6 1.488 1.378 1.420 1.403 1.250 1.691 1.720 1.533 1.518 leeland 7 1.500 1.514 1.681 1.468 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 </td <td>Finland</td> <td>1</td> <td>1.361</td> <td>1.186</td> <td>1.375</td> <td>1.417</td> <td>1.162</td> <td>1.373</td> <td>1.635</td> <td>1.387</td> <td>1.360</td>	Finland	1	1.361	1.186	1.375	1.417	1.162	1.373	1.635	1.387	1.360
Ireland 5	Sweden	3	1.396	1.272	1.468	1.441	1.143	1.220	1.713	1.350	1.569
Switzerland 6 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 1.3	Norway	4	1.408	1.193	1.391	1.417	1.247	1.710	1.734	1.371	1.215
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 <th< td=""><td>Ireland</td><td>5</td><td>1.448</td><td>1.473</td><td>1.782</td><td>1.404</td><td>1.177</td><td>1.412</td><td>1.949</td><td>1.299</td><td>1.000</td></th<>	Ireland	5	1.448	1.473	1.782	1.404	1.177	1.412	1.949	1.299	1.000
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 <t< td=""><td>Switzerland</td><td>6</td><td>1.488</td><td>1.378</td><td>1.420</td><td>1.403</td><td>1.250</td><td>1.691</td><td>1.720</td><td>1.533</td><td>1.518</td></t<>	Switzerland	6	1.488	1.378	1.420	1.403	1.250	1.691	1.720	1.533	1.518
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 1.997 1.991 1.	Iceland	7	1.500	1.514	1.681	1.458	1.480	1.269	1.882	1.369	1.361
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 1.002 Japan 17 1.824 1.465 1.893 1.598 1.699 1.880 2.226 1.328 2.621 Singapore	New Zealand	8	1.533	1.188	1.306	1.249	1.345	1.825	1.925	1.334	2.251
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	Netherlands	9	1.535	1.397	1.690	1.546	1.331	1.693	1.749	1.389	1.437
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 1.862 1.993 2.506 <th< td=""><td>Austria</td><td>10</td><td>1.589</td><td>1.634</td><td>1.998</td><td>1.535</td><td>1.171</td><td>1.849</td><td>1.799</td><td>1.522</td><td>1.000</td></th<>	Austria	10	1.589	1.634	1.998	1.535	1.171	1.849	1.799	1.522	1.000
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<	Germany	11	1.608	1.622	1.739	1.449	1.170	1.854	1.893	1.389	1.673
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	Canada	12	1.614	1.308	1.750	1.392	1.168	1.755	2.085	1.497	1.959
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	Australia	13	1.616	1.226	1.679	1.317	1.212	1.667	1.997	1.422	2.465
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	United Kingdom	14	1.624	1.221	1.972	1.382	1.251	2.097	2.108	1.288	1.607
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	Belgium	15	1.666	1.676	2.065	1.722	1.203	1.797	1.849	1.413	1.415
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	France	16	1.769	1.972	1.991	1.726	1.390	2.339	2.233	1.342	1.022
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	Japan	17	1.824	1.465	1.893	1.598	1.699	1.880	2.226	1.328	2.621
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	Singapore	18	1.829	1.948	1.847	1.143	1.287	2.011	2.959	1.775	1.722
Portugal 21 1.889 2.409 2.164 2.238 1.703 1.464 2.040 1.519 1.438	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
Slovenia 22 1.921 2.474 2.265 2.463 1.799 1.554 2.186 1.320 1.158	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

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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

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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

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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
Kygyz 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

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SECTION 1

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- 6 An independent t test confirms that the difference in means between these groups is significant at the 95 per cent confidence level.
- 7 The full PPI covers 162 countries and spans the time frame 2005 to 2015. Unfortunately, the data is not available to cover the full range of countries for years prior to 2005. However, in order to undertake additional analysis, IEP has calculated an approximate PPI with a subset of indicators that dates back to 1996. PPI scores for these two versions of the index correlate with each other at 0.99.
- 8 Where indices contain similar variables, further correlations were performed on subsets of the PPI without the domain containing the similar variable to avoid collinearity. Tests found that the indicators still correlated with the subset PPIs.

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- 4 Based on an independent t test.
- To measure this, the strength of Positive Peace has been estimated for every year since 1945 using the Polity IV Governance indicator, which has a time series spanning 1800-2010. Information of health, education and income have been imputed from the Human Development Index (1980-2014).

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- 5 The correlation between the Gini coefficient and homicide rates is r = 0.6. The Gini coefficient was also found to be a statistically significant independent variable in a multivariable regression analysis on the GPI domain Societal Safety and Security, especially where other aspects of Positive Peace are weak. For futher discussion, see Institute for Economics and Peace, "Societal Safety and Security: The effects of urbanisation on peace," Global Peace Index 2015, Sydney, 2015, p 29, available at www.visionofhumanity.org.
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SECTION 4 ANNEXES

- 1 Significance (or significance threshold) is the qualitative level at which IEP considers a relationship between two variables is meaningful. Statistical significance (significance level) indicates something that passes the appropriate statistical test (for correlation, the t-test which distinguishes the correlation from zero). All correlations presented, other than societal attitudes, have a determined level of significance > 0.5 or < 0.5. The threshold for a meaningful correlation from global surveys was considered more appropriate at > 0.4 or < -0.4.
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2015 Global Peace Index

Institute for Economics and Peace, June 2015

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



2013 Mexico Peace Index

Institute for Economics and Peace, Nov 2013

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



Peace and Corruption

Institute for Economics and Peace, May 2015

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



Pillars of Peace

Institute for Economics and Peace, Sept 2013

Pillars of Peace is a new conceptual framework for understanding and describing the factors that create a peaceful society.



2015 Mexico Peace Index

Institute for Economics and Peace, Mar 2014

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



2013 Global Peace Index

Institute for Economics and Peace, June 2013

The 2013 GPI Report analyses the state of peace around the world, identifying trends in violence and conflict, as well as the key drivers of peace.



2014 Global Terrorism Index Report

Institute for Economics and Peace, Nov 2014

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



2013 United Kingdom Peace Index

Institute for Economics and Peace, Apr 2013

The UK Peace Index report analyses the fabric of peace in the UK over the last decade and has found that since 2003 the UK has become more peaceful.



The Link between Peace and Religion

Institute for Economics and Peace, Oct 2014

A global statistical analysis on the empirical link between peace and religion.



2012 Global Terrorism Index

Institute for Economics and Peace, Dec 2012

A global statistical analysis on the empirical link between peace and religion.



2014 Global Peace Index

Institute for Economics and Peace, Feb 2014

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