

An abstract graphic consisting of several overlapping, semi-transparent blue shapes that resemble pillars or columns of varying heights and widths, arranged in a cluster. The colors range from light blue to a deeper teal. The background is a light, textured grey.

# PILLARS OF PEACE

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UNDERSTANDING THE KEY ATTITUDES AND INSTITUTIONS THAT  
UNDERPIN PEACEFUL SOCIETIES

INSTITUTE FOR  
ECONOMICS  
& PEACE



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

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# EXECUTIVE SUMMARY

## Global Peace Index (GPI)

Produced by the Institute for Economics and Peace, the Global Peace Index is the world's leading measure of national peacefulness. Now in its seventh year, the GPI uses 22 qualitative and quantitative indicators to rank 162 nations according to the absence of violence and fear of violence. The GPI provides a rich body of research for comparative studies of peacefulness.

The Pillars of Peace is a new conceptual framework for understanding and describing the factors that create peaceful societies. This framework defines the national characteristics which are most closely associated with peace and has been derived from a process of statistical analysis. It stands as one of the few holistic and quantitative based studies to isolate the positive factors which sustain and reinforce peaceful societies. The attitudes, institutions and structures associated with peace are also associated with many other aspects that are considered desirable, such as a strong business environment, gender equality and high levels of human capital; consequently, the Pillars of Peace can be seen as describing the optimal environment for human potential to flourish.

Peace can be viewed through the lens of both negative and positive peace. Negative peace, which is the absence of violence or fear of violence, is used as the definition of peace to create the Global Peace Index (GPI), while positive peace can be defined as the attitudes, institutions and structures that, when strengthened, lead to a more peaceful society.

The Pillars of Peace provides a framework for assessing the positive peace factors that create peaceful societies. The taxonomy also forms an ideal base for measuring a society's potential for peace. These positive peace factors can also be used to assess how supportive the underlying environment is towards development, as they are positively associated with developmental outcomes and therefore the fulfillment of human potential. The Pillars of Peace provides the ideal benchmark against which to measure the performance of the broader aspects of social development and a country's overall resilience when confronted with social upheaval.

In constructing the Pillars of Peace over 900 different indices, datasets and attitudinal surveys were analysed in conjunction with current thinking about what drives peace, resilience and conflict. In order to ensure the development of a holistic framework, both a multidisciplinary and 'systems approach' was applied to the concept of peace, drawing on a range of recent research.

The Pillars of Peace is an eight-part taxonomy which consists of:

- A well-functioning government;
- A sound business environment;
- An equitable distribution of resources;
- An acceptance of the rights of others;

“Countries with higher levels of peace tend to be more resilient to external shocks, whether they are economic, geopolitical or natural disasters.”

- Good relations with neighbours;
- Free flow of information;
- A high level of human capital; and
- Low levels of corruption.

These eight Pillars were found to be associated with peaceful environments and are both inter-dependent and mutually reinforcing, such that improvements in one factor would tend to strengthen others and vice versa. Therefore the relative strength of any one Pillar has the potential to positively or negatively influence the others, thereby influencing peace. To demonstrate the link between how factors have an impact on others, consider the example of increases in corruption. This will undoubtedly have an effect on *well-functioning government*, business and the *free-flow of information*. Alternatively, consider restrictions on the *free flow of information*; its impact on financial transparency thereby affecting business, the functioning of government and the ability for individuals to engage in corruption.

Due to the interdependent nature of these factors, the weakening or strengthening of any one Pillar will also weaken or strengthen the other Pillars. A peaceful environment is therefore 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.

The framework described in this paper does not aim to isolate causality; rather to describe the ‘optimal’ environment for peace to flourish. This means that peace building efforts should aim to enhance and build these Pillars as much as possible, while also dealing with tactical issues such as violence containment. To further demonstrate the impact of the Pillars, ‘*growth analysis*’ was performed. This is where the average change in Peace is compared for nations according to the initial strength of each of the Pillars. That is, states were separated such that the groups were organised according to their relative strength in a Pillar, such as the *free flow of information* and their average change in Peace was observed. From this it was found that the past strength of Pillars tended to indicate whether a nation would experience a more virtuous cycle of peace.

One of the more interesting findings to flow from the Institute for Economics and Peace (IEP) research is the relationship between resilience and peace. Resilience is defined as the capacity of social systems to absorb stress, adapt and repair. Countries with higher levels of peace tend to be more resilient to external shocks, whether they

are economic, geopolitical or natural disasters. This was demonstrated by the respective recoveries in Iceland and Japan, one after the financial crisis and the other following the March 2011 earthquake and tsunami. As challenges to sustainability increase, the resilience of societies is becoming more critical as it determines their ability to pull together in times of crisis.

Peace is statistically associated with better business environments, higher per capita income, higher educational attainment and stronger social cohesion. Therefore, by establishing the appropriate environment to support peace many other benefits will flow. The Pillars of Peace describes an optimal environment which allows the flourishing of both peace and human potential.

When applying the Pillars of Peace, the best mechanisms and approaches to adopt will need to be culturally sensitive and varied for societies at different stages of development. In developing contexts for example, the maintenance of customary law in some jurisdictions may be the best method of ensuring the rule of law, so institutions match prevailing moral codes.

IEP has also developed the Positive Peace Index (PPI) which ranks nations according to how well-developed their attitudes, institutions and structures are in terms of sustaining peace, creating resilience and developing human potential. This then provides the ability to determine whether a country has a potential peace ‘deficit’ or ‘surplus’. If the PPI rank is rated substantially lower than the country’s position on the GPI, then the country faces the prospect of substantial falls in peace. This has been borne out by recent experience, as most of the countries that have recorded large falls in peacefulness in recent years were those countries which had large peace deficits. This is also evidenced by the fact that most Arab Spring countries recorded large positive peace deficits.

The Pillars of Peace framework is new and innovative and will evolve over time as new measures, statistical relationships and theories of peace develop.

# INTRODUCTION

The Global Peace Index, produced by the Institute for Economics and Peace, is the first ever study to rank the nations of the world by their peacefulness. Inaugurated in 2007, it ranks 162 nations by their “absence of violence” or “absence of the fear of violence”. This concept is often referred to as “Negative Peace” [1]. In order to measure negative peace, the GPI uses 22 qualitative and quantitative indicators from highly respected sources, which gauge three broad themes: the level of safety and security; the extent of domestic or international conflict; and the degree of militarisation [1]. While understanding the different types of violence and the relative levels of violence between nations is useful, this on its own it does not help deepen our understanding of the factors that create or maintain a peaceful society. In contrast to negative peace, which refers simply to the absence of violence, positive peace defines the set of attitudes, institutions and structures which when strengthened, lead to a more peaceful society. According to Galtung this results in ‘co-operation for mutual benefit’ and a situation where ‘individuals and society are in harmony’.[2] To understand positive peace, the GPI can be used as the research base for cross country comparisons with other data sets, indexes, and attitudinal surveys to determine statistically what attitudes, institutions and structures are associated with peace. When conducting this analysis, over 900 cross country datasets were used covering key economic, political, and cultural determinants that were hypothesised to be associated with the levels of violence and peace in societies.

With the GPI now in its seventh year, IEP is able to utilise its detailed and extensive datasets to deepen the statistical analysis of peace. As a consequence of the availability of richer data, it is possible to define and identify particular mechanisms that are associated with peace and show that peaceful environments are associated with particular cultural, political, and economic characteristics.

Whereas previous studies of positive peace have focused on constructing a comprehensive but normative definition of what positive peace should encompass, the Pillars of Peace is the first study to use statistical analysis to comprehensively identify the factors associated with peace. These factors have then been grouped together to form the eight-part taxonomy of the Pillars of Peace. As a result, this study provides a unique conceptual basis for thinking about positive peace and the key factors that help to determine peaceful environments.

## BOX 1 // A SYSTEMS APPROACH TO PEACE

A system is a collection of components which interact together to perform a function [3]. An example of this might be a forest which is comprised of individual components such as trees, grass, soil and fauna. Just as the organisms that live in the forest rely on it for their survival, so too does the forest rely on the organisms. The system is therefore more than simply the sum of its components, as the wider interactions in a system also determine the way components themselves operate. Similarly, when considering the environment which underlies a peaceful society it is vital to recognise the way government, the economy, and culture might interact. For the Pillars of Peace this means that any one Pillar cannot be considered alone.

For example, when considering a *well-functioning government*, we must also consider how the *free flow of information* and the other pillars may interact with it. A *sound business environment* is likely to be influenced by a range of the Pillars, such as the *free flow of information*, which in itself is likely to be influenced by the effectiveness of government or the levels of corruption, which in turn influence the environment which encourages the *free flow of information*.

This also means that defining causality is difficult, as it may not be possible to isolate factors which interact with one-another to make a country more peaceful. Therefore it is best to think in terms virtuous or vicious cycles, with the system interacting to propel it in a certain direction. Because of this, the Pillars of Peace should be seen as mutually interdependent, meaning that the best improvements in peace result from improvements in the entire system. Again, this is analogous to a forest whose strength and prosperity comes from the health of individual parts and their interactions.

The research outlined in this report shows that peace does not exist in its own right. The relative peace of a society is underpinned by the material and cultural circumstances of that society, whether it is the efficiency of the formal institutions of government, the strength of the economic conditions, or the strength of the cultural and informal norms that relate to corruption. Figure 1 is a visual representation of the Pillars of Peace. The eight Pillars can be seen as highly interconnected and interacting in varied and complex ways to form either virtuous or vicious cycles, with causality running both ways. The animated relationships between the Pillars are purely indicative and are not literal interpretations of the various statistical associations identified. The strength of the various interactions will depend on the historical, political, economic and cultural circumstances of particular societies.

## CONFLICT

Many studies in peace and conflict research aim at understanding why conflict occurs, and the chain of causality driving economic, political and cultural patterns and events. However, complex patterns of causation are unlikely to be explained in simple terms. Causality can flow in either direction, depending on the circumstances of a particular situation. This can best be exemplified by the relationship between business activity and peace. In a conflict zone, other than a few exceptions such as private security companies, business activity will struggle or not develop until the conflict ceases. Conversely, where economies falter or fail violence can erupt as can be seen from the recent economic turmoil in Europe.

**FIGURE 1** The Pillars of Peace

*The Pillars of Peace is a holistic framework which describes the factors which make a country more peaceful.*





Typical views of conflict centre around that of ‘conflict entrepreneurs’ whereby the history of conflicts are analysed in order to identify the conditions which make it beneficial for individuals or groups to engage in conflict [4]. From this perspective, discouraging conflict requires that we remove the characteristics which make it beneficial [5]. However, because such an approach only focuses on the conditions arising at that time, it may not allow for a fuller understanding of the environment that allows conflict to arise, nor will it identify the processes which contributed to the conditions under which peace will prevail.

Consider business; improving business conditions may provide an incentive to maintain and increase the levels of peace through creating employment. However, in the event of an economic downturn the wider community also needs to be strong enough to adapt and recover in order to minimise the social impacts of the downturn and to recover as quickly as possible. Therefore the overall environment must be *strong*, not just the business sector, in order for a society to be resilient. The key is that the business environment is not viewed in isolation from the wider contexts of society, such as the strength of community bonds, functioning of government, informal safety nets or innovation. In recognition of this, the Pillars of Peace represents a holistic assessment of what makes a society peaceful.

## RESILIENCE AND PEACE

Peace creates resilience, thereby allowing societies to absorb shocks and disturbances more easily [6]. In this context, resilience is seen as the capacity of social systems to absorb stress and repair themselves, as well as a capacity for renewal and adaptation [3]. The resilient nature of peaceful societies is one of the most profound observations to result from an analysis of the GPI which shows that those countries with stronger Pillars also tend to be those which experience more virtuous cycles of peace.

Peaceful nations are also better equipped through their attitudes, institutions and structures to respond to external shocks. This can be seen with internal peace correlating strongly to measures of intergroup cohesion and civic activism, which are key proxies that indicate the ability of societies to resolve internal political, economic, and cultural conflicts as well as being able to respond to external shocks.

The mutually reinforcing nature of the Pillars suggests that as individual Pillars become stronger they will also reinforce other Pillars, thereby strengthening a country’s resilience.

The framework described in this paper does not aim to isolate causality; rather to describe the ‘optimal’ environment for peace to flourish. This means that peace building efforts should aim at enhancing and building these Pillars as much as possible while dealing with tactical issues such as violence containment.

In practical terms there are many benefits for societies which enable the Pillars of Peace to flourish; collectively all of these factors improve human wellbeing. This can mean:

- Lower levels of business risk;
- Higher per capita incomes;
- More equitable distribution of resources;
- Improved trust between citizens; and
- Greater social cohesion.

### BOX 2 // PEACE, HUMAN DEVELOPMENT AND THE MILLENNIUM DEVELOPMENT GOALS

In his book ‘Development as Freedom’, Amartya Sen suggested that the level of human development of an individual can be judged against their attainment of five substantive freedoms [7]. These included:

**Political Freedoms:** Such as freedom of speech, ability to scrutinise and participate in government decision making.

**Economic Facilities:** The ability to participate in a fair economic system through guarantees against bonded labour, sufficient access to credit, and a fair and open labour market.

**Social Freedoms:** including the ability to attain basic levels of education, good health and equal opportunities regardless of personal factors such as gender or caste.

**Transparency Guarantees:** Such as the absence of corruption and sufficient levels of trust within and between communities, and a sufficiently transparent system of justice.

**Protective Security:** Which include a guarantee of security from deprivation during times of need, such as in times of drought, famine or war.

The five freedoms, much like the Pillars of Peace are suggested to be mutually reinforcing and interdependent. The Pillars of Peace is also inextricably linked to Sen’s freedoms, with Pillars such as *low levels of corruption* being a key component of the ‘Transparency Guarantees’, a *sound business environment* being integral to an individual’s ‘Economic Facilities’ and a *well-functioning government* being essential to the ‘Political Freedoms’.

The Pillars of Peace provides an important extension to the development literature by providing a more holistic, and quantifiable, explanation of the pre-requisites necessary for peace, and therefore human development. Peace is a pre-requisite for development; the absence of peace makes simple activities such as gaining basic education, starting a business or community group, and speaking freely, more difficult [8], [9], [10].



# CHARACTERISTICS OF CONFLICT & THE PILLARS OF PEACE

Although there has been limited research investigating the underlying causes of peace, factors which are commonly associated with conflict have been extensively investigated. This section provides a brief overview of such research, with a particular focus on the characteristics which may make conflict more likely and the trigger factors which are commonly associated with its inception.

In the 2011 World Development Report the World Bank suggested trigger factors and characteristics which are associated with conflict to be chiefly related to security, justice and the economy [5]. Although it is likely that the drivers of conflict are particular to a given conflict, the factors which have been generally accepted as being associated with a greater risk of conflict include low average income, a country's size and whether conflict has recently been experienced by a nation [11].

External economic stresses such as sudden price increases or decreases may provide an impetus for conflict. An example of this might be a sudden increase in the price of food in a community which, when combined with limited social safety nets or alternative sources of subsistence, will heighten community tensions. Alternatively, a fall in the price of a good may have negative impacts for communities which rely upon it for their income. This was confirmed in a study of the impact of prices shocks in Colombia, which found that conflict intensified in regions that were more reliant on goods which experienced a sudden change in prices [12].

Internal factors which have been associated with higher conflict risk include rapid urbanisation, corruption, the concentration and level of natural resource wealth, and unemployment [5]. Because a stable business environment provides individuals with a means of attaining a livelihood through employment it has often been suggested as a key driver for reducing the risk of conflict. A key reason for this, is that by offering an alternative means of attaining a livelihood, a stable business environment decreases the attractiveness of joining organised criminal networks or rebel groups [5]. This is also supported by the Pillars of Peace analysis, as a range of factors relating to a *sound business environment* are linked to a country's level of peace.

The actual and perceived justice in a community may also increase the risk of conflict; this might include internal

factors such as ethnic, religious or regional competition or marginalisation. Marginalised groups such as specific indigenous, religious or ethnic groups, may find conflict to be a viable option, particularly if there are no peaceful alternatives for resolving grievances [5]. Similarly, the risk of conflict may arise where the tensions exist between nations, or specific groups within nations, as opposed to within a particular state. Research also suggests that the risk of conflict is higher in countries where the government tends to infringe on the fundamental rights of its citizens [13]. For this reason, Pillars such as *acceptance of the rights of others* and *well-functioning government* are vital in ensuring social cohesion, justice, and the prevention and mitigation of community tensions. Research by IEP has also found a strong link between corruption within the police, military and judiciary and levels of peace. Furthermore, there appears to exist a 'tipping point' such that after a certain level of corruption small increases in corruption result in large falls in peacefulness.

Both internal and external security concerns may also increase the prospect of conflict. These might include a history of conflict, the presence of foreign troops, conflicts in adjacent countries or the existence of transnational terrorism. Adjacent conflicts may also encourage the emergence of conflict through the creation of tensions through criminal activity and violence spilling over national borders. Crucially, the impact of this occurring may extend beyond that of a nation's security with research suggesting an impact on the economies of bordering states [14]. The Pillars of Peace analysis also supports this, with better relationships within and between states being consistently associated with greater peace. Although better relationships are expected to emerge as a result of greater peace, it is suggested that the causality runs in both directions, such that better community relationships will tend to encourage greater levels of peace by discouraging the formation of tensions and reducing the chance of tensions devolving into conflict.

# METHODOLOGY

Although there has been a significant amount of research as to the factors that may lead to conflict, there are limited studies which focus on the factors which underlie peace. In response to this gap in the literature, IEP's research has attempted to take a holistic and empirical approach to defining the environments that nurture peace. To this end, information from a broad range of sources has been incorporated while also considering features that have not been covered in previous research.

Data was selected from 20 sources, including the World Bank, Gallup World Poll, the United Nations, and the Organisation for Economic Cooperation and Development. Also included in the analysis is the GPI data time series from 2008. The final database for this analysis consisted of over 900 country characteristics with 4,700 variables spanning from 2003 to 2013. In order to determine how closely variables are associated, the level of correlation between each variable was calculated alongside the level of statistical significance. Where the level of correlation was found to be statistically significant it was then examined in greater detail alongside existing literature to determine whether the nature of the relationship has a valid basis. Where possible, variables were then examined across a number of years to determine whether the relationship was consistent over time.

## ABOUT GROWTH ANALYSIS

In order to further investigate the relationships between each of the Pillars of Peace, 'growth analysis' was conducted to supplement correlation analysis. This approach attempts to determine whether the past characteristics of states, such as their levels of corruption, could be used to help predict how peaceful they were in the future. As a simple example we might take two countries with identical characteristics other than their levels of inequality and observe how peace has changed in each country over time. If the levels of peace have differed over time, it can lend support to the idea that the *equitable distribution of resources*, and factors associated with it, has been one of the causes associated with the increases in peace.

A key advantage of this approach is that because causality can only occur from the past to the present, it can help provide greater levels of confidence regarding the direction of causality. For example, if peace causes a more

equitable distribution of resources, but a more equitable resource distribution does not result in greater levels of peace, they will still be correlated.

Again, while this is not suggested to provide conclusive evidence of causality, it does provide us with greater levels of confidence regarding our overall conclusion that the institutional characteristics described by the Pillars of Peace are essential for creating societies in which human potential can flourish.

### BOX 3 // A NOTE ON CORRELATION

In recognition of the myriad of characteristics which determine how peaceful a country is, the Pillars of Peace has sought to take a 'systems approach' by analysing a wide range of characteristics and their association with peace. Although correlation and other statistical techniques are essential to understand what factors are associated with peace, they do not suggest these factors are causal.

Importantly, causality in this paper is seen as being dependent on the situation and will vary. However, by focusing on the overall health of the system, it is suggested that the various factors associated with peace will be enhanced as a consequence of their mutual reinforcement. Set out below is a simple example of what is meant by a correlation.

Correlation is a measure of the degree of association between variables. A practical example of this might be a person's shoe size and their height. Because we would expect a person who is taller to generally have larger feet, we say that these two things are correlated. Where the relationship between shoe size and height is more constant, or predictable,





we would tend to say it is 'highly correlated'.

In this instance because a person's shoe size and height would both tend to move positively with each other, we would say that the two are 'positively correlated'. Something which is said to be negatively correlated might be their height and how many steps it takes them to walk up a hill. Because we might expect a taller person to take longer steps, they will be able to walk quicker the taller they are. The two variables are therefore negatively correlated.

As is commonly acknowledged, correlation doesn't imply that one thing causes the other. For instance, if we were to purchase a larger size in shoes we wouldn't expect to grow taller. In complex systems the relationships between two things, such as the rule of law and peace, are not likely to be as obvious as the relationship between height and shoe size. Consequently, we run the risk of making the wrong conclusions about which variable causes the other. Importantly, this insight underpins our use of a systems approach which seeks to avoid making simplistic conclusions regarding causality.

# PILLAR OF PEACE: WELL-FUNCTIONING GOVERNMENT

Well-functioning government can be broken down into two major domains. The first refers to the government's effectiveness, its governance activities and the rule of law. The second domain refers to the way in which the government shares the same vision as its citizens, that it is accountable and allows its citizens to have a voice in decision making. Practically this might entail how it manages public resources, responds to external shocks or engages the community in decision making. Importantly, this concept also extends beyond the political sphere to that of civil servants who administer the day to day operation of government. Furthermore, because a well-functioning government relies on the participation of civil society, it can extend beyond the mechanics of government to community relationships [15].

Because the government controls a large proportion of a country's resources, it has a major impact on the wellbeing of individuals through how well and fairly it is run. This might mean the difference between having access to land, water, social security, education and having rules which are favourable to operating a business. Consequently, a poorly governed country can create the seeds of tension by either the under provision of public goods or their inequitable distribution. Community wellbeing, peace and a well-functioning government are therefore inextricably linked.

Additionally, a government which supports individuals, business and communities is also likely to encourage stable community relationships, encouraging optimism and allow people to better plan for their future. A consequence of this is that people can be more confident about engaging in long-term projects such as starting a new business, engaging in education or investing in community building. By doing this, individuals and communities will strengthen social networks and safety nets which in turn can help encourage greater resilience.

Consequently a well-functioning government when combined with the other Pillars is more likely to create peaceful individuals, that is, community members who profit from strengthening community ties, as opposed to those who profit from conflict [16]. The importance of *well-functioning government* has also been reinforced by recent research from the World Bank which has suggested that improved governance strengthens development and improves living standards [17], [18].

Although what is defined to be a *well-functioning government* varies, our analysis centers around a three part taxonomy consisting of, Government Effectiveness, the Rule of Law, and Voice and Accountability [15]. A summary of the measures which were found to be associated with peace are provided in Table 1.

**TABLE 1** Well-Functioning Government and Peace (2012 GPI)

SOURCE	INDEX	INDICATOR	YEAR	
<b>Government Effectiveness and Governance</b>				
OECD	Better Life Index	Water quality	2013	-0.800
Legatum Institute	Legatum Prosperity Index	Governance	2012	-0.730
World Bank	World Governance Indicators	Government effectiveness	2011	-0.714
World Bank	World Governance Indicators	Regulatory quality	2011	-0.680
Economist Intelligence Unit	Democracy Index	Functioning of government	2012	-0.650
Economist Intelligence Unit	Democracy Index	Political culture	2012	-0.640
Yale	Environmental Performance Index	Overall score	2010	-0.600
Gallup World Poll	-	City beauty – satisfied (%)	2012	-0.450
<b>Rule of Law</b>				
World Bank	World Governance Indicators	Rule of law	2011	-0.760
World Justice Project	Rule of Law Index	Due process of law and rights of the accused	2013	-0.752
Bertelsmann Stiftung	Sustainable Governance Indicators	Rule of law	2011	-0.720
World Justice Project	Rule of Law Index	Government powers are effectively limited by independent auditing and review	2013	-0.706
Bertelsmann Stiftung	Sustainable Governance Indicators	Legal certainty	2011	-0.600
Freedom House	Freedom of the Press Index	Laws (legal environment)	2013	0.560
Bertelsmann Stiftung	Sustainable Governance Indicators	Judicial review	2011	-0.510
Gallup World Poll	-	Confidence in local police – yes (%)	2012	-0.400
<b>Voice and Accountability</b>				
World Bank	World Governance Indicators	Voice and accountability	2011	-0.680
Bertelsmann Stiftung	Sustainable Governance Indicators	Quality of democracy	2011	-0.680
Freedom House	Freedom of the World Survey	Civil liberties	2012	0.670
International Institute of Social Studies	Indices of Social Development	Civic activism	2010	-0.600
Freedom House	Freedom of the World Survey	Political rights index	2012	0.590
Gallup World Poll	Confidence in the honesty of elections	Confidence in the honesty of elections – % who responded 'yes'	2012	-0.410
Gallup World Poll	Express of Political Views	Expressing political views – 'most are afraid' (% of responses)	2012	0.450

## GOVERNMENT EFFECTIVENESS AND GOVERNANCE

Where public services such as health, education and investment in infrastructure are performed efficiently and effectively, community needs are more likely to be met, thereby encouraging greater wellbeing and a more peaceful community. Furthermore, because government is responsible for the maintenance of the safety and security of its citizens through the provision and maintenance of public services such as police, fire, army and ambulance services, the effectiveness of government has strong implications for the strength of other Pillars, such as *low levels of corruption* and a *sound business environment*.

The equity of taxation and the appropriate provisioning of goods and services are also important when considering the effectiveness of government. This is because how revenue is raised and how public funds are spent will impact the material and perceived fairness of government. On a practical level this might involve government funding of services which encourages community access to justice, the

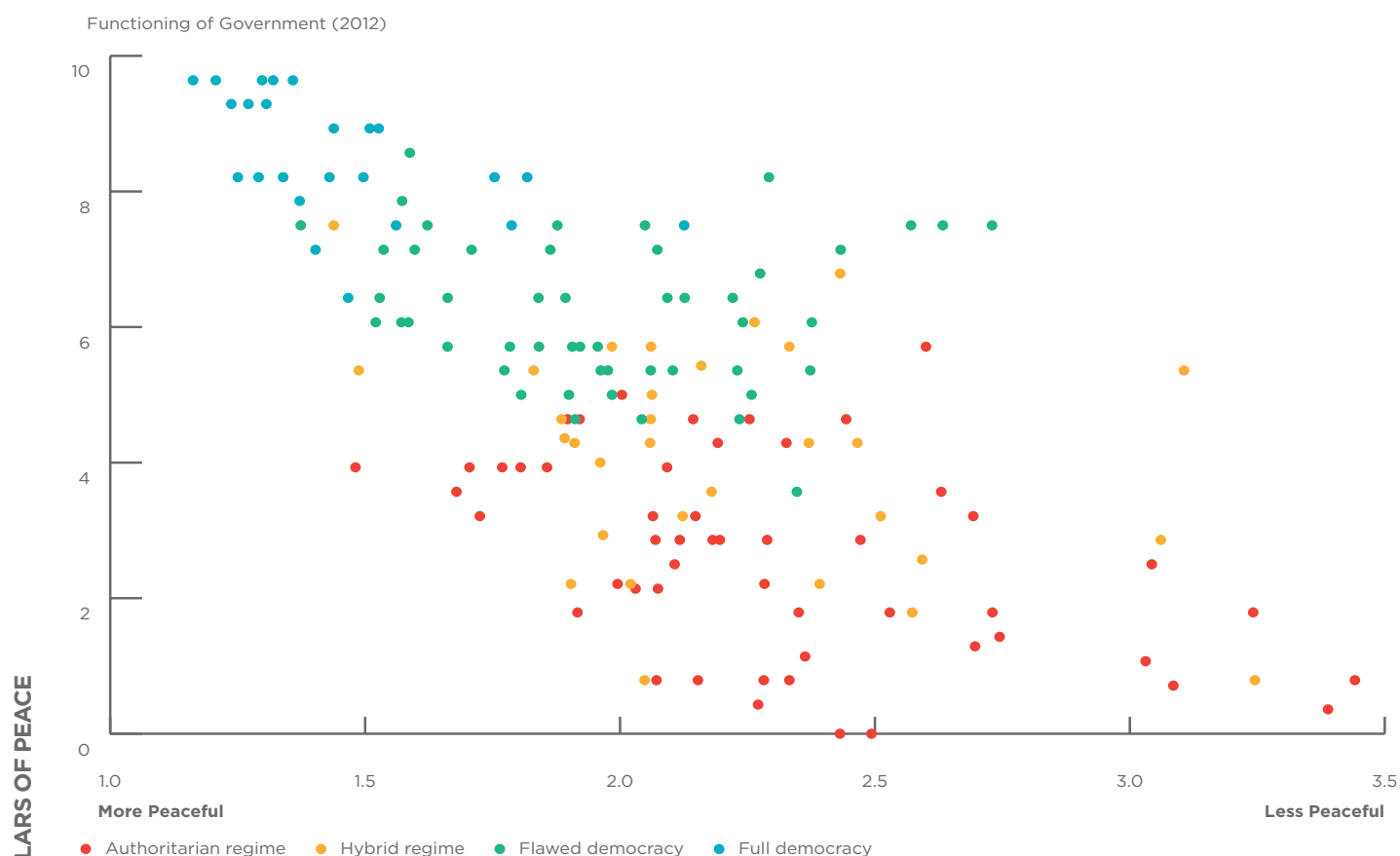
funding of infrastructure projects or whether the burden of taxation is inequitable.

IEP analysis supports this, with a range of measures of the effectiveness of government being found to be associated with peace. Table 2 presents the finding of a number of indicators used as proxies for 'Government Effectiveness'. In particular, measures of the effectiveness of government such as the Economist Intelligence Unit's 'Functioning of Government' indicator, a sub-component of the Democracy Index, was found to be strongly associated with a country's peacefulness.

This result is likely to have occurred for a number of reasons. Firstly, there is evidence to suggest that accountability is a driver of the effectiveness of public service provision by government [19]. A consequence of this is that the more democratic a country is, the better their provisioning of public services is likely to be. This appeared to be confirmed in the analysis, with democracies tending to have better public services when compared with authoritarian and hybrid regimes.

**FIGURE 1** The Functioning of Government (2012) and Peace (2013 GPI)

*The most peaceful authoritarian regimes are less peaceful than their full democratic peers*





Secondly, those countries which were democratic also tended to have higher incomes. High incomes have been found to be associated with a lower risks of internal conflict [20]. Despite this, it is notable that some low-income countries are more peaceful than high-income countries reflecting the fact that a country's level of income is not the sole determinant of its peacefulness. For example both Tanzania and Malawi were found to have higher levels of peace than might be expected given their income level.

Measures of 'environmental governance' were strongly associated with peace with indicators relating to the quality of the environment, such as the proportion of people satisfied with the beauty of their city and the quality of water, all being strongly associated with higher

levels of peace. Although it is likely this association is due to a range of factors including per capita income, there is evidence to suggest that insufficient access to environmental resources of a sufficient quality can drive conflict. In particular, because a poor environment can result in lower agricultural production and therefore greater poverty, a poor environment may encourage tension and conflict [21]. For instance, Yale's Environmental Performance Index was found to be associated with a country's level of peacefulness. The index measures a range of factors relating to the environment including changes in water quality, forest cover and exploitation of fish stocks. It therefore represents a comprehensive measure of a country's environmental performance.

**TABLE 2** Government Effectiveness, Governance and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
OECD	Better Life Index	Water quality	2013	-0.800
Legatum Institute	Legatum Prosperity Index	Governance	2012	-0.730
World Bank	World Governance Indicators	Government effectiveness	2011	-0.714
World Bank	World Governance Indicators	Regulatory quality	2011	-0.680
Economist Intelligence Unit	Democracy Index	Functioning of government	2012	-0.650
Economist Intelligence Unit	Democracy Index	Political culture	2012	-0.640
Yale University	Environmental Performance Index	Overall score	2010	-0.600

## RULE OF LAW

The rule of law and separation of powers describes how power is exercised, disputes are resolved and to what extent government is separate and compliant with the legal system. Because the rule of law can help ensure the protection of the rights of individuals, a country with a better functioning legal system is expected to be more likely to resolve grievances in a peaceful and equitable manner [22]. Although what is meant by the 'rule of law' can vary between contexts, our definition revolves around an impartial judiciary, laws which are publically accessible and the absence of laws which discriminate or benefit particular groups [23].

Because a country with the rule of law will tend to have accepted, non-violent mechanisms for resolving conflicts, it underpins peaceful responses to community tensions. This is because an effective legal system can provide a non-

violent avenue for the resolution of conflict. Since the rule of law requires the support of individuals, it is also important to recognise its strong links with the *acceptance of the rights of others*. That is, the rule of law requires both formal institutions and a culture which supports them [24].

'Separation of powers' describes how authority is distributed across government. Nations which have powers vested in a range of bodies are expected to be less open to abuse by government [25]. This is chiefly expected to be a consequence of government leaders having their powers subject to the review of other parties. This is likely to be particularly important for minimizing the potential avenues for corruption as it would provide a greater assurance of accountability through increased oversight.

Nations in which power is more diversely distributed as described by the separation of powers, are also expected to have a legal system which is more independent and equitable. Although the extent of this will depend on

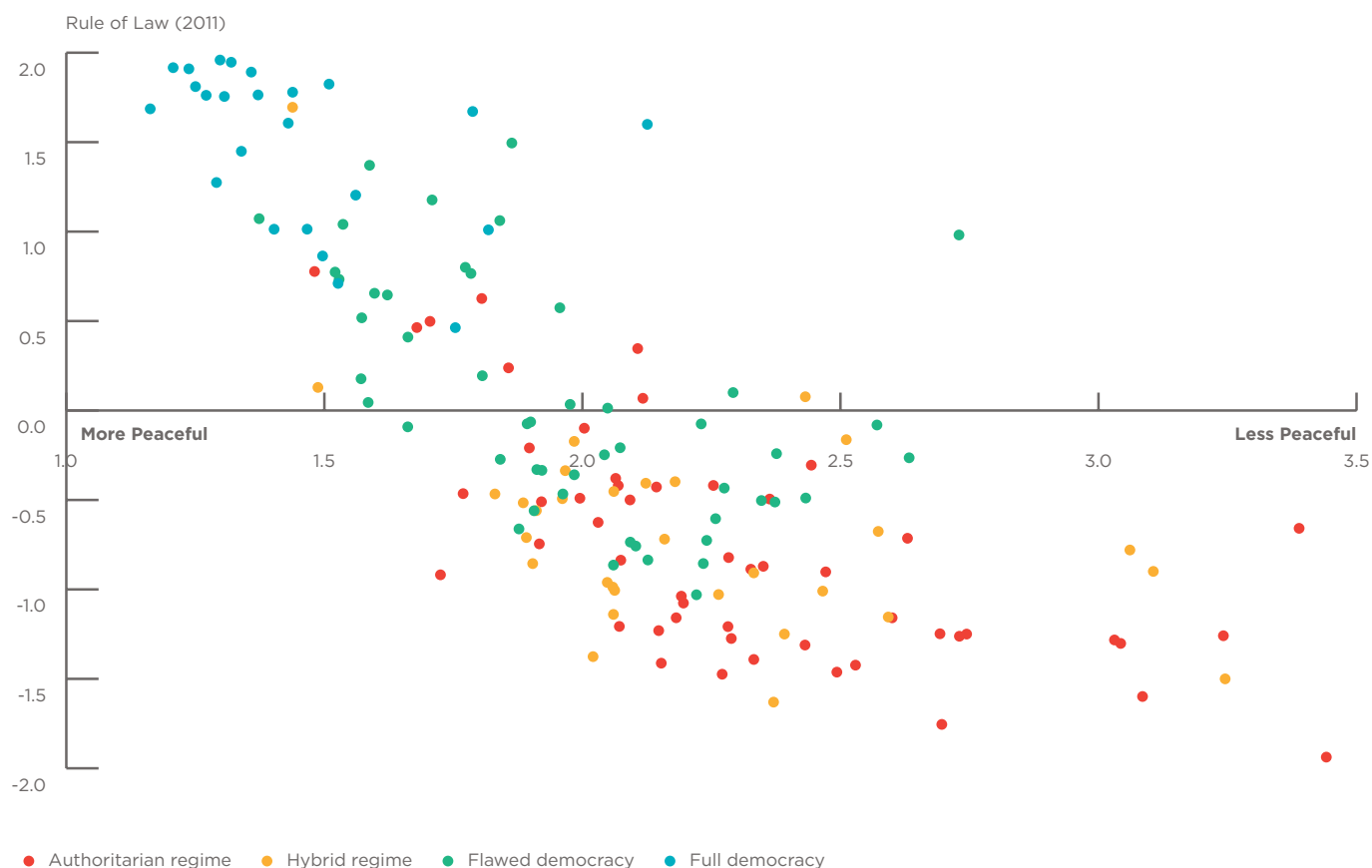


the laws themselves, as the legal system becomes more independent the application of laws will tend to be less arbitrary and less open to abuse by those in positions of power. Because the trust individuals have in the legal system is a key factor underlying their willingness to engage in formal means of conflict resolution, it is also expected that the separation of powers can help encourage greater community engagement, thereby encouraging the peaceful resolution of conflict [26].

The World Bank's 'Rule of Law' variable captures perceptions of the extent to which agents have confidence in, and abide by, the rules of society [23]. The variable includes a range of measures such as the speed of the judicial process, the independence of the judiciary and the strength of contract law and property rights. The association between the 'Rule of Law' and peace is illustrated in Figure 2.

**FIGURE 2** Rule of Law (2011) and Peace (2013 GPI) -  $r = -0.760$

*The extent to which there is 'rule of law' in a country is strongly related to peace*



Interestingly, when the association between the 'rule of law' and Peace is separated according to regime type, the association remains consistent (Figure 2). That is, regardless of the system of government, those countries with a more favorable 'rule of law' score tend to be more peaceful. The relationship appears to be the strongest for authoritarian regimes. Authoritarian regimes also were those with the widest variance in their levels of peace and rule of law, whereas democracies had the least.

The overall relationship between peace and measures of the 'rule of law' are likely to reflect a range of factors. Firstly, those countries with incomes beyond a certain level

will tend to have better resourced legal systems; therefore one would expect the rule of law and peace to be positively associated. Secondly, because the rule of law provides a peaceful avenue for the resolution of community tensions, countries with better legal systems would also tend to be less prone to conflict and therefore more peaceful. Finally, although the relationship between the 'rule of law' is consistent across regime types, democracies show the lowest level of variation with the rule of law and peace suggesting that, on average, the legal framework is better in more democratic states.

**TABLE 3** Rule of Law and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
World Bank	World Governance Indicators	Rule of law	2011	-0.760
World Justice Project	Rule of Law Index	Due process of law and rights of the accused	2013	-0.752
Bertelsmann Stiftung	Sustainable Governance Indicators	Rule of law	2011	-0.720
World Justice Project	Rule of Law Index	Government powers are effectively limited by independent auditing and review	2013	-0.706
Bertelsmann Stiftung	Sustainable Governance Indicators	Legal certainty	2011	-0.600
Freedom House	Freedom of the Press Index	Laws (legal environment)	2011	0.560
Bertelsmann Stiftung	Sustainable Governance Indicators	Judicial review	2011	-0.510
Gallup World Poll	-	Confidence in local police - yes (%)	2012	-0.400

As illustrated in Table 3 those countries which score highly within this area tend to be more peaceful. This pattern was also confirmed by the 'Laws' sub-index from Freedom House which specifically measures the legal protection of journalists and freedom of the press. In addition, it was found that those countries which scored

more favorably according to their regulation of the press in 2002 tended to be more peaceful in 2013, as measured by the GPI. Although not implying causality, it does suggest that past levels of legal protection of the press may have had some ability to predict how peaceful a country would be currently.

#### BOX 4 // RULE OF LAW, THE LEGAL ACCEPTANCE OF THE RIGHTS OF OTHERS AND PEACE

At their most basic level, legal rights should allow individuals to live a life as free as possible of violence. This requires that when violence does occur that the perpetrators are brought to justice within a system that is accepted as fair and impartial. Further than just requiring that the legal protections are in place, it also requires that the police, judiciary and military are free from corruption, independent, accountable and accessible.

There are also some rights which are thought to be consistent across nations. These might include the right to life, to be treated equally regardless of race or gender, or the right to speak freely or own property. The relationship between such 'basic rights' and conflict was also noted by the World Bank in the 2011 World Development Report. The report found that with

each point rise in the Political Terror Scale, there was a doubling of the chance of conflict occurring. It was suggested that this might occur both as a consequence of the grievances created through government abuse of rights and the limited means for individuals and groups to air these grievances [5].

The *acceptance of the rights of others* pillar, covered later in this report, is also important in helping to avoid grievances and also underpins good rule of law. Laws can both ensure that differences are negotiated between parties while helping to avoid them from occurring at the outset. The legal acceptance of the rights of others based on the customs of the culture is therefore a crucial component to building a more peaceful society.

## VOICE AND ACCOUNTABILITY

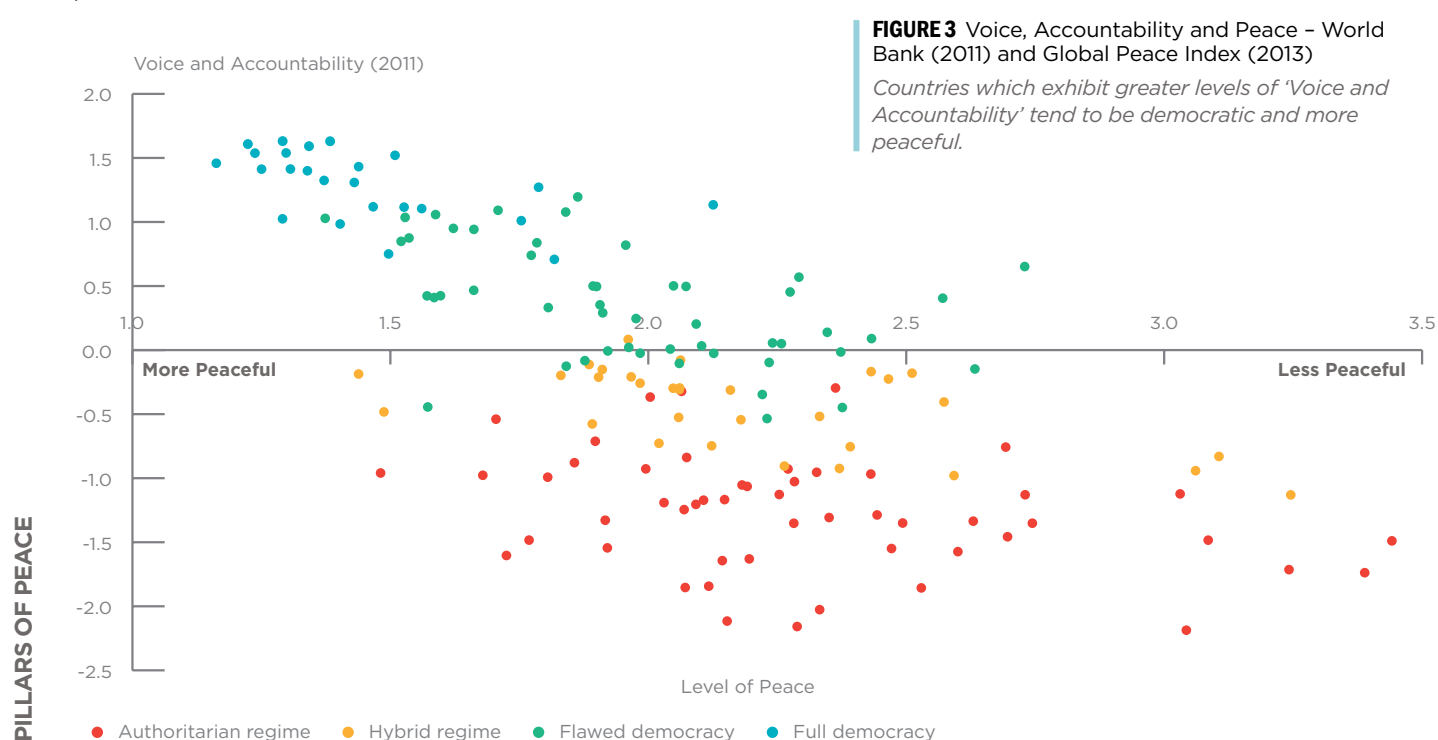
Voice and accountability describes how strongly the public is able to influence and participate in the decision making processes of government and the wider society. This might entail the responsiveness of politicians to public concerns through public consultation, voter surveys or communication with business groups, unions or cooperatives. Voice and accountability in this report represents the perceptions of the extent to which citizens can participate in the decisions of their government [27].

Emphasising the interrelated nature of the pillars, the level of voice and accountability can also be strongly dependent on how efficiently information flows between government and society [28][29]. Where information is free flowing and unbiased it is more likely that civil society will be able to gain a greater understanding of the actions of government, how they might be impacted and voice their support or opposition to the policy. In addition, better information flows can help government monitor the concerns of its citizens and the impact of its actions.

IEP analysis supported this, with countries that are more peaceful tending to also have a greater capacity for citizens to interact with government and hold it to account. This was confirmed by Freedom House's 'Civil Liberties' indicator, the Legatum Institute's 'Personal Freedom' indicator and the World Bank's 'Voice and Accountability' indicator. Details of the results are provided in Table 4.

**TABLE 4** Voice, Accountability and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
WORLD BANK	World Governance Indicators	Voice and accountability	2011	-0.680
BERTELSMANN STIFTUNG	Sustainable Governance Indicators	Quality of democracy	2011	-0.680
FREEDOM HOUSE	Freedom of the World Survey	Civil liberties	2012	0.670
LEGATUM INSTITUTE	Legatum Prosperity Index	Personal freedom	2012	-0.660
INTERNATIONAL INSTITUTE OF SOCIAL STUDIES	Indices of Social Development	Civic activism	2010	-0.600
FREEDOM HOUSE	Freedom of the World Survey	Political rights index	2013	0.590
GALLUP WORLD POLL	Confidence in the Honesty of Elections	Confidence in the honesty of elections - % who responded 'yes'	2012	-0.410
GALLUP WORLD POLL	Express Political Views	Expressing political views - 'most are afraid' (% of responses)	2012	0.450



The relationship between the World Bank's 'Voice and Accountability' (2011) measure and the Global Peace Index (2013) is illustrated in Figure 3. The measure includes a range of factors including civil liberties, the level of 'favoritism' of government decisions and press freedom.

## CONCLUDING COMMENTS

Overall the analysis tends to confirm that peace is associated with favorable measures of governance across the domains of Voice and Accountability, Government Effectiveness, and Rule of Law. In fact, analysis of the tendency of a country to experience virtuous, as opposed to vicious, cycles of peace also supports this (see Box 5).

The interdependent nature of a *well-functioning government* and the Pillars has important relevance to the approach many donors should take to building competencies in fragile states or in their approach to Official Development Assistance (ODA). In particular, donors and intergovernmental organisations working in post-conflict regions need to focus not just on acute problems but on all the interrelated aspects of long-term peace-building. This requires that attention is paid not just to improving the functioning of government but that sufficient focus is given to other Pillars, such as the *free flow of information* and the informal institutions that underpin the *acceptance of the rights of others*.

### BOX 5 // GOVERNANCE AND THE PREDICTION OF PEACE

The World Bank's Worldwide Governance Indicators present data on aspects of governance for 215 countries for the period 1996 to 2011. The indicators are based on 30 individual data sources from a range of sources worldwide. Domains measured by the indicators include Voice and Accountability, Political Stability and the Absence of Violence, Government Effectiveness, Regulatory Quality, the Rule of Law and the Control of Corruption.

Because of the important role played by a Well-Functioning Government in encouraging peace, analysis was conducted to determine to what extent past measures of good governance could provide predictions of the future levels of peace in a nation.

Analysis found that each of the six governance indicators in 1996 was correlated with how peaceful a nation was in 2013. That is, countries which scored higher on the governance indicators in 1996 tended to be more peaceful in 2013. This finding was also confirmed when comparing the average growth in peacefulness for well governed and poorly governed states, with better governed states, on average, being more likely to experience a more favourable growth in their levels of peace.

This finding is supported by a range of other measures, with 2007 ratings for 'Civil Liberties', 'Political Rights' and the level of confidence in the honesty of elections all being found to be associated with more peaceful nations in 2013. That is, measures of Voice and Accountability appeared to provide some level of predictive power as to how peaceful nations would be in the future.

Although this does not suggest that one causes the other, it strengthens the overall hypothesis that countries with good governance tend to be more peaceful, both now and in the future. These findings were also reinforced by other indices and attitude surveys which utilize slightly different methodologies, data sources, and forms of measurement to arrive at similar conclusions [30], [31].

PILLAR OF PEACE:

# SOUND BUSINESS ENVIRONMENT



A *sound business environment* is crucial to peace. Business provides employment, which is instrumental in providing a viable taxation base, the productive use of human capital, and provides the ability for individuals to access capital. The relationships between business and peace were strongly illustrated in the United States Peace Index, where peace was found to be strongly associated with economic opportunity [32]. The wider business environment relies on many factors to create an optimal environment for it to flourish. Some of these factors include;

- A *well-functioning government* to create the appropriate regulatory and governance environment;
- The *free-flow of information* which enables the transparency necessary to accurately price transactions;
- *Low levels of corruption* to facilitate more transparent markets and greater corporate efficiency;
- High levels of education to increase the pool of human capital;
- Infrastructure to enhance the competitiveness of business; and
- The existence of enforceable property rights.

The strong influence of the business environment on crime and conflict was also supported by surveys of conflict-affected countries. Specifically, surveyed youths cited unemployment and idleness as the predominant reasons for joining rebel groups and gangs [5]. IEP analysis supports this, with a wide range of business indicators being strongly correlated with the level of peace. The factors that are associated with peace and business are many and wide-ranging, examples being the quality of infrastructure, business sophistication and innovation, the quality of employment opportunities and the quality of business regulations applied to consumers and business. A summary of these characteristics and others which were found to be associated with peace have been provided in Table 5.

TABLE 5 Sound Business Environment and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
<b>SUPPORTING INSTITUTIONS</b>				
FREEDOM HOUSE	Index of Economic Freedom	Property rights	2013	-0.680
LEGATUM INSTITUTE	Legatum Prosperity Index	Entrepreneurship & opportunity	2012	-0.670
WORLD ECONOMIC FORUM	Global Competitiveness Report	Institutions	2013	-0.620
WORLD ECONOMIC FORUM	Global Competitiveness Report	Overall score	2013	0.560
FREEDOM HOUSE	Index of Economic Freedom	Financial freedom	2013	-0.540
FREEDOM HOUSE	Index of Economic Freedom	Business freedom	2013	-0.500
FREEDOM HOUSE	Index of Economic Freedom	Overall score	2013	-0.600
<b>SUPPORTING INFRASTRUCTURE</b>				
WORLD ECONOMIC FORUM	Global Competitiveness Report	Infrastructure	2013	-0.600
GALLUP WORLD POLL	-	Home has access to the internet (% Yes)	2010	-0.590
WORLD BANK	-	Telephone lines (per 100 people)	2011	-0.520
WORLD BANK	-	Quality of port infrastructure	2012	-0.470
WORLD BANK	-	Improved water source (% of population with access)	2010	-0.473
<b>BUSINESS SOPHISTICATION</b>				
WORLD ECONOMIC FORUM	Global Competitiveness Report	Technological readiness	2013	-0.670
WORLD ECONOMIC FORUM	Global Competitiveness Report	Innovation	2013	-0.570
WORLD ECONOMIC FORUM	Global Competitiveness Report	Business sophistication	2013	-0.540
<b>MARKET ACCESS, SIZE AND EFFICIENCY</b>				
WORLD BANK	-	Tariff rate (weighted average)	2012	0.586
WORLD BANK	-	Burden of customs procedure	2012	-0.570
WORLD BANK	-	GDP per capita (PPP constant 2005 international \$)	2011	-0.570
WORLD ECONOMIC FORUM	Global Competitiveness Report	Goods market efficiency	2013	-0.570
WORLD BANK	Doing Business	Trading across borders	2012	0.560



# SUPPORTING INSTITUTIONS

Supporting institutions are those structures or mechanisms which provide for the day-to-day interactions between businesses, customers and wider society. Importantly, these can be both formal, in the case of laws and regulations, or informal, in the case of social or cultural norms or ‘ways of doing things’ [33].

Formal business institutions may cover a range of factors such as the extent and nature of property rights, and a firm’s rights and obligations or define the process for starting a new business. Because formal business institutions provide the rules for how a business should operate, excessively burdensome regulations may result in less businesses being established or in businesses operating in a manner which is not conducive to the interests of the wider community. For example, research has found that excessively burdensome entry regulations tend to discourage new entrants from starting businesses [34].

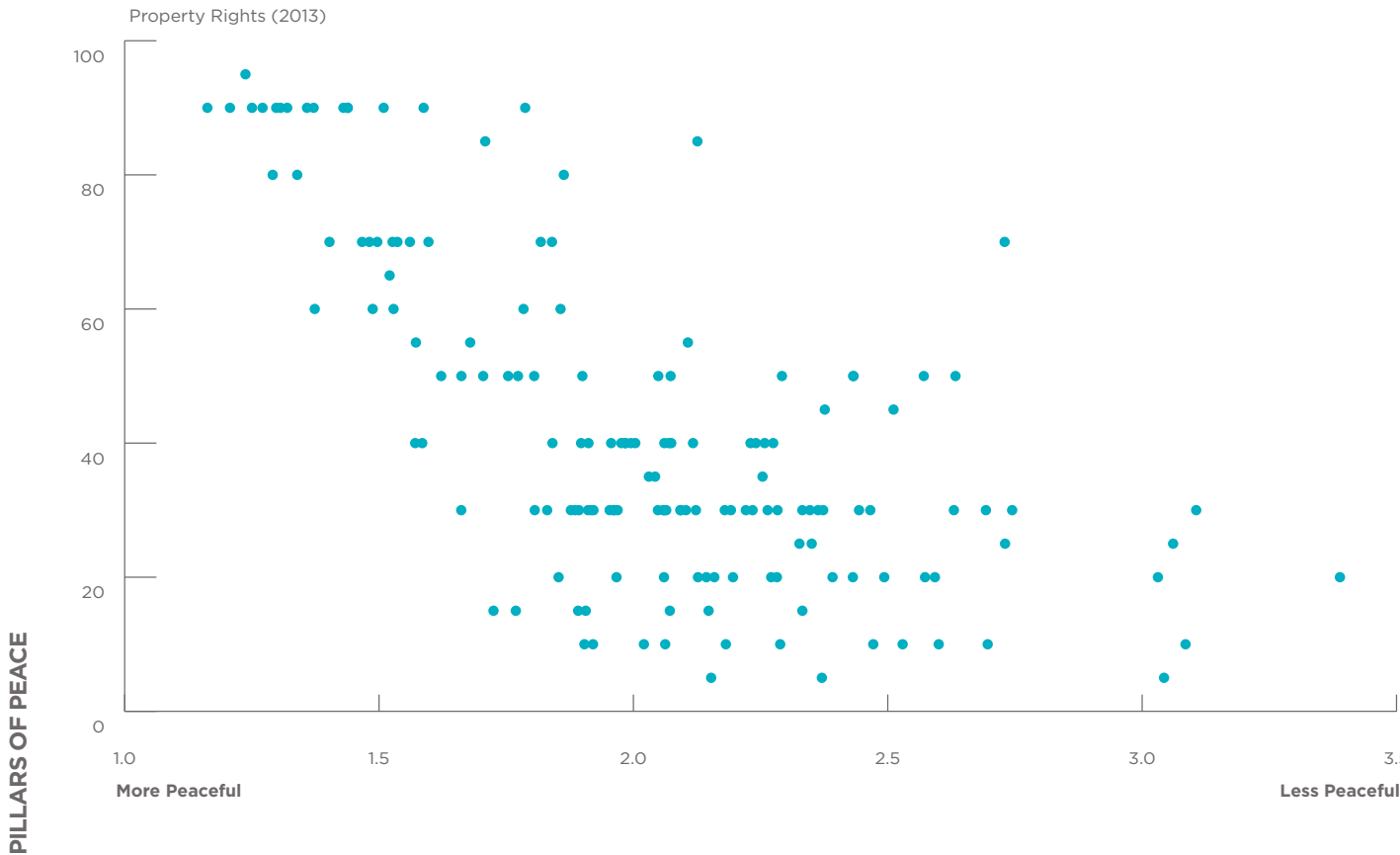
Informal institutions include the accepted norms of operating a business, undertaking employment or exchanging goods. Although informal institutions may not be legally enforceable they are still relevant. In particular, as

informal institutions define the socially acceptable behavior expected of individuals who are engaged in economic activity, favorable informal institutions can have a large impact on the operation and establishment of business [35].

IEP analysis supported this, with better formal institutions tending to be associated with higher levels of peace. Measures of institutional quality include Freedom House’s Property Rights Index, the Legatum Institute’s measure for the level of entrepreneurship and opportunity and the World Economic Forum’s measure for the quality of a country’s institutions (Table 6) [5].

Freedom House’s Property Rights Index measures the ability of individuals to accumulate private property while having the ownership of this property secured by the state. Scores range from 0 to 100 in increments of 10. A higher score on the index would suggest a situation in which private property is guaranteed by the government, contracts are enforced efficiently by the court system and the justice system punishes those who unlawfully confiscate private property [36]. As is illustrated in Figure 4 countries with better property rights tend to more peaceful.

**FIGURE 4** Property Rights (2013) are positively associated with Peace (2013 GPI) -  $r = -0.67$   
*Countries with more secure property rights tend to be more peaceful.*





This finding also tended to be echoed by other measures including Freedom House's Financial Freedom and Business Freedom measures, suggesting that countries have a tendency to be more peaceful when government regulation of businesses and the financial sector are less burdensome.

This tendency for more peaceful nations to have better quality institutions is also supported by the 'institution' indicator produced by the World Economic Forum. Recognising the multi-dimensional nature of institutions this indicator measures a range of factors such as property rights, ethics, and corruption, protecting the interests of minority shareholders, auditing and accounting standards.

Finally, it was found that countries which achieved favorable scores in regards to property rights, business freedom and financial freedom in 2007 were consistently more peaceful in 2013, suggesting that better supporting institutions have some predictive power as to how peaceful a country would be in the future.

**TABLE 6** Institutional Factors and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
FREEDOM HOUSE	Index of Economic Freedom	Property rights	2013	-0.680
LEGATUM INSTITUTE	Legatum Prosperity Index	Entrepreneurship & opportunity	2012	-0.670
FREEDOM HOUSE	Index of Economic Freedom	Overall score	2013	-0.600
WORLD ECONOMIC FORUM	Global Competitiveness Report	Institutions	2013	-0.620
WORLD ECONOMIC FORUM	Global Competitiveness Report	Overall score	2013	0.560
FREEDOM HOUSE	Index of Economic Freedom	Financial freedom	2013	-0.540
FREEDOM HOUSE	Index of Economic Freedom	Business freedom	2013	-0.500

## SUPPORTING INFRASTRUCTURE

Supporting infrastructure includes the quality and quantity of physical infrastructure such as roads, telephone lines and ports. Because infrastructure provides an important input to economic activity through the provision of essential inputs like electricity and water, it is suggested that infrastructure development is a key component in supporting the existence of a *sound business environment* under which peace can flourish.

Measures of infrastructure density and quality were found to be associated with a country's level of peace. Targeted investments in infrastructure are likely to encourage peace due to their ability to enhance the efficiency of trade through a range of means such as linking communities via transport routes, the reliable provision of electricity and by enhancing communication infrastructure [37].

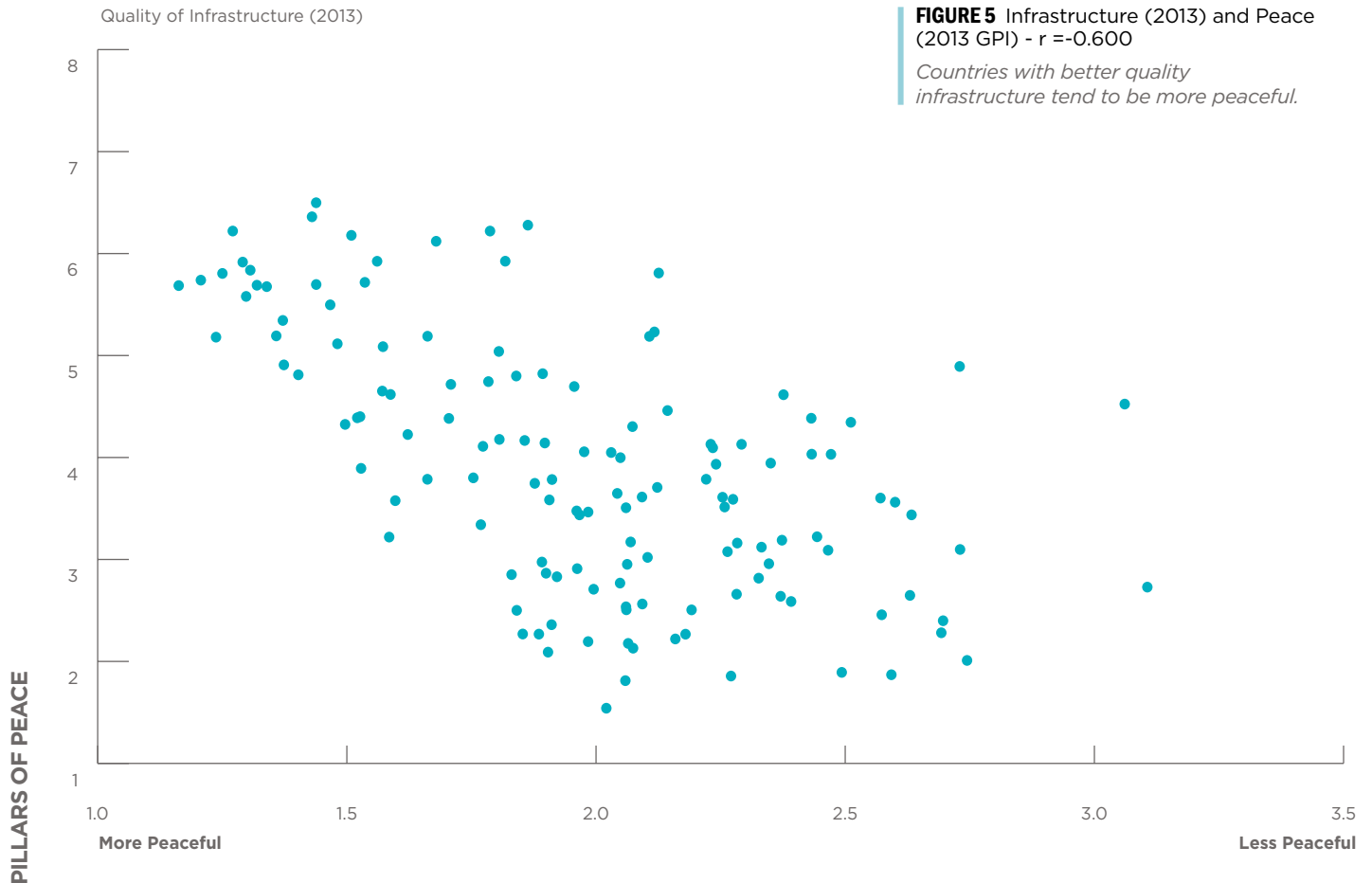
Furthermore, infrastructure can also provide a means for strengthening other important Pillars such as better communication infrastructure improving the *free flow of information*, or greater transport infrastructure providing people with greater opportunities to access health and education services, thereby strengthening the *human capital* Pillar.

From this analysis it was found that the World Economic Forum's 'Infrastructure' measure and both the quality of port infrastructure and the per-capita supply of telephones, were all related to a country's level of peace. Generally, where the quantity and quality of a country's infrastructure were higher countries were more likely to be peaceful.

**TABLE 7** Supporting Infrastructure and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
WORLD BANK		Internet users (per 100 people)		-0.620
WORLD ECONOMIC FORUM	Global Competitiveness Report	Infrastructure	2013	-0.600
GALLUP WORLD POLL	-	Home has access to the internet (% Yes)	2012	-0.590
WORLD BANK	-	Telephone lines (per 100 people)	2011	-0.520
WORLD BANK	-	Improved water source (% of population with access)	2010	-0.480
WORLD BANK	-	Quality of port infrastructure	2011	-0.470
GALLUP WORLD POLL	-	Home has landline telephone (Yes %)	2010	-0.470

The indicator with the strongest association is the World Economic Forum's 'Infrastructure' variable', as shown in Figure 5. The indicator provides a broad measure of the overall quality of infrastructure such as ports, air transport and electricity, in addition to information relating to the development of rail and telephone infrastructure [38].



Although research tends to support that infrastructure is strongly associated with economic development and per capita GDP, it is important to note this association cannot be implied as suggesting that roads bring peace [39], [40]. In particular, the relationship to peace is likely to reflect the impact of many other factors such as the quality of governance, the general performance of business or the levels of corruption. Despite this, it is also important to recognise that infrastructure is likely to at the very least play a supportive role to factors which underlie more peaceful societies.

## BUSINESS SOPHISTICATION AND INNOVATION

The level of business sophistication and innovation describes the 'depth' of industry networks and the willingness to innovate. For instance, a region with more sophisticated business operations would tend to have more extensive business networks and a greater level of industry and managerial expertise. Because regions with higher levels of business sophistication are expected to have stronger networks, greater levels of experience, be better at planning for the future and utilizing information, it is expected these countries will also have stronger and more resilient business environment, making them more able to withstand shocks [41].

IEP analysis confirms this, with the World Economic Forum's 'Technological Readiness', 'Innovation' and 'Business Sophistication' measures all being associated with peace as measured by the 2013 GPI. These relationships have been provided in more detail in Table 8.

The World Economic Forum's 'Business Sophistication' measure is meant as an indicator of the sophistication of business operations and how extensive business networks are in a country. Data which is used to construct the indicator includes information on the quality and quantity of businesses, the sophistication of production, the sophistication of management processes and the extent to which marketing is used [38]. As has been illustrated by Figure 6, greater levels of peace tend to be associated with higher levels of business sophistication.

When this relationship is examined in greater detail the association was found to hold regardless of a country's income level, with low-income countries dominating the bottom of the sophistication measure while high income countries had the highest levels of sophistication. High income countries also tended to be more peaceful.

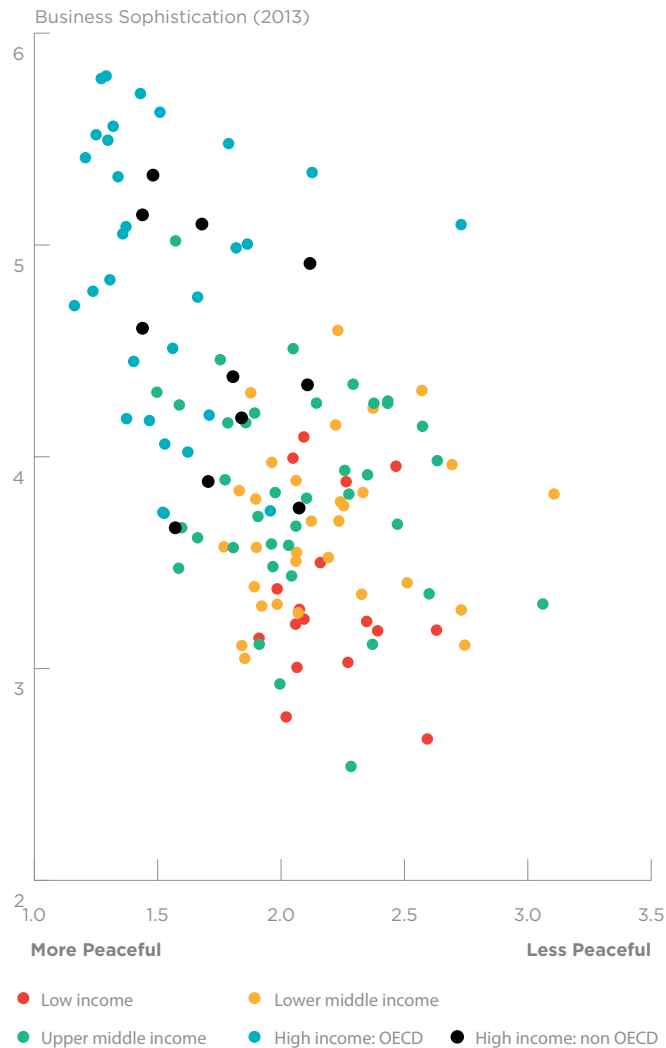
**TABLE 8** Business Sophistication, Innovation and Peace (2013 GPI)

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
WORLD ECONOMIC FORUM	Global Competitiveness Report	Technological readiness	2013	-0.670
WORLD ECONOMIC FORUM	Global Competitiveness Report	Innovation	2013	-0.570
WORLD ECONOMIC FORUM	Global Competitiveness Report	Business sophistication	2013	-0.540

## MARKET ACCESS, SIZE AND EFFICIENCY

**FIGURE 6** Business Sophistication (2013) and Peace (2013 GPI) -  $r = -0.540$

*Countries with higher levels of income and business sophistication tend to be more peaceful.*

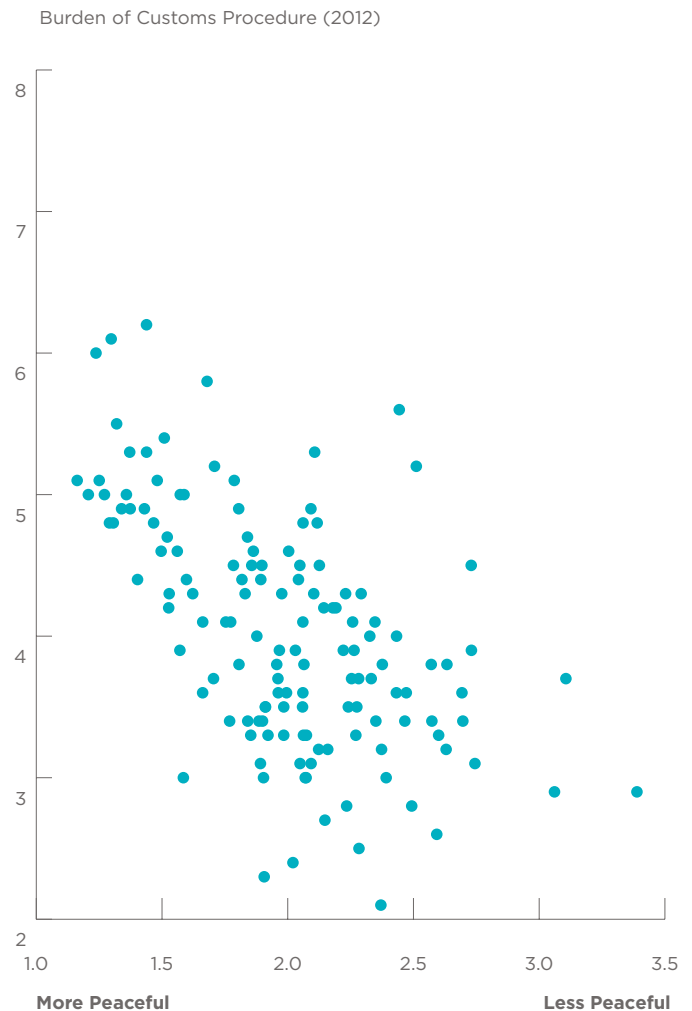


A number of measures which indicate the level of access to markets, their size and efficiency were found to be positively associated with the level of peace. Market access refers to the extent to which businesses are able to purchase and sell both domestically and overseas. A key reason is that as market access increases, so do business networks and the level of community interdependence. Consequently, it is suggested that in addition to supporting a stable business environment, a greater market size will tend to increase the interdependence between communities and states, heightening the economic cost of conflict and thereby encouraging peace [42].

Correlation analysis tended to support this finding, with those countries with simpler customs procedures in 2007 being more peaceful in 2013. That is, if we had used the burden of customs procedures in 2007 to predict how peaceful countries would be in 2013 we would have been, on average, correct. Although this does not imply that one is causally linked to the other, it does provide added confidence as to the stability of this relationship over time.

**FIGURE 7** Burden of Customs Procedure (2012) and Peace (2013 GPI) -  $r = -0.570$

*More peaceful countries also tend to have less burdensome customs procedures.*



Recent measures of market access, size and efficiency which were found to be associated with peace included the World Bank's 'burden of customs procedure', 'trading across borders' and the World Economic Forum's 'goods market efficiency' (Table 9).

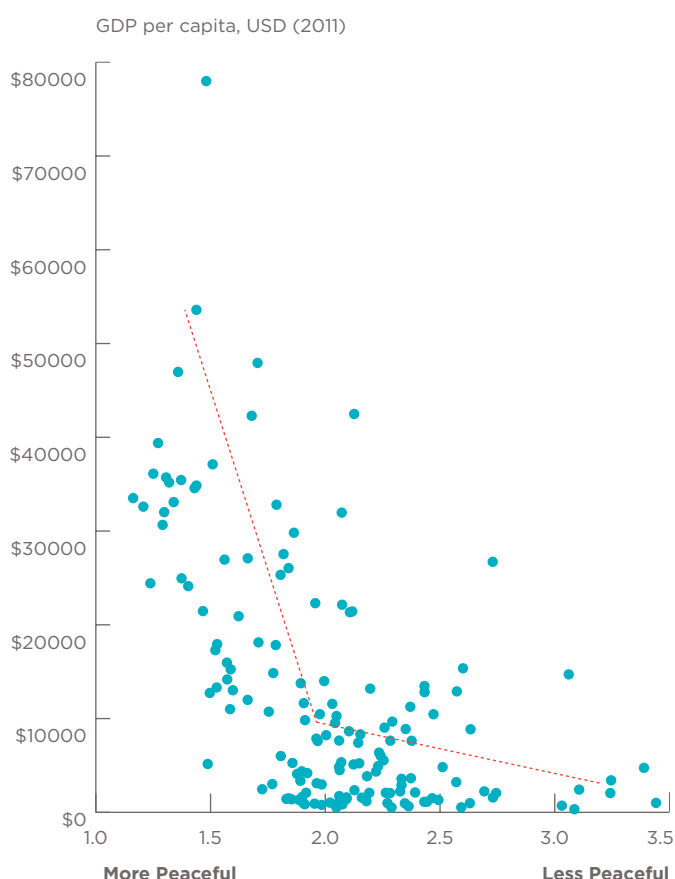
**TABLE 9** Market access, size and efficiency measures and peace

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
World Bank	-	Tariff rate (weighted average)	2012	0.586
World Bank	-	Burden of customs procedure	2012	-0.570
World Bank	-	GDP per capita PPP (constant 2005 international \$)	2011	-0.570
World Economic Forum	Global Competitiveness Report	Goods market efficiency	2013	-0.570
World Bank	Doing Business	Trading across borders	2012	0.560

Income also tends to be positively associated with peace, with countries which have higher levels of average income tending to be those which are more peaceful. This is illustrated in Figure 8.

**FIGURE 8** Average Income (2011 GDP per capita) and Peace (2013 GPI) –  $r = -0.58$ 

*Countries with higher levels of average incomes tend to be more peaceful*

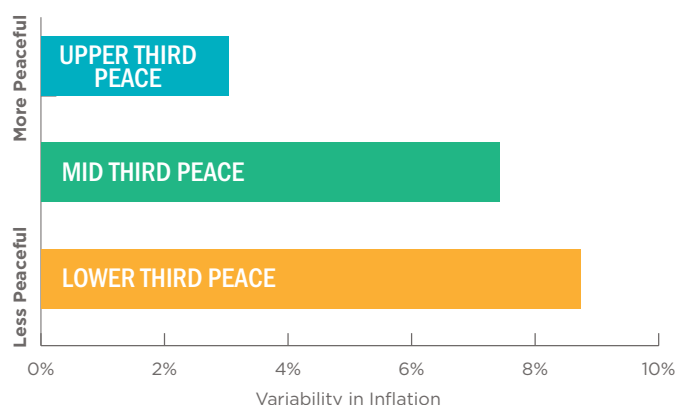


It is important to recognise that this does not imply that greater per capita income will necessarily result in greater levels of peace, particularly if it is poorly utilized. In addition, because GDP per capita tends to be correlated with many of the other Pillars, it is likely that some of this relationship is a consequence of these rather than income. Despite this, this finding is consistent with research on the causes of conflict which find that conflict is more likely in regions with lower average incomes [43].

There appears to be a tendency for more peaceful countries to experience lower variability in their inflation rates across countries. That is, more peaceful countries tend to have inflation which is low and less variable. This has been illustrated in Figure 9.

**FIGURE 9** Inflation (2011) and Peace (2013 GPI)

*Countries which are more peaceful tend to have more predictable levels of inflation.*



There are likely to be a number of explanations for this. Firstly, because when prices rise too quickly they are typically associated with lower levels of financial stability, it is likely prices will tend to be less stable in less peaceful regions [44].

Secondly, price increases can be a signal of a shortage in goods. In the case of unanticipated shortages, prices of goods may rise as communities compete for a limited supply of food, because this can be both a driver and cause of tensions, less peaceful countries would tend to experience higher rates of inflation [12], [45].

Thirdly, managing inflation requires that there is good economic governance, which as this report argues, is more likely in regions which are peaceful.

## CONCLUDING COMMENTS

A *sound business environment* is crucial to providing both individuals and communities with a means to peacefully, equitably and efficiently share a country's resources. This was confirmed by analysis which found that factors associated with a *sound business environment* were also associated with peace. These factors include the level and quality of infrastructure, business sophistication and innovation, the quality of employment opportunities and the level of regulations applied to businesses.

Furthermore, countries that scored better for Economic Freedom overall, Business Freedom and Property Rights in 2007 tended to be more peaceful in 2013. That is, those countries which were rated more favorably for their business environment in the past were more likely to be peaceful in the future.

Among the measures examined it was found that both the World Economic Forum's 'Global Competitiveness Report' and Freedom House's 'Index of Economic Freedom' were consistently associated with peace. Crucially, this was also found to be true of their individual sub-indices which measure a range of factors ranging from quality of infrastructure to the level of business freedom. These results tend to support that a *sound business environment* is a crucial ingredient to attaining peace.

Although the prospect of creating a world which is entirely peaceful is a utopian proposition, the financial benefits alone are clearly significant. For instance, analysis by IEP in the 2013 Global Peace Index Report found that a 50 per cent reduction in global violence containment expenditure would result in \$4.73 trillion of additional economic activity which is equivalent to repaying the debt of the developing world, provide enough money for the European stability mechanism and provide the additional funding required to achieve the Millennium Development Goals [46].

## PILLAR OF PEACE:

EQUITABLE  
DISTRIBUTION  
OF RESOURCES

Equity describes the extent to which individuals and groups are treated fairly, regardless of their personal characteristics such as their social position, race, religion or gender. How equitable resources and opportunities are distributed throughout a society may define how easily an individual or group accesses a range of vital goods and services such as land, water, education, health care and justice, all of which are important contributors to human development. Because what is termed to be 'equitable' will vary from country to country, what is considered equitable in one country may not be acceptable in another. However where the distribution of resources between individuals and groups is considered poor, feelings of injustice and powerlessness may emerge, thereby encouraging social divisions and potentially undermining peace [47], [48], [49], [50].

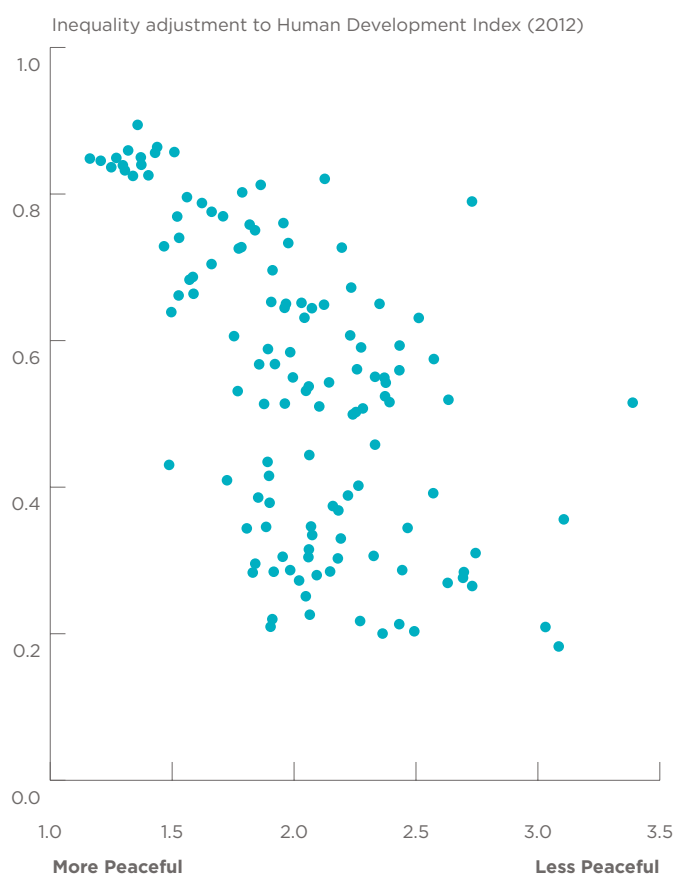
A range of measures of equity were found to be related to peace, including the World Bank's measure of vulnerable employment and the extent of adjustment for inequality in the UNDP's Human Development Index (HDI). Where the scores indicated greater levels of equality, a nation tended to be more peaceful. Results have been provided in Table 10.

Introduced in 2010, the inequality-adjusted HDI (IHDI) is a measure of human development that aims to account for how equally human development is distributed within a country. According to the UN, under perfect conditions the HDI and IHDI are equal; the greater the difference between the two, the more uneven the distribution of income, education and life expectancy [51].

Differences between the HDI and the inequality-adjusted HDI were used as proxies as to the levels of specific types of inequality in a country. This allowed an examination of the extent to which different forms of inequality such as income, educational access and attainment, and life expectancy were associated with peace. As has been shown in Figure 10 the association suggests that countries that have a better distribution of education, income and life expectancy, tend to be more peaceful.

**FIGURE 10** Human Development Inequality (2012) and Peace (2013 GPI) -  $r = 0.570$

*Countries with higher levels of inequality in human development tend to be less peaceful*





The Gini coefficient is the best known measure of income inequality. It calculates the distribution between the richest and the poorest individuals within a country; indicating a value of 0 for complete equality to 1 for maximal inequality. It was found that there was not a strong association between the Gini-coefficient and peace.

The result was similar when associations were analysed according to regime type, income level and geographical region. Despite this, it should be noted that because calculating the Gini-coefficient is difficult in many developing contexts, measures of the Gini-coefficient can often be either inaccurate or unavailable. It is therefore possible that as more data becomes available, the association between the Gini Index and peace will be found to be stronger. Prior IEP analysis for the United Kingdom Peace Index and the United States Peace Index has consistently found the Gini-coefficient to be associated with peace. For instance, the United Kingdom Peace Index found a significant statistical relationship between the Gini-coefficient and crime in the London boroughs ( $r=0.69$ ), suggesting that greater inequality and peace are associated [52]. In addition, in the United States Peace Index, the Gini-coefficient was found to be associated with violence at the state level ( $R=0.62$ ) [53].

**TABLE 10** Equitable Distribution of Resources and Peace

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
United Nations	Human Development Index	Human development inequality	2012	0.570
United Nations	Human Development Index	Life expectancy inequality	2012	0.530
United Nations	Human Development Index	Education inequality	2012	0.530
Institute for Economics and Peace	Youth Development Index	Overall score	2013	-0.530
World Bank	World Development Indicators	Infant mortality	2011	0.510
World Bank	World Development Indicators	Life expectancy	2011	-0.500
World Bank	World Development Indicators	Population below \$2 per day	2012	0.453
World Bank	World Development Indicators	Vulnerable employment total (% of total employment)	2011	0.450
World Bank	World Development Indicators	Gini coefficient	2012	0.280

## BOX 6 // GROWTH ANALYSIS - THE EQUITABLE DISTRIBUTION OF RESOURCES AND PEACE

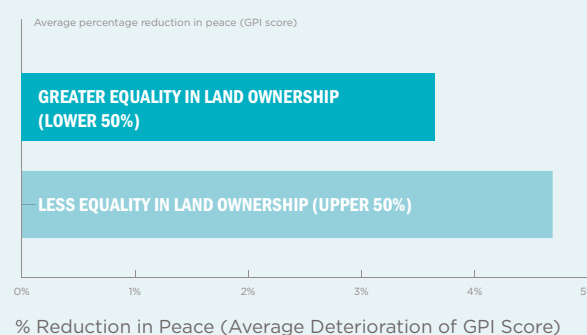
In order to determine to what extent inequality may have resulted in different outcomes in terms of peace growth analysis was conducted. To do this, countries in the GPI were first split into two groups according to their relatively levels of inequality, as measured by the Food and Agricultural Organisation (FAO)'s Gini Index for land. Average growth rates for the GPI were then calculated for each group to determine the extent to which each group's average level of peacefulness has changed since 2008.

FAO's Gini's index of concentration is a measure of concentration of agricultural land areas. The index measures the 'evenness' of the size of land holdings. If all holdings of land were to have the same area it would equal zero, suggesting total equality, whilst if all agricultural land in a country was held by one person it would equal one, implying total inequality.

If a more uneven distribution of land did in fact result in lower levels of peace we would expect this to be reflected in how their levels of peacefulness have evolved over time. That is, we would expect greater deteriorations in the GPI scores for countries with greater levels of inequality.

**FIGURE 11** The Level of Land Inequality and GPI Growth

*Greater inequality in land ownership is associated with greater reductions in peace. It should be noted peace declined globally on average 5 % over the 2008 – 2013 period, as measured by the GPI.*



As can be seen above, the 26 countries (out of a total 52) which had the highest levels of initial inequality tended to also experience larger deterioration in their



## CONCLUDING COMMENTS

Equity describes the extent to which individuals and groups are treated fairly, regardless of their personal characteristics such as their social position, race, religion or gender. How equitable resources and opportunities are distributed throughout a society may define how easily an individual or group accesses a range of vital goods and services such as land, water, education, health care and justice. Analysis in this report tends to confirm that countries with more equitable distribution of resources and opportunities are also more peaceful, with this range of measures being associated with a level of peacefulness as measured by the 2013 GPI.

Inequitable distribution of resources is much more than the poverty line, which only measures whether an individual or household's income is below a certain level. In both developing and developed nations, access to health or first order needs, should be seen as important as the distribution of income. This approach does not attempt to apply a particular value judgment to what constitutes an 'ideal' level of resource distribution. Often what is determined as an acceptable level of distribution varies from country to country and can be contingent on the mix of economic and political circumstances, as well as local cultural attitudes and values.

levels of peacefulness, as measured by the change in their GPI scores since 2008.

This analysis implies that the level of inequality in a nation may have some capacity to predict future levels of peace. As although on average, all countries have experienced a decline in their levels of peacefulness, those which have experienced the lowest declines tended to have greater equality in terms of land distribution. In addition, because it is not possible for *current* levels of peace to impact *past* levels of land inequality, the analysis provides additional evidence that in fact high inequality is not just correlated with peace, but is likely, alongside the other pillars, a causal factor.

This also appears to be supported by evidence in the literature, with landlessness and land inequality being commonly cited as a source of tensions and potentially conflict [54], [55], [56]. For instance, analysis focussed on explaining conflict in Nepal during the Maoist insurgency found that the intensity of conflict could be explained by the extent of landlessness [57].

“How equitable resources and opportunities are distributed throughout a society may define how easily an individual or group accesses a range of vital goods and services such as land, water, education, health care and justice.”

## PILLAR OF PEACE:

# ACCEPTANCE OF THE RIGHTS OF OTHERS

*Acceptance of the rights of others* is a category designed to include both the formal institutions that ensure basic rights and freedoms as well as the informal social and cultural norms that relate to the behaviors of citizens. These factors relate to tolerance between the different ethnic, linguistic, religious, and socio-economic groups within a country.

The *acceptance of the rights of others* domain attempts to measure the level of tolerance and acceptance afforded to individuals and groups in a society. Because this is expected to provide wider avenues for the acceptance of differences between groups, a greater acceptance of the rights of others is hypothesised to be associated with a more peaceful and less conflict-prone community [16], [58]. Furthermore, this Pillar is associated with both more extensive social networks and stronger community relationships, thereby promoting a greater sense of wellbeing and greater resilience [59], [60]. This is strongly supported by analysis, with a range of indicators which proxy the acceptance of the rights of others being related with peace (Table 11).

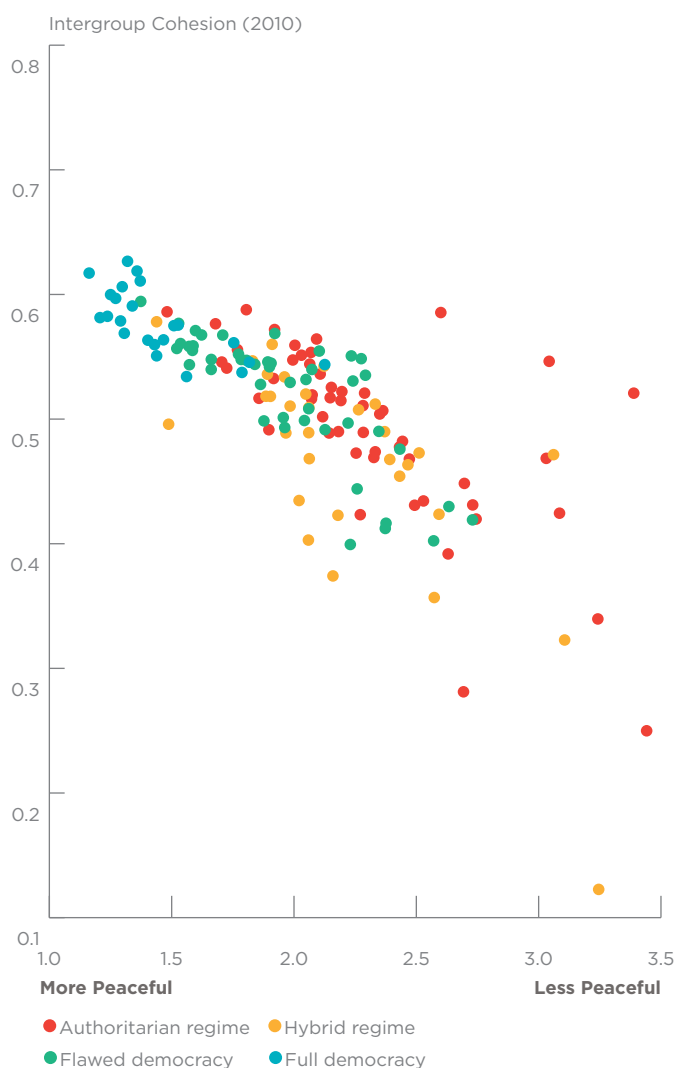
One of the strongest set of correlations with the Global Peace Index is in relation to human freedoms, social cohesion and rights. Informal social and cultural norms that relate to the behaviours of citizens are equally important in determining whether there are appropriate levels of tolerance and acceptance of people's rights within the society. The Institute of Social Studies' measure of Intergroup Cohesion was found to be strongly associated with the level of peace (Figure 12).

This measure reflects the strength of the informal social and cultural norms which relate to the behaviours of citizens in relation to their tolerance and acceptance of people within a community. Questions range from the acceptance of ethnic groups and attitudes about perceived discrimination on the basis of ethnicity, nationality or immigration status. Other measures that are surveyed include level of religious tensions, number of violent riots, and the likelihood of violent acts.

The subjective nature of this measure is important as it reflects the local context. The relationship between peace and intergroup cohesion is consistent regardless of a country's region, income group or regime type. A slight exception to this is for a number of authoritarian and hybrid regimes, which appear as outliers in Figure 12.

**FIGURE 12** Intergroup Cohesion (2010) and Peace (2013 GPI) -  $r = -0.770$

*Countries with greater acceptance of ethnic groups and lower levels of discrimination, as measured by the Intergroup Cohesion index, tend to be more peaceful.*



## BOX 7 // ATTITUDINAL SURVEYS AND THE ACCEPTANCE OF THE RIGHTS OF OTHERS

Various global attitudinal surveys have been found to be associated with the GPI, providing insight into relationships between commonly held public attitudes and third party qualitative and quantitative measures of the *acceptance of the rights of others*. Included are correlations between the GPI and a number of global surveys, which were collated for the IEP by the Program on International Policy Attitudes (PIPA) at the University of Maryland [30]. The surveys come from a variety of sources and measure attitudes on the use of torture, foreign policy, and country morality.

The two World Values Survey [61] questions showed that citizens of peaceful countries tend to support leaders who take a compromising and cooperative approach and think it is important to understand others' preferences in building good relations. This is related to responses from two World Public Opinion surveys on the topics of torture [62], and foreign policy [63]. These were significantly correlated to the Global Peace Index. The response to the likelihood of rejecting the use of torture, including against terrorists was most strongly linked to the GPI ( $r = -0.72$ ), closely followed by whether individuals are more likely to support leaders who take a cooperative and compromising approach ( $r = -0.68$ ).

When considered together, commitment to human freedoms and societal attitudes towards foreigners can be informative descriptors of how the citizens of a country accept the rights of people from other nations. These various statistical relationships highlight how informal attitudes, norms and behaviours may relate to real political decision-making and the role they have in fostering peace.

QUESTION	SOURCE	SAMPLE SIZE	YEAR	CORRELATION COEFFICIENT
More likely to reject any use of torture, including against terrorists	World Public Opinion	19 countries, 19,000 respondents	2008	-0.72
More likely to support leaders who take a cooperative and compromising approach	World Values Survey	N/A	2004	-0.68
More likely to see their country as having average morality in its foreign policy	World Public Opinion	21 countries, 21,000 respondents	2009	-0.47
More likely to think that it is important to understand other preferences in building good relations	World Values Survey	33 countries, 47,000 respondents	2004	0.47
Freedom in your life - satisfied (%)	Gallup World Poll	Over 100 countries	2012	-0.47

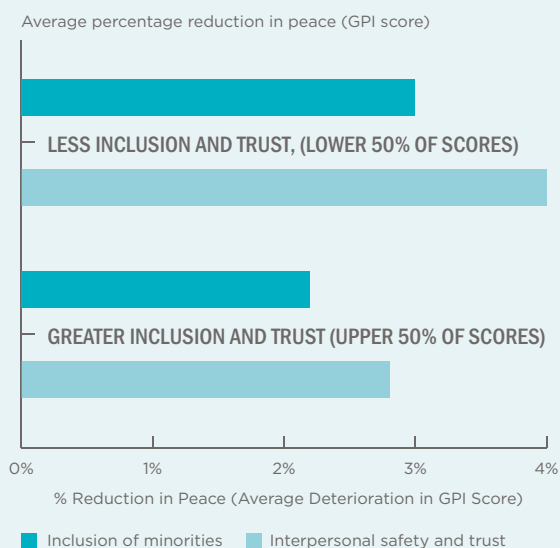
The Institute for Social Studies' 'Gender Equality' index was also associated with the 2013 GPI, suggesting that higher levels of gender equality are linked with peace. The strength of the association was found to be broadly consistent across geographical regions, regime types and income levels. Table xx details this and a range of other measures which were found to be associated with peace.

**TABLE 11** Acceptance of the Rights of Others

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
International Institute of Social Studies	Indices of Social Development	Interpersonal trust and safety	2010	-0.770
International Institute of Social Studies	Indices of Social Development	Inclusion of minorities	2010	-0.700
Legatum Institute	Legatum Prosperity Index	Personal freedom	2012	-0.660
United Nations Development Programme	-	Gender inequality	2013	0.607
Institute for Social Studies	Indices of Social Development	Gender equality	2010	-0.570
Cingranelli and Richards (CIRI)	Human Rights Dataset	Empowerment index	2012	0.500

**FIGURE 13** The Acceptance of the Rights of Others and Peace

*Countries that had less acceptance for the rights of others in 1990 have experienced greater deteriorations in peacefulness since 2008. It should be noted peace declined globally on average 5% over the 2008-2013 period as measured by the GPI.*



As illustrated above the countries who scored poorly (the bottom half) for interpersonal safety and trust or the inclusion of minorities tended to have relatively stronger deterioration in their GPI scores since 2008. That is, countries with lower levels of *acceptance of the rights of others* have tended to experience greater levels of deterioration in peacefulness relative to more accepting communities. Crucially, this is in addition to a broader trend for less peacefulness in the world overall.

Evidence appears to support this contention with research spanning 15 countries and over 19 thousand respondents finding that the chance of criminal victimisation was higher in less cohesive communities [64]. That is, violent crime tends to occur more frequently in a community which is less accepting of the rights of others.

It is important to note, whilst this analysis does not conclusively prove the direction of causality it suggests that past measures of 'interpersonal safety and trust' and the 'inclusion of minorities' have some capacity to predict future changes in a nation's level of peacefulness.

It is also important to note that the extent of difference between growth rates depends on how disparate the groups being compared are. In particular, when comparing the bottom and top ten per cent of countries in terms of their inclusion of minorities, as opposed to the top and bottom half, the relative difference in the deterioration of peace between the two groups is much greater.

## CONCLUDING COMMENTS

*Acceptance of the rights of others* denotes the level of tolerance and acceptance afforded to individuals and groups in a society. The growth analysis highlighted that higher interpersonal safety and trust and inclusion of minorities was associated with greater peacefulness in future years. Similarly, attitudinal survey data also shows strong associations between cooperative attitudes, willingness to compromise, and appreciating the importance of understanding others' preferences as a prerequisite to building good relations.

Although the focus of this Pillar is chiefly related to acceptance of individuals within informal community networks, it is important to recognise the important role that the rule of law plays in supporting these attitudes. This was reinforced with a significant level of correlation shown between intergroup cohesion and measures relating to the rule of law, such as the 'Human Rights and the Rule of Law'. This is a clear illustration of the interdependency between the various Pillars of Peace.



# PILLAR OF PEACE: GOOD RELATIONS WITH NEIGHBOURS

*Good relations with neighbours* refer to the relationship between individuals, communities and states. While this Pillar is expected to be strongly linked to the *acceptance of the rights of others*, it is different as it measures the quality of relationships between the constituent groups within the country and also the quality of the relations with its neighbouring countries. Furthermore, the *acceptance of the rights of others* is more closely aligned with the recognition of individual rights rather than the interaction of groups. Because better relationships are associated with stronger bonds between community groups, it is expected that countries which have better local and regional relationships will be more integrated economically, less likely to engage in conflict, more likely to discourage crime, and are more likely to seek to maintain productive regional relationships [42], [64], [65], [66].

*Good relations with neighbours* have been shown to be strongly associated with peace. For example, research

suggests that social divisions over nationalism, ethnicity, and religion are associated with a higher probability of the occurrence of conflict [67]. Poor regional relations tend to accompany higher than average military expenditure, more armed services personnel, a greater number of heavy weapons per capita, and more displaced people. In addition, hostile relations virtually prohibit the possibility of regional economic integration, eliminating the chance of mutual gains from trade [68]. There is also evidence to suggest that the greater level of military expenditure which is related to poor regional relationships reduces economic growth [69].

To explore the relationship between community and interstate relationship and peace a range of factors were analysed to proxy the quality of community relationships. These included the Economist Intelligence Unit's measure for 'the extent of regional integration' and the 'hostility to foreigners/private property'. Results have been provided in Table 12.

**TABLE 12** Good Relations with Neighbours and Peace

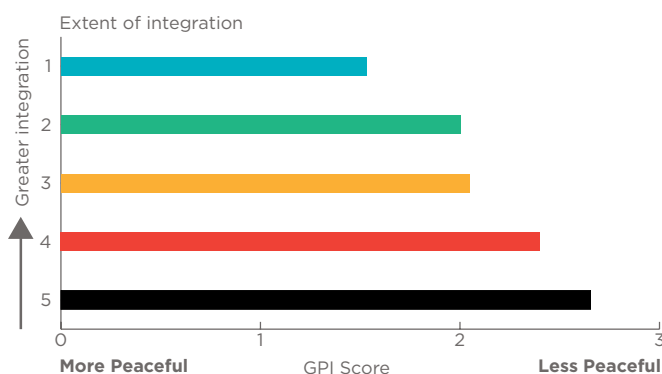
SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
International Institute of Social Studies	Indices of Social Development	Intergroup cohesion	2010	-0.770
International Institute of Social Studies	Indices of Social Development	Inclusion of minorities	2010	-0.700
Gallup World Poll	-	Safe walking alone - yes (%)	2012	0.700
Economist Intelligence Unit	-	Hostility to foreigners/private property	2012	0.630
Economist Intelligence Unit	-	The extent of regional integration	2011	0.610
OECD	Better Life Index	Quality of support network	2013	-0.580
Legatum Institute	Legatum Prosperity Index	Social capital	2012	-0.560
Gallup World Poll	-	Other countries responsible: tension - agree (%)	2010	0.550
Gallup World Poll	-	Immigration level - present level (%)	2012	-0.540
International Institute of Social Studies	Indices of Social Development	Interpersonal safety and trust	2010	-0.520
United Nations Development Programme		Satisfaction with community	2012	-0.438



The Economist Intelligence Unit's 'Extent of Regional Integration' indicator is a qualitative measure reflecting the level of regional integration as measured by a country's membership of regional trade alliances. Scores range from one to five, with one being the highest level of integration and five being the least. The analysis found that countries that were more regionally integrated tended to be more peaceful. Examination of the tendency for more integrated states to be more peaceful was confirmed when countries were separated by geographical groupings, regime types, and income levels.

**FIGURE 14** The Extent of Regional Integration (2011) and Peace (2013 GPI) -  $r = -0.64$

*On average, countries which are more regionally integrated are also more peaceful.*



## BOX 9 // GROWTH ANALYSIS - GOOD RELATIONS WITH NEIGHBOURS AND PEACE

In order to assess how *relations with neighbours* might impact the evolution of a country's level of peacefulness, growth analysis was conducted to compare the extent to which improvements in peace since 2008 have been associated with past measures of the quality of relationships between neighbours.

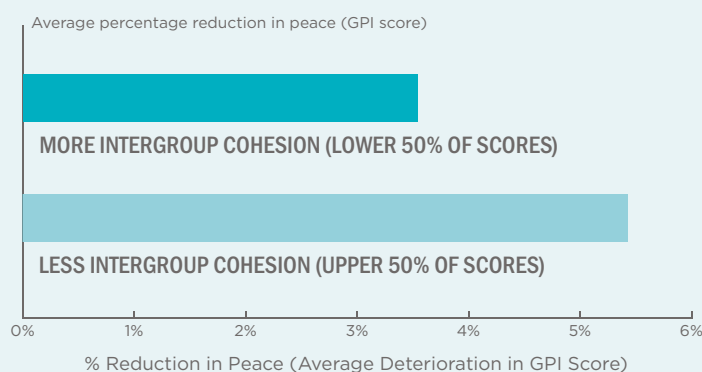
As a proxy for the quality of relationships with neighbours within a country the measure 'intergroup cohesion' was used. The measure places a value

on the quality of the relations of cooperation and respect between identity groups in a society. This uses data on inter-group disparities, perceptions of being discriminated against, and feelings of distrust against members of other groups.

The approach was to compare how peace has changed for the two groups of countries, for those with the comparatively higher levels of intergroup cohesion in 1990 relative to those with lower levels of intergroup cohesion in 1990.

**FIGURE 15** Good Relations with Neighbours and Peace

*Countries with less social cohesion in 1990 tended to experience greater declines in peacefulness. It should be noted peace declined globally on average 5% over the 2008-2013 period, as measured by the GPI.*



As illustrated, the analysis suggests that countries with lower levels of intergroup cohesion tended to experience greater relative declines in peacefulness. This is also significant when considered alongside the wider world trend towards declining levels of peace. Furthermore, because it is not possible that *current* levels of peacefulness have determined *past* levels of intergroup cohesion this supports the hypothesis that better relations with neighbours

encourages peace.

Despite this, it does not imply that intergroup cohesion is the only factor which has determined growth in peace since 2008, merely that it is likely one of the factors. When this result is coupled with analysis throughout the report it also provides added confirmation as to mutually supporting role of the other Pillars, such as a *well-functioning government* and peace.

## CONCLUDING COMMENTS

*Good relations with neighbours* refers to the relationship between individuals, communities and states. Analysis of a range of measures of community and regional relationship suggests that regions which have better relations between the constituent groups within their borders and better relations with neighbouring countries tend to be more peaceful. It was also found that those regions that were more 'regionally integrated' and less hostile to 'foreigners or private ownership' tended to be more peaceful.

Although better relations with neighbours are expected to result in greater levels of peace it is expected that causality runs in both directions. That is, better relations with neighbours drive peace and greater peace encourages better relation with neighbours. Because better relations with neighbours is likely to encourage trust, tolerance and the flow of information in the community It is suggested that improvements in this Pillar will tend to reinforce and be reinforced by the *free flow of information*, the *acceptance of the rights of others* and a *sound business environment*.



# PILLAR OF PEACE: FREE FLOW OF INFORMATION

The *free flow of information* is essential to a well-informed society. Accurate and well-distributed information underpins the free market, improves human capital, provides transparency of government decisions and improves judicial and government decisions. The measures for the *free flow of information* capture how easily citizens can gain access to information, including whether the media is free and independent, as well as the extent to which citizens are informed and engaged in the political process and the diversity of access to information, such as measured through internet access or simply the ability to express political views. In this sense, the *free flow of information* is an attempt to account for the degree of access to information as well as the independence of that information from vested political and economic interests. In this respect, freedom of the press is also helpful in countering corruption as greater transparency can provide a means for increasing the oversight of resource distribution by the media [70].

Freedom of information can have many flow-on effects for society as the open and unbiased dissemination of information helps play a key role in keeping governments accountable, driving economic efficiencies and enabling civil society to better participate in political processes and express opinions without fear or prejudice[71]. 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 [72], [73]. In addition, because media can potentially be dominated by government, the elite or other interest groups, both the coverage and saturation are important. That is, the *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 [74].

To assess the level to which *free flow of information* is associated with peace a range of indicators were selected which assess the extent to which communities could access a variety of information sources. Measures included the extent of mobile phone ownership, the level of civic activism and the 'Freedom of the Press' index. Results have been provided in Table 12.

**TABLE 13** Free Flow of Information and Peace

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
WORLD BANK	World Governance Indicators	Voice and accountability	2011	-0.680
REPORTERS WITHOUT BORDERS	World Press Freedom Index	Overall score	2013	0.630
FREEDOM HOUSE	Freedom of the Press Index	Overall score	2012	0.620
INTERNATIONAL INSTITUTE OF SOCIAL STUDIES	Indices of Social Development	Civic activism	2010	-0.600
GALLUP WORLD POLL	-	Home has access to internet - yes (%)	2012	-0.590
FREEDOM HOUSE	Freedom of the Press Index	Law score	2012	0.560
FREEDOM HOUSE	Freedom of the Press Index	Economic score	2013	0.540
GALLUP WORLD POLL	-	Telephone lines (per 100 people)	2011	-0.520
GALLUP WORLD POLL	-	Home has landline telephone - yes (%)	2012	-0.470
GALLUP WORLD POLL	-	Cellular/mobile phone - yes (%)	2012	-0.450
GALLUP WORLD POLL	Express of Political Views	Expressing political views - 'most are afraid' (% of responses)	2012	0.450
WORLD BANK	World Development Indicators	Mobile phone subscriptions per 100 people	2011	-0.450

Overall, those countries which had greater information flows also tended to be more peaceful. Measures pertaining to greater press freedom and communication coverage were positively associated with peace. In particular, Freedom House's 'Freedom of the Press' index was found to be strongly associated with how peaceful a country is. The measure is based on a comprehensive range of sources such as reports from specialists, governments and human rights organisations and provides an important benchmark for measuring freedom of the press across countries. The measure's association with the 2013 GPI is provided in Figure 16.

When the relationship between a country's level of press freedom and peace was examined according to income and geographical groupings the relationship remained. However, when the data was examined by regime type a clear pattern emerged with countries classified as 'full democracy' or 'flawed-democracy' tending to be more peaceful and enjoying greater levels of press freedom than 'authoritarian regimes' and 'hybrid regimes'. Interestingly, the clustering of

scores appears to be tighter for full democracies, suggesting there are less variation in both the levels of press freedom and peace in democracies. Results by 'regime type' have been provided in Figure 16.

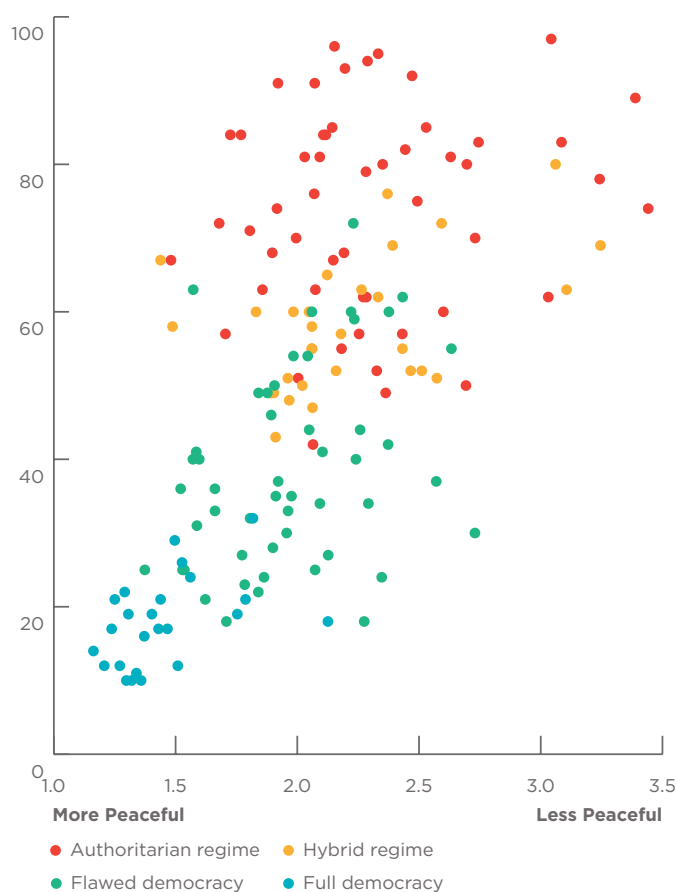
This tendency for nations with freer flowing information to be more peaceful also held true when analysed by the reported mobile phone usage, with countries with higher mobile phone ownership tending to be more peaceful. This has been illustrated in Figure 17.

This contention is supported by research focusing on households in Uganda. Specifically, it was found that greater mobile phone coverage accompanied increases in commodity sales in remote communities [75]. A key reason posited for this is, that mobile phones allow geographical distances to be bridged through opening up avenues of mobile communication, buyers, sellers and communities can be more easily connected across large distances. That is, by improving the flow of information the *sound business environment* Pillar can be strengthened, thereby encouraging peace.

**FIGURE 16** Freedom of the Press Index – overall score (2013) and Peace (2013 GPI) -  $r = 0.630$

*Countries with greater levels of press freedom tend to be democratic and more peaceful.*

Freedom of the Press (2013)

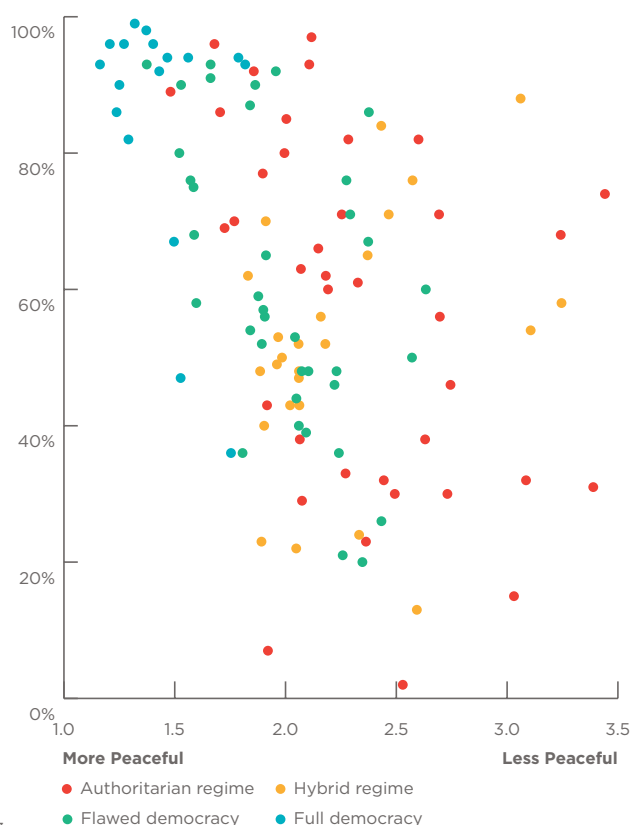


SOURCE: Freedom House, Freedom of the Press Index, 2013; Global Peace Index, 2013

**FIGURE 17** Reported Cellular Phone Ownership (2012) and Peace (2013 GPI)

*More peaceful nations tend to be democratic and have higher cellular phone ownership.*

Reported Cellular Phone Ownership



Although Figure 17 supports that greater information flows accompany greater peace, it is important to note that mobile phone ownership is also strongly correlated with GDP per capita, suggesting that both are likely a factor. As illustrated, an important property of this relationship is that the extent of variation in peace tends to reduce as the proportion of phone ownership and peace increases. A key reason for this is that, as the Pillars of Peace research argues, there are a range of factors which determine the level of peace in a country, such as a *sound business environment* and an *equitable distribution of resources*.

The International Institute of Social Studies' 'Civic Activism' measure was also found to be strongly associated with the level of peace. The indicator is comprised of a mix of quantitative, qualitative and survey-based measures of civic participation. These include access to civic associations, participation in the media, and the means to participate in civic activities such as nonviolent demonstration or petition. Civic activism is essential in ensuring that public institutions function in an

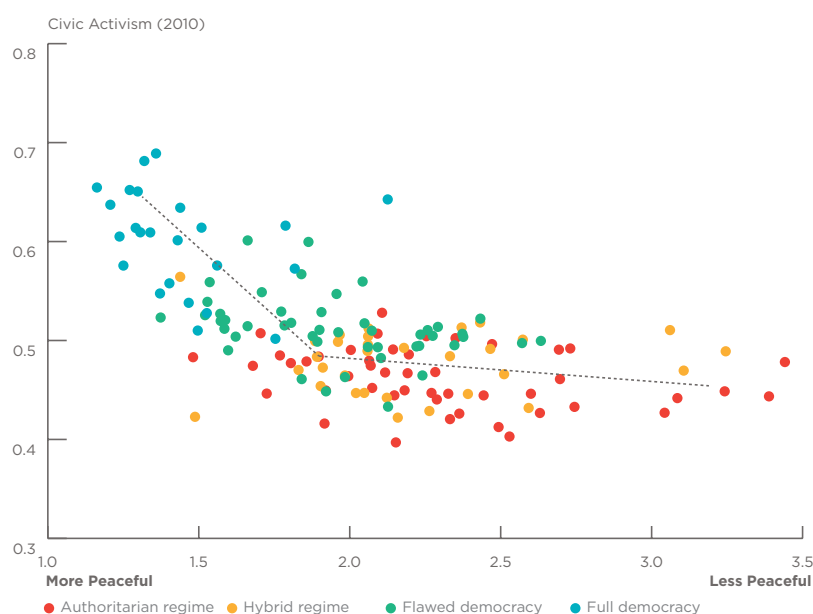
accountable and transparent manner, with participation and representation for all.

A key focus of the measure is as an indicator of how informed citizens are and whether they are able to demand action of government through non-violent action, such as protests and petitions. Some of the indicators used as part of this index include the proportion of people who have listened to news broadcasts several times in a week, the number of radios and newspapers per capita. The strong association between civic activism and peace is provided in Figure 17. In this sense, civic activism is not measuring direct political involvement but rather if citizens have the means to remain well informed.

This can be seen as an important proxy for people using this information in their daily lives so they can have informed conversations and be able to understand the events that affect them. The analysis clearly suggests that regions where citizens are better informed also tend to be more peaceful. It was also found that those countries which are most peaceful are full and flawed democracies.

**FIGURE 18** Civic Activism (2010) and Peace (2013 GPI) -  $r = -0.62$

*Countries with higher levels of civic activism tend to be more peaceful, even amongst flawed democracies.*



This tendency is also supported by the 'U-Curve Hypothesis' which suggests that civil conflict will tend to be less likely in political systems which allow for non-violent means of channelling political grievances. However, this may not apply to strict authoritarian regimes as a result of these repressing their citizens, for instance through heavy policing. Consequently, the opportunity for conflict may be low in authoritarian states but increase as a state becomes less repressive. Conflict would then be expected to follow an inverted 'U-Curve' such that civil conflict is low in repressive states but increases before decreasing as states move to

become democratic [76].

Crucially, Figure 18 clearly supports the contention that democracies are less prone to conflict, with countries that are not democratic being less peaceful. Furthermore, although the relationship does not appear to support a 'U-Curve', this is likely a consequence of the GPI being a broader measure of peace rather than a strict measure of the presence of armed conflict. That is, in repressive regimes peace is lower as a consequence of their higher expenditure on policing, internal security, and the military. In addition, it is possible that where grievances are repressed we might

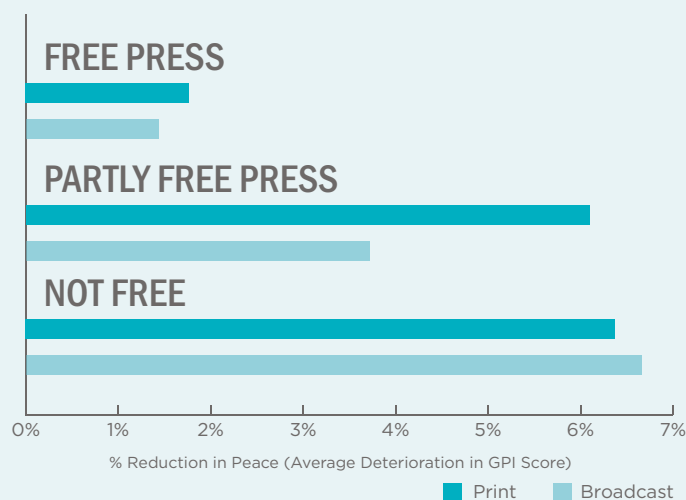
## BOX 10 // GROWTH ANALYSIS - THE FREE FLOW OF INFORMATION AND PEACE

Growth analysis was conducted in order to determine the extent to which the *free flow of information* might determine how peaceful a country is. The approach taken involves two steps. The first step was to separate countries into three groups according to their levels of press freedom in 1980. Average changes in the GPI for each of the three groups were then calculated in order to determine how peace had evolved since 2008.

Freedom House's Freedom of the Press index which spans back to 1980 assesses the degree of print, broadcast, and internet freedom in every country in the world by analysing the events of each calendar year. It provides numerical rankings and rates each country's media as 'free', 'partly free', or 'not free' with 'not free' indicating the most restrictive environment for the press. Results of the analysis are provided below.

**FIGURE 19: Peace and the Free Flow of Information**

*Countries with a free press experienced much smaller deteriorations in peace compared to those that were completely not free. It should be noted peace declined globally on average 5% over the 2008-2013 period, as measured by the GPI.*



As demonstrated above, although there has been a general trend towards lower levels of peace those countries which had greater 'print' and 'broadcast' press freedom tended also to be those who have experienced the lowest declines in peacefulness from 2008 to 2013. Importantly, this lends support to the idea that the *free flow of information* has some capacity to predict future levels of peacefulness in a nation.

Crucially, because it is not possible for *current* levels of peacefulness to influence *past* levels of press freedom this tends to lend support to the idea that the *free flow of information*, and factors associated with it, have exhibited a positive influence on the extent of peacefulness in a nation.

## CONCLUDING COMMENTS

The *free flow of information* captures how easily citizens can gain access to information, whether the media is free and independent, as well as the extent to which citizens are informed and engaged in the political process. After analysing a wide range of factors relating to information flows and the penetration of communication infrastructure it was found that countries with greater levels of information flows also tend to be the most peaceful.

In high, upper-middle, and even lower-middle income economies, internet access is a critical medium for information dissemination. This was implied by a range of metrics, including internet access which tends to be higher in those nations which are more peaceful. Although this does not imply a causal link, it does provide an important indicator of the extent of information access and how this is related to peace. The importance of free and unrestricted information access has also been recognised 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 access and includes violations such as disconnection or filtering [77].



# PILLAR OF PEACE: HIGH LEVEL OF HUMAN CAPITAL

Human capital describes a country's stock of skills, knowledge and behaviours. Whilst the concept of human capital is often narrowly defined as the economic benefits associated with education, this approach considers the definition in its wider context to not only include education but also individuals' health and attitudes which materially impact their contribution to the community [78]. Overall it is suggested that greater levels of human capital, such as health and education, will tend to increase social cohesion, economic development, and peace [79], [80], [81].

In considering the *level of human capital* within a nation it is important to recognise that it is not just the levels which matter, but also its utilisation. This is illustrated by a survey by the World Bank which found that individuals who had joined Rebel movements tended to cite unemployment or idleness as a motivating factor [5].

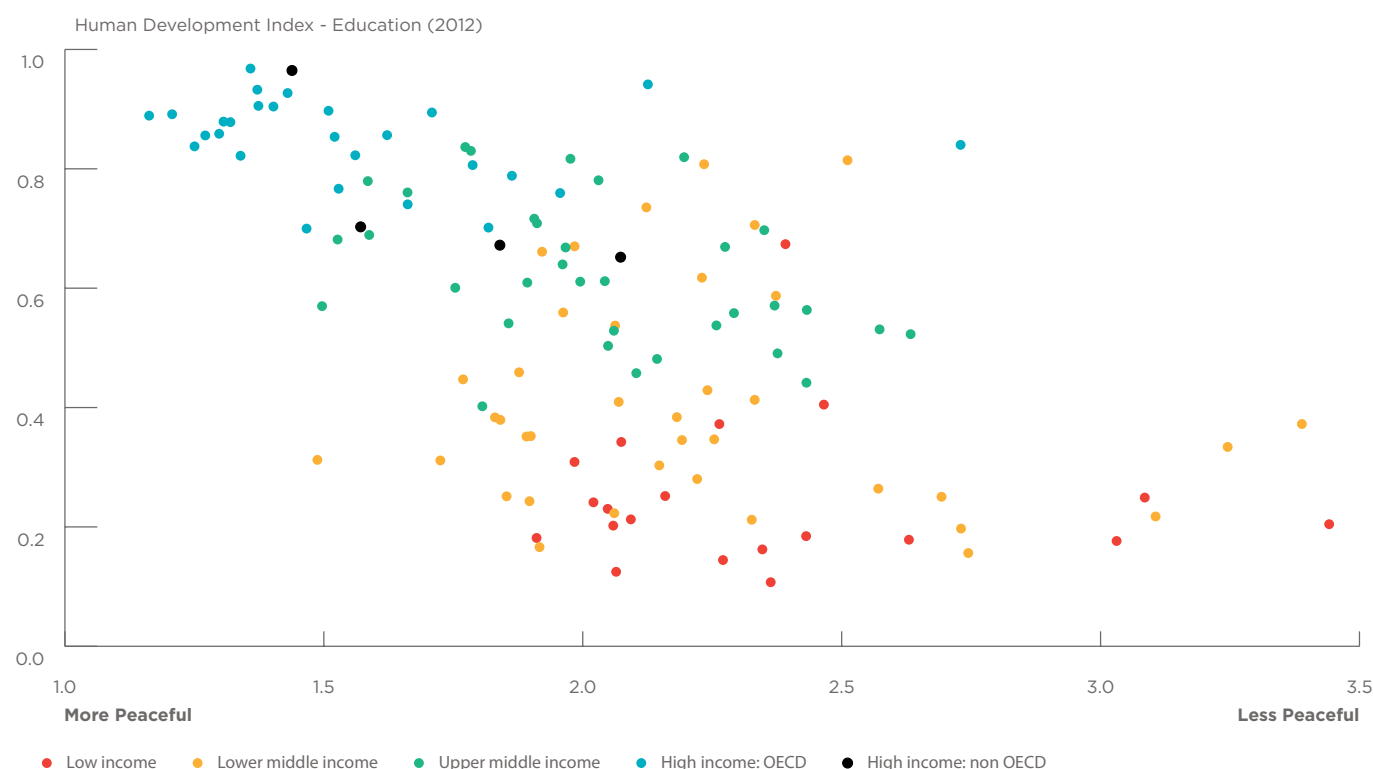
This has also been supported by research which suggests that countries with higher youth unemployment tend to face

greater risks of conflict. Specifically, it was found that the majority of recent episodes of mass violence had occurred in nations with high youth populations [82]. Although this is suggested to partially be a consequence of poorer nations having higher fertility rates, it is also possible that this reflects the impact of there being a lack of alternative opportunities for youth. This is supported by the results of surveys of those involved in conflict in Sierra Leone which found that many recruits of rebel groups tended to be young, poor and those who were forced to end their schooling early [83].

This tendency for higher levels of education to be associated with greater levels of peace is also supported by IEP analysis which found more peaceful countries tended to have better educational outcomes, as measured by the education score in the Human Development Index. This has been demonstrated in more detail by Figure 20 below.

**FIGURE 20** Education score in 2012 Human Development Index and Peace (2013 GPI) -  $r = -0.58$

*Countries with higher incomes and better education outcomes tend to be more peaceful.*



The strong association between peace and education has also been confirmed by regional analysis of the United States. Specifically, the 2012 United States Peace Index found strong state-level correlations between violence and lower high school graduation rates, reinforcing the relationship between peace and human capital.

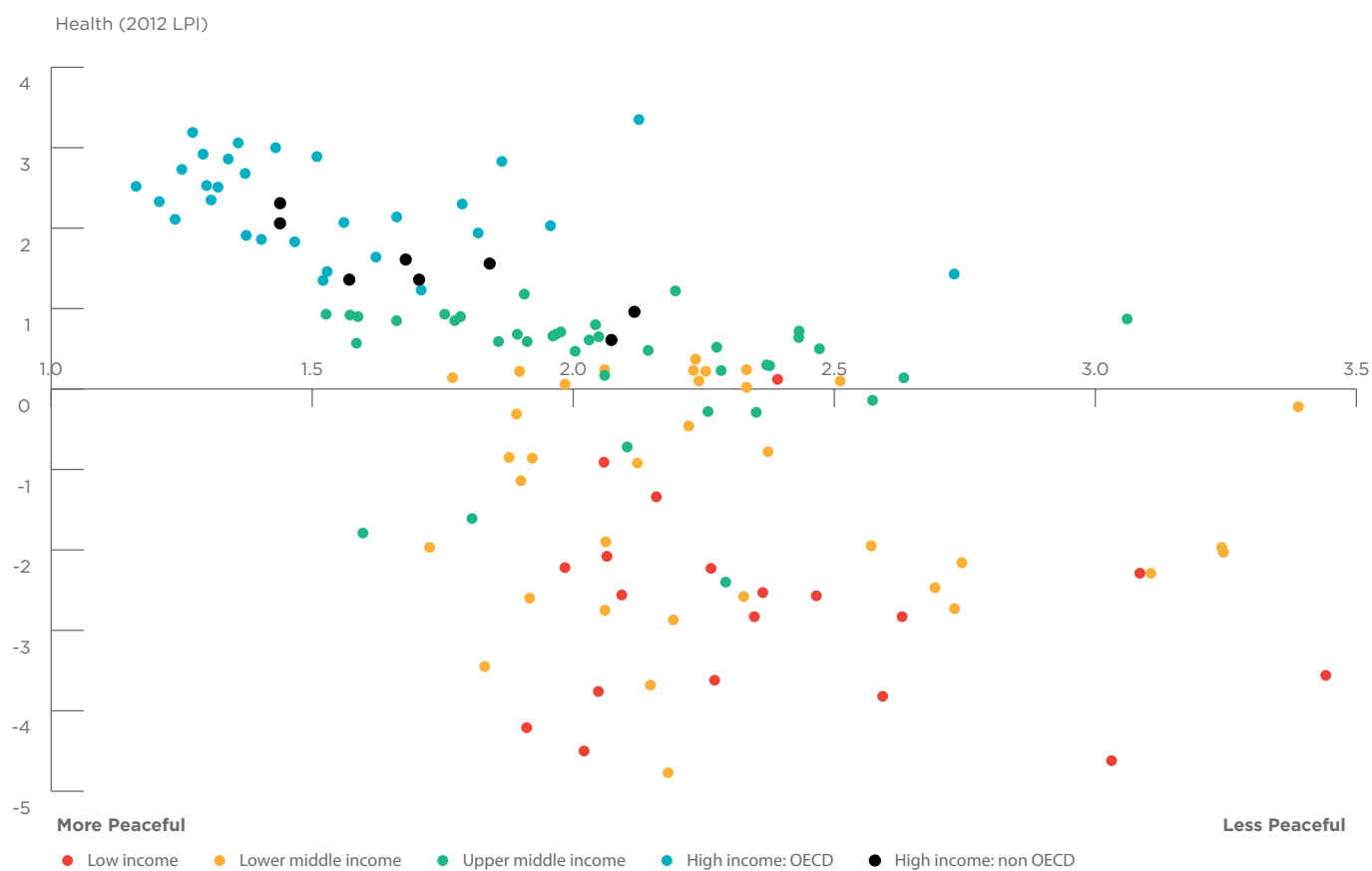
The Legatum Institute measures the dimension of human capital which is attributable to health through their 'health' sub-index. The measure includes factors such as immunisation rates, life expectancy, infant mortality, individual satisfaction with health, and the impacts of the environment on health. When examined against the level of

peace, there is a clear association with peace and the level of health-related human capital. Because individual country scores have been 'standardised', final scores represent their variation from the average health score. As a consequence some countries will receive a negative score, suggesting they are below average in terms of health outcomes. This also explains why values tend to centre on zero (zero being the average score) as has been illustrated in Figure 21.

When the relationship was examined according to geographical groupings, income groups and regime types those that tend to be the most peaceful are democratic and have the highest levels of health-related human capital. For income this has been illustrated in Figure 21.

**FIGURE 21** Health (2012 LPI) and Peace (2013 GPI) -  $r = -0.580$

*Countries with better health outcomes and higher incomes tend to be more peaceful.*



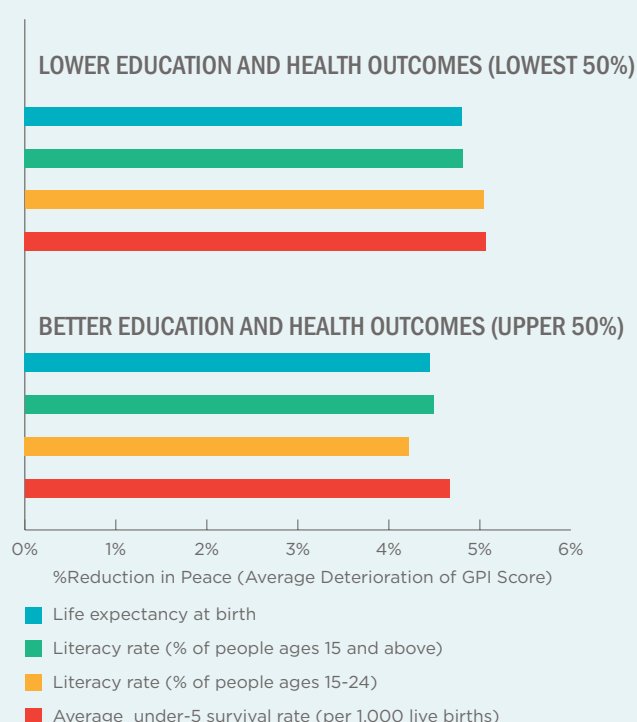
**TABLE 14** Human Capital and Peace

SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
United Nations	Human Development Index	Inequality-adjusted Human Development index	2012	-0.600
Legatum Institute	Legatum Prosperity Index	Education	2012	-0.590
Legatum Institute	Legatum Prosperity Index	Health	2012	-0.580
United Nations	Human Development Index	Inequality-adjusted education index	2012	-0.580
World Bank	World Development Indicators	Nurses and midwives (per 1000 people)	2012	-0.540
United Nations	Human Development Index	Non-income HDI	2012	-0.540
United Nations	Human Development Index	Inequality-adjusted life expectancy index	2012	-0.530
World Bank	-	Number of scientific publications per 100 000 people.	2000-09	-0.515
World Database of Happiness	-	Happy life years	2000-09	-0.500
Gallup World Poll	-	Children learn and grow - yes (%)	2010	-0.500
Gallup World Poll	-	Freedom in your life - satisfied (%)	2012	-0.470
Gallup World Poll	-	Country five years ago - index score	2008	-0.470
Gallup World Poll	-	Standard of living - satisfied (%)	2012	-0.460
Gallup World Poll	-	Job satisfaction - satisfied (%)	2012	-0.430



## BOX 11 // GROWTH ANALYSIS – HUMAN CAPITAL

Analysis was conducted in order to determine the extent to which past measures of human capital impact the future growth of peace. This was done by first separating the countries into two groups, one group of countries with *high levels of human capital* in 1980 and one group with low levels of human capital in 1980. For each of these groups the average change in their GPI score was then calculated. The results of the analysis have been provided below.



As demonstrated, despite the global trend towards lower levels of peace, those countries which have relatively low levels of human capital, as measured by life expectancy, infant mortality, and literacy also tend to be those countries that have experienced a greater deterioration in peace. That is, in 1980 if we had used the health and education outcomes to guess which countries were likely to experience better outcomes in terms of peacefulness we would be, on average, correct.

Furthermore, because only the *past* can impact the *future*, the analysis provides us with additional confidence as to the direction of causality. That is, because the *past* levels of human capital can impact the *future* evolution of a country's peace, whereas future levels of peace can't impact past levels of human capital, we can be more confident that the direction of causality is from human capital to peace.

Having said this, it is important also to recognise that this does not imply human capital alone has caused differences in the levels of peace experienced by countries, merely that it is among a range of factors. Specifically, many of the countries who had better health and education outcomes in 1980 are likely to also have also good outcomes in other Pillars, such as *strong business environment*, the *free flow of information* and the *acceptance of the rights of others*. The analysis therefore confirms the importance of a *high level of human capital* in addition to the other Pillars in creating peace.

### FIGURE 22 Human capital and change in peacefulness

*Countries with relatively high levels of human capital have also tended to be those who have experienced the lowest average declines in peace. It should be noted peace declined globally on average 5% over the 2008-2013 period, as measured by the GPI.*

## CONCLUDING COMMENTS

Human capital describes the stock of skills, knowledge and behaviours of individuals which contribute to a more productive life. There is a range of evidence which suggests that a broad human capital base encourages productivity, enables political participation and increases community cohesion [84], [85], [86], [87]. In many ways education and health can be seen as fundamental building blocks through which societies can build resilience and develop mechanisms to adapt, respond effectively to, and learn from crises.

However, it is also necessary to highlight the importance of utilising human capital, that is, sufficient opportunities

need to exist in order for a nation's human capital to be usefully employed. Without these, other factors will come into play that affects the state of peacefulness. This has been reflected in measures such as the ability for 'Children to Learn and Grow', 'Job Satisfaction' and 'Freedom in Your Life' measures, which all provide a proxy for both the perceived ability to grow and learn within a country.

A number of measures were used when exploring these relationships, including the World Bank's data on the prevalence of nurses and midwives (per 1000 people), the Legatum Institute's measure of education and health, and the United Nation's Human Development Index. Based on this examination, it was found that a wide range of proxies for the level of human capital in a country were associated with peace.

## PILLAR OF PEACE: LOW LEVELS OF CORRUPTION

Corruption describes the abuse of a position to gain undue advantage. This might occur through a range of channels, such as through government, business or community relationships. This might include a range of actions such as government officials asking for a facilitation payment for the processing of documents, police ignoring illegal activity in return for payment, or political candidates directly bribing voters. Although to the reader many of these activities may seem to be clear examples of corruption, it is important to realize that what is considered to be 'corrupt' can vary significantly between different cultures, countries and regions [88].

In societies with high corruption, resources may be inefficiently allocated, resulting in essential services decaying quickly because of poor construction or resources being badly allocated such that schools and hospitals miss out on appropriate funding. Research has also found links between corruption, price stability, economic growth, and the level of GDP per capita which would affect the functioning of the overall business environment, thereby undermining peace and a sound business environment [89].

In IEP's 2012 Global Terrorism Index report it was found that the ten nations most impacted by terrorism were also more corrupt when compared to the global average [90]. In addition, the report provided additional support for the detrimental association between conflict and corruption, and some support for there being an association with specific types of violence, such as terrorism, and corruption. Importantly, the types of corruption which were found to be particularly detrimental to peace were corruption in the police, military and judiciary.

Insofar the extent of corruption also provides an indication of the extent public resources are allocated for the purposes of sectional interests, it is also likely to be associated with greater financing opportunities for engaging in internal conflict. That is, where alternative mechanisms for resolving disputes do not exist, conflict may be more attractive where it can be more easily funded through corruption [91], [92], [93], [94].

Corruption may also result in the generation of wider community tensions, thereby undermining peaceful relations. Importantly, this can occur through a range of mechanisms such as fuelling grievances in response to

resources being used for the benefit of a privileged minority, impeding economic growth, or through too few resources being invested in areas which encourage peace, such as education [95].

Furthermore, corruption can be a symptom of other factors such as an ineffective government or a limited level of law and order. An example of this might be corruption impedes information flows in country. For instance, as information on the allocation of government finances becomes more readily available it may be that engaging in corruption becomes more difficult, as it becomes easier for citizens to discover illegitimate uses of public funds [96].

Despite these hypothesised links it is important to recognise that corruption alone does not cause conflict, nor is the direction of causality likely to extend just to peace, rather peace itself is also likely to influence corruption.

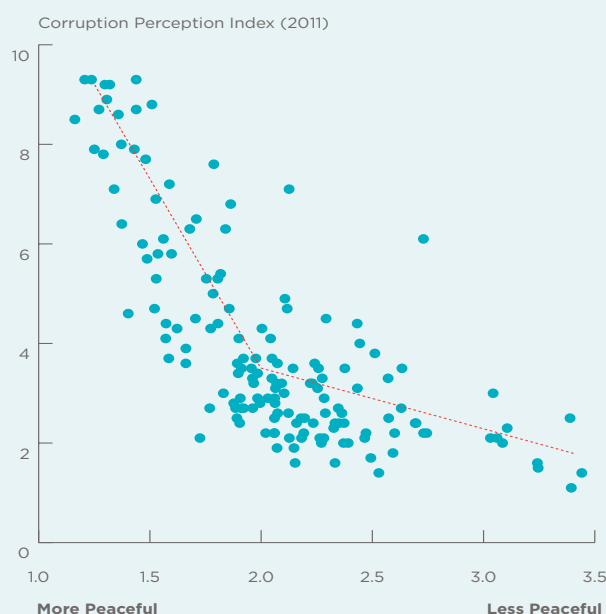
## BOX 12 // PEACE, CORRUPTION AND THE 'TIPPING POINT'

There is a strong link between peace and corruption. However, it has been found that once a country has limited corruption up to a certain point, further reductions in corruption result in only small increases in peacefulness. On the other hand when the level of corruption passes beyond a certain point, further small increases in corruption are associated with steep decreases in peacefulness. That is, there tends to be a 'tipping point' where a country's level of peace may deteriorate more quickly with increases in corruption. This has been illustrated below in Figure 23.

Interestingly, the relationship between peace and

**FIGURE 23:** Peace, Corruption and the 'Tipping Point'

*After a certain point reductions in corruption result in only small increases in peacefulness.*



corruption tends to show a clustering of high corruption and moderate to low-peace nations in the bottom right quadrant of the figure. Furthermore, when these results are examined according to regime type they show a clear tendency for countries on the 'tipping point' to be undemocratic, whereas regimes which are less peaceful and more corrupt tend to be either authoritarian or hybrid regimes (see Figure 24). This is discussed in more detail below.

This relationship has also been borne out by the events of the Arab Spring, where most countries that experienced rioting, coups or revolution started at the bottom end of the 'tipping point'. High levels of corruption were already so endemic that widespread upheaval could not be avoided once the societies came under stress, most noticeably in Egypt and Libya.

To investigate this in more detail a range of measures of corruption were assessed against the 2013 Global Peace Index to determine to what extent peace is associated with corruption. Measures of corruption which were found to be associated with peace included the World Bank's 'Control of Corruption' indicator, Transparency International's (TI), Corruption Perception Index (CPI) and the reported level of corruption in government from the Gallup World Poll. Results have been provided in Table 15.

**TABLE 15** Corruption and Peace

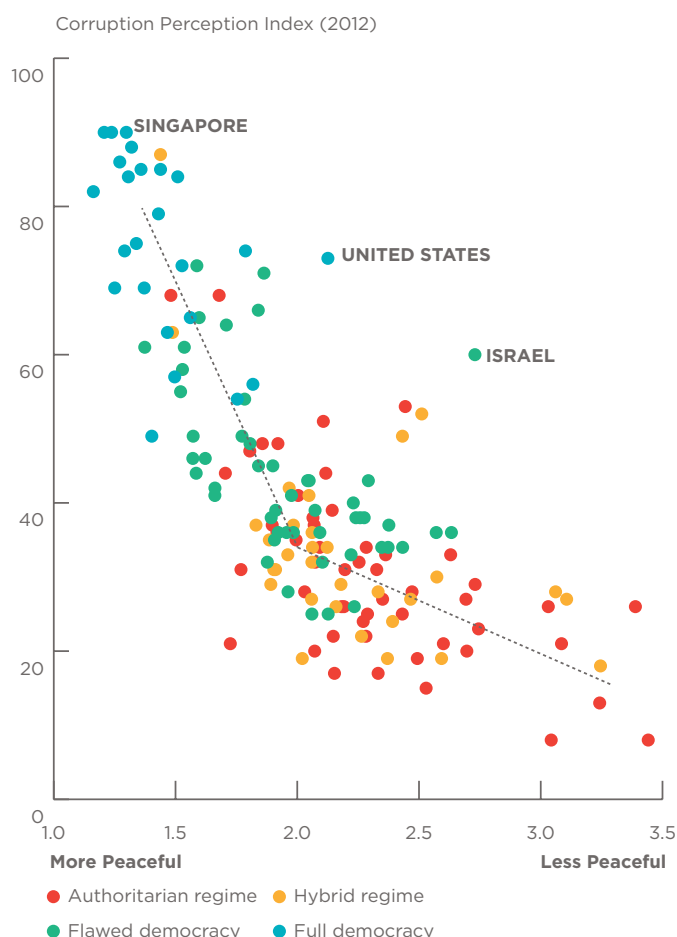
SOURCE	INDEX	INDICATOR	YEAR	CORRELATION
WORLD BANK	Worldwide Governance Indicators	Control of corruption	2011	-0.750
GALLUP WORLD POLL	-	Corruption in government - yes (%)	2012	-0.740
GALLUP WORLD POLL	-	Corruption within businesses - yes (%)	2012	-0.730
TRANSPARENCY INTERNATIONAL	Corruption Perception Index	Overall score	2012	-0.730
TRANSPARENCY INTERNATIONAL	Corruption Perception Index	Political and economic risk consultancy	2012	-0.730
TRANSPARENCY INTERNATIONAL	Corruption Perception Index	Country policy and institutional assessment	2012	-0.690
GLOBAL INSIGHT	Corruption Perception Index	Country risk ratings	2012	-0.670
TRANSPARENCY INTERNATIONAL	Corruption Perception Index	Bribe payers survey	2012	-0.638
TRANSPARENCY INTERNATIONAL	Global Corruption Barometer	% people who responded yes	2013	0.472
TRANSPARENCY INTERNATIONAL	Global Corruption Barometer	Over the past 2 years, how has the level of corruption in this country changed? - % of people who believed it had stayed the same	2013	-0.446



Both Transparency International's CPI and the World Bank's World Governance Indicators 'Control of Corruption' measure were found to be strongly correlated with peace. These strong correlations have been consistent for every year of the GPI with Transparency International's CPI where the correlation has improved in strength from 2008 to 2013. The CPI uses expert assessments and opinion surveys to rank societies' perceptions of public sector corruption [97]. Countries are rated using a 1 – 10 scale and a visual representation of the correlation between the two data sets can be seen in Figure 24 below.

**FIGURE 24** Corruption Perception Index and Peace (2013 GPI) -  $r = -0.74$

*The levels of corruption tend to be higher in less peaceful countries*



The Figure shows a clear dichotomy between two types of societies: those which have low peace and are corrupt; and those which are relatively peaceful and have little corruption. It appears that those experiencing the greatest levels of corruption are countries which are less democratic.

The United States, for example, can be seen as an outlier in terms of it being significantly less peaceful than other countries classified as 'full democracies'. This is chiefly due to America's high incarceration rates, availability of small arms, high levels of military expenditure, high homicide rate and engagement in a range of external conflicts. It is in stark contrast to Singapore, which despite not being classified as fully democratic has achieved levels of peace rivalling many democracies as a consequence of its low levels of organised conflict, homicide and violent crime and its good relations with neighbours.

Research tends to support this relationship, with a study of 124 countries finding that the quality of democratic institutions is a key predictor of corruption [96], [98]. Importantly, a key reason cited for this finding is that democratic institutions help to keep government officials accountable. Again, this is not suggested to be universal, as can be seen above some hybrid regimes are less corrupt than democracies.

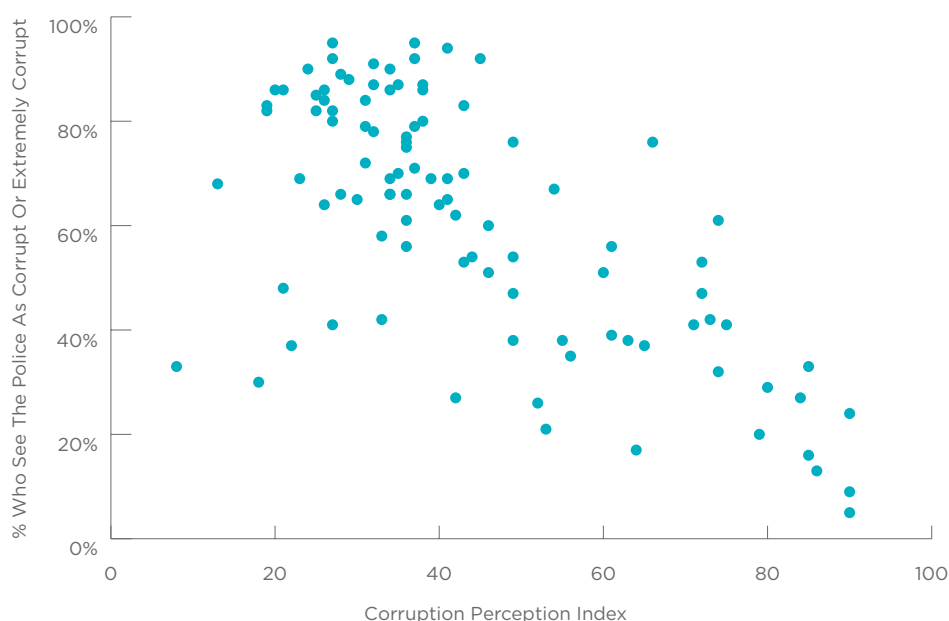
Again, this tends to support theme that there are a range of factors which contribute the level of peace experienced in a nation such as the *free flow of information* and a *sound business environment*. Policies to encourage peace should consequently focus on strengthening all the Pillars so as to create an environment which induces peaceful relations where human potential can flourish.

## CORRUPTION IN INSTITUTIONS – THE IMPORTANCE OF POLICE CORRUPTION

Table 16 shows the correlation between the Global Peace Index and attitudes that respondents have towards particular institutions. In TI's Global Corruption Barometer (GCB) respondents were asked how corrupt they considered a particular institution to be on a scale of 1 to 5, where 4=corrupt and 5=extremely corrupt.

The perceptions of corruption survey for specific institutions finds that police corruption has the strongest relation followed by the military and then the judiciary. This suggests that fixing police corruption and its associated institutions should have the highest priority. Given that police, military and judiciary deal closely with direct violence, it is not surprising that this association exists. Figure 25 shows the correlation between the CPI and perceptions of police corruption.

**FIGURE 25** CPI (x-axis) vs % who see the police as corrupt or extremely corrupt



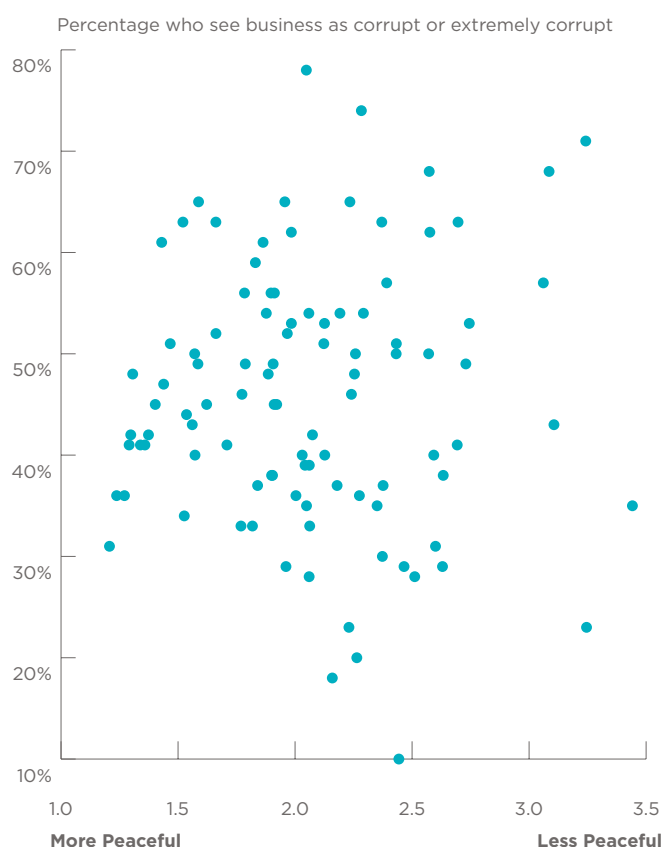
**TABLE 16** Correlation Matrix: GPI, CPI and Selected GCB Questions

*Bribery and perceived police corruption correlate with both the GPI (internal) and the CPI.*

		GLOBAL PEACE INDEX	INTERNAL PEACE	CORRUPTION PERCEPTIONS INDEX
	Global Peace Index	1.00		
	Internal Peace	0.96	1.00	
	Corruption Perceptions Index	-0.71	-0.78	1.00
In the last year...	% Believe corruption has stayed the same	-0.41	-0.46	0.40
	% Believe corruption has increased	0.15	0.18	-0.09
% who see the institution as corrupt or extremely corrupt	Political Parties	-0.03	0.02	-0.05
	Parliament	0.19	0.23	-0.29
	Police	0.46	0.56	-0.73
	Business	-0.26	-0.30	0.24
	Medical Services	-0.09	-0.17	0.20
	Civil Servants	0.33	0.37	-0.52
	Judiciary	0.33	0.40	-0.61
	Military	0.43	0.44	-0.42
	Education System	0.37	0.39	-0.58
Paid a bribe in the last year		0.53	0.63	-0.68

**FIGURE 26** GPI (x-axis) vs % who see business as corrupt or extremely corrupt

*There is a weak negative correlation between the GPI and perceptions of business corruption suggesting more peaceful environments tend to have perceptions of greater business and private sector corruption.*



Perhaps the most surprising result is that perceptions of business corruption are weakly correlated with peacefulness, as shown in Figure 26. This may indicate that in environments with high corruption a focus on fixing business corruption may not yield as strong results as focusing on the institutions that control coercive force, such as the police and the military.

### BOX 13 // GROWTH ANALYSIS – CORRUPTION AND PEACE

To further explore the relationship between peace and corruption, growth analysis was conducted to determine the extent to which past levels of corruption are likely to have made a difference to the how peace has evolved.

This was done by first separating countries into two groups according to the perceived extent of corruption in 1995, as measured by the Corruption Perception Index. The average growth in the GPI was then calculated for each group and compared between groups so as to determine the extent to which peacefulness has changed between countries with relatively high and low initial levels of corruption.

The CPI uses expert assessments and opinion surveys to rank societies' perceptions of public sector corruption, using a 1 – 10 scale. Higher levels of perceived corruption would be indicated by a higher score, whilst lower perceived corruption would be indicated by a lower score. Results of the analysis have been provided in the Figure below.

**FIGURE 25** Corruption and Peace

*Those countries that had lower levels of perceived corruption in 1995 also tended to be those who experienced lower deteriorations in peacefulness since 2008. It should be noted peace declined globally on average five per cent over the last six years of the GPI.*

Average percentage reduction in peace (GPI score)

HIGHER PERCEPTIONS OF CORRUPTION  
(UPPER 50% OF CPI)

LOWER PERCEPTIONS OF CORRUPTION  
(LOWER 50% OF CPI)

0% 1% 2% 3% 4% 5%

As is shown, the analysis suggests that despite a wider trend towards lower levels of peace, those countries with lower levels of corruption in 1995 also tended to be those who have experienced lower deteriorations in their levels of peacefulness since 2008. That is, had we guessed that those countries which were less corrupt in 1995 would also experience more favourable growth in peace, we would be, on average, correct.

This provides further confirmation to the posited relationship between *low levels of corruption* and peace. In particular, because it is not possible for the *present* to impact the *past* it provides some indication that to some extent the direction of causality runs from corruption to peace.

Despite this, it is important to understand that this does not suggest that corruption is the only factor, nor that peace does not have an influence on the levels of corruption in a country. Rather, when coupled with the overall Pillars of Peace analysis it provides added confirmation of the important role the Pillars play, individually and as a combination to determine the level of peacefulness in a country.

## CONCLUDING COMMENTS

Corruption describes the abuse of a position to gain undue advantage. This might occur through a range of channels, such as through government, business or community relationships. Analysis of a range of objective and subjective measures of corruption tended to confirm that countries with higher levels of corruption tend to be those which are less peaceful. Corruption in the police, judiciary and military are particularly linked to lower levels of peace.

Strong correlations have also been found with other similar indices. The World Bank Worldwide Governance Indicators sub-index of 'Control on Corruption' correlated with the GPI. This indicator measures the extent to which power is exercised for private gain, as well as the "capture" of the state by elites and private interests.

It is important to recognise that there are numerous links between corruption, as measured by the Transparency International CPI, and a variety of other societal measures employed in Transparency International's research. For instance, corruption is very highly correlated with political instability and GDP per capita. Other strong relationships appear to exist between corruption and crime-related indicators such as homicide and levels of violent crime, as well as equity-related indicators such as life expectancy and infant mortality and human and economic development more broadly [99], [100].

# CONCLUSION

To date, the overwhelming emphasis within peace and conflict studies has been placed on understanding the causes of war or violence. In contrast, the Pillars of Peace is an attempt to systematically expand and explore our understanding of the factors that drive peace.

This report has introduced an original conceptual framework based on empirical research which links peace with key economic, governance and cultural attitudes as well as with a number of formal and informal institutions. These same factors are also associated with many other aspects that are considered highly desirable such as a strong business environment, gender equality, high levels of human capital, economic development and social cohesion.

The Pillars of Peace provides a framework for assessing the 'positive peace' factors that create peaceful societies. The taxonomy also forms an ideal basis for measuring a society's propensity for peace. As these same measures can be used to assess how supportive the underlying environment is towards development and the fulfillment of human potential, the Pillars of Peace provides the ideal benchmark against which to measure the performance of the broader aspects of societal development and a country's overall resilience when confronted with social upheaval.

These factors are intuitively understood and visualised through an eight-part taxonomy:

**Well-Functioning Government** – Based on several factors, from how governments are elected and the political culture they engender, to the quality of the public services they deliver and their political stability. Strong relationships across a number of these indicators and sub-indicators demonstrate the interdependent nature of the various governance indicators. These measures are consistently linked to peace.

**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 freedom 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** – Refers to income distribution but more importantly to whether there is equity and access to resources such as education and health. The UN's Inequality-adjusted Human Development Index (IHDI) correlates with the GPI and even more strongly with the GPI's internal peace measure.

**Acceptance of the Rights of Others** – A category designed to include both the formal laws that guarantee basic human rights and freedoms as well as the informal social and cultural norms that relate to behaviors of citizens. These factors can be seen as proxies for tolerance between different ethnic, linguistic, religious, and socio-economic groups within a country. A commitment to human rights and freedom are key characteristics of peaceful countries, a claim supported by very strong correlations with several indexes measuring human rights. Also important are societal attitudes towards fellow citizens, minorities, ethnic groups, genders and foreigners.

**Good Relations with Neighbours** – Refers to the relations between individuals and communities as well as to cross-border relations. 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.

**Free Flow of Information** – Captures the extent to which citizens can gain access to information, whether the media is free and independent, as well as how well-informed citizens are and the extent of their engagement in the political process. Peaceful countries tend to have free and independent media which disseminates information in a way that leads to greater openness and helps individuals and civil society work together. This leads to better decision-making and rational responses in times of crisis.

**High Levels of Human Capital** – A broad human capital base increases the pool of human capital which in turn improves economic productivity, enables political participation, and increases social capital. Education in many ways is a fundamental building block through which societies can build resilience and develop mechanisms to learn and adapt. Mean years of schooling is closely associated with the most peaceful countries, however tertiary levels of education

and the percentage of government spending dedicated to education is not statistically as important.

**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 inequality can lead to civil unrest and in extreme situations can be the catalyst for more violence. Low corruption, by contrast, can enhance confidence and trust in institutions, which in turn helps to create informal institutions that enhance peace.

These structures, attitudes and institutions can also help promote resilience in society, enabling nations to overcome adversity and resolve internal economic, cultural, and political conflict through peaceful methods. They can be seen as interconnected and interacting in varied and complex ways, forming either virtuous circles of peace creation or vicious circles of destruction, with causality running in either direction depending on individual circumstances. Overall the complex and multidimensional nature of peace can be observed, underlining the need for pluralist and multidisciplinary approaches to understand the interrelationships between economic, political, and cultural factors that affect peace.



# APPENDIX A

## CORRELATION MATRIX

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1.00	0.97	0.83	0.95	0.86	0.78	-0.73	-0.69	-0.65	0.83	0.83	-0.72	0.72	0.74	0.66	0.62	0.73	0.70	0.94	0.95	0.84	-0.30	-0.63	-0.66
2	0.97	1.00	0.82	0.94	0.85	0.80	-0.69	-0.66	-0.63	0.82	0.81	-0.75	0.72	0.71	0.70	0.62	0.72	0.73	0.95	0.95	0.81	-0.26	-0.57	-0.63
3	0.83	0.82	1.00	0.78	0.60	0.50	-0.63	-0.51	-0.58	1.00	0.64	-0.95	0.57	0.68	0.51	0.48	0.68	0.77	0.78	0.75	0.49	-0.40	-0.68	-0.57
4	0.95	0.94	0.78	1.00	0.81	0.78	-0.67	-0.61	-0.57	0.78	0.78	-0.68	0.63	0.67	0.63	0.53	0.68	0.68	0.93	0.94	0.77	-0.22	-0.56	-0.58
5	0.86	0.85	0.60	0.81	1.00	0.78	-0.78	-0.75	-0.70	0.60	0.87	-0.49	0.81	0.80	0.68	0.59	0.68	0.56	0.82	0.84	0.85	-0.26	-0.48	-0.46
6	0.78	0.80	0.50	0.78	0.78	1.00	-0.60	-0.52	-0.50	0.50	0.66	-0.40	0.56	0.58	0.58	0.47	0.48	0.53	0.76	0.79	0.68	0.00	-0.35	-0.46
7	-0.73	-0.69	-0.63	-0.67	-0.78	-0.60	1.00	0.72	0.89	-0.63	-0.83	0.52	-0.87	-0.92	-0.69	-0.56	-0.71	-0.42	-0.64	-0.64	-0.79	0.62	0.54	0.44
8	-0.69	-0.66	-0.51	-0.61	-0.75	-0.52	0.72	1.00	0.70	-0.51	-0.82	0.39	-0.80	-0.80	-0.60	-0.48	-0.54	-0.40	-0.63	-0.63	-0.63	0.73	0.49	0.38
9	-0.65	-0.63	-0.58	-0.57	-0.70	-0.50	0.89	0.70	1.00	-0.58	-0.76	0.47	-0.72	-0.93	-0.65	-0.54	-0.67	-0.46	-0.59	-0.59	-0.70	0.56	0.48	0.42
10	0.83	0.82	1.00	0.78	0.60	0.50	-0.63	-0.51	-0.58	1.00	0.64	-0.95	0.57	0.68	0.51	0.48	0.68	0.77	0.78	0.75	0.49	-0.40	-0.68	-0.57
11	0.83	0.81	0.64	0.78	0.87	0.66	-0.83	-0.82	-0.76	0.64	1.00	-0.56	0.82	0.87	0.70	0.52	0.73	0.53	0.78	0.82	0.86	-0.54	-0.51	-0.42
12	-0.72	-0.75	-0.95	-0.68	-0.49	-0.40	0.52	0.39	0.47	-0.95	-0.56	1.00	-0.46	-0.56	-0.44	-0.42	-0.60	-0.71	-0.67	-0.67	-0.36	0.37	0.62	0.50
13	0.72	0.72	0.57	0.63	0.81	0.56	-0.87	-0.80	-0.72	0.57	0.82	-0.46	1.00	0.83	0.61	0.46	0.65	0.41	0.66	0.67	0.77	-0.24	-0.48	-0.40
14	0.74	0.71	0.68	0.67	0.80	0.58	-0.92	-0.80	-0.93	0.68	0.87	-0.56	0.83	1.00	0.72	0.55	0.71	0.51	0.67	0.69	0.72	-0.46	-0.55	-0.45
15	0.66	0.70	0.51	0.63	0.68	0.58	-0.69	-0.60	-0.65	0.51	0.70	-0.44	0.61	0.72	1.00	0.50	0.65	0.59	0.65	0.70	0.56	-0.47	-0.43	-0.37
16	0.62	0.62	0.48	0.53	0.59	0.47	-0.56	-0.48	-0.54	0.48	0.52	-0.42	0.46	0.55	0.50	1.00	0.66	0.60	0.60	0.58	0.60	-0.54	-0.48	-0.58
17	0.73	0.72	0.68	0.68	0.68	0.48	-0.71	-0.54	-0.67	0.68	0.73	-0.60	0.65	0.71	0.65	0.66	1.00	0.61	0.74	0.72	0.75	-0.32	-0.54	-0.54
18	0.70	0.73	0.77	0.68	0.56	0.53	-0.42	-0.40	-0.46	0.77	0.53	-0.71	0.41	0.51	0.59	0.60	0.61	1.00	0.74	0.71	0.48	-0.37	-0.50	-0.53
19	0.94	0.95	0.78	0.93	0.82	0.76	-0.64	-0.63	-0.59	0.78	0.78	-0.67	0.66	0.67	0.65	0.60	0.74	0.74	1.00	0.98	0.87	-0.26	-0.57	-0.62
20	0.95	0.95	0.75	0.94	0.84	0.79	-0.64	-0.63	-0.59	0.75	0.82	-0.67	0.67	0.69	0.70	0.58	0.72	0.71	0.98	1.00	0.88	-0.26	-0.54	-0.59
21	0.84	0.81	0.49	0.77	0.85	0.68	-0.79	-0.63	-0.70	0.49	0.86	-0.36	0.77	0.72	0.56	0.60	0.75	0.48	0.87	1.00	1.00	0.00	-0.46	-0.44
22	-0.30	-0.26	-0.40	-0.22	-0.26	0.00	0.62	0.73	0.56	-0.40	-0.54	0.37	-0.24	-0.46	-0.47	-0.54	-0.32	-0.37	-0.26	-0.26	0.00	1.00	-0.15	0.38
23	-0.63	-0.57	-0.68	-0.56	-0.48	-0.35	0.54	0.49	0.48	-0.68	-0.51	0.62	-0.48	-0.55	-0.43	-0.48	-0.54	-0.50	-0.57	-0.54	-0.46	-0.15	1.00	0.50
24	-0.66	-0.63	-0.57	-0.58	-0.46	-0.46	0.44	0.38	0.42	-0.57	-0.42	0.50	-0.40	-0.45	-0.37	-0.58	-0.54	-0.53	-0.62	-0.59	-0.44	0.38	0.50	1.00

## CORRELATION MATRIX LEGEND

#	PILLAR	SOURCE	INDEX	INDICATOR
1	WELL-FUNCTIONING GOVERNMENT	World Bank	World Governance Indicators	Rule of law
2	WELL-FUNCTIONING GOVERNMENT	Legatum Institute	Legatum Prosperity Index	Governance
3	WELL-FUNCTIONING GOVERNMENT	World Bank	World Governance Indicators	Voice and accountability: estimate
4	SOUND BUSINESS ENVIRONMENT	Freedom House	Index of Economic Freedom	Index of economic freedom sub index property rights
5	SOUND BUSINESS ENVIRONMENT	Global Competitiveness Report	Global Competitiveness Report	Infrastructure
6	SOUND BUSINESS ENVIRONMENT	Global Competitiveness Report	Global Competitiveness Report	Goods market efficiency
7	EQUITABLE DISTRIBUTION OF RESOURCES	United Nations Development Program	Human Development Index	Human development index
8	EQUITABLE DISTRIBUTION OF RESOURCES	World Bank	World Development Indicators	Vulnerable employment total (% of total employment)
9	EQUITABLE DISTRIBUTION OF RESOURCES	United Nations Development Program	Human Development Index	Education inequality
10	FREE FLOW OF INFORMATION	World Bank	World Governance Indicators	Voice and accountability: estimate
11	FREE FLOW OF INFORMATION	Gallup World Poll	-	Home has access to internet (Yes %)
12	FREE FLOW OF INFORMATION	Freedom House	Overall Score	Press freedom index
13	HIGH LEVELS OF HUMAN CAPITAL	United Nations Development Program	Human Development Index	Inequality-adjusted life expectancy index
14	HIGH LEVELS OF HUMAN CAPITAL	United Nations Development Program	Human Development Index	Inequality-adjusted education index
15	HIGH LEVELS OF HUMAN CAPITAL	World Bank	World Development Indicators	Nurses and midwives (per 1000 people)
16	ACCEPTANCE OF THE RIGHTS OF OTHERS	International Institute of Social Studies	Indices of Social Development	Intergroup cohesion
17	ACCEPTANCE OF THE RIGHTS OF OTHERS	International Institute of Social Studies	Indices of Social Development	Inclusion of minorities
18	ACCEPTANCE OF THE RIGHTS OF OTHERS	Legatum Institute	Legatum Prosperity Index	Personal freedom
19	LOW LEVELS OF CORRUPTION	World Bank	World Governance Indicators	Control of corruption: estimate
20	LOW LEVELS OF CORRUPTION	Transparency International	Corruption Perception Index	Overall score
21	LOW LEVELS OF CORRUPTION	Transparency International	Corruption Perception Index	Bribe payers survey
22	GOOD RELATIONS WITH NEIGHBOURS	Gallup World Poll	-	Other countries responsible for tension (agree %)
23	GOOD RELATIONS WITH NEIGHBOURS	Economist Intelligence Unit	-	Extent of regional integration
24	GOOD RELATIONS WITH NEIGHBOURS	Economist Intelligence Unit	-	Hostility to foreigners

# APPENDIX B

## GLOBAL PEACE INDEX INDICATORS AND SOURCES

INDICATOR	WEIGHT	TYPE	SOURCE
Aggregate number of heavy weapons per 100,000 people	3	quantitative	SIPRI, IEP
Ease of access to weapons of minor destruction	3	qualitative	EIU
Estimated number of deaths from organised conflict (external)	5	quantitative	Uppsala Conflict Data Program, EIU
Level of organised conflict (internal)	5	qualitative	EIU
Level of violent crime	4	qualitative	EIU
Likelihood of violent demonstrations	3	qualitative	EIU
Military expenditure as a percentage of GDP	2	quantitative	IISS Military Balance, National accounts, EIU
Number of armed services personnel per 100,000 people	2	quantitative	IISS Military Balance
Number of deaths from organised conflict (internal)	5	quantitative	IISS
Number of displaced people as a percentage of the population	4	quantitative	UNHCR Statistical Yearbook, IDMC
Number of external and internal conflicts fought	5	quantitative	Uppsala Conflict Data Program, EIU
Number of homicides per 100,000 people	4	quantitative	UNODC, UNCJS
Number of internal security officers and police 100,000 people	3	quantitative	UNODC, UNCJS, EIU
Number of jailed population per 100,000 people	3	quantitative	World Prison Population List
Perceptions of criminality in society	4	qualitative	EIU
Political instability	4	qualitative	EIU
Relations with neighbouring countries	5	qualitative	EIU
Respect for human rights (Political Terror Scale)	4	quantitative	Political Terror Scale
Terrorist activity	1	qualitative	IEP, Global Terrorism Index (GTI)
UN Peacekeeping funding	2	quantitative	IEP
Volume of transfers of major conventional weapons as supplier (exports) per 100,000 people	3	quantitative	SIPRI Arms transfers database
Volume of transfers of major conventional weapons, as recipient (Imports) per 100,000 people	2	quantitative	SIPRI Arms transfers database

# APPENDIX C

## DATA DEFINITIONS

SOURCE	INDEX	INDICATOR	DESCRIPTION
BERTELSMANN STIFTUNG	Sustainable Governance Indicators	Judicial review	Scores based on response to question “Do independent courts monitor whether the government and administration act in compliance with the law?”.
BERTELSMANN STIFTUNG	Sustainable Governance Indicators	Legal certainty	Scores based on response to question “Do the government and administrative bodies act in accordance with the law to provide legal certainty?”
BERTELSMANN STIFTUNG	Sustainable Governance Indicators	Quality of democracy	A composite score based on factors associated with the quality of a democracy (such as the electoral process, access to information, the rule of law and civil rights).
BERTELSMANN STIFTUNG	Sustainable Governance Indicators	Rule of law	Scores based on response to question “How strong is adherence to the rule of law?”
CINGRANELLI AND RICHARDS	Human Rights Dataset	Empowerment rights index	Index summarizing government respect for electoral self-determination, domestic movement, foreign movement, religion, speech, assembly & association, and workers’ rights.
ECONOMIST INTELLIGENCE UNIT	-	Hostility to foreigners/private property	Qualitative assessment of the extent to which demonstrations/civil unrest or parties in armed conflict have specifically shown hostility to foreigners or private ownership. Ranked from 1 to 5 (virtually no hostility to very high) by the Economist Intelligence Unit’s Country Analysis team. Country analysts assess this question on a quarterly basis. The score provided is the average of the scores given for each quarter.
ECONOMIST INTELLIGENCE UNIT	-	The extent of regional integration	Qualitative assessment fo the level of membership of trade alliances, such as NAFTA, ASEAN, etc. Ranked from 1 to 5 (very high integration to very low) by the Economist Intelligence Unit’s Country Analysis team. Country analysts assess this indicator on an annual basis.
ECONOMIST INTELLIGENCE UNIT	Democracy Index	Functioning of government	Qualitative assessment of whether freely elected representatives determine government policy and whether there is an effective system of checks and balances on the exercise of government authority. Ranked from 1 to 10 (very low to very high) by the Economist Intelligence Unit’s Country Analysis team.
ECONOMIST INTELLIGENCE UNIT	Democracy Index	Political culture	Qualitative assessment of the degree of societal consensus and cohesion to underpin a stable, functioning democracy; as well as the level of separation of church and state. Ranked from 1 to 10 (very low to very high) by the Economist Intelligence Unit’s Country Analysis team.
FREEDOM HOUSE	Freedom of the Press Index	Economic score	Subjective measure of how conducive the economic environment is to a free press.
FREEDOM HOUSE	Freedom of the Press Index	Laws (legal environment)	Subjective measure of how conducive the legal environment is to a free press.
FREEDOM HOUSE	Freedom of the Press Index	Overall score	Subjective measure of how conducive the environment is to a free press.
FREEDOM HOUSE	Freedom of the World Survey	Civil liberties	Rating based on the range of civil liberties provided to citizens such as freedom of expression, assembly, association, education, and religion. A higher score would indicate the a country accords less political rights to its citizens.
FREEDOM HOUSE	Freedom of the World Survey	Political rights index	Rating based on the level of political rights provided to citizens such as free and fair elections. A higher score would indicate the a country accords less political rights to its citizens.
FREEDOM HOUSE	Index of Economic Freedom	Business freedom	Business freedom is a quantitative measure of the ability to start, operate, and close a business that represents the overall burden of regulation as well as the efficiency of government in the regulatory process. The business freedom score for each country is a number between 0 and 100, with 100 equaling the freest business environment.
FREEDOM HOUSE	Index of Economic Freedom	Financial freedom	Financial freedom is a measure of banking efficiency as well as a measure of independence from government control and interference in the financial sector.

<b>FREEDOM HOUSE</b>	Index of Economic Freedom	Property rights	Score is an assessment of the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state. It measures the degree to which a country's laws protect private property rights and the degree to which its government enforces those laws.
<b>GALLUP WORLD POLL</b>	-	Cellular/mobile phone - yes (%)	Do you, yourself, have a cellular/mobile phone, or not?
<b>GALLUP WORLD POLL</b>	-	Children Learn and Grow - Yes (%)	Do most children in this country have the opportunity to learn and grow every day?
<b>GALLUP WORLD POLL</b>	-	City beauty - satisfied (%)	In the city or area where you live, are you satisfied or dissatisfied with the beauty or physical setting?
<b>GALLUP WORLD POLL</b>	-	Confidence in local police - yes (%)	In the city or area where you live, do you have confidence in the local police force, or not?
<b>GALLUP WORLD POLL</b>	-	Corruption in Government - Yes (%)	Is corruption widespread throughout the government in this country, or not?
<b>GALLUP WORLD POLL</b>	-	Corruption Within Businesses - Yes (%)	Is corruption widespread within businesses located in this country, or not?
<b>GALLUP WORLD POLL</b>	-	Country Five Years Ago - Index Score	Now, I will ask you some questions about this country. Once again, imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose the top of the ladder represents the best possible situation for this country and the bottom represents the worst possible situation. What is the number of the step on which you think this country stood about five years ago?
<b>GALLUP WORLD POLL</b>	-	Country headed toward civil war - disagree (%)	Do you agree or disagree with the following statements: This country is headed toward a civil war?
<b>GALLUP WORLD POLL</b>	-	Freedom in your life - satisfied (%)	In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?
<b>GALLUP WORLD POLL</b>	-	Home has access to internet - yes (%)	Does your home have access to the Internet?
<b>GALLUP WORLD POLL</b>	-	Home Has Landline Telephone - Yes (%)	Does your home have a landline telephone?
<b>GALLUP WORLD POLL</b>	-	Immigration Level - Present level (%)	In your view, should immigration in this country be kept at its present level, increased, or decreased?
<b>GALLUP WORLD POLL</b>	-	Job performance: U.N. leadership - disapprove (%)	Do you approve or disapprove of the job performance of the leadership of the following countries? United Nations.
<b>GALLUP WORLD POLL</b>	-	Job satisfaction - Satisfied (%)	Are you satisfied or dissatisfied with your job or the work you do? (asked only of those who are employed)
<b>GALLUP WORLD POLL</b>	-	Other countries responsible: tension - agree (%)	Do you agree or disagree with the following statements: In this country, foreign countries are responsible for most of the social and political tension?
<b>GALLUP WORLD POLL</b>	-	Safe Walking Alone - Yes (%)	Do you feel safe walking alone at night in the city or area where you live?
<b>GALLUP WORLD POLL</b>	-	Standard of Living - Satisfied (%)	Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?
<b>GALLUP WORLD POLL</b>	-	Telephone lines (per 100 people)	Number of telephone lines per 100 people.
<b>GALLUP WORLD POLL</b>	-	This country: military coup d'etat - disagree (%)	Do you agree or disagree with the following statements: This country is headed toward a military coup d'etat?
<b>GALLUP WORLD POLL</b>	-	Confidence in the honesty of elections - % who responded 'Yes'	In this country, do you have confidence in each of the following, or not? How about honesty of elections?

<b>GALLUP WORLD POLL</b>	Express of Political Views	Expressing political views - 'most are afraid' (% of responses)	In your opinion, how many people in this country, if any, are afraid to openly express their political views?
<b>INSTITUTE FOR ECONOMICS AND PEACE</b>	Youth Development Index	Overall Score	Index produced by the Institute for Economics and Peace on the extent of human development specific to youth. Measures a range of factors including empowerment, health, education and civic participation.
<b>INTERNATIONAL INSTITUTE OF SOCIAL STUDIES</b>	Indices of Social Development	Civic Activism	Score measuring the social norms, organisations, and practices which facilitate greater citizen involvement in public policies and decisions. A higher rating suggests a more conducive environment to civic activism.
<b>INTERNATIONAL INSTITUTE OF SOCIAL STUDIES</b>	Indices of Social Development	Gender equality	Score measuring the level of gender equality. Includes factors such as the male/female wage ratio, the level of economic rights afforded to women and the female/male education enrolment ratio. A higher score indicates greater gender equality.
<b>INTERNATIONAL INSTITUTE OF SOCIAL STUDIES</b>	Indices of Social Development	Inclusion of minorities	Score measures the level of inclusion of minorities using indicators which are based on direct measurement of social institutions and their outcomes, and perception-based indicators, based on assessments by public opinion surveys, private agencies and non-governmental organisations, and proxy measures to measure the access to jobs and educational attainment.
<b>INTERNATIONAL INSTITUTE OF SOCIAL STUDIES</b>	Indices of Social Development	Intergroup cohesion	Score measuring inter-group disparities, perceptions of being discriminated against, and feelings of distrust against members of other groups. ISD also use data on the number of reported incidents of riots, terrorist acts, assassinations, and kidnappings; agency ratings on the likelihood of civil disorder, terrorism and social instability; and reported levels of engagement in violent riots, strikes, and confrontations.
<b>INTERNATIONAL INSTITUTE OF SOCIAL STUDIES</b>	Indices of Social Development	Interpersonal Safety and Trust	Interpersonal norms of trust and security exist to the extent that individuals in a society feel they can rely on those whom they have not met before. Measured by using data on general social trust from a wide variety of surveys, indicators of trustworthiness such as reported levels of crime victimisation, survey responses on feelings of safety and security in one's neighbourhood, data on the incidence of homicide, and risk reports on the likelihood of physical attack, extortion, or robbery.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Education	Score measuring a country's performance in access to education, quality of education, and human capital. A higher score indicates better outcomes on this scale.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Entrepreneurship & opportunity	Score based on the level of entrepreneurship and opportunity available within a country, includes factors such as entrepreneurial environment, innovative activity, and access to opportunity. A higher score indicates better outcomes on this scale.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Governance	Score based on factors such as an effective and accountable government, fair elections and political participation, and rule of law.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Health	Score evaluates countries on the basis of indicators that reflect strong health infrastructure, such as rates of immunization and public expenditure. Countries are also assessed on average life expectancy, rates of infant mortality, and undernourishment. The sub-index further includes measures of individual satisfaction with health, and the effects on health from environmental factors such as water, air quality, and environmental beauty.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Personal freedom	The Personal Freedom sub-index captures the effects of freedom of choice, expression, movement, and belief, on a country's per capita GDP and the subjective wellbeing of its citizens. It also assesses how levels of tolerance of ethnic minorities and immigrants impact countries' economic growth and citizens' life satisfaction.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Separation of powers	Score based on how separate government power is held. Includes the level of competition in different branches of government, the independence of the judiciary and the level of political participation by citizens.
<b>LEGATUM INSTITUTE</b>	Legatum Prosperity Index	Social capital	This sub-index evaluates how factors such as volunteering, helping strangers, and donating to charitable organisations impact economic performance and life satisfaction. It also measures levels of trust, whether citizens believe they can rely on others, and assesses how marriage and religious attendance provide support networks beneficial to wellbeing.
<b>OECD</b>	Better Life Index	Homicide rate	Average number of reported homicides per 100,000 people.



<b>OECD</b>	Better Life Index	Quality of support networks.	Subjective score based on the proportion of people who state they have friends or family they can rely on.
<b>OECD</b>	Better Life Index	Water quality	Score based on the proportion of people reporting to be satisfied with the quality of local water.
<b>REPORTERS WITHOUT BORDERS</b>	World Press Freedom Index	Overall score	Score based on the degree of freedom that journalists, news organizations, and netizens enjoy in each country. Also accounts for the efforts made by the authorities to respect and ensure respect for this freedom.
<b>TRANSPARENCY INTERNATIONAL</b>	Corruption Perception Index	Bribe payers survey	Based on surveys of the extent of bribery in business operations. Sectors are scored on a scale of 0-10, where a maximum score of 10 corresponds with the view that companies in that sector never bribe and a 0 corresponds with the view that they always do.
<b>TRANSPARENCY INTERNATIONAL</b>	Corruption Perception Index	Country policy and institutional assessment	Responses based on surveys by experts pertaining to the extent of transparency, accountability, and corruption in the public sector.
<b>TRANSPARENCY INTERNATIONAL</b>	Corruption Perception Index	Overall score	Score based on expert opinions on the extent of public sector corruption in a country. Scores scale from 0 to 10 with 0 indicating high levels of perceived corruption and 10 indicating low levels of perceived corruption.
<b>TRANSPARENCY INTERNATIONAL</b>	Corruption Perception Index	Political and economic risk consultancy	Rating of perceived corruption based on respondent answers to the question: "How serious do you consider the problem of corruption to be in the public sector?"
<b>UNITED NATIONS</b>	Human Development Index	Education inequality (% loss of index after inequality adjustment)	Score based on how evenly the distribution of schooling is. A higher score indicates greater inequality.
<b>UNITED NATIONS</b>	Human Development Index	Expected years of schooling	Score based on the mean of years of schooling for adults aged 25 years and expected years of schooling for children of school entering age adjusted for how evenly distributed these outcomes are.
<b>UNITED NATIONS</b>	Human Development Index	Human development inequality (overall loss of rank after equality adjustment %)	Loss of rank in Human Development Index score after the levels of inequality in human development are accounted for.
<b>UNITED NATIONS</b>	Human Development Index	Inequality-adjusted education index	Score based on a country's attainment of educational outcomes, adjusted for the evenness of distribution.
<b>UNITED NATIONS</b>	Human Development Index	Inequality-adjusted Human Development Index	Score of the level of human development of people in a society that accounts for inequality. A higher score indicates greater human development after adjusting for how even this development is spread across a state.
<b>UNITED NATIONS</b>	Human Development Index	Inequality-adjusted life expectancy index	Score based on the level of life expectancy in nation, adjusted for how unequally this life expectancy is distributed.
<b>UNITED NATIONS</b>	Human Development Index	Life expectancy inequality (% loss of index after inequality adjustment)	Based on the distribution of life expectancy according to specific age ranges. The index is therefore a measure of life expectancy inequality over time.
<b>UNITED NATIONS</b>	Human Development Index	Non-income HDI	Score based on the level of all non-income components of the Human Development Index.
<b>UNITED NATIONS DEVELOPMENT PROGRAMME</b>	-	Gender inequality	Measure of the extent of disadvantage faced by women covering the dimensions of reproductive health, empowerment and labor market access.
<b>UNITED NATIONS DEVELOPMENT PROGRAMME</b>	-	Satisfaction with community	Based on the percentage of people responding "Yes" to question: "Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?" as being an indicator of being satisfied with the community.
<b>WORLD BANK</b>	-	Improved water source (% of population with access)	Refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs
<b>WORLD BANK</b>	-	Number of scientific publications per 100,000 people	Measure of the number of scientific publications per 100,000 people.

WORLD BANK	-	Burden of customs procedure	Score measures business executives' perceptions of their country's efficiency of customs procedures.
WORLD BANK	-	GDP per capita PPP (constant 2005 international \$)	Measure of GDP on a purchasing power parity basis divided by population. Meant to provide an average measure of purchasing power across nations.
WORLD BANK	-	Nurses and midwives (per 1000 people)	Number of nurses or midwives per 1000 people in a nation.
WORLD BANK	-	Poverty gap at \$5 a day (PPP) (%)	Measure of the mean shortfall from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.
WORLD BANK	-	Quality of port infrastructure	Score based on surveys of business executives which gauge their perception of the quality of their country's port facilities. A higher score indicates a more favorable perception of port quality.
WORLD BANK	-	Tariff rate (weighted average)	Weighted average of tariff rate applied imports.
WORLD BANK	-	Telephone lines (per 100 people)	The number of telephone lines per 100 people.
WORLD BANK	-	Vulnerable employment total (% of total employment)	% of employment which is unpaid family workers and own-account workers. Taken as a percentage of total employment.
WORLD BANK	Doing Business	Trading across borders	Score based on the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by sea transport.
WORLD BANK	Ease of Doing Business	Closing a business	indicators measure the time, cost and outcome of insolvency proceedings involving domestic entities. Is called 'Resolving Insolvency' in more recent interactions.
WORLD BANK	World Development Indicators	Gini coefficient	Indicator measuring the extent of income inequality, with zero representing perfect equality and one representing perfect inequality.
WORLD BANK	World Development Indicators	Infant mortality	Measures the rate of child mortality (per 1000 births).
WORLD BANK	World Development Indicators	Life expectancy	Indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.
WORLD BANK	World Development Indicators	Population below \$2 per day	Measures the percentage of the population living on less than \$2.00 a day at 2005 international prices.
WORLD BANK	World Governance Indicators	Government effectiveness	Government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
WORLD BANK	World Governance Indicators	Political stability and absence of violence	Measures perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. Includes data on violent demonstrations, political killing and violent social conflicts.
WORLD BANK	World Governance Indicators	Regulatory quality	Score capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
WORLD BANK	World Governance Indicators	Rule of law	Score capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
WORLD BANK	World Governance Indicators	Voice and accountability	Score capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

<b>WORLD BANK</b>	Worldwide Governance Indicators	Control of corruption	Score capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.
<b>WORLD DATABASE OF HAPPINESS</b>	-	Happy life years	Score provides a measure of how long and happy the average citizen of a country lives.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Business sophistication	Score includes measures of supplier quality, the breadth of the value chain and extent of marketing.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Goods market efficiency	Score based on factors such as the intensity of local competition, rate of taxation and difficulty of starting a business.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Infrastructure	A composite score based on a range of indicators related to infrastructure (such as the number of telephone lines)
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Innovation	Score based on factors such as the quality of scientific research institutions, level of research and development spending and the availability of scientists and engineers.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Institutions	Composite score based on factors such as the extent of corruption, existence of property rights (including intellectual property), government inefficiency and corporate ethics.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Overall score	The Global Competitiveness Report 2012-2013 assesses the competitiveness landscape of 144 economies, providing insight into the drivers of their productivity and prosperity.
<b>WORLD ECONOMIC FORUM</b>	Global Competitiveness Report	Technological readiness	A composite score based on a range of technological adoption indicators (such as internet subscriptions)
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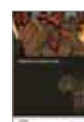
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