



METHODOLOGY, RESULTS & FINDINGS

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## EXECUTIVE SUMMARY

Steve Killelea, an international businessman and philanthropist, in conjunction with an international team of academics, businesspeople, philanthropists and peace institutions, has initiated an innovative project to compile a Global Peace Index (GPI), ranking 121 nations according to their relative states of peace. Mr Killelea commissioned the Economist Intelligence Unit to assist with the project, asking them to take the lead in developing the methodology underlying the index, and collecting the required data. A team of international peace experts also provided valuable input.

The Global Peace Index is composed of 24 indicators, ranging from a nation's level of military expenditure to its relations with neighbouring countries and the level of respect for human rights. The index has been tested against a range of potential "drivers" or determinants of peace – including levels of democracy and transparency, education and material wellbeing. The team has used the latest available figures (mainly 2004-06) from a wide range of respected sources, including the International Institute of Strategic Studies, the World Bank, and various UN offices and Peace Institutes. Steve Killelea and his team hope that this project will contribute significantly to the public debate on peace. For more information on the Global Peace Index, including more detail on the results, methodology and potential uses, please visit [www.visionofhumanity.com](http://www.visionofhumanity.com).

## BACKGROUND

Asked to evaluate the state of world peace in 2007, many might despair at humanity's seeming insatiable appetite for conflict, pointing to the ongoing bloodbath in Iraq, genocide in Darfur, civil wars in previously stable Nepal and Côte d'Ivoire and the rise in international terrorism since September 11th 2001. However, a deeper analysis reveals that the number of armed conflicts throughout the world – both international and civil wars – has decreased dramatically since the end of the Cold War in 1990, although interstate warfare has picked up again since 2002. The fact that this statistic is little known is indicative of how the study of peace has failed to make a significant impact across the world's media.

This has been part of the motivation behind the compilation of the Global Peace Index (GPI). The project's ambition is to go beyond a crude measure of wars and systematically explore the texture of peace. The hope is that it will provide a quantitative measure of peace, comparable over time, that will provide a greater understanding of the mechanisms that nurture and sustain peace. This, in turn, will provide a new platform for further study and discussion, which will hopefully inspire and influence world leaders and governments to further action.

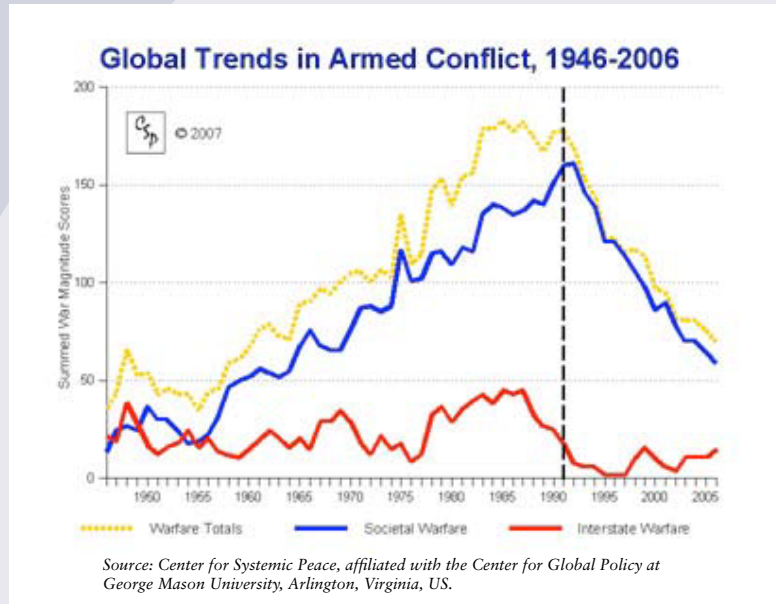


Figure 1

## DEFINING PEACE

The concept of peace is notoriously difficult to define. The simplest way of approaching it is in terms of harmony achieved by the absence of war or conflict. Applied to nations, this would suggest that those not involved in violent conflicts with neighbouring states or suffering internal wars would have achieved a state of peace. This is what Johan Galtung<sup>1</sup> defined as a “negative peace” – an absence of violence. The concept of negative peace is immediately intuitive and empirically measurable, and can be used as a starting point to elaborate its counterpart concept, “positive peace”: having established what constitutes an absence of violence, is it possible to identify which structures and institutions create and maintain peace? The Global Peace Index is a first step in this direction; a measurement of peace that seeks to determine what cultural attributes and institutions are associated with states of peace.

In 1999 the UN General Assembly launched a programme of action to build a “culture of peace” for the world’s children, which envisaged working towards a positive peace of justice, tolerance and plenty. The UN defined a culture of peace as involving values, attitudes and behaviours that:

- Reject violence
- Endeavour to prevent conflicts by addressing root causes
- Aim at solving problems through dialogue and negotiation

It proposed that such a culture of peace would be furthered by actions promoting education for peace and sustainable development, which it suggested was based on human rights, gender equality, democratic participation, tolerant solidarity, open communication and international security. However, these links between the concept of peace and the causes of them were presumed rather than systematically measured. For example, while Doyle<sup>2</sup> and advocates of his liberal peace theory have held that democratic states rarely attack each other, the ongoing war in Iraq demonstrates how some democratic countries can be militant or belligerent – the justification for war often being that peace is ultimately secured through violence or the threat of violence.

<sup>1</sup> Galtung, Johan. *Peace by Peaceful Means: peace and conflict, development and civilization*. Oslo: International Peace Research Institute, 1996

<sup>2</sup> Doyle, Michael. *Kant, Liberal Legacies, and Foreign Affairs*. *Philosophy and Public Affairs* (1983) 205, 207-208

## MEASURING STATES OF PEACE

The difficulties in defining the concept of peace may partly explain why there have been so few attempts to measure states of peace across nations.

This project has approached the task on two fronts – the first aim is to produce a scoring model and global peace index that ranks 121 nations by their relative states of peace using 24 indicators. The indicators have been selected as being the best available datasets that reflect the incidence or absence of peace, and contain both quantitative data and qualitative scores from a range of trusted sources. The second aim is to use the underlying data and results from the Global Peace Index to begin an investigation into the relative importance of a range of potential determinants or “drivers” that may influence the creation and nurturance of peaceful societies, both internally and externally.

### THE RESEARCH TEAM

As with all indexes of this type, there are issues of bias and arbitrariness in the factors that are chosen to assess peace and, even more seriously, in assigning weights to the different indicators (measured on a comparable and meaningful scale) to produce a single synthetic measure. In order to minimise these risks, the choices of indicators and the weights assigned to them have been decided upon following close and extensive consultation with an international panel of experts.

#### **Professor Kevin P Clements – Panel Chair**

Director, Australian Centre for Peace and Conflict Studies (ACPCS)  
University of Queensland, Australia

#### **Professor Daniel Druckman**

Visiting scholar, Australian Centre for Peace and Conflict Studies (ACPCS)  
University of Queensland, Australia

#### **Paul van Tongeren**

Executive Director, Global Partnership for the Prevention of Armed Conflict (GPPAC),  
The Netherlands

#### **Emeritus Professor Stuart Rees**

Sydney Peace Foundation,  
University of Sydney, Australia

#### **Dr Manuela Mesa**

Director, Peace Research Center (Centro de Investigación para la Paz, CIP-FUHEM) & President, Asociación Española de Investigación para la Paz (AIPAZ), Spain

#### **Professor Andrew Mack**

Director, Human Security Centre,  
University of British Columbia, Canada

#### **Alyson JK Bailes**

Director, Stockholm International Peace Research Institute (SIPRI), Sweden

#### **Dan Smith**

Author, in a private capacity

#### **Associate Professor Mohammed Abu-Nimer**

School of International Service,  
American University, Washington DC, USA

## METHODOLOGY AND DATA SOURCES

### The indicators

The 24 indicators of the existence or absence of peace are listed below, divided into three key thematic categories. Many of the indicators have been “banded” on a scale of 1-5; qualitative indicators in the index have been scored by the Economist Intelligence Unit’s team of country analysts, and gaps in the quantitative data have been filled by estimates. Indicators of quantitative data such as military expenditure or jailed population have been normalised on the basis of:

$$x = (x - \text{Min}(x)) / (\text{Max}(x) - \text{Min}(x))$$

where Min (x) and Max (x) are respectively the lowest and highest values in the 121 countries for any given indicator. The normalised value is then transformed from a 0-1 value to a 1-5 score to make it comparable with the other indicators. For details on the precise definition of each indicator see Annex A.

### Measures of ongoing domestic and international conflict

The Global Peace Index is intended as a review of the state of peace in nations over the last five years (given reporting lags across some countries for some of the indicators), although many indicators are based on available data from the last two years. The advisory panel decided against including data reflecting a country’s longer-term historical experience of domestic and international conflict. The GPI consists of 24 indicators, of which five relate to conflict and propensity to conflict. These five indicators consist of authoritative statistics on ongoing civil and trans-national wars collated by institutes such as the Uppsala Conflict Data Program and the International Peace Research Institute, Oslo, coupled with two indicators scored by the Economist Intelligence Unit’s country analysts.

- Number of external and internal conflicts fought: 2000-05
- Estimated number of deaths from organised conflict (external)
- Number of deaths from organised conflict (internal)
- Level of organised conflict (internal)
- Relations with neighbouring countries

### Measures of societal safety and security

Ten of the indicators in the GPI assess the levels of safety and security in a society (country), ranging from the level of distrust in other citizens, to the level of respect for human rights and the rate of homicides and violent crimes. The difficulties of comparing international crime statistics are discussed in detail in Appendix A. Crime data are from the UN Office of Drugs and Crime, while other data sources include the World Bank and International Centre for Prison Studies. Five of these indicators have been scored by the Economist Intelligence Unit’s team of country analysts.

- Level of distrust in other citizens
- Number of displaced people as a percentage of the population
- Political instability
- Level of disrespect for human rights (Political Terror Scale)
- Potential for terrorist acts
- Number of homicides per 100,000 people
- Level of violent crime
- Likelihood of violent demonstrations
- Number of jailed population per 100,000 people
- Number of internal security officers and police per 100,000 people

## METHODOLOGY AND DATA SOURCES

### Measures of militarisation

Nine of the indicators in the GPI are related to a country's military build-up – reflecting the assertion that the level of militarisation and access to weapons is directly linked to how at peace a country feels internationally. Comparable data are readily available from sources such as the International Institute of Strategic Studies (IISS).

- Military expenditure as a percentage of GDP
- Number of armed services personnel per 100,000 people
- Volume of transfers (imports) of major conventional weapons per 100,000 people
- Volume of transfers (exports) of major conventional weapons per 100,000
- UN Deployments 2006-07 (percentage of total armed forces)
- Non-UN Deployments 2006-07 (percentage of total armed forces)
- Aggregate number of heavy weapons per 100,000 people
- Ease of access to small arms and light weapons
- Military capability/sophistication

### Weighting the index

The advisory panel apportioned scores based on the relative importance of each of the indicators on a 1-5 scale. The consensus scores for each indicator are given in Table 1 on page 8.

Two sub-component weighted indices were then calculated from the GPI group of indicators, 1) a measure of how at peace internally a country is; 2) a measure of how at peace externally (its state of peace beyond its borders). The overall composite score and index was then formulated by applying a weight of 60% to the measure of internal peace and 40% for external peace. The heavier weight applied to internal peace was agreed within the advisory panel, following robust debate. The decision was based on the innovative notion that a greater level of internal peace is likely to lead to, or at least correlate with, lower external conflict – in other words, if “charity begins at home” – so might peace.

## METHODOLOGY AND DATA SOURCES

Indicator	Weight (1 to 5)
<b>INTERNAL PEACE</b>	<b>60%</b>
<b>EXTERNAL PEACE</b>	<b>40%</b>
Level of distrust in other citizens	4
Number of internal security officers and police per 100,000 people	3
Number of homicides per 100,000 people	4
Number of jailed population per 100,000 people	3
Ease of access to weapons of minor destruction	3
Level of organised conflict (internal)	5
Likelihood of violent demonstrations	3
Level of violent crime	4
Political instability	4
Respect for human rights	4
Volume of transfers of major conventional weapons, as recipient (imports) per 100,000 people	2
Potential for terrorist acts	1
Number of deaths from organised conflict (internal)	5
Military expenditure as a percentage of GDP	2
Number of armed services personnel per 100,000 people	2
UN Deployments 2006-07 (percentage of total forces)	2
Non-UN Deployments 2006-07 (percentage of total forces)	4
Aggregate number of heavy weapons per 100,000 people	3
Volume of transfers of major conventional weapons as supplier (exports) per 100,000 people	3
Military capability/sophistication	2
Number of displaced people as a percentage of the population	4
Relations with neighbouring countries	5
Number of external and internal conflicts fought: 2000-05	5
Estimated number of deaths from organised conflict (external)	5

*Table 1*



## ANALYSIS OF THE RESULTS

Table 2 provides the 121 GPI rankings. Countries most at peace ranked first.

Rank	Country	Score	Rank	Country	Score
1	Norway	1.357	36	Taiwan	1.731
2	New Zealand	1.363	37	Malaysia	1.744
3	Denmark	1.377	38	United Arab Emirates	1.747
4	Ireland	1.396	39	Tunisia	1.762
5	Japan	1.413	40	Ghana	1.765
6	Finland	1.447	41	Madagascar	1.766
7	Sweden	1.478	42	Botswana	1.786
8	Canada	1.481	43	Lithuania	1.788
9	Portugal	1.481	44	Greece	1.791
10	Austria	1.483	45	Panama	1.798
11	Belgium	1.498	46	Kuwait	1.818
12	Germany	1.523	47	Latvia	1.848
13	Czech Republic	1.524	48	Morocco	1.893
14	Switzerland	1.526	49	United Kingdom	1.898
15	Slovenia	1.539	50	Mozambique	1.909
16	Chile	1.568	51	Cyprus	1.915
17	Slovakia	1.571	52	Argentina	1.923
18	Hungary	1.575	53	Zambia	1.930
19	Bhutan	1.611	54	Bulgaria	1.936
20	Netherlands	1.620	55	Paraguay	1.946
21	Spain	1.633	56	Gabon	1.952
22	Oman	1.641	57	Tanzania	1.966
23	Hong Kong	1.657	58	Libya	1.967
24	Uruguay	1.661	59	Cuba	1.968
25	Australia	1.664	60	China	1.980
26	Romania	1.682	61	Kazakhstan	1.995
27	Poland	1.683	62	Bahrain	1.995
28	Estonia	1.684	63	Jordan	1.997
29	Singapore	1.692	64	Namibia	2.003
30	Qatar	1.702	65	Senegal	2.017
31	Costa Rica	1.702	66	Nicaragua	2.020
32	South Korea	1.719	67	Croatia	2.030
33	Italy	1.724	68	Malawi	2.038
34	France	1.729	69	Bolivia	2.052
35	Vietnam	1.729	70	Peru	2.056

Table 2 (continued over page)

## ANALYSIS OF THE RESULTS

Rank	Country	Score	Rank	Country	Score
71	Equatorial Guinea	2.059	98	Honduras	2.390
72	Moldova	2.059	99	South Africa	2.399
73	Egypt	2.068	100	Philippines	2.428
74	Dominican Republic	2.071	101	Azerbaijan	2.448
75	Bosnia and Hercegovina	2.089	102	Venezuela	2.453
76	Cameroon	2.093	103	Ethiopia	2.479
77	Syria	2.106	104	Uganda	2.489
78	Indonesia	2.111	105	Thailand	2.491
79	Mexico	2.125	106	Zimbabwe	2.495
80	Ukraine	2.150	107	Algeria	2.503
81	Jamaica	2.164	108	Myanmar	2.524
82	Macedonia	2.170	109	India	2.530
83	Brazil	2.173	110	Uzbekistan	2.542
84	Serbia	2.181	111	Sri Lanka	2.575
85	Cambodia	2.197	112	Angola	2.587
86	Bangladesh	2.219	113	Cote d'Ivoire	2.638
87	Ecuador	2.219	114	Lebanon	2.662
88	Papua New Guinea	2.223	115	Pakistan	2.697
89	El Salvador	2.244	116	Colombia	2.770
90	Saudi Arabia	2.246	117	Nigeria	2.898
91	Kenya	2.258	118	Russia	2.903
92	Turkey	2.272	119	Israel	3.033
93	Guatemala	2.285	120	Sudan	3.182
94	Trinidad and Tobago	2.286	121	Iraq	3.437
95	Yemen	2.309			
96	United States of America	2.317			
97	Iran	2.320			

*Table 2*

Norway is ranked as the country most at peace, followed by New Zealand and Denmark. Based on 24 indicators which evaluate ongoing domestic and international conflict, measures of safety and security in society and the level of militarisation, it is clear that small, stable and democratic countries are the most peaceful – 15 of the top 20 countries are western or central

European democracies. Most of them are members of a regional supranational and intergovernmental organisation, the European Union. Four Scandinavian countries are in the top ten, with Sweden in seventh place in spite of its armaments industry and relatively high score for the exports of weapons. Island nations generally fare well.

## ANALYSIS OF THE RESULTS

The average score for all the countries in the GPI is 2 (based on a 1-5 measure) with countries relatively evenly spread around the mean, although there is an exceptional tail on the countries at the bottom of the rankings. As this is the first year that the GPI has been compiled, it lacks a historical perspective, but the index itself is structured in such a way as to lend itself to year on year comparisons, as data can be updated and re-scored on a systematic basis.

While the index has a broad level of country and regional coverage at 121 separate nations (encompassing around 95% of the world's population and over two-thirds of the planet's land mass), data paucity has resulted in the exclusion of a number of less-developed countries. It is likely that these countries would, on average, score less well, so the overall global picture is probably worse.

Table 3 groups countries by region. Western Europe is markedly the most peaceful region (although it has the smallest group of countries other than North America), with the majority of the measured countries in this group ranking in the top 20 overall. France and the United Kingdom represent two large European countries that score less favourably. Although they score relatively well on the domestic measures of peace, their relatively high levels of militarisation, sophisticated weapon industries and arms exports push them lower down the overall rankings. The United Kingdom's battlefield troop losses in Afghanistan and Iraq and its involvement in those conflicts, as well as Sierra Leone, during the review period reduce its ranking further to 49th overall.

Most of the other regions are characterised by wide variations in their overall rankings. In central and eastern Europe, the recent members of the European Union generally fare well, with the Czech Republic leading the way in 13th place. Russia comes last within the region and 118th overall, scoring poorly in almost all of the measures, but mostly on measures of internal peace with high scores for homicides, jailed population, distrust amongst citizens, violent crime and respect for human rights. Asia is the next most peaceful region on average but again exhibiting wide variation. The OECD nations of Asia and Oceania rank highly, with New Zealand coming second overall and Japan fifth, a two-pronged impact of very strong scores for overall domestic peace and low levels of militarisation for the size of economy.

High levels of crime and internal disharmony in the Philippines, Thailand and Myanmar push these countries towards the bottom of the rankings. High numbers of registered internal conflicts in Sri Lanka, India and Pakistan and in the case of the latter two countries, interstate conflict in Kashmir, contribute to their low rankings. Latin America also exhibits a broad spread, with Chile and Uruguay in the top 30, but with Colombia ranking 116th. The countries of the Middle East and North Africa generally shift downwards collectively as a result of relatively high levels of militarisation although some do well on the measure of internal peace, with Oman just missing the top 20 overall. Sub-Saharan African nations are generally placed in the bottom half of the index, although the highest-ranked nations, Ghana and Madagascar, are in 40th and 41st place respectively.

Western Europe	Overall Rank	Overall Score	Regional Rank
Norway	1	1.36	1
Denmark	3	1.38	2
Ireland	4	1.40	3
Finland	6	1.45	4
Sweden	7	1.48	5
Portugal	9	1.48	6
Austria	10	1.48	7
Belgium	11	1.50	8
Germany	12	1.52	9
Switzerland	14	1.53	10
Netherlands	20	1.62	11
Spain	21	1.63	12
Italy	33	1.72	13
France	34	1.73	14
Greece	44	1.79	15
United Kingdom	49	1.90	16
Cyprus	51	1.92	17
<b>Average</b>	<b>19</b>	<b>1.58</b>	

Central and Eastern Europe	Overall Rank	Overall Score	Regional Rank
Czech Republic	13	1.52	1
Slovenia	15	1.54	2
Slovakia	17	1.57	3
Hungary	18	1.58	4
Romania	26	1.68	5
Poland	27	1.68	6
Estonia	28	1.68	7
Lithuania	43	1.79	8
Latvia	47	1.85	9
Bulgaria	54	1.94	10
Kazakhstan	61	1.99	11
Croatia	67	2.03	12
Moldova	72	2.06	13
Bosnia and Hercegovina	75	2.09	14
Ukrain	80	2.15	15
Macedonia	82	2.17	16
Serbia	84	2.18	17
Turkey	92	2.27	18
Azerbaijan	101	2.45	19
Uzbekistan	110	2.54	20
Russia	118	2.90	21
<b>Average</b>	<b>56</b>	<b>1.94</b>	

Middle East and North Africa	Overall Rank	Overall Score	Regional Rank
Oman	22	1.64	1
Qatar	30	1.70	2
United Arab Emirates	38	1.75	3
Tunisia	39	1.76	4
Kuwait	46	1.82	5
Morocco	48	1.89	6
Libya	58	1.97	7
Bahrain	62	2.00	8
Jordan	63	2.00	9
Egypt	73	2.07	10
Syria	77	2.11	11
Saudi Arabia	90	2.25	12
Yemen	95	2.31	13
Iran	97	2.32	14
Algeria	107	2.50	15
Lebanon	114	2.66	16
Israel	119	3.03	17
Iraq	121	3.44	18
<b>Average</b>	<b>72</b>	<b>2.18</b>	

Africa	Overall Rank	Overall Score	Regional Rank
Ghana	40	1.77	1
Madagascar	41	1.77	2
Botswana	42	1.79	3
Mozambique	50	1.91	4
Zambia	53	1.93	5
Gabon	56	1.95	6
Tanzania	57	1.97	7
Nambia	64	2.00	8
Senegal	65	2.02	9
Malawi	68	2.04	10
Equatorial Guinea	71	2.06	11
Cameroon	76	2.09	12
Kenya	91	2.26	13
South Africa	99	2.40	14
Ethiopia	103	2.48	15
Uganda	104	2.49	16
Zimbabwe	106	2.49	17
Angola	112	2.59	18
Cote d' Ivore	113	2.64	19
Nigeria	117	2.90	20
Sudan	120	3.18	21
<b>Average</b>	<b>78</b>	<b>2.22</b>	

Asia and Australia	Overall Rank	Overall Score	Regional Rank
New Zealand	2	1.36	1
Japan	5	1.41	2
Bhutan	19	1.61	3
Hong Kong	23	1.66	4
Australia	25	1.66	5
Singapore	29	1.69	6
South Korea	32	1.72	7
Vietnam	35	1.73	8
Taiwan	36	1.73	9
Malaysia	37	1.74	10
China	60	1.98	11
Indonesia	78	2.11	12
Cambodia	85	2.20	13
Bangladash	86	2.22	14
Papua New Guinea	88	2.22	15
Philippines	100	2.43	16
Thailand	105	2.49	17
Myanmar	108	2.52	18
India	109	2.53	19
Sri Lanka	111	2.57	20
Pakistan	115	2.70	21
<b>Average</b>	<b>61</b>	<b>2.01</b>	

Latin America	Overall Rank	Overall Score	Regional Rank
Chile	16	1.57	1
Uruguay	24	1.66	2
Costa Rica	31	1.70	3
Panama	45	1.80	4
Argentina	52	1.92	5
Paraguay	55	1.95	6
Cuba	59	1.97	7
Nicaragua	66	2.02	8
Bolivia	69	2.05	9
Peru	70	2.06	10
Dominican Republic	74	2.07	11
Mexico	79	2.12	12
Jamica	81	2.16	13
Brazil	83	2.17	14
Ecuador	87	2.22	15
El Salvador	89	2.24	16
Guatemala	93	2.28	17
Trinidad and Tobago	94	2.29	18
Honduras	98	2.39	19
Venezuela	102	2.45	20
Colombia	116	2.77	21
<b>Average</b>	<b>71</b>	<b>2.09</b>	

North America	Overall Rank	Overall Score	Regional Rank
Canada	8	1.48	1
United States of America	96	2.32	2
<b>Average</b>	<b>52</b>	<b>1.90</b>	

Table 3

Three of the world's major military-diplomatic powers (the European Union could be considered the 4th) score relatively badly overall, with China at 60th, the United States at 96th and Russia at 118th. The United States could be seen to be suffering for a Pax Americana<sup>3</sup> with very high levels of military expenditure and engagement beyond its borders – effectively acting as a global policeman. However, it also suffers

internally with the highest jailed population (as a proportion of the population) out of the 121 countries and comparatively high levels of homicides per 100,000 people for a developed country. Members of the G8 apart from Russia, the United Kingdom and the United States do relatively better with Japan at 5th, Canada 8th, Germany at 12th, and Italy and France 33rd and 34th respectively

<sup>3</sup> Pax Ameriana is a term describing the period of relative peace in the West since 1945, coinciding with the dominant military and economic position of the United States

## THE TEN MOST AT PEACE

### Norway: 1st position

*Score: 1.357*

Norway is ranked the nation most at peace of the 121 countries surveyed—there is no internal conflict and involvement in external conflicts is limited to peacekeeping roles. Relations between Norway and its neighbouring Scandinavian countries, with which it shares a strong cultural and linguistic heritage, are very good; indeed, close co-operation with the other Nordic countries is a cornerstone of Norway's foreign policy. The rate of violent crime is very low, there is a strong level of respect for human rights, the political scene is stable and violent demonstrations are highly unlikely to occur, all of which indicate a harmonious society.

Norway's measures of militarisation receive low scores in a broad international comparison, although military expenditure as a percentage of GDP is higher than the other Nordic countries surveyed, including Denmark, which is also a NATO member. Access to small arms and light weapons is highly restricted. Norway's direct military role in the international struggle against terrorism following the September 11th 2001 attacks on the US has been limited, although important for Norwegian forces. The change in the nature of threats to security in the western hemisphere has altered the priorities of Norwegian defence. Instead of being chiefly geared to counter a Russian invasion, the military is adopting a more flexible structure. A reform process has been underway since 2002 and the active peacetime military force is being gradually cut by at least 5,000 troops (from about 26,600 at the outset) and the military intends to dispose of one-third of its property.

### New Zealand: 2nd position

*Score: 1.363*

New Zealand's lofty position in the GPI partly reflects its lack of internal and external conflicts and its very good relations with neighbouring countries, namely Australia and fellow member states of the Pacific Islands Forum (PIF, the main regional body). Diplomatic and economic links with Australia, with which it shares a cultural and linguistic heritage, have been underpinned since 1983 by the Closer Economic Relations (CER) agreement. New Zealand's political scene is stable and measures of safety and security such as the level of violent crime, the likelihood of violent demonstrations and the number of homicides receive very low scores. However, violent crime is higher than in Norway and the number of jailed population is considerably higher than the four Nordic nations surveyed.

New Zealand's military expenditure as a percentage of GDP is low, and notably lower than that of Australia. Defence and regional security issues have been contentious since 1985, when the Labour government declared New Zealand nuclear-free, leading the US to suspend the operation of the tripartite Australia-New Zealand-United States (ANZUS) Treaty. New Zealand's ability to play a security role within the Pacific region was nevertheless demonstrated in July 2003, when it sent 35 policemen and 230 military personnel to the Solomon Islands as part of a 2,225-strong Australian-led peacekeeping force. The intervention was approved by the governments of the Solomon Islands and other members of the PIF. Although New Zealand committed troops to the US-led war against terrorism in Afghanistan in late 2001, the government did not support the US-led war in Iraq in 2003, which upset bilateral relations.

## THE TEN MOST AT PEACE

### Denmark: 3rd position

*Score: 1.377*

Like Norway, Denmark is politically stable and enjoys good relations with its neighbours. Rates of violent crime and homicides are low, violent demonstrations are highly unlikely to occur and there is high level of respect for human rights. Although Denmark abandoned its policy of neutrality in 1949 to become a member of NATO, it has maintained a relatively modest level of defence contribution and refuses to allow nuclear weapons on its soil in peacetime. Military expenditure as a percentage of GDP is lower than that of both Sweden and Norway, and the volume of exports of major conventional weapons per head is far lower than the volume recorded for Sweden.

Since the late 1990s Denmark's foreign policy has seen a greater emphasis on maintaining close relations with the US. The government, led by Anders Fogh Rasmussen (Liberal Party), lent strong support to the US-led intervention in Iraq in March 2003, and a Danish contingent of around 500 troops has been present in Iraq since June 2003 as part of the international reconstruction effort. The mandate was extended for a further 12 months in June 2006. Emphasis has been placed on active membership of the UN and participation in peacekeeping operations – Danish soldiers are participating in Kosovo (KFOR) and Afghanistan (ISAF). Along with the other Nordic states, Denmark has contributed both equipment and training to help the Baltic States establish stronger military capacities.

### Ireland: 4th position

*Score: 1.396*

Ireland enjoys political stability and good relations with neighbouring countries. Violent crime is low, although the rate is higher than that of the Scandinavian countries surveyed. Ireland has a very small professional defence force, which serves with UN peacekeeping missions around the world. The country has traditionally been uninvolved in military alliances and the government secured an opt-out from any future EU defence arrangements in 2002. Military expenditure as a percentage of GDP is one of the lowest of the 121 countries surveyed; indeed most the indicators of militarisation receive very low scores. Small arms and light weapons are, however, more easily accessible than in Norway and New Zealand. Since November 1999 Ireland has participated in NATO's Partnership for Peace (PfP) programme, which entails co-operation between Irish and other PfP forces in areas such as peacekeeping, humanitarian operations, search and rescue and military procurement.

Ireland's high position in the GPI is perhaps surprising, given the historical conflict between the Provisional Irish Republican Army (PIRA) and Great Britain over the status of Northern Ireland. However, the majority of the violence that occurred during the "troubles" took place on British soil and the indicators that form the GPI reflect events since 2000 (by which time the peace process that followed the signing of the Good Friday Agreement in April 1998 had gained momentum). In July 2005, the PIRA announced an end to all illegal activities and claimed it would decommission its weapons.

## THE TEN MOST AT PEACE

### Japan: 5th position

*Score: 1.413*

Since the turbulent years immediately after the second world war, Japan has been free from civil unrest, and despite tense relations with many neighbouring countries, there are no conflicts. Japan is politically stable and measures of societal safety and security such as the level of violent crime, the likelihood of violent demonstrations and the number of homicides receive very low scores. Human rights are widely respected and stringent laws prohibit the possession of firearms.

Japan's low volumes of imports and exports of major conventional weapons and its relatively low level of military expenditure as a percentage of GDP reflect the ban on maintaining war potential that was enshrined in the 1946 constitution. Nevertheless, Japan's Self-Defence Forces (SDF) are highly sophisticated, and they have been deployed on international peacekeeping missions since legislation was passed in 1992. The government's decision, taken in December 2003, to dispatch the SDF to Iraq to help the US reconstruction effort in that country, and its decision in 2004 and again in 2005 to extend the SDF's tour of duty there, were further steps towards the normalisation of Japan's military.

### Finland: 6th position

*Score: 1.447*

In common with the other Nordic countries surveyed, Finland is politically stable, free of civil unrest and not at war with any other country. Relations with neighbouring states are good and the level of violent crime is very low. Other measures of safety and security in society, such as the likelihood of violent demonstrations and the number of homicides, are low but higher than in Norway and Denmark.

Since the end of the cold war Finland has professed a policy of strategic non-alignment and chosen not to apply for NATO membership, despite the fact that the three nearby Baltic states joined in 2004. Nevertheless, the number of armed services personnel per head of population is relatively high (higher than Sweden, Denmark and Canada). Furthermore, Finland has more heavy weapons per head of population than most European countries. The Finnish government has adopted an essentially neutral approach to the conflict in Iraq; it has refrained from sending troops and is not included in the US list of countries eligible to bid for contracts for reconstructing Iraq. However, Finland is involved in the NATO Partnership for Peace (PfP) programme and has supplied troops to the NATO-led force in Afghanistan.

## THE TEN MOST AT PEACE

### Sweden: 7th position

*Score: 1.478*

Politically stable and free of civil unrest, Sweden's scores in the measures of conflict and safety and security in society are similar to the low scores recorded in the other Nordic countries, with which it has a long-standing tradition of harmonious co-operation. The level of violent crime is very low and violent demonstrations are highly unlikely to occur. The number of jailed population per head is low compared with the United Kingdom, but slightly higher than the other Nordic countries surveyed.

Sweden's security policy has traditionally involved a combination of peacetime military non-alignment and wartime neutrality. Nevertheless, military spending as a percentage of GDP is relatively high, although lower than that of Norway, which is a NATO member. Moreover, Sweden's volume of exports of major conventional weapons per head is very high (of the 121 countries surveyed, only Russia and Israel record higher volumes, according to the Stockholm International Peace Research Institute, SIPRI). Sweden is a member of the NATO-initiated Partnership for Peace (PfP) programme and it participates in peacekeeping operations in Afghanistan (ISAF) and in Kosovo (KFOR), both with UN mandates.

### Canada: 8th position

*Score: 1.481*

Canada is politically stable and free of civil unrest. The level of violent crime is very low and violent demonstrations are highly unlikely to occur. Respect for human rights is accorded the highest possible score in Dalton and Gibney's index, in line with all the countries ranked above Canada in the GPI. The number of jailed population per 100,000 people is very low compared with that of neighbouring US, but higher than the Nordic countries and Japan.

Militarily, Canada has a relatively high percentage of its total forces (2.37%) involved in non-UN deployments in 2006-07. This largely reflects its presence in Afghanistan as part of NATO's International Security Assistance Force (ISAF). Canadian troops are also involved in peacekeeping activities in the Balkans and Haiti. Military expenditure as a percentage of GDP (1.42% according to IISS) is low by the standards of NATO members, and very low compared with the US (2.45%). Canada declined to contribute military forces to the US-led attack on Iraq in March 2003 in the absence of a UN mandate, and in 2005 Canada refused to join the US in its anti-ballistic missile shield initiative.



## THE TEN MOST AT PEACE

### Portugal: 9th position

*Score: 1.481*

Politically stable and free from civil unrest since the mid-1980s, Portugal is the highest-ranked southern European country in the GPI. Relations with neighbouring countries are very good and the level of violent crime is very low, although human rights accord less respect than the top-ranked eight countries in the index. Other measures of safety and security in society, such as the likelihood of violent demonstrations, the level of distrust in other citizens and the number of internal security officers and police per head of population are fairly low in global terms, but notably higher than the Nordic countries surveyed. Access to small arms and light weapons is heavily restricted.

A founding member of NATO, Portugal spends a relatively small percentage of its GDP on the military. There are fewer heavy weapons per head of population than the Nordic nations, although more than in Japan. Portuguese soldiers have participated in the UN peacekeeping mission in Angola since 1995. In 2003 the ruling Social Democratic Party (PSD) supported the US-led war in Iraq, in keeping with Portugal's Atlanticist tradition, and sent a small paramilitary force, although the decision was opposed by the Socialist Party (PS). The troops returned to Portugal in February 2005, shortly before the general election, when their mandate expired.

### Austria: 10th position

*Score: 1.483*

Neutral since the end of Soviet occupation of part of the country in 1955, Austria is politically stable and free of civil unrest. The country enjoys good relations with neighbouring states. Levels of violent crime are very low, as is the homicide rate. The number of jailed population per 100,000 is higher than that recorded in the Nordic countries and Japan, but lower than in Portugal.

Although Austria's military expenditure as a percentage of GDP is amongst the lowest of the 121 countries surveyed, the volume of imports of major conventional weapons per 100,000 is around three times higher than the other top ten-ranked countries. This probably reflects the (domestically) controversial procurement of 18 Typhoon interceptor (Euro-fighter) aircraft from the European Aeronautic Defence and Space Company (EADS). Since 1995 Austria has been a member of NATO's Partnership for Peace (PfP) programme, which has led to its direct involvement in many NATO activities. In 2002 Austria adopted a new foreign-policy doctrine, which allows for greater involvement in collective security arrangements without formally abandoning Austria's constitutionally enshrined neutrality. Austria has been an active member of the formerly NATO-led peace operation in Bosnia-Herzegovina since 1995 and of the NATO-led KFOR operation in Kosovo since 1999. In recent years Austrian troops have also operated as part of UN missions in the Golan Heights, Cyprus and Afghanistan (as part of the International Security Assistance Force).

## THE TEN LEAST AT PEACE

*Globally, war-torn Iraq is classified as the least at peace out of the GPI 121, followed by Sudan. A focused review and outlook for the bottom 10 countries in the rankings follows below.*

### **Iraq: 121st place**

*Score: 3.437*

The ongoing war in Iraq, which, since 2005, has taken on an increasingly sectarian nature and left most of the country in turmoil, makes it the lowest-ranked nation of the 121 territories surveyed in the GPI. Not surprisingly, Iraq's measures of ongoing domestic and international conflict have received extremely high scores. The country's indicators show high levels of political instability, and the number of displaced persons as a percentage of the population is also very high. It has been estimated that waves of emigrants and refugees in recent decades have led to 4m Iraqis living in exile, and a survey issued in mid-2006 by the US Committee for Refugees and Immigrants (USCRI) estimated that there were 801,000 Iraqi refugees in Jordan and Syria alone. Iraq is a highly militarised country, the legacy of Saddam Hussein's steady build-up of forces from his time as head of security in the ruling Ba'ath Party in the 1970s to the overthrow of his regime by US-led forces in May 2003. The fact that small arms and light weapons are also highly accessible partly reflects the ease with which munitions can be smuggled across Iraq's porous borders.

### **Sudan: 120th place**

*Score: 3.182*

Sudan's lowly position reflects the continued bloodshed and deepening humanitarian crisis in the western region of Darfur. The conflict began in early 2003, when the Sudan Liberation Army (SLA) began guerrilla attacks on government positions in Darfur. The US accused Sudan of genocide in Darfur and called for sanctions in September 2004. The crisis in Darfur has created more than 2m refugees, many of whom have fled to Chad.

Although a peace agreement in 2005 ended 21 years of war between the north and south of the country and enabled the formation of a government of national unity with a referendum on unity in 2011, some opposition groups from the east of the country have remained outside of the new government. Overall, Sudan's indicator scores for domestic and international conflict are very high, as are measures of security and safety in society such as the level of distrust in other citizens and the likelihood of violent demonstrations. High scores have also been recorded for measures of militarisation, particularly the ease of access to small arms and light weapons and military expenditure as a percentage of GDP.

## THE TEN LEAST AT PEACE

### Israel: 119th place

*Score: 3.033*

Israel's high score for "relations with neighbouring countries" reflects high levels of tension recorded in early 2007. Relations with Lebanon have been fraught since the seizure by Hizbullah guerrillas (the Lebanese Shia paramilitary group) of two Israeli troops on the border in July 2006. The subsequent large-scale Israeli military operations in Lebanon caused many deaths and injuries, and the two Israeli soldiers remain incarcerated. The relatively high numbers of deaths in internal and external conflicts (as recorded by the Uppsala Data Conflict Program) largely reflect the violent conflict associated with the Second Palestinian Intifada (Uprising), which began in September 2000 and only abated in 2005. Scores that indicate a high potential for terrorist acts, a high level of distrust in other citizens and a lack of respect for human rights point to an overall lack of societal safety and security in Israel.

Military expenditure in Israel as a percentage of GDP is one of the highest in the world (at 4.12%) and the country has the largest number of armed service personnel per head of population in the GPI. Additionally, Israel has by far the most heavy weapons of the countries surveyed, according to the Bonn International Centre for Conversion, BICC, more than four times the figure for the US. The combination of the very high levels of militarisation and conflict with neighbouring countries puts Israel at 119th place in the index, with these factors outweighing the relatively low level of violent crime domestically and a broadly stable political scene.

### Russia: 118th place

*Score: 2.903*

Russia's armed conflict with separatists in the southern region of Chechnya is the reason for the country's relatively high scores in the measures of ongoing domestic and international conflict. Russian forces resumed fighting in Chechnya in 1999 (the first Chechen War ended in 1996 after two years), and there were 80,000 troops in the republic as of March 2005. The violence occasionally spills over into neighbouring republics in the North Caucasus, and the rebels have increasingly resorted to terrorist attacks in Moscow and elsewhere in Russia. This has further dampened Russians' low levels of trust in other citizens, already undermined by high rates of homicide and violent crime. The International Centre for Prison Studies records that a very high proportion of the Russian population is in jail (second only to the US in the GPI).

Russia's military capability has shrunk greatly since the Soviet era, but it remains powerful; the country's active armed forces totalled just over 1m in 2004. Military expenditure as a percentage of GDP remains fairly high and the number of exports of major conventional weapons is extremely high (4.82 per 100,000 population, second only to Israel), according to the Stockholm International Peace Research Institute (SIPRI).

## THE TEN LEAST AT PEACE

### **Nigeria: 117th place**

*Score: 2.898*

Since the return to civilian rule in 1999, Nigeria has suffered from regular outbreaks of ethno-religious violence: at least 50,000 people have died and an additional 800,000 people have been displaced. The government has tried to take a firm line, often using the military to quell violence. Accordingly, Nigeria receives high scores in indicators such as the level of internal organised conflict. Measures of external conflict are scored lower, reflecting relatively good relations with neighbouring countries, although there is an ongoing territorial dispute with Cameroon over the oil-rich Bakassi Peninsula.

Distrust among the population is high, as is the likelihood of violent demonstrations. The scores for Nigeria's measures of militarisation present a mixed picture; on the one hand, the military receives a relatively small amount of government expenditure as a percentage of GDP and the number of armed service personnel per head is fairly low. On the other hand, it is extremely easy to obtain small arms and light weapons, which raises the country's overall score.

### **Colombia: 116th place**

*Score: 2.770*

High scores in the measures of internal conflict are one reason for Colombia's low position in the GPI. For decades parts of the country have been mired in conflict between the government and leftist guerrilla groups, many of which were formed in the mid-1960s to represent the interests of the rural poor. Since the late 1980s the Fuerzas Armadas Revolucionarias de Colombia (FARC) and the Ejército de Liberación Nacional (ELN) have been the two main guerrilla forces. Both prospered through drug-trafficking, which fed violence and corruption. Colombia's homicide rate is very high, as are the level of violent crime and the potential for terrorist acts. Conversely, respect for human rights is extremely low, according to Gibney and Dalton's index as measured in 2005. Military expenditure as a percentage of GDP is the joint highest (with Cuba) of the Latin American countries surveyed – although considerably lower than some Middle-Eastern countries – and even though the aggregate number of heavy weapons is relatively low, small arms and light weapons are easily accessible.

## THE TEN LEAST AT PEACE

### **Pakistan: 115th place**

*Score: 2.697*

Pakistan's low position is partly a reflection of continuing conflict with neighbouring India in the Himalayan province of Kashmir, as well as several ethnic and religious conflicts within the country. Sporadic bombings continue to occur nationwide, primarily on trains, buses and in marketplaces. These problems have been accentuated in recent times by the infiltration of al-Qaida militants into the urban areas of Pakistan in the aftermath of the US war in Afghanistan. Political instability, the level of violent crime and the potential for terrorist acts in Pakistan are all very high, and these factors are aggravated by a poor human rights record.

The army remains Pakistan's ultimate political arbiter. It has run the country for as many years as civilian governments, and was the driving force behind the premature removal of the last four elected administrations. Military expenditure as a percentage of GDP is high, although lower than many Middle-Eastern countries. Small arms and light weapons are, moreover, very easily accessible.

### **Lebanon: 114th place**

*Score: 2.662*

Extremely tense relations between Lebanon and its neighbours, Syria and Israel, explain the country's very high scores in the indicators of ongoing domestic and international conflict. Israel's military offensive in southern Lebanon in 2006 has also intensified political divisions in Lebanon, as some blamed Hizbullah for the destruction, whereas others complained that the country's international allies – particularly the US – had delayed calling for a ceasefire while Lebanon was being bombed.

As in most of the bottom ten countries in the GPI, Lebanon has high levels of distrust in other citizens and has a high risk of terrorist acts. The score for political instability is also high, reflecting the tensions that have engulfed the country since the assassination of the former prime minister, Rafiq al Hariri, in 2005. There are ongoing tensions between Hizbullah, which operates an effective state within a state, and the weak government led by the prime minister, Fuad Siniora.

Lebanon is a highly militarised country: according to the IISS, the number of armed services personnel per head (4.32 per 100,000 population) is higher than that of any other country surveyed apart from Israel (5.0 per 100,000). Military expenditure as a percentage of GDP is fairly high (2.14%) and small arms and light weapons are highly accessible.

## THE TEN LEAST AT PEACE

### Côte d'Ivoire: 113th place

*Score: 2.638*

Once considered one of the most stable countries in sub-Saharan Africa, Côte d'Ivoire has experienced a collapse of political order since the military coup of December 1999, degenerating into civil war in September 2002. Although a peace accord was signed in January 2003, the country remains divided in two, with the north controlled by the former rebels, known as the New Forces, and the south under government control. The very high score for the level of organised conflict (internal) reflects the sporadic violence that continues in the west of the country, close to the Liberian border. Relations with neighbouring countries are relatively good.

The indicator scores for safety and security in society are high, particularly the level of distrust in other citizens and the likelihood of violent demonstrations; both these indicators receive the highest possible score. Côte d'Ivoire's score for political instability is extremely high, second only to Iraq in the 121 countries surveyed, and level with Pakistan. This reflects the continued failure of the president, Laurent Gbagbo, and the leader of the New Forces, Guillaume Soro, to agree on and organise fresh national elections. However, a deal outlining plans for forming a joint army and with a new timetable for elections, which was brokered and co-signed by the President of Burkina Faso, Blaise Compaore, in March 2007, has brought hope. Côte d'Ivoire's record on human rights is poor. The level of violent crime and the potential for terrorist acts, however, are both ranked as moderately high.

The scores for Côte d'Ivoire's measures of militarisation present a mixed picture; on the one hand, the military receives a relatively small amount of government expenditure as a percentage of GDP, according to the IISS and the number of armed service personnel per head is fairly low. Historically, the Ivorian government has invested less in the army than in the police, particularly the gendarmerie, as it was traditionally more concerned with domestic law and order than with external threats. On the other hand, it is very easy to access small arms and light weapons, which raises the country's overall score.

## THE TEN LEAST AT PEACE

### Angola: 112th place

*Score: 2.587*

Angola's 26-year civil war ended in April 2002 and the guerrilla army, União Nacional para a Independência Total de Angola (UNITA), disbanded shortly afterwards, marking the start of UNITA's transition from a rebel movement to a political party. However, the country receives high scores in the indicators of ongoing domestic conflict, reflecting the low-level armed insurgency that rumbles on in Angola's oil-rich enclave of Cabinda. Angolan troops have operated in neighbouring Democratic Republic of Congo (DRC) and Congo (Brazzaville) in recent years.

The indicator scores for safety and security in society are high, notably the number of homicides and the level of distrust in other citizens. The level of violent crime is high and violent demonstrations are likely to occur. A very high proportion of Angola's population is displaced, the legacy of the prolonged and brutal civil war. Angola receives a high ranking for political instability, even though the Movimento Popular de Libertação de Angola (MPLA) has been dominant since it emerged as the victor in the civil war.

Angola has a large, battle-hardened army, the Forças Armadas Angolanas (FAA), and is a regional military superpower. Mercenaries were used for frontline activity in the past, and numerous private security firms are employed to protect strategic assets such as diamond mines and oil installations. Military expenditure as a proportion of GDP is high and small arms and light weapons are easily accessible.

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

The GPI is a numerical measure of how at peace a country is with itself and other countries. It is a foundation on which to establish a measure of the incidence of peace. However, it cannot on its own explain why these absences occur and whether groups of countries exhibit sufficient similar deficiencies resulting in an absence of peace.

In addition to the collation of data and scores for the 24 indicators listed on pages 6 and 7, this study has assessed a secondary dataset of 33 indicators measuring government competence and efficacy; the strength of institutions and the political process; international openness; demographics; regional integration; religion and culture; and education and material wellbeing. Full descriptions for each of these indicators are provided in Annex B.



CORRELATION COEFFICIENTS	OVERALL	INTERNAL	EXTERNAL
Overall score	1.00	0.96	0.53
Internal peace	0.96	1.00	0.28
External peace	0.53	0.28	1.00
Level of distrust in other citizens	0.71	0.74	0.20
Number of internal security officers and police 100,000 people	0.15	0.12	0.16
Number of homicides per 100,000 people	0.55	0.65	-0.06
Number of jailed population per 100,000 people	0.03	-0.01	0.14
Ease of access to weapons of minor destruction	0.66	0.73	0.06
Level of organised conflict (internal)	0.79	0.78	0.36
Likelihood of violent demonstrations	0.70	0.77	0.06
Level of violent crime	0.59	0.72	-0.14
Political instability	0.70	0.73	0.21
Respect for human rights	0.83	0.84	0.32
Imports of major conventional weapons per 100,000 people	-0.14	-0.19	0.11
Potential for terrorist acts	0.55	0.47	0.48
Number of deaths from organised conflict (internal)	0.69	0.60	0.57
Military expenditure as a percentage of GDP	0.18	0.05	0.45
Number of armed services personnel per 100,000 people	0.08	-0.06	0.47
UN Deployments 2006-07 (percentage of total forces)	-0.14	-0.10	-0.19
Non-UN Deployments 2006-07 (percentage of total forces)	-0.16	-0.15	-0.09
Aggregate number of heavy weapons per 100,000 people	0.11	-0.03	0.50
Exports of major conventional weapons per 100,000 people	0.01	-0.12	0.42
Military capability/sophistication	-0.02	-0.19	0.53
Number of displaced people (% of population)	0.17	0.11	0.28
Relations with neighbouring countries	0.61	0.52	0.52
Number of external and internal conflicts fought: 2000-05	0.58	0.46	0.60
Estimated number of deaths from organised conflict (external)	0.21	0.06	0.56
Volume of transfers of major conventional weapons, as recipient (Imports)	0.00	-0.08	0.25
Number of armed services personnel ('000s)	0.21	0.12	0.39
Number of paramilitary personnel ('000s)	0.09	0.07	0.09
Aggregate number of heavy weapons	0.23	0.11	0.48
Volume of transfers of major conventional weapons as supplier	0.14	0.04	0.37
Number of crimes per 100,000 people	-0.02	-0.04	0.06
Political Democracy Index	-0.48	-0.50	-0.13
Electoral process	-0.31	-0.32	-0.11
Functioning of government	-0.60	-0.62	-0.20
Political participation	-0.35	-0.39	-0.03
Political culture	-0.49	-0.55	0.00
Civil liberties	-0.44	-0.44	-0.19
Corruption perceptions (10 = highly clean, 0 = highly corrupt)	-0.68	-0.76	-0.02
Women in parliament (% total number of representatives in lower house)	-0.30	-0.31	-0.12
Freedom of the press	0.49	0.48	0.23
Exports + Imports % of GDP	-0.22	-0.21	-0.11
Foreign Direct Investment (flow) % of GDP	0.01	-0.01	0.08
Number of visitors as % of domestic population	-0.15	-0.14	-0.09
Net Migration (% of total population)	-0.17	-0.23	0.13
15-34 year old males (% of total population)	0.34	0.40	-0.04
Gender ratio of population: women/men	-0.02	-0.03	0.02
Extent of regional integration	0.58	0.55	0.33
Current education spending (% of GDP)	-0.24	-0.29	0.07
Primary school enrolment ratio (% Net)	-0.42	-0.47	-0.01
Secondary school enrolment ratio (% Net)	-0.48	-0.58	0.10
Higher education enrolment (% Gross)	-0.43	-0.54	0.14
Mean years of schooling	-0.50	-0.57	0.00
Adult literacy rate (% of population over 15)	-0.38	-0.45	0.05
Hostility to foreigners/private property	0.59	0.61	0.18
Importance of religion in national life	0.53	0.53	0.23
Willingness to fight	0.31	0.22	0.39
Nominal GDP (US\$PPP bn)	0.01	-0.09	0.31
Nominal GDP (US\$ bn)	-0.06	-0.17	0.32
GDP per capita	-0.56	-0.65	0.04
Gini-coefficient	0.33	0.42	-0.15
Unemployment (%)	0.25	0.25	0.11
Life expectancy	-0.42	-0.50	0.07
Infant mortality per 1,000 live births	0.50	0.57	0.02
Total population (m)	0.14	0.10	0.19
Number of paramilitary personnel per 100,000 people	-0.04	-0.06	0.06

Table 4

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

The list of potential drivers is by no means exhaustive; it comprises indicators with data that are both available across the countries from credible sources and are comparable and consistent in their measurement. Table 4 lists each of the indicators in the two groups, the GPI and the pool of potential drivers. Correlation coefficients of the GPI scores and ranks and then the scores for the internal and external measures of peace are given against each indicator. Pearson correlation coefficients are calculated across the full 121 countries. Values are shaded where  $x > 0.5$  and  $x < -0.5$ .

Of the listed variables, the overall index is strongly determined by the internal measure of peace with  $r = 0.96$ . Of the drivers, the composite measure of democracy just misses

on an  $r > 0.5$  against the overall score, but one of its sub-components calculates as having a reasonable correlation, thereby resulting in a significant correlation for political democracy and internal peace. Functioning of government – a 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 – has an  $r = -0.60$  against the overall peace score. This is even slightly higher against the internal measure of peace, at  $r = -0.62$ . Interestingly, the external peace measure is not significantly correlated with any of the measures relating to democracy.

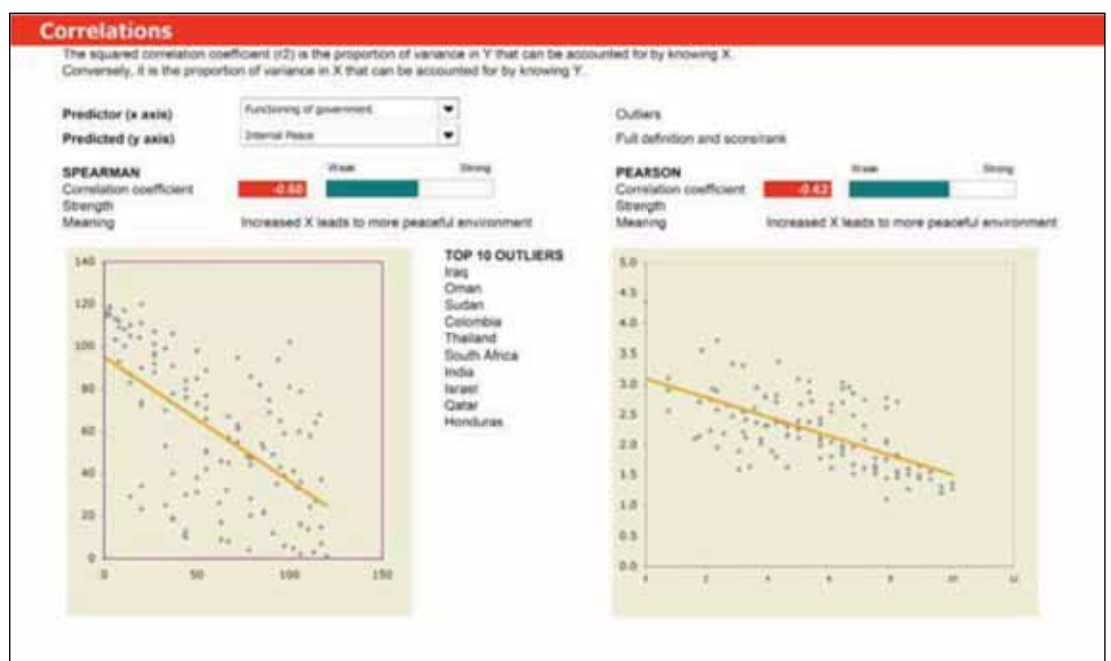


Figure 2: Government and internal peace

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

The variable charting perceptions of corruption within a society have a strong correlation with the overall index and the internal index scores. The Pearson correlation coefficient on the internal index was  $r = -0.76$ , and  $r = -0.68$  on the overall score.

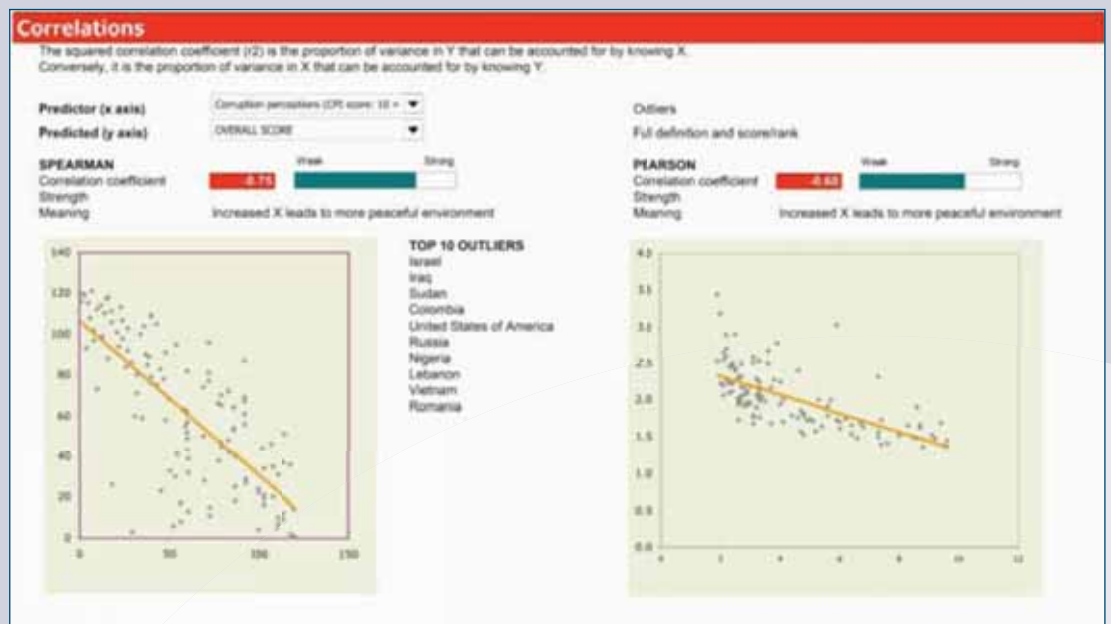


Figure 3: Corruption and overall score

The indicators for international openness exhibit no significant correlations. Neither do the demographic indicators. Some commonly held metrics as potential drivers for domestic and international conflict, such as above-average shares of young men in the population and imbalances between males and females, have low correlation coefficients on the basis of the calculations.

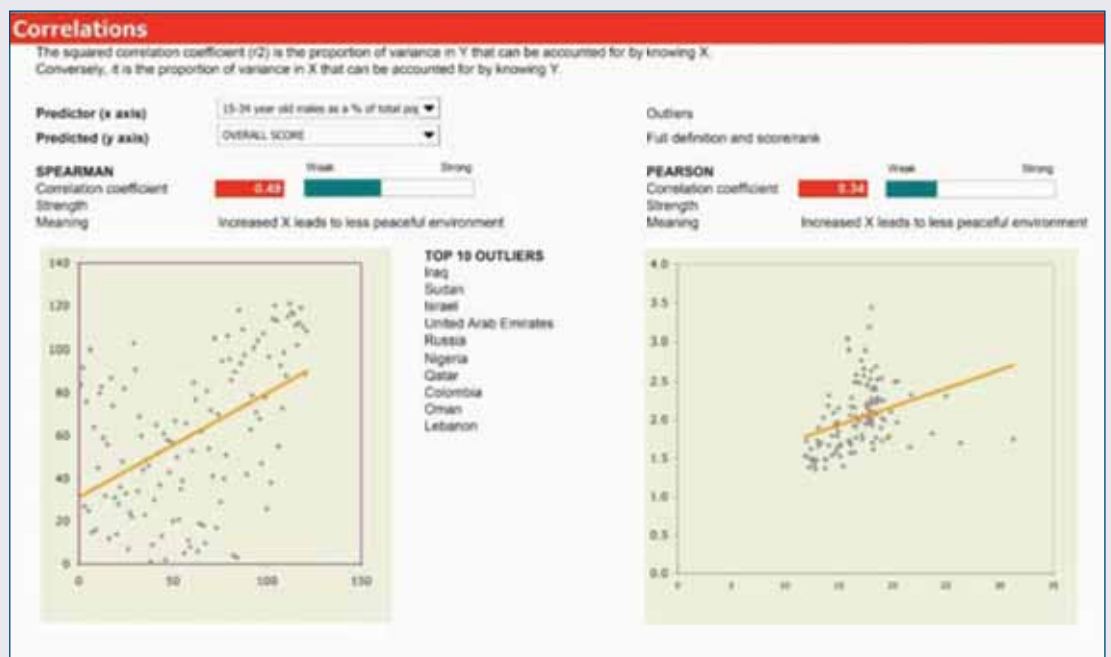


Figure 4: Young men and internal peace

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

The extent of regional integration is shown to have a significant correlation with the overall index, but also with the internal measure. This is surprising, as the regional integration score is a qualitative assessment of a country's relations with its neighbours, and therefore an external metric. To an extent this is explained by the high scores for regional integration in the countries of the European Union and their generally high peace scores.

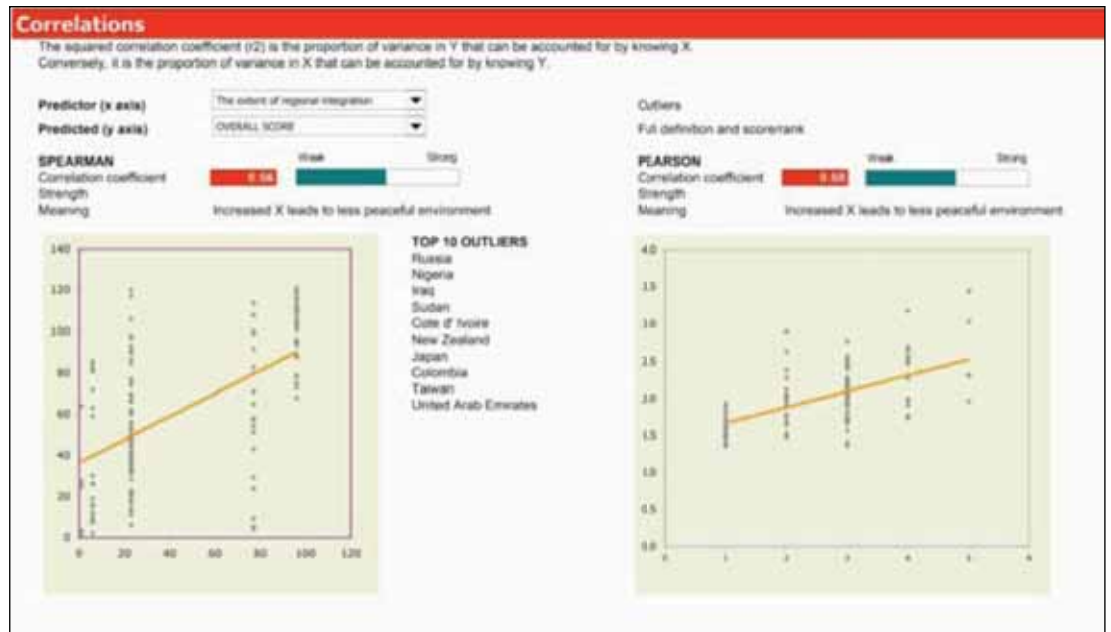


Figure 5: Regional integration and overall score

The education measures used in the index appear to have significant correlations with the measure of internal peace. Enrolment measures have an average  $r$  of  $-0.53$ , while mean years of schooling is at  $r = -0.57$ . Their correlation coefficients are between  $r = -0.4$  and  $r = -0.5$  against the overall index, with mean years of schooling at  $-0.5$ . These educational variables are, however, likely to be strongly correlated with other measures such as good governance and material wellbeing.

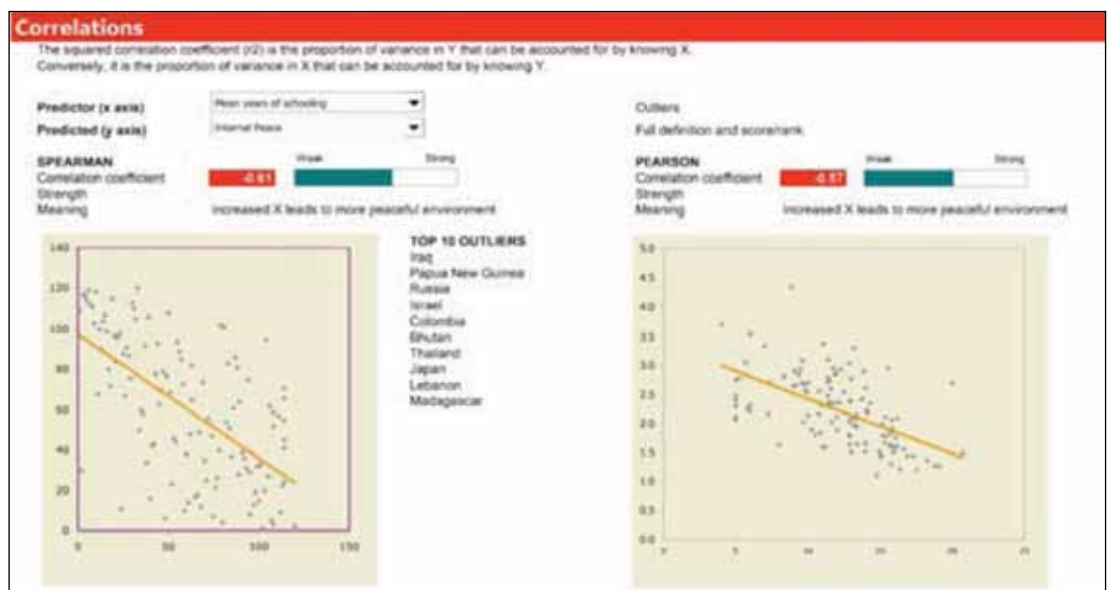


Figure 6: Mean years of schooling and internal peace

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

Two societal, qualitative assessments scored by the Economist Intelligence Unit's team of country analysts also appear to have a reasonable, correlation to the overall score. The first indicator, hostility to foreigners and private property attempts to measure just that, society and government's general attitude to foreigners and their investments in any given country. The second is a measure of the importance of religion in national life, both for households and its influence on government policy. Some caution is necessary here, however, as the significance of the correlation is likely influenced by the stepped nature of these scores as they proceed from 1 to 5.

The final two indicators of significance are measures of material wellbeing and health. Their significance matches other quantitative investigations in this area of study, establishing a causal relationship with GDP per head. Broadening the range of countries beyond the set selected in the first cut of the Global Peace Index would probably strengthen this finding. The relationship is even more pronounced against the measure of internal peace. There appears to be no relationship, however, on the measure of external peace.

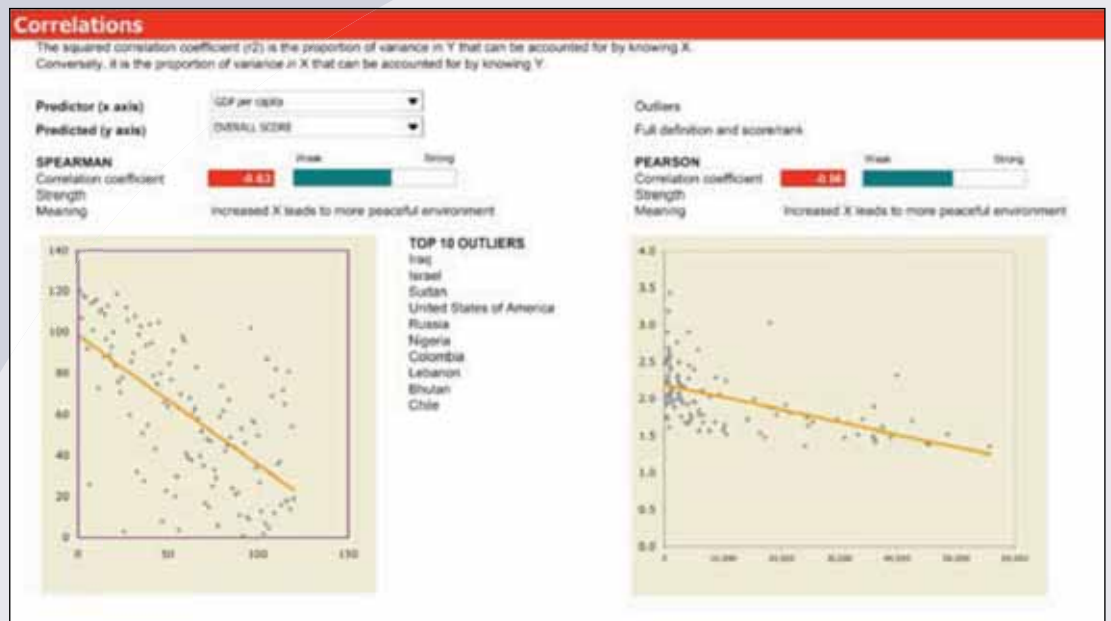


Figure 7: GDP per capita and overall score

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

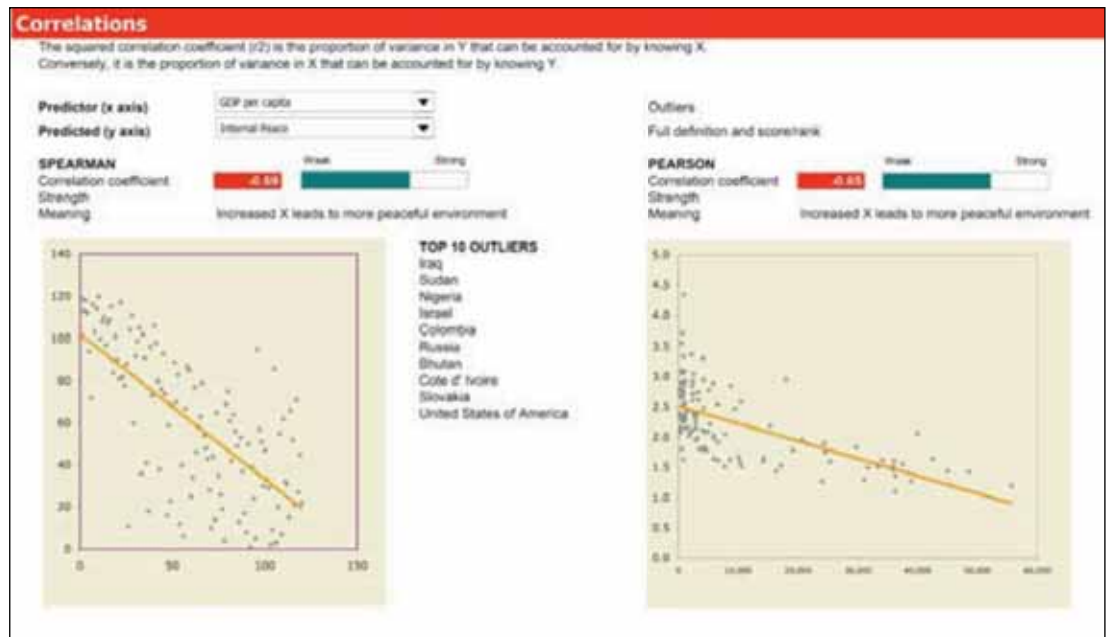


Figure 8: GDP per capita and overall score

The final indicator suggesting a possible relationship is infant mortality. Again this indicator is likely to be highly correlated to a number of the other potential drivers, such as GDP per head.

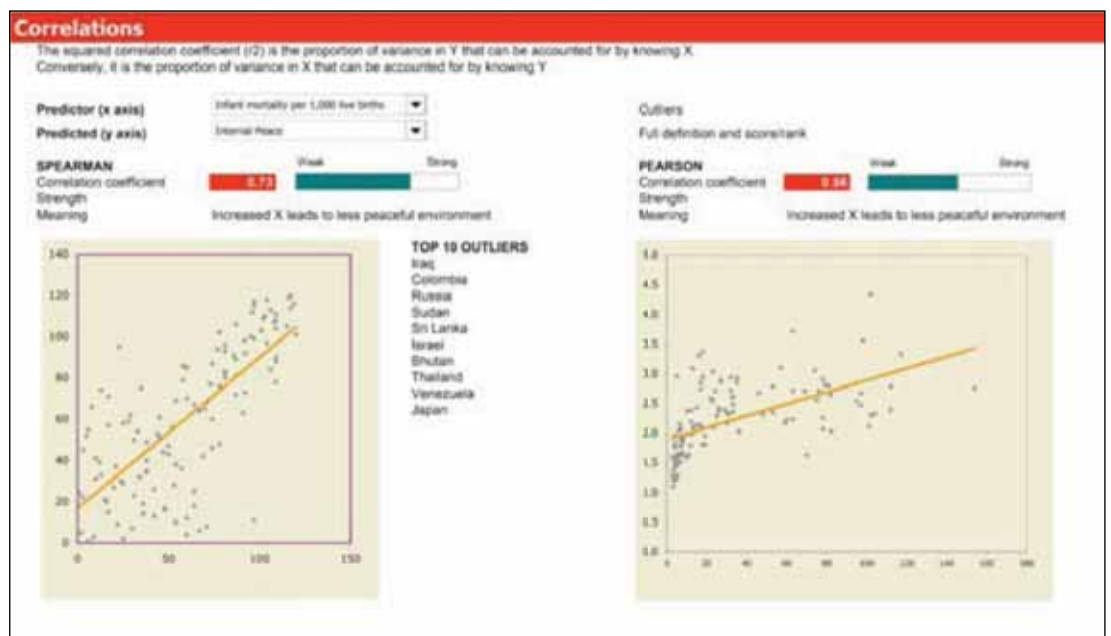


Figure 9: Infant mortality and internal peace

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

None of the other metrics on material wellbeing and health have correlation coefficients greater than 0.5 or less than -0.5, although life expectancy only just crosses the bar of significance with a Pearson correlation of 0.502. The Gini coefficient, a measure of income distribution, also comes close. It might break the threshold of significance with an extension to more countries. There are nevertheless some problems with the Gini coefficient; the latest year of publication for many countries suffers from a considerable lag and the Economist Intelligence Unit had to estimate the coefficient for a sizeable number of countries in the GPI.

For each of the calculations carried out there has been a significant amount of outliers, some consistent with each measure. A list of the countries is given in each of the figures above between the two scattergrams. Frequently listed countries include Iraq, Sudan, Israel, Colombia, Lebanon and the United States. As outliers they weaken the overall results, but also appear not to be following the general trends established for other countries. There are clearly other factors relating to these countries that are not being captured by the chosen set of determinants.

It should be noted that little has been established in the way of correlations to the measure of external peace. This is probably attributable to the previously noted observation that there have been very few interstate conflicts within the GPI 121 during the period under review. The observable sample set of countries thus is very small and diverse, from the United States and the United Kingdom to Pakistan.

Based on these preliminary investigations, an ordering of influences and drivers would look like the following.

## INVESTIGATING THE SET OF POTENTIAL DETERMINANTS

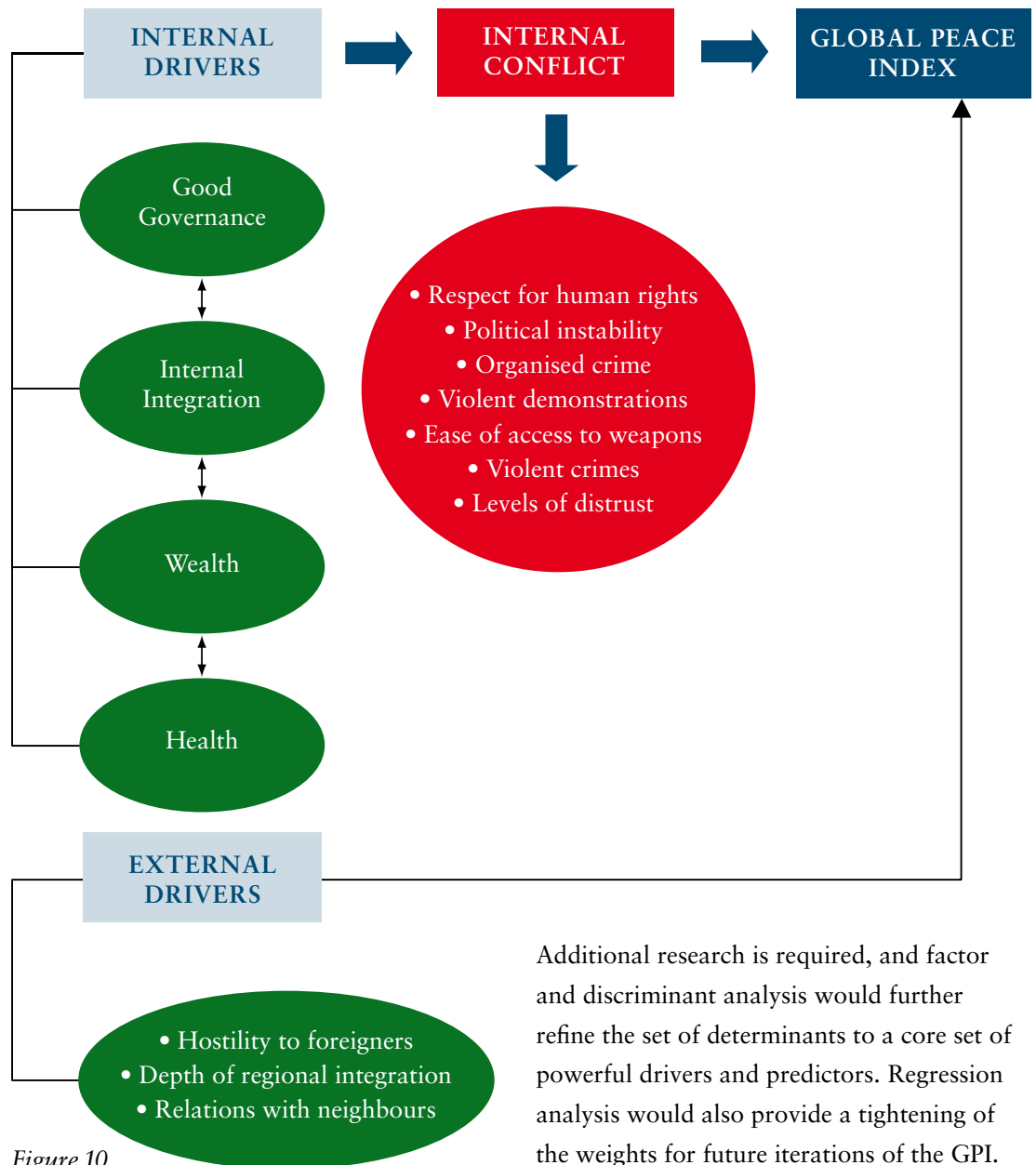


Figure 10

Based on the initial research carried out on the GPI against the chosen set of drivers, peaceful societies are those characterised as countries with very low levels of internal conflict with efficient, accountable governments, strong economies, cohesive/integrated populations and good relations within the international community.

Additional research is required, and factor and discriminant analysis would further refine the set of determinants to a core set of powerful drivers and predictors. Regression analysis would also provide a tightening of the weights for future iterations of the GPI. Modelling and the building of a historical database would also help make causality clearer in the ordering problem; do the societal variables really drive internal conflict or does it work the other way round. For example, do rises in average incomes and wealth such as GDP per capita create more peaceful societies, or is the emergence of greater internal and external peace a prerequisite for a take-off in economic growth? Is corruption a symptom of an absence of peace or its cause?



## ANNEX A

Where the quantitative indicators have missing data, the Economist Intelligence Unit's analysts have estimated scores.

### Measures of ongoing domestic and international conflict

	Indicator	Central Source	Year	Definition / coding
1	<b>Number of external and internal wars fought</b>	Uppsala Conflict Data Program (UCDP), University of Uppsala, Sweden / International Peace Research Institute, Oslo (PRIO) Armed Conflict Dataset and "The Atlas of War and Peace"—Earthscan, 2003	2000-05	UCDP defines conflict as: "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a year"  For more detailed explanation see note below:
2	<b>Estimated number of deaths from organised conflict (external)</b>	UCDP	2004 and 2005	As above
3	<b>Number of deaths from organised conflict (internal)</b>	UCDP/PRIO Armed Conflict Dataset	2004 and 2005	As above
4	<b>Level of organised conflict (internal)</b>	Economist Intelligence Unit	2007	Qualitative assessment of the intensity of conflicts within the country. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
5	<b>Relations with neighbouring countries</b>	Economist Intelligence Unit	2007	Qualitative assessment of relations with neighbouring countries. Ranked 1-5 (very low – very high) by Economist Intelligence Unit analysts

## ANNEX A

Where the quantitative indicators have missing data, the Economist Intelligence Unit's analysts have estimated scores.

### Measures of safety and security in countries

	Indicator	Central Source	Year	Definition / coding
6	Level of distrust in other citizens	Economist Intelligence Unit	2007	Qualitative assessment of level of distrust in other citizens. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
7	Number of displaced people as a percentage of the population	World Bank WDI	2003	Refugee population by country or territory of origin, as a percentage of the country's total population
8	Political instability	Economist Intelligence Unit	2007	Qualitative assessment of the level of political instability. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
9	Level of respect for human rights (Political Terror Scale)	Amnesty International / Gibney and Dalton	2005	A qualitative measure of the level of political terror through an analysis of Amnesty International's Yearbook
10	Potential for terrorist acts	Economist Intelligence Unit	2007	Qualitative assessment of the potential for terrorist acts. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
11	Number of homicides per 100,000 people	UNODC, 9th, 8th and 7th UN Surveys of Criminal Trends and Operations of Criminal Justice Systems (UNCJS)	2004 and 2002	Intentional homicide refers to death deliberately inflicted on a person by another person, including infanticide. For additional information on this indicator see Additional notes on the indicators
12	Level of violent crime	Economist Intelligence Unit	2007	Qualitative assessment of the level of violent crime. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
13	Likelihood of violent demonstrations	Economist Intelligence Unit	2007	Qualitative assessment of the level of violent demonstrations. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
14	Number of jailed population per 100,000 people	International Centre for Prison Studies, King's College London, <i>World Prison Population List</i>	2006	For additional information on this indicator see Additional notes on the indicators
15	Number of internal security officers and police per 100,000 people	UNODC, 8th and 7th UN Surveys of Criminal Trends and Operations of Criminal Justice Systems (UNCJS)	2002 and 2000	Refers to the civil police force as distinct from national guards or local militia

## ANNEX A

### Measures of militarisation

	Indicator	Central Source	Year	Definition / coding
16	<b>Military expenditure as a percentage of GDP</b>	The International Institute for Strategic Studies, <i>The Military Balance 2007</i>	2004	Cash outlays of central or federal government to meet the costs of national armed forces – including strategic, land, naval, air, command, administration and support forces as well as paramilitary forces, customs forces and border guards if these are trained and equipped as a military force
17	<b>Number of armed services personnel per 100,000 people</b>	The International Institute for Strategic Studies, <i>The Military Balance, 2007</i>	2006	Active armed services personnel comprises all servicemen and women on full-time duty in the army, navy, air force and joint forces (including conscripts and long-term assignments from the Reserves)
18	<b>Volume of transfers of major conventional weapons (imports) per 100,000 people</b>	SIPRI Arms Transfers Project database	2001-05	The SIPRI Arms Transfers Database covers all international sales and gifts of <i>major conventional weapons</i> and the technology necessary for the production of them. The transfer equipment or technology is from one country, rebel force or international organisation to another country, rebel force or international organisation. Major conventional weapons include aircraft, armoured vehicles, artillery, radar systems, missiles, ships, engines
19	<b>Volume of transfers of major conventional weapons (exports) per 100,000 people</b>	SIPRI Arms Transfers Project database	2001-05	The SIPRI Arms Transfers Database As above
20	<b>UN Deployments (percentage of total forces)</b>	The International Institute for Strategic Studies, <i>The Military Balance, 2007</i>	2006-07	Military deployments to UN peacekeeping missions worldwide 2006-07
21	<b>Non-UN Deployments (percentage of total forces)</b>	The International Institute for Strategic Studies, <i>The Military Balance, 2007</i>	2006-07	Military deployments in non-UN missions 2006-07 – including those organised by NATO (ISAF, KFOR), US Coalition (MNF-I), EU (EUFOR, EUPOL), African Union (AMIS), OSCE
22	<b>Aggregate number of heavy weapons per 100,000 people</b>	Bonn International Centre for Conversion (BICC)	2003	The BICC Weapon Holdings Database contains figures for four weapon categories: armoured vehicles, artillery, combat aircraft, major fighting ships. The numbers of weapons in these categories have been indexed, with 1996 as the fixed base year. Holdings are those of government forces and do not include holdings of armed opposition groups. Weapon systems in storage are also not included. Indices for groups are directly calculated from the aggregated numbers of holdings of heavy weapons
23	<b>Ease of access to small arms and light weapons</b>	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the ease of access to small arms and light weapons. Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts
24	<b>Military capability / sophistication</b>	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the grade of sophistication and the extent of military research and development (R&D) Ranked 1-5 (very low-very high) by Economist Intelligence Unit analysts

## ADDITIONAL NOTES ON THE INDICATORS USED IN THE GLOBAL PEACE INDEX

### Number of external and internal armed conflicts fought: 2000-05

Source: the Uppsala Conflict Data Program (UCDP), Uppsala University, Sweden

The separate elements of the definition are as follows:

(1) Use of armed force: use of arms in order to promote the parties' general position in the conflict, resulting in deaths.

(1.1) Arms: any material means, e.g. manufactured weapons but also sticks, stones, fire, water, etc.

(2) 25 deaths: a minimum of 25 battle-related deaths per year and per incompatibility.

(3) Party: a government of a state or any opposition organisation or alliance of opposition organisations.

(3.1) Government: the party controlling the capital of the state.

(3.2) Opposition organisation: any non-governmental group of people having announced a name for their group and using armed force.

(4) State: a state is:

(4.1) an internationally recognised sovereign government controlling a specified territory, or

(4.2) an internationally unrecognised government controlling a specified territory whose sovereignty is not disputed by another internationally recognised sovereign government previously controlling the same territory.

(5) Incompatibility concerning government and/or territory the incompatibility, as stated by the parties, must concern government and/or territory.

(5.1) Incompatibility: the stated generally incompatible positions.

(5.2) Incompatibility concerning government: incompatibility concerning type of political system, the replacement of the central government or the change of its composition.

Incompatibility concerning territory: incompatibility concerning the status of a territory, e.g. the change of the state in control of a certain territory (interstate conflict), secession or autonomy (intrastate conflict).

### Respect for Human Rights (Political Terror Scale)

Mark Gibney and Matthew Dalton, from the University of North Carolina, have coded countries on a 1 to 5 scale according to their level of terror in their previous year, based on the description provided in the Amnesty International Yearbook (in this case the 2006 Yearbook, referring to 2005 data). There is an additional index coded on a 1 to 5 scale based on a close analysis of Country Reports from the US State Department. Amnesty International scores have been used where available, with US State Department scores used to fill missing data.

- Level 1 is scored if the country operates under a secure rule of law. People are not imprisoned for their views and torture is rare or exceptional. Politically – motivated murders are extremely rare;
- Level 2 points that there is a limited amount of imprisonment for non-violent political activity. However, few persons are affected and torture and beatings are exceptional. Politically-motivated murder is rare;
- Level 3: Imprisonment for political activity is more extensive. Politically-motivated executions or other political murders and brutality are common. Unlimited detention, with or without a trial, for political views is also commonplace;

## ADDITIONAL NOTES ON THE INDICATORS USED IN THE GLOBAL PEACE INDEX

- Level 4: The practices of level 3 affect a larger portion of the population and murders, disappearances and torture are a common part of life. In spite of its pervasiveness, on this level political terror affects those who interest themselves in politics;
- Level 5: The terrors characteristic of level 4 countries encompass the whole population at level 5. The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals.

### Number of homicides per 100,000 people

This indicator has been compiled using UNODC figures (7th and 8th Surveys of Criminal Trends) rather than Interpol data. The figures refer to the total number of penal code offences or their equivalent, but excluding minor road traffic and other petty offences, brought to the attention of the police or other law enforcement agencies and recorded by one of those agencies. The latest Interpol figures used are for 1998/99 and the consensus among experts on the analysis of criminal justice is that the UNODC figures are more reliable – they are compiled from a standard questionnaire sent to national officials via the UN statistical office. However, the UN acknowledges that international comparisons of crime statistics are beset by methodological difficulties:

- Different definitions for specific crime types: The category in which any incident of victimisation is recorded relies on the legal definition of crime in any country. Should that definition be different, which is often the case, comparisons will not be made of exactly the same crime type. This is particularly the case in crimes that require

some discretion from a police officer or relevant authority when they are identified. For example, the definitional difference between serious or common assault in different legal jurisdictions may be different, and this will be reflected in the total number of incidents recorded.

- Different levels of reporting and traditions of policing: This relates closely to levels of development in a society, most clearly reflected in accessibility to the police. Factors such as the number of police stations or telephones impact upon reporting levels. The level of insurance coverage in a community is also a key indicator of the likelihood of citizens approaching the police as their claim for compensation may require such notification. In addition, in societies where the police are or have been mistrusted by the population, most specifically during periods of authoritarian rule, reporting levels are likely to be lower than in cases where the police are regarded as important members of the community.
- Different social, economic and political contexts: Comparing crime data from societies that are fundamentally different may ignore key issues present in the society that impact upon levels of reporting. For example, different social norms in some countries may make it difficult for women to report cases of rape or sexual abuse, while in others, women are encouraged to come forward.

The International Crime Victim Survey (ICVS) is perhaps a more sensitive and accurate measure of crime – and arguably offers a picture of how the public views the criminal justice system – but is currently limited to a few, mainly industrialised, countries so these data are not included.

## ADDITIONAL NOTES ON THE INDICATORS USED IN THE GLOBAL PEACE INDEX

Where data are not present, The Economist Intelligence Unit's country analysts have estimated figures based on their deep knowledge of each country. All the figures for homicides per 100,000 people have been banded as:

1	2	3	4	5
0-1.9	2-5.9	6-9.9	10-19.9	> 20

### Level of distrust in other citizens

A qualitative assessment of the level of distrust in other citizens, ranked from 1-5 (very low to very high) by the Economist Intelligence Unit's country analysis team. The lowest score (1) records that the majority of other people can be trusted and that there is an overall positive climate of trust in the country. The highest score (5) indicates that people are extremely cautious in dealing with others.

### Number of internal security officers and police 100,000 people

The original figures have been taken from UNODC, 8th and 7th UN Surveys of Criminal Trends and Operations of Criminal Justice Systems (UNCJS) and refer to the civil police force as distinct from national guards or local militia. Where there are gaps, then, Economist Intelligence Unit country analysts have filled the gaps and clustered data in bands:

1	2	3	4	5
0-199	200-399	400-599	600-799	> 800

### Number of jailed population per 100,000 people

Figures are from the International Centre for Prison Studies, King's College, University of London and are compiled from a variety of sources. In almost all cases the original source is the national prison administration of the country concerned, or else the Ministry responsible for the prison administration. The International Centre for Prison Studies warns that because prison population rates (per 100,000 of the national population) are based on estimates of the national population they should not be regarded as precise. Comparability is compromised by different practice in different countries, for example with regard to whether all pre-trial detainees and juveniles are held under the authority of the prison administration, and also whether the prison administration is responsible for psychiatrically ill offenders and offenders being detained for treatment for alcoholism and drug addiction. People held in custody are usually omitted from national totals if they are not under the authority of the prison administration.

The data have been banded:

1	2	3	4	5
0-69	70-139	140-209	210-279	> 280

## ADDITIONAL NOTES ON THE INDICATORS USED IN THE GLOBAL PEACE INDEX

### **Ease of access to weapons of minor destruction**

A qualitative assessment of the accessibility of small arms and light weapons (SALW), ranked 1-5 (very low – very high) by Economist Intelligence Unit country analysts. Very limited access is scored if the country has developed policy instruments and best practices, such as firearm licences, strengthening of export controls, codes of conduct, firearms or ammunition marking. Very easy access, on the contrary, is characterised by the lack of regulation of civilian possession, ownership, storage, carriage and use of firearms.

### **Number of deaths from organised conflict (internal)**

UCDP/PRIO Armed Conflict Dataset records the number of battle deaths per conflict, defined as: “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a year”. Economist Intelligence Unit country analysts, then, have clustered the figures available for 2004 and 2005 in bands:

1	2	3	4	5
0-24	25-999	1000-4999	5000-9999	>10000

### **Aggregate number of heavy weapons per 100,000 people**

The BICC Weapon Holdings Database contains figures for four weapon categories: armoured vehicles, artillery, combat aircraft, and major fighting ships. The numbers of weapons in these categories have been indexed, with 1996 as the fixed base year. Holdings are those of government forces and do not include holdings of armed opposition groups. Weapon systems in storage are also not included. Indices for groups are directly calculated from the aggregated numbers of holdings of heavy weapons, as follows:

1	2	3	4	5
0-199	200-999	1000-2999	3000-6999	>7000

ANNEX B  
POTENTIAL DETERMINANTS OF PEACE

Democracy and Transparency

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
Electoral process	EIU Democracy Index	2006	Qualitative assessment of whether elections are competitive in that electors are free to vote and are offered a range of choices. Ranked 1- 10 (very low to very high)	100%
Functioning of government	EIU Democracy Index	2006	Qualitative assessment of whether freely elected representatives determine government policy? Is there an effective system of checks and balances on the exercise of government authority? Ranked 1- 10 (very low to very high)	100%
Political participation	EIU Democracy Index	2006	Qualitative assessment of voter participation/turn-out for national elections, citizens' engagement with politics. Ranked 1- 10 (very low to very high)	100%
Political culture	EIU Democracy Index	2006	Qualitative assessment of the degree of societal consensus and cohesion to underpin a stable, functioning democracy; score the level of separation of church and state. Ranked 1- 10 (very low to very high)	100%
Civil liberties	EIU Democracy Index	2006	Qualitative assessment of the prevalence of civil liberties. Is there a free electronic media? Is there a free print media? Is there freedom of expression and protest? Are citizens free to form professional organisations and trade unions? Ranked 1- 10 (very low to very high)	100%
Corruption perceptions	Transparency International, Corruption Perception Index	2006	The Index draws on multiple expert opinion surveys that poll perceptions of public sector corruption scoring countries on a scale from 0 to 10, with 0 indicating high levels of perceived corruption and 10 indicating low levels of perceived corruption	100%
Women in parliament (as a percentage of the total number of representatives in the lower house)	Inter-parliamentary Union	2006	Figures are based on information provided by national parliaments by 31st December 2006	98%
Freedom of the press	Reporters without borders	2006	The index measures the state of press freedom in the world, reflecting the degree of freedom journalists and news organisations enjoy in each country, and the efforts made by the state to respect and ensure respect for this freedom	98%
Political Terror Scale (Human rights)	Mark Gibney and Matthew Dalton, University of North Carolina, USA	2005	Countries are coded on a scale of 1-5 according to their level of terror their previous year, according to the description provided in the Amnesty International and US Department County Reports	98%



## ANNEX B POTENTIAL DETERMINANTS OF PEACE

### International openness

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
Ratio of GNP to GDP – importance of earnings from abroad	World Bank WDI	2005		99%
Exports + Imports % of GDP	EIU	2005		98%
Foreign Direct Investment (flow) % of GDP	EIU	2005		98%
Number of visitors as % of domestic population	UNWTO Compendium of Tourism Statistics, Data 2000-2004	2006	Arrivals data correspond to international visitors to the economic territory of the country and include both tourists and same-day non-residents visitors	98%
Net Migration (% of total population)	World Bank WDI, data refers to 1995-2000	2006	Net migration is the net average annual number of migrants during the period 1995-2000, that is the number of immigrants less the number of emigrants, including both citizen and non-citizens	99%

### Demographics

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
15-34 year old males as a % of total population	UN World Population Prospects	2006		98%
Gender ratio of population: women/men	UN Statistics, Social Indicator	2006	Ratio women/men	99%

### Regional & international framework/conditions

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
Relations with neighbouring countries	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the intensity of contentiousness of neighbours. Ranked 1-5 (peaceful-very aggressive) by Economist Intelligence Unit analysts	Work in progress
Extent of regional integration	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the level of membership of trade alliances, such as NAFTA, ANSEAN, etc. Ranked 1-5 (Very low-very high) by Economist Intelligence Unit analysts	Work in progress

## ANNEX B POTENTIAL DETERMINANTS OF PEACE

### Education

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
Current education spending (% of GDP)	UNESCO, data refer to the UNESCO Institute for Statistics estimate, when no estimate is available	2001-1999	Public spending on education, total (% of GDP)	85%
Primary school enrolment ratio (% Net)	World Bank WDI	Latest available 2002-2000	Net enrolment ratio is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age	85%
Secondary school enrolment ratio (% Net)	World Bank WDI	Latest available 2002-2000	Net enrolment ratio is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age	78%
Higher education enrolment (% Gross)	World Bank WDI	2001	Gross enrolment ratio is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown	85%
Mean years of schooling	UNESCO, data refer to the UNESCO Institute for Statistics estimate, when no estimate is available	2003-2001	School life expectancy (years), Primary to tertiary	82%
Adult literacy rate (% of population over the age of 15)	UNDP, Human Development Report	2005	Data refer to national literacy estimates from censuses or surveys conducted between 2000 and 2004	98%

## ANNEX B POTENTIAL DETERMINANTS OF PEACE

### Culture

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
Hostility to foreigners/ private property	EIU Risk briefing	2006	Scored 1-5 by Economist Intelligence Unit analysts	99%
Importance of religion in national life	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the level of importance of religion in politics and social life. Ranked 1-5 (very low – very high) by Economist Intelligence Unit analysts	100%
Attendance at Religious Services	World Values Survey	2005	Calculation across countries based on survey responses to frequency of attendance at religious services	95% (approx)
Level of distrust in other citizens	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the level of distrust in other citizens. Ranked 1-5 (very low – very high) by Economist Intelligence Unit analysts	100%
Willingness to fight	Economist Intelligence Unit	Q1 2007	Qualitative assessment of the willingness of citizens to fight in wars. Ranked 1-5 (very low – very high) by Economist Intelligence Unit analysts	100%
Adult literacy rate (% of population over the age of 15)	UNDP, Human Development Report	2005	Data refer to national literacy estimates from censuses or surveys conducted between 2000 and 2004	98%

### Material wellbeing

Indicator	Central Source	Year	Definition	Coverage (% of 121 countries)
GDP per capita	Economist Intelligence Unit	2004		98%
Average growth in GDP per capita (last ten years)	Economist Intelligence Unit	2004		98%
Gini coefficient	World Bank, WDI	2006	Gini index measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution	83%
Unemployment %	ILO	2004-2000	ILO defines the unemployed as members of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work	84%
Life expectancy	World Bank, WDI	2003	Life expectancy at birth is 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	99%
Infant mortality per 1,000 live births	World Bank, WDI 2005	2003	Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year	99%



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