# METHODOLOGY

# 1. ASSESSING GLOBAL WEALTH AND WELLBEING

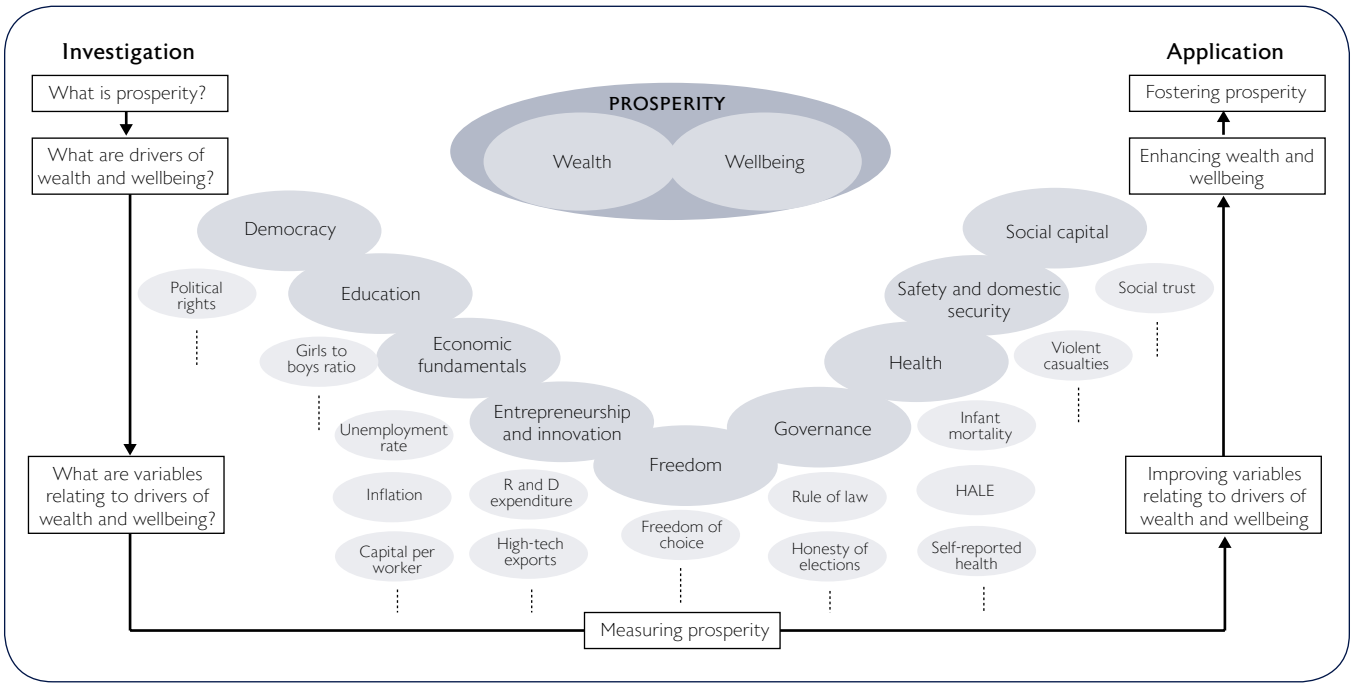
The 2009 Legatum Prosperity Index presents an assessment in prosperity of countries around the world. This chapter explains how we evaluate the national prosperity of 104 countries that are ranked in the Index.

As illustrated below, the Index measures prosperity across nine areas that have an established empirical relationship with either national wealth or wellbeing: economic fundamentals, entrepreneurship and innovation, democratic institutions, education, health, safety and security, governance, personal freedom, and social capital.

Each of these nine areas or drivers of prosperity is covered in a sub-index. The Prosperity Index is, in effect, the combination of nine sub-indexes.

For each driver of prosperity, the Index evaluates national performance based on selected statistical variables, to calculate a sub-index score. These sub-index scores, and the values of the variables that make up each sub-index, reveal how a country performs in areas that are integral to its prosperity. A comparison of sub-index scores and rankings highlights where a country can improve most.

The average of a country's scores on each sub-index determines how the country stands in the overall Prosperity Index.




## CALLOUT 1: **TERMINOLOGY**

To avoid confusion about terminology, we use the following terms consistently throughout this section:

- **Index:** Index or 'overall Index' refers in short to the 2009 Prosperity Index.
- **Overall Index ranking**: Overall Index ranking refers to the 2009 Prosperity Index ranking.
- **Sub-index:** Sub-index refers to one of the nine sub-indexes that make up the Prosperity Index: Economic Fundamentals, Entrepreneurship and Innovation, Democratic Institutions, Education, Health, Safety and Security, Governance, Personal Freedom, and Social Capital.
- **Sub-index ranking:** Sub-index ranking refers to the ranking of countries on one of the sub-indexes.
- **Driver:** Driver refers to one of the nine sub-indexes that comprise the overall Prosperity Index.
- **Variable or factor:** Variable or factor refers to the measures that are grouped under a sub-index. For instance, the health sub-index groups various variables of national health such as infant mortality, health-adjusted life expectancy, self-reported health problems. The terms 'variable' and 'factor' are used interchangeably.
- **Weight:** Weight refers to the importance that each variable has in each sub-index.
- **Value:** Value refers to the underlying country data for each variable (factor). For instance, the variable value for Health-adjusted life expectancy in New Zealand is 70.8 years.
- **Score:** There are three types of scores that are referred to in the report: variable, sub-index, and Index scores. A variable score refers to the multiple of a variable's value and its weight. A sub-index score refers to the sum of all the variable scores for each country. The Index score refers to the average of the nine sub-index scores for each country.

# 2. WHAT IS PROSPERITY?

The Legatum Prosperity Index assumes that national prosperity includes both wealth and wellbeing. In other words, the Prosperity Index goes 'beyond GDP' to include other factors such as social capital, health, political liberty, and overall quality of life.

The Prosperity Index builds on recent advances in research into the field of subjective wellbeing. This research is sometimes referred to as "the economics of happiness" or "the science of happiness" and is driven by advances in behavioural economics and positive psychology. The quantitative nature of the variables used in this research enables us to assess some of the 'soft' aspects of quality of life using 'hard' statistical variables. We can thus build an index consisting of factors that correlate with higher average personal wellbeing – in addition to factors that spur economic growth and accumulation of national wealth, as measured by increases in a country's per capita income.

Just as with its predecessor Indexes published in 2007 and 2008, this year's Index rests on empirical analysis to rank countries according to their success in being economically competitive as well as in providing their citizens with a liveable environment.

## CALLOUT 2: **LIFE SATISFACTION AS A MEASURE OF HAPPINESS**

There are a number of different survey-based "measures of happiness" that have been studied extensively. Most studies to date use survey questions relating to happiness or life satisfaction. While both have been shown to be valid measures, the two types of questions appear to respond to somewhat different psychological phenomena. Mood and emotional response play a larger role in how individuals reply to questions on their personal happiness, whereas individuals' evaluations of their life satisfaction are led by cognitive, intellectual assessments of their life as a whole.

The Gallup World Poll dataset has made available another measure of subjective wellbeing (SWB), which is often referred to, in short, as "life today":

> Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?

"Life today" has a number of advantages. First among these is country coverage, as the question is asked reliably in the Gallup World Poll. This poll presents the most encompassing sample of subjective wellbeing indicators to date, covering around 95% of the world's population by means of nationally representative samples. (For additional information on sampling, please refer to the technical appendix.)

Initially it appeared that there were significant differences between the "life today" survey item and more commonly used measures such as life satisfaction. Additional survey waves, and therefore more data, have enabled further scholarly investigation and direct comparison of these variables. Evidence shows that the image of the ladder frames individuals' assessment of their personal wellbeing more in relative terms, and studies have found this measure to be more closely correlated with income, than responses to open ended questions such as "how satisfied are you overall with your life these days" (Graham, Picon and Chattopadhyay, 2009; see also Helliwell et al., 2009).

That said, research confirms that both measures show a similar correlation with key structural determinants of subjective wellbeing. We therefore opted to base the wellbeing-related factors in the Prosperity Index on the "life today" variable, which offers a much larger sample of more than a quarter of a million observations. "Life Today" is used interchangeably with the terms SWB and life satisfaction in the Prosperity Index.

# 3. WHAT DRIVES PROSPERITY?

We have selected nine drivers of prosperity that have been established, both in existing academic research and by our own statistical analysis, as being correlated with accepted and emerging policy goals. Promoting higher levels of per capita income has long been an explicit policy goal for most countries worldwide, while promoting higher levels of average subjective wellbeing, or "Gross National Happiness" as some commentators have named it, is today an emerging policy goal in many countries.

All nine drivers of prosperity are evaluated separately so that country scores and rankings are available for each driver:

- **Economic Fundamentals.** This sub-index evaluates how sound the fundamentals of a country's economy are, allowing for stable and productive economic growth.
- **Entrepreneurship and Innovation**. This sub-index assesses the degree to which a country's political and legal environment fosters entrepreneurial activity, and the vigour of that activity, along with a country's capacity to engage in commercialisation of innovation.

- **Democratic Institutions**. This sub-index evaluates the transparency and accountability of a country's democratic institutions, and the political rights and civil liberties that promote economic growth.
- **Education.** This sub-index measures the human capital available to a country's economy, now and in the future, and includes variables relating to the quality of education.
- **Health.** This sub-index evaluates the physical wellbeing of a society using a diverse set of objective and subjective measures of health, including the state of national healthcare infrastructure and health-related quality of life.
- **Safety and Security**. This sub-index assesses the level of internal security of a country, along with crime and other personal safety issues.
- **Governance.** This sub-index gauges how well governed a country is, including the extent of political participation it grants to its citizens, their trust in the electoral process, and perceived levels of corruption.
- **Personal Freedom.** This sub-index measures the personal freedom a country's citizens enjoy, and perceived levels of tolerance for diversity in the society.
- **Social Capital.** This sub-index evaluates the strength and density of social networks in a country's society, both within and outside the realm of family and friends, and including both civil and religious organisations.

In reality, the relationships between these drivers and prosperity are complex. These drivers are both causes and consequences of high incomes and high average levels of wellbeing, and in many cases relate also to each other. For instance, a country that performs well in educating its workers probably also has an innovative economy. A country with healthy democratic institutions is, other things being equal, likely to have better governance than a dictatorship.

Empirical analysis provides us with the weighting of factors within the nine prosperity drivers. However, we do not apply a theoretical or empirical framework to weigh these nine drivers of prosperity relative to each other, as that inhibits the ability to perform cross-country comparisons on each sub-index.

Hence the 2009 Prosperity Index gives equal weight to all drivers of prosperity. The overall Prosperity Index ranking is based on the average score of a country on all nine sub-indexes.

Unlike the 2008 Prosperity Index, the 2009 Prosperity Index applies the same weights to all countries, regardless of their level of development. While it is true that countries at different levels of development may have different needs, for the purposes of an Index, it is important to judge each country by the same yardstick. Giving different weights to countries would make country rankings incomparable across income levels. This would also lead to changes in scores or rankings from year to year that would be unrelated to changes in the factors assessed by the Index.

Additionally, we have conducted tests of how weights for countries might change at different levels of development, and selected variables for which the weights are generally consistent as countries become wealthier.

While the overall 2009 Prosperity Index ranking is based on attributing equal importance to all nine drivers of prosperity, we offer you the opportunity to give your own weightings to each of the sub-indexes, and see how the rankings change, on our website at www.prosperity.com.

## CALLOUT 3: **WEALTH AND WELLBEING**

The Prosperity Index assumes that national prosperity includes both wealth and wellbeing, and measures prosperity across nine areas that have an established empirical relationship with either national wealth or wellbeing. Variables in the Personal Freedom, Governance, Safety and Security, and Social Capital sub-indexes are weighted based on their empirical relationship with subjective wellbeing. Variables in the Democratic Institutions, Economic Fundamentals, Education, and Entrepreneurship and Innovation sub-indexes are weighted based on their empirical relationship with per capita income.

However, for most of these drivers of prosperity there is, in fact, evidence that they correlate with both. For instance, there is not only a large literature assessing the link between health and wellbeing, but also a large literature assessing the link between health and income growth.

On account of data availability, this year we were able to create two separate sub-indexes to measure the effect of governance on both income and wellbeing: Democratic Institutions and Governance. The Democratic Institutions sub-index uses only objective, institutional measures to assess the impacts of the level of democracy on income. The Governance sub-index uses both objective and subjective variables of the relationship between the government and its citizens to measure the effect of governance on wellbeing. Data series used in the Democratic Institutions sub-index are all published annually and for a large set of countries. By contrast, most data used in the Governance sub-index are cross-sectional and published more infrequently.

In the future, we intend to measure each driver of prosperity based on the empirical links with both wealth and wellbeing. This will become possible with increasing availability of data on subjective wellbeing and economic variables.

# 4. HOW DO WE MEASURE PROSPERITY?

## IDENTIFYING SUBJECTIVE AND OBJECTIVE VARIABLES

The Prosperity Index uses both objective and subjective variables to measure prosperity. Wherever possible, we have tried to follow a balanced approach, incorporating survey-based variables together with expert assessments and economic and financial variables. We aim to prevent the country rankings from being biased due to either prejudice or misperceptions on the one hand, or due to poor quality of record keeping and reported statistics on the other.

For each driver of prosperity we compiled statistical variables that are commonly used in academic and policy research on these issues. We then tested these variables empirically. Only variables that proved statistically significant in correlating with income per capita or average subjective wellbeing are included in the Prosperity Index.

At the end of this chapter we list all variables and their interpretations.

## DETERMINING THE RELEVANCE OF EACH VARIABLE

The Index is based on regression analyses that evaluate the relevance (weight) of each of the variables in the sub-indexes. This statistical analysis indicates the degree to which an improvement in the variable correlates with higher incomes or higher wellbeing.

For instance, our tests suggest that increasing average years of tertiary education per worker from 1.4 years (as in Mozambique) to 4.9 years (as in South Korea) correlates with a 4.2% rise in average income per person in a country. Similar interpretations for every variable are presented at the end of this methodology chapter.

To assess the sub-index weights, we built a regression model for each sub-index, using standard sets of control variables. The coefficients of the regression then provide us with a weight for each variable in the sub-index. The technical appendix to the 2009 Prosperity Index lists the nine regressions and the regression results, along with other statistical details such as sample size, estimation method, choice of control variables, and levels of statistical significance.

As previously noted, the Prosperity Index is composed of nine sub-indexes that provide in-depth measurements of different aspects of prosperity. Since some variables within each sub-index capture different elements of the same theme, there is a potential for high correlation between these factors. (That is, there is a potential for 'duplicate information' or 'double-counting'.) Consequently, variables with more than 40% correlation are included within a single Principal Component (PC).

That is to say, we employ a statistical procedure that seeks to eliminate 'duplicated information' in the variables before we assign weights to the variables in each sub-index. This is especially important because we often deliberately include multiple measures of the same underlying issue. For instance, the Health sub-index includes closely related variables such as number of health professionals and hospital beds, health-adjusted life expectancy, sanitation facilities, infant mortality, and undernourishment. These variables are included in one PC in order to reduce duplicated effects and determine a more accurate weight for each variable.

## SCORING EACH COUNTRY'S SUB-INDEX PERFORMANCE

For every driver of prosperity we then evaluate national performance by multiplying each country's normalised raw variable value by its weight and calculating the sum of the products. The sum of these variables provides us with a score that measures a country's performance on a given sub-index.

For instance, in the Personal Freedom sub-index, Australia's raw values for the country's four variables are 0.9157, 1, 0.8818, and 0.9016. Each of these raw values is multiplied by its respective variable weights: 0.4123, 0.3636, 0.0542, and 0.1514. The sum of these multiples is 0.9283, which is Australia's country score in this sub-index.

## RANKING COUNTRIES BASED ON AVERAGED SUB-INDEX SCORES

In order to make the sub-index scores for each country comparable, we normalise them. That is, we attribute a value of one to the best performing, and a value of zero to the worst performing country on a given sub-index. The average of these normalised scores in the nine sub-indexes determines the standing of a country in the overall Prosperity Index ranking.

## LIMITATIONS OF THE DATA

The 2009 Prosperity Index is based on 79 variables that we found to have statistically significant relationships with per capita income or subjective wellbeing.

This list of 79 is narrowed down from more than 200 variables tested, but even this longer list is narrower than the list of issues that are in theory important to prosperity but for which we were unable to find usable empirical measures. Due to limitations on country coverage, we were not always able to test variables that we would have liked to analyse or include in the Index. For instance, collections of detailed data on entrepreneurship, such as that by the Global Entrepreneurship Monitor, do not cover enough of the 104 countries in the Prosperity Index to facilitate a robust empirical analysis.

### CALLOUT 4: **MISSING DATA**

Although the country coverage of international data sources has significantly improved in recent years, it is still difficult to obtain relevant information on certain countries. To maintain accuracy in the Prosperity Index, we in most cases only included variables for which data are available for 75 percent or more of the 104 countries in the Index.

In instances where data were missing, we used income-specific medians as proxies. That is, we divided countries into groups according to the World Bank classification of high, upper-middle, lower-middle and low income countries. If a country was missing a variable, we used the group median as a proxy for the missing value. This method was selected over other possible methods for its simplicity and transparency.

For one sub-index, Social Capital, we used geographic region medians as proxies. This is because social capital tends to vary more based on cultural rather than income-related factors. (In contrast to other drivers of prosperity such as health and governance.)

Finally, there were countries where, for political reasons, polling has been difficult and sometimes impossible, so that no data on citizens' opinions, beliefs, and evaluation of life in their country were available. Therefore, in two notable instances, China and Hong Kong, we asked an expert panel to estimate values based on their knowledge and familiarity with these countries and territories. We also used this approach with regard to Taiwan, which is not a member of organisations that compile international statistics.

# 5. WHAT DO THE INDEX RESULTS MEAN?

## THE DIFFERENCE BETWEEN SCORES AND RANKS

The Prosperity Index ranks countries according to their overall scores, which are averages of the normalised scores that countries receive in each sub-index. A country's score in the sub-indexes or in the overall Index indicates the relative distance between the rankings. The score provides an idea of how much less prosperous a low ranking country is compared to a country that fares better in the ranking.

Note that while a country with a higher score always ranks higher than a country with a lower score, the difference between country ranks is not constant. A country ranking second is not twice as good as a country ranking fourth. Particularly in some areas where many countries perform well, the differences between countries can be very small. Numerous countries evaluated in the Index, for example, possess sound democratic institutions that only differ in a few characteristics. To assess the scale of differences between countries, refer to scores rather than ranks.

As a result of this normalisation process, the Index does not set an absolute standard of prosperity. Instead, the standard is relative: the Prosperity Index identifies the most and least prosperous countries in the world. The yearly updates of the Index reflect how this global landscape is changing, and whether countries are catching up or falling back in fostering prosperity.

One reason we divide the Index into nine drivers of prosperity is that this allows us to base the Index on empirical relationships that we can identify with some degree of confidence. Evaluating national prosperity separately across nine areas makes it possible to measure each aspect of national prosperity with a degree of accuracy. Further, building a correctly specified model of overall prosperity is difficult, because data may not be available for all variables over the same period of time, and we may be unable to use a preferred estimation method that yields robust results.

## USING THE RESULTS

As described above, the Prosperity Index is constructed by employing an empirical analysis that assesses how drivers of prosperity are correlated with either higher wealth or higher wellbeing. The Index results can be interpreted to identify areas of relative strength and weakness, and to assess what a country has to improve in order to achieve higher levels of prosperity. A breakdown of these results can be found in the country profiles.

In developing policy responses to these findings, the fact that the drivers of prosperity are often interrelated can result in synergies. For example, better education may also lead to more innovation, both stimulating economic growth. However, there might also be trade offs, such as between freedom and safety and domestic security. The Prosperity Index reports on the drivers of prosperity individually, and not on these synergies or trade offs. Decisions on these synergies or trade offs are a matter not for mechanical assessment by an Index, but for informed individual and policy choices.

By referring to the tables below, users of the Index can also assess the increase in income or wellbeing that might be associated with particular changes in the various drivers of prosperity – with the important caveat that, as noted above, the drivers of prosperity are interrelated with each other, and can be both causes and consequences of wellbeing.

The tables below give an idea of the size of the benefits that may be correlated with specific policy-driven adjustments to each of the variables in the Prosperity Index. Figures are rounded to three significant figures unless more precision is needed to show a smaller relationship. Users wishing to evaluate the importance of the Index variables relative to each other should refer to the graphical presentation of this information, found in the technical appendix.

## CALLOUT 5: HOW MEASURES BEYOND GDP INFORM POLICY

As noted on page 11, French President Nicolas Sarkozy announced in September 2009 that France would use measures of well-being, such as health, income inequality, and family relationships, to gauge social and economic progress. The announcement is the highest profile example to date of the emerging global trend towards the adoption, as serious policy targets, of measures of national wellbeing that go 'beyond GDP'.

Related government initiatives to augment or replace GDP as a policy target are underway in countries including India, Canada, and Thailand. Perhaps the earliest adopter was Bhutan, which has developed of a measure of 'gross national happiness' that directs national development planning.

There are strong grounds for augmenting national accounts. GDP has evolved into a de facto measure of national wellbeing, a purpose for which this measure was neither designed nor intended. In a well-known study, economist Richard Easterlin showed that while average income rose seven fold in Japan over the 1950s and 1960s, Japanese citizens did not seem happier. Similar trends, and evidence of a satiation point above which rising incomes do not appear to improve average self-reported wellbeing, have been noticeable in a number of countries, including the United States, France, Germany, and the United Kingdom. New research disputes that there is such a satiation point, but the implications continue to be debated.

The current downturn and 'crisis of capitalism' has provided political momentum for efforts to augment or replace GDP, which are likely to gather pace in the coming year. The OECD World Forum on Measuring the Progress of Societies, held in South Korea at the end of October 2009, brought together thousands of scholars from across the globe to explore these questions.

While these efforts to go 'beyond GDP' are increasingly serious and sophisticated, they are not uncontroversial. Some commentators have expressed fear regarding a 'dictatorship of happiness', alluding to a state that claims to know what makes individuals happy, and consequently prescribes how citizens ought to live.

On balance, policy makers are still well served by new research into the foundations of human flourishing and well-functioning societies. Indexes based on subjective wellbeing, including the Prosperity Index, use an empirical approach that looks at which social, demographic or institutional factors correlate with higher reported individual wellbeing. A wellbeing approach in policymaking would not aim to raise individuals' happiness itself, but rather improve liveability of citizens' environment, creating living conditions conducive to wellbeing.

Nonetheless, the trend towards augmenting or replacing GDP with measures such as the Prosperity Index will be one to watch carefully in the years ahead. If France does report a decline in average health, for instance, as a fall in 'augmented GDP', it is possible that policymakers will begin to chase such targets in earnest. This is, of course, the point of the initiative. Yet it is not obvious that the consequences for policy in areas from health, to macroeconomics, to education, to international trade, have been clearly thought through, including by the political leaders who are most enthusiastic about moving 'beyond GDP'.

## INTERPRETATION OF RESULTS

In the following tables, Absolute Impact refers to the extent to which a percentage increase in a variable results in an increase in the levels of life satisfaction or GDP per capita. Relative Importance refers to the impact a variable can have in moving a country from worst to best performing in the Index.

These are not the same because the Prosperity Index is a statistical construct, and thus reflects how countries perform relative to each other. Improving some variables by 1% makes the difference between the best in the world and worst performance in the world. Improving other variables by 1% does not make much of a difference in terms of relative performance. The Index reflects this distribution of country performance. Therefore, while a variable may have a larger Absolute Impact on GDP per capita, it may be less capable in its ability to affect the country's GDP per capita, relative to other countries' performances.

Generally, Absolute Impact is better to use when there is a specific area of focus, because this relates a change in a variable to a desirable outcome (either higher average incomes or higher average wellbeing). A country's particular circumstances and level of development will determine how easy or difficult it is to effect such a change. Relative Importance, by contrast, is helpful when trying to understand how a country can improve relative to the other countries in the Index.

## ECONOMIC FUNDAMENTALS: 10 VARIABLES

| Relative Importance | | Absolute Impact |
|---|---|---|
| Capital per Worker | 0.1050 | • A 1% increase in physical capital per worker correlates with 0.06% increase in per capita income |
| Interest Margin | 0.0827 | • A 1% decrease in the interest margin in the credit sector correlates with a 0.02% increase in per capita income* |
| Export as a Capacity to Import | 0.0787 | • A 1% improvement in the ratio of price of exports relative to the cost of imports correlates with a 0.08% increase in per capita income |
| Non-performing Loans | 0.0770 | • A 1% decrease in the percent of loans that are non-performing correlates with a 0.35% increase in per capita income* |
| Inflation | 0.0699 | • A 1% decrease in the inflation rate correlates with a 0.05% increase in per capita income* |
| Foreign Direct Investment | 0.0664 | • A 1% increase in foreign direct investment as a percent of GDP correlates with a 0.26% increase in per capita income* |
| Household Consumption | 0.0660 | • A 1% increase in household expenditure as a percent of GDP correlates with a 0.74% increase in per capita income* |
| Domestic Savings | 0.0532 | • A 1% increase in domestic savings as a percent of GDP correlates with a 0.10% increase in per capita income* |
| Unemployment | 0.0532 | • A 1% decrease in the unemployment rate correlates with a 0.04% increase in per capita income* |
| Raw Material Exports | 0.0495 | • Improving the Herfindahl index of raw material export concentration by 1, i.e. reducing the raw material concentration of exports by 1%, correlates with a 0.05% increase in per capita income* |

Source: own calculations

The relative importance bar charts on the left show that in order to improve a country's performance in per capita income, relative to the other countries in this sub-index, improving capital per worker will be the most effective and reducing the level of raw material exports will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on per capita income.

*Percentage improvements are proportional, not absolute. That is, a 1% increase in a primary enrolment ratio of 80% means an increase from 80% to 80.8%, not 80% to 81%.

## ENTREPRENEURSHIP AND INNOVATION: 10 VARIABLES

| Relative Importance | | Absolute Impact |
|---|---|---|
| Personal Computers | 0.0107 | • A 1% increase in the number of PCs per 100 people correlates with a 0.006% increase in per capita income |
| Secure Internet Servers | 0.0102 | • A 1% increase in secure internet servers per 1 million people correlates with a 0.005% increase in per capita income |
| Research and Development | 0.0101 | • A 1% increase in per capita spending on research and development correlates with a 0.03% increase in per capita income* |
| Internet Bandwidth | 0.0100 | • A 1% increase in the internet bandwidth, measured in megabits per second, correlates with a 0.004% increase in per capita income |
| Royalty Receipts | 0.0079 | • A 1% increase in royalty receipts for the authorised use of intangible, non-produced, non-financial assets and proprietary rights correlates with a 0.003% increase in per capita income |
| Value Added in Service Industry | 0.0079 | • A 1% increase in the share of economic output accounted for by services correlates with a 0.012% increase in per capita income* |
| ICT Exports | 0.0076 | • A 1% increase in information and communication technology exports as a proportion of total exported goods correlates with a 0.005% increase in per capita income* |
| High-tech Exports | 0.0070 | • A 1% increase in high-tech exports as a proportion of manufactured exports correlates with a 0.004% increase in per capita income* |
| New Businesses Registered | 0.0062 | • A 1% increase in the number of newly registered businesses in a given year correlates with a 0.0005% increase in per capita income |
| Business Start-up Costs | 0.0058 | • A 1% decrease in the number of formal procedures to start a new business correlates with a 0.006% increase in per capita income |

Source: own calculations

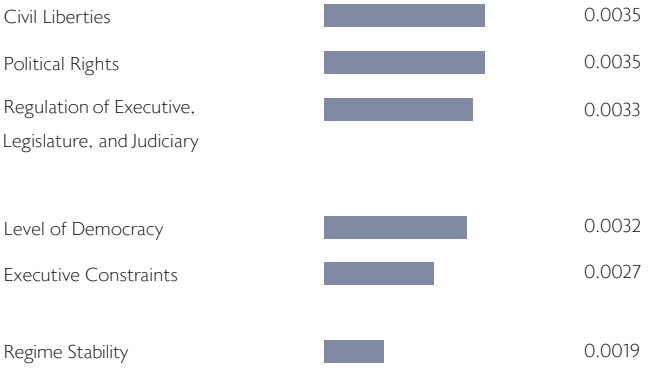
The relative importance bar charts on the left show that in order to improve a country's performance in per capita income, relative to the other countries in this sub-index, increasing PCs per capita will be the most effective and encouraging the creation of new businesses will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on per capita income.

*Percentage improvements are proportional, not absolute. That is, a 1% increase in a primary enrolment ratio of 80% means an increase from 80% to 80.8%, not 80% to 81%.

## DEMOCRATIC INSTITITIONS: 6 VARIABLES

### Relative Importance




Source: own calculations

### Absolute Impact

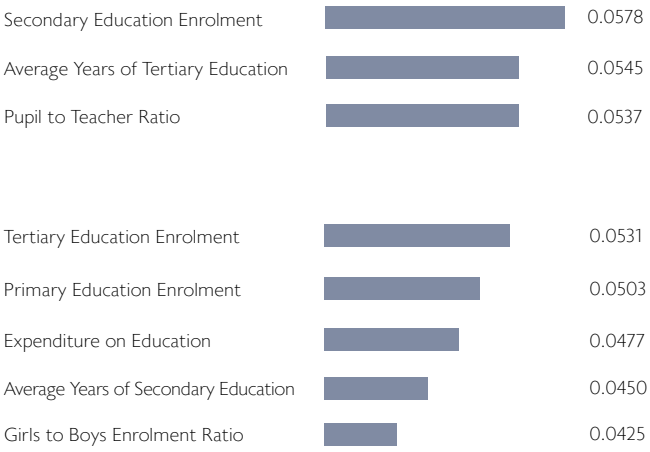
- A one-step improvement on the Freedom House scale of civil liberties correlates with a 0.06% increase in per capita income
- A one-step improvement on the Freedom House scale of political rights correlates with a 0.06% increase in per capita income
- A one-step improvement any of the following scales, available in the Database of Political Institutions: legislative and executive competition, regulation of executive elections, independence of the judiciary, correlates with a 0.02% increase in per capita income
- A five-step improvement on the 20-step Polity IV democracy measure correlates with a 0.08% increase in per capita income
- A shift from no constraints to full constraints on the power of the executive, on the scale – developed by Witold Henisz– correlates with a 0.38% increase in per capita income
- 50 additional years without regime change correlates with a 0.05% increase in per capita income

The relative importance bar charts on the left show that in order to improve a country's performance in per capita income, relative to the other countries in this sub-index, improving civil liberties will be the most effective and encouraging regime stability and durability will have the least effect. The effectiveness of the policy measure declines as we descend the bars in the above graph.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on per capita income.

## EDUCATION: 8 VARIABLES

### Relative Importance




Source: own calculations

### Absolute Impact

- Increasing secondary gross enrolment rates by 1% correlates with a 0.04% increase in per capita income*
- A one-year increase in average tertiary education per worker correlates with a 1.56% increase in per capita income
- An increase in the number of teachers, relative to the number of students, in primary and secondary education that reduces the average number of students per teacher by five correlates with a 0.49% increase in per capita income
- Increasing tertiary gross enrolment rates by 1% correlates with a 0.06% increase in per capita income*
- Increasing net enrolment rates by 1% correlates with a 0.01% increase in per capita income*
- Increasing government expenditure on education by 1,000 USD per student correlates with a 0.26% increase in per capita income
- A one-year increase in average secondary education per worker correlates with a 1.17% increase in per capita income
- Increasing the girls to boys enrolment ratio by 1% correlates with a 0.01% increase in per capita income*

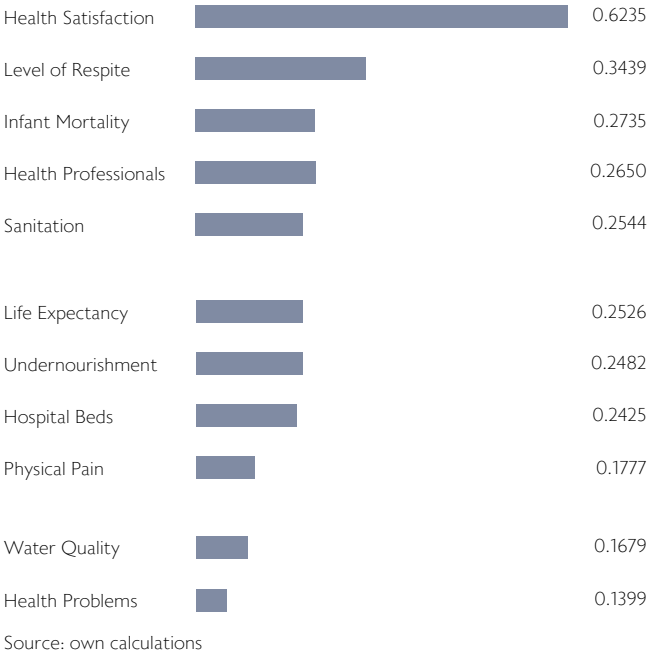
The relative importance bar charts on the left show that in order to improve a country's performance in per capita income, relative to the other countries in this sub-index, increasing enrolment in secondary education will be the most effective and encouraging higher gender equality will have the least effect. The effectiveness of the policy measure declines as we descend the bars in the above graph.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on per capita income.

*Percentage improvements are proportional, not absolute. That is, a 1% increase in a primary enrolment ratio of 80% means an increase from 80% to 80.8%, not 80% to 81%.

## HEALTH: 11 VARIABLES

### Relative Importance




Source: own calculations

### Absolute Impact

- A 10 percentage point increase in the population satisfied with their health correlates with a 0.15 point increase in average subjective wellbeing
- A 10 percentage point increase in the population feeling well rested correlates with a 0.10 point increase in average subjective wellbeing
- A 1% decrease in the number of infants that die per 1,000 live births correlates with a 0.02 point increase in average subjective wellbeing*
- A 1% increase in the number of doctors and nurses per capita correlates with a 0.05 point increase in average subjective wellbeing*
- A 1% increase in the percentage of the population with access to improved sanitation facilities correlates with a 0.28 point increase in average subjective wellbeing*
- A 1% increase in average health-adjusted life expectancy correlates with a 0.03 point increase in average subjective wellbeing
- A 1% reduction in the percentage of the population that is undernourished correlates with a 0.01 point increase in average subjective wellbeing*
- A 1% increase in the number of hospital beds per 1,000 people correlates with a 0.09 point increase in average subjective wellbeing
- A 10 percentage point decrease in the population reporting having experienced pain the previous day correlates with a 0.05 point increase in average subjective wellbeing
- A 10 percentage point increase in the population considering water quality to be good correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point decrease in the population reporting health problems correlates with a 0.05 point increase in average subjective wellbeing

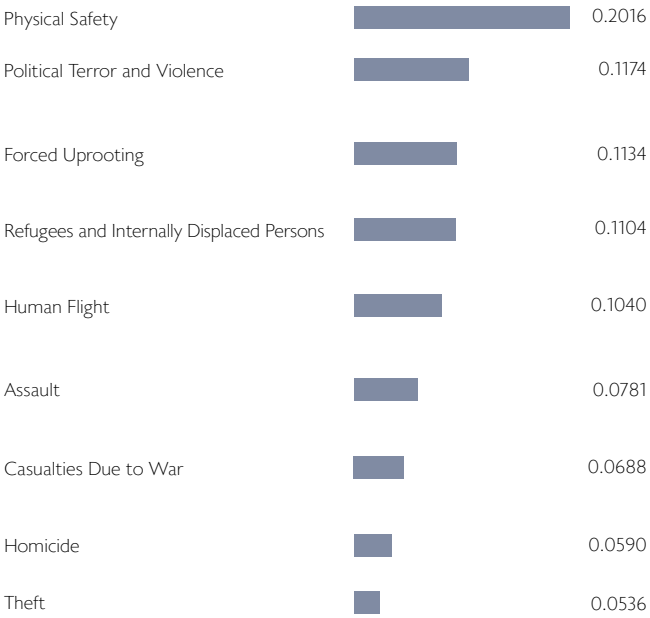
The relative importance bar charts on the left show that in order to improve a country's performance in terms of subjective wellbeing, relative to the other countries in this sub-index, increasing satisfaction with health will be the most effective and reducing health problems will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on subjective wellbeing.

*Percentage improvements are proportional, not absolute. That is, a 1% increase in a primary enrolment ratio of 80% means an increase from 80% to 80.8%, not 80% to 81%.

## SAFETY AND SECURITY: 9 VARIABLES

### Relative Importance




Source: own calculations

### Absolute Impact

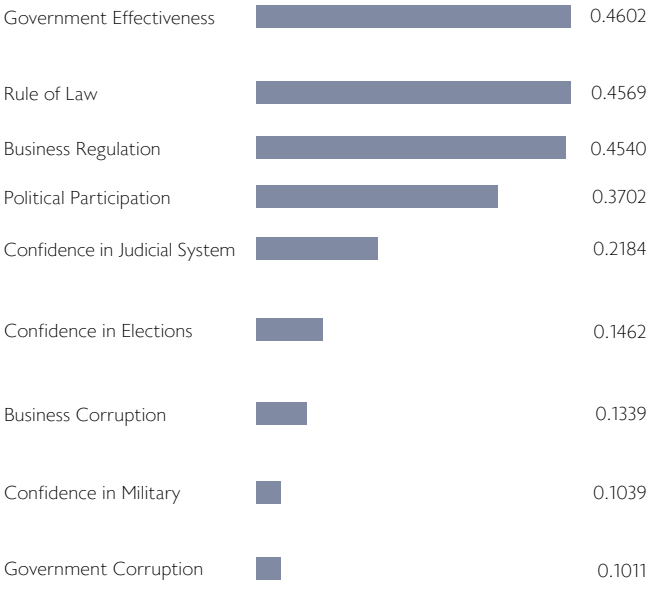
- A 10 percentage point increase in the population feeling safe walking home alone at night correlates with a 0.03 point increase in average subjective wellbeing
- A one-step improvement on the Political Terror Scale, assessing the prevalence of state-sponsored violence including torture, political imprisonment, and disappearances, correlates with a 0.03 point increase in average subjective wellbeing
- A one-step improvement on the statistical scale of the Failed State Index with regards to group grievances correlates with a 0.01 point increase in average subjective wellbeing
- A one-step improvement on the statistical scale of the Failed State Index with regards to refugees and internally displaced persons correlates with a 0.01 point increase in average subjective wellbeing
- A one-step improvement on the statistical scale of the Failed State Index with regards to human flight correlates with a 0.01 increase in average subjective wellbeing
- A 10 percentage point decrease in the population reporting being assaulted during the past year correlates with a 0.03 point increase in average subjective wellbeing
- A one-point reduction in the magnitude score of episode(s) of civil violence, ethnic warfare, and ethnic violence involving that state in that year correlates with a 0.01 point increase in average subjective wellbeing
- Reducing the number of deaths per 100,000 capita by one correlates with a 0.10 point increase in average subjective wellbeing
- A 10 percentage point decrease in the population reporting having had property stolen during the past year correlates with a 0.02 point increase in average subjective wellbeing

The relative importance bar charts on the left show that in order to improve a country's performance in terms of subjective wellbeing, relative to the other countries in this sub-index, improving physical safety will be the most effective and reducing theft rates will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on subjective wellbeing.

## GOVERNANCE: 9 VARIABLES

### Relative Importance




### Absolute Impact

- A one point improvement on the statistical scale for government effectiveness correlates with a 0.12 point increase in average subjective wellbeing
- A one point improvement on the statistical scale for rule of law correlates with a 0.12 point increase in average subjective wellbeing
- A one point improvement on the statistical scale for regulatory quality correlates with a 0.11 point increase in average subjective wellbeing
- A one step improvement on the political participation scale correlates with a 0.19 point increase in average subjective wellbeing
- A 10 percentage point increase in the population confident in the country's judiciary system correlates with a 0.03 point increase in average subjective wellbeing
- A 10 percentage point increase in the population believing elections of the country are honest and fair correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point decrease in the population believing corruption to be widespread in business correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point increase in the population confident in the country's military correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point decrease in the population believing corruption to be widespread in government correlates with a 0.01 point increase in average subjective wellbeing

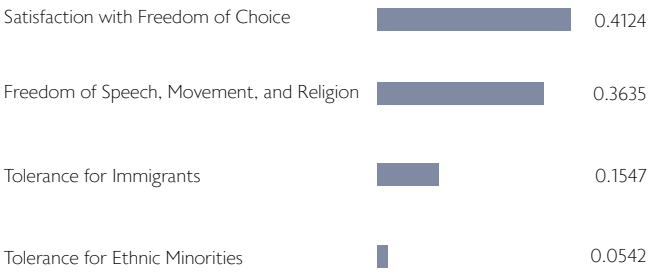
Source: own calculations

The relative importance bar charts on the left show that in order to improve a country's performance in terms of subjective wellbeing, relative to the other countries in this sub-index, improving the effectiveness of the government will be the most effective and reducing government corruption will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on subjective wellbeing.

## PERSONAL FREEDOM: 4 VARIABLES

### Relative Importance




### Absolute Impact

- A 10 percentage point increase in the population satisfied with their freedom of choice correlates with a 0.08 point increase in average subjective wellbeing
- A one-step improvement on a composite variable of freedom of movement, speech, and religion correlates with a 0.05 point increase in average subjective wellbeing
- A 10 percentage point increase in the population reporting that their area is a good place for immigrants to live correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point increase in the population reporting that their area is a good place for minorities to live correlates with a 0.01 point increase in average subjective wellbeing

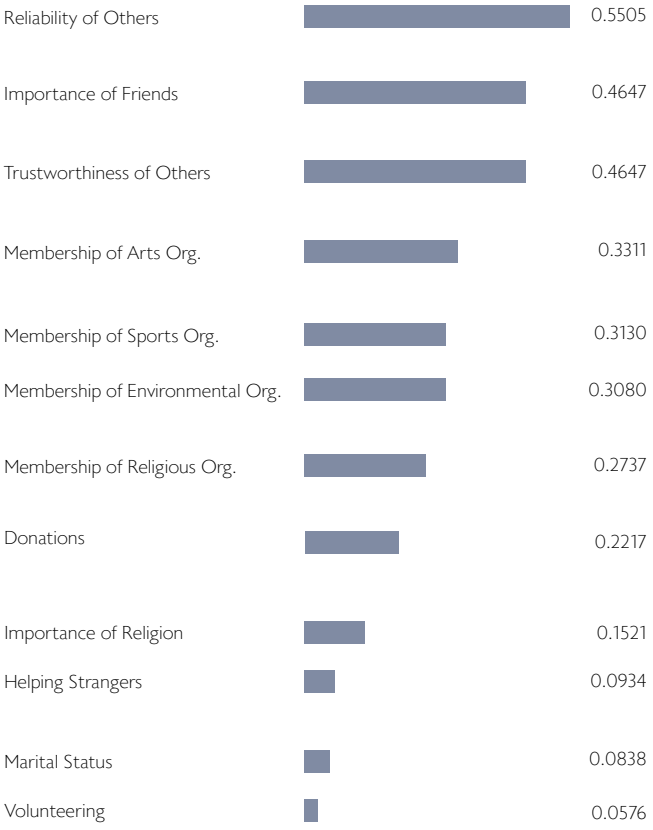
Source: own calculations

The relative importance bar charts on the left show that in order to improve a country's performance in terms of subjective wellbeing, relative to the other countries in this sub-index, increasing the population's satisfaction with their freedom of choice will be the most effective and increasing tolerance for ethnic minorities will have the least effect.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on subjective wellbeing.

## SOCIAL CAPITAL: 12 VARIABLES

### Relative Importance




Source: own calculations

### Absolute Impact

- A 10 percentage point increase in the population reporting to have relatives or friends to rely on in times of need correlates with a 0.12 point increase in average subjective wellbeing
- A one-step increase on scale of importance of friends where one means "not important at all", and four means "very important" correlates with a 0.44 point increase in average subjective wellbeing
- A 10 percentage point increase in the population believing others generally can be trusted correlates with a 0.07 point increase in average subjective wellbeing
- A 10 percentage point increase in the percentage of the population being members of an art club correlates with a 0.05 point increase in average subjective wellbeing
- A 10 percentage point increase in the population being members of a sports club correlates with a 0.05 point increase in average subjective wellbeing
- A 10 percentage points increase in the population being members of an environmental organisation correlates with a 0.05 point increase in average subjective wellbeing
- A 10 percentage points increase in the population being members of a religious organisation correlates with a 0.03 point increase in average subjective wellbeing
- A 10 percentage point increase in the population having donated money to a charity the previous month correlates with a 0.03 point increase in average subjective wellbeing
- An 0.1 point increase on the Gallup Religiosity Index correlates with a 0.02 increase in average subjective wellbeing
- A 10 percentage point increase in the population having helped a stranger the previous month correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point increase in the population being married correlates with a 0.02 point increase in average subjective wellbeing
- A 10 percentage point increase in the population having volunteered time to an organisation the previous month correlates with a 0.01 point increase in average subjective wellbeing

The relative importance bar charts on the left show that in order to improve a country's performance in terms of subjective wellbeing, relative to the other countries in this sub-index, increasing reliance on others will be the most effective and increasing the volunteering rate will have the least effect. The effectiveness of the policy measure declines as we descend the bars in the above graph.

The Absolute Impact data on the right capture the effect of a unit increase of each variable on subjective wellbeing.

## CALLOUT 6: **WHO'S PROSPERING AND WHO'S IN DECLINE?**

The 2009 Prosperity Index uses an improved set of measures of prosperity, which are somewhat different from the methods used in the 2008 edition of the Index. These new methods and sources of data represent our ongoing efforts to refine our understanding of holistic prosperity. And yet, when assessing changes in countries' relative performance, it is important to compare "apples with apples". What happens if we track countries' performance using the same standards for 2008 and 2009? Which countries are prospering, and which are in decline?

To answer this question, we have gone back and recalculated Prosperity Index scores for 2008, using the methods and data sources of the 2009 Prosperity Index. The accompanying table shows the countries that experience significant rankings changes from 2008 to 2009. Note that due to missing data, not all sub-indexes are assessed accurately for 2008, so this analysis should be taken as merely illustrative. For two countries, Algeria and Tunisia, earlier data are not available for a large number of sub-indexes, and thus these countries are excluded from our list. As a result, readers will note that the 2009 rankings shown here may differ slightly from the 2009 rankings shown elsewhere in the report.

The arrows to the left of each country name highlight the changes in ranking for that country. The light blue and grey boxes show changes in rankings within each sub-index. The "sub-index tally" column compares the number of sub-indexes where ranks have improved or worsened, for each country.

Overall, very few countries experience any significant change in ranking beyond a place or two. Most of the changes in country ranks that do occur are driven by changes in a few sub-indexes: Health, Personal Freedom, and Governance. Each of these sub-indexes contains variables based on the Gallup World Poll. In addition, both Personal Freedom and Governance contain variables based on expert assessments. The nature of opinion polling is such that even with modern techniques, a margin of error is inevitable. For different reasons, expert assessments may also contain an element of 'noise'. Hence, it is difficult to draw firm conclusions from the current analysis. As more years of the Index accumulate, we will be better able to distinguish the impacts of 'noise' in expert assessments, and random error in the polling data, from genuine trends.

At the top of the rankings, countries such as Switzerland and Australia climb a place, while Sweden and Canada fall a place. As the chart indicates, these shifts are driven by a complex mix of improving and worsening sub-index ranks and variables. In Sweden, for instance, variables of banking sector efficiency and consumer price inflation worsen noticeably, causing a 10-place decline in the country's Economic Fundamentals ranking.

Between 2008 and 2009, at least in the countries at the top of the Prosperity Index, no country improves on all fronts. Hong Kong comes closest, moving up at least one rank on five of the eight sub-indexes.

Looking at all the countries in the Index, the biggest ranking shifts occur in the countries ranked 50th and below. The sharpest declines are experienced by Jordan, Venezuela, Mongolia, Lebanon, Saudi Arabia, and Namibia. In Saudi Arabia, Jordan, and Lebanon, the most important driver of decline is worsening public health; and in Mongolia, Namibia, and Venezuela, the key driver is perceptions of greater restrictions on personal freedom. Specifically, in Mongolia and Venezuela, self-reported tolerance of immigrants and minorities declines notably as does satisfaction with freedom of choice.

And where are the biggest improvements? These are achieved by Moldova, Nepal, and Russia. In Moldova and Russia, the most important driver is the perception of improved governance, while in Nepal, it is an improvement in public health. In both Moldova and Russia, both expert and citizen perceptions of governance standards improved. Whether these perceptions will survive the test of the current global recession will be a matter for the 2010 Prosperity Index to explore.

| 2008 Rank | 2009 Rank | | Country | Economic Fundamentals | Entrepreneurship & Innovation | Democratic Institutions | Education | Health | Safety & Security | Governance | Personal Freedom | Social Capital | Better/Worse Tally |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | | Finland | 2 | -1 | | | | | | | -1 | -1 |
| 3 | 2 | ↗ | Switzerland | | | | | -1 | | 2 | 2 | | 1 |
| 2 | 3 | ↘ | Sweden | -10 | | | | -4 | | -2 | | | -3 |
| 4 | 4 | | Denmark | 6 | | | | 2 | -1 | | 1 | | 2 |
| 5 | 5 | | Norway | -2 | -1 | | | 5 | | -3 | 1 | -2 | -2 |
| 7 | 6 | ↗ | Australia | 3 | -1 | | | 4 | 2 | 4 | | | 3 |
| 6 | 7 | ↘ | Canada | -1 | | | | -1 | -1 | | -2 | | -4 |
| 8 | 8 | | Netherlands | 6 | | | | -4 | 2 | | -2 | 2 | 1 |
| 10 | 9 | ↗ | United States | -3 | | | | 2 | | -1 | 2 | | |
| 9 | 10 | ↘ | New Zealand | -3 | | | | 1 | 2 | -1 | | | |
| 11 | 11 | | Ireland | -2 | | | | 1 | -1 | | -2 | 4 | -1 |
| 12 | 12 | | United Kingdom | -5 | | | | | 1 | | -4 | 1 | |
| 13 | 13 | | Belgium | | | | | 4 | -2 | 1 | | | 1 |

| 2008 Rank | 2009 Rank | | Country | Economic Fundamentals | Entrepreneurship & Innovation | Democratic Institutions | Education | Health | Safety & Security | Governance | Personal Freedom | Social Capital | Better/Worse Tally |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 14 | ↗ | Germany | | -1 | | | | | | 2 | 1 | 1 |
| 14 | 15 | ↘ | Austria | 5 | | | | | | -3 | -1 | 1 | |
| 16 | 16 | | Japan | 5 | 2 | | | 1 | 1 | -1 | 2 | 3 | 5 |
| 17 | 17 | | France | 2 | 1 | | | -6 | 1 | | 5 | -10 | 2 |
| 18 | 18 | | Hong Kong | | 1 | | | 1 | | 1 | 2 | 6 | 5 |
| 19 | 19 | | Spain | 4 | 1 | | | -5 | -2 | | 4 | -1 | |
| 22 | 20 | ↗ | Slovenia | 4 | -1 | | | | 1 | 1 | 7 | 2 | 4 |
| 21 | 21 | | Italy | 3 | -1 | | | 2 | -4 | -1 | -12 | -5 | -3 |
| 20 | 22 | ↘ | Portugal | 1 | | | 1 | -2 | -5 | -1 | -15 | -1 | -3 |
| 23 | 23 | | Singapore | -2 | -1 | | 2 | 1 | 2 | 2 | 1 | | 3 |
| 24 | 24 | | Taiwan | -5 | | | | 1 | | 2 | 6 | -1 | 1 |
| 25 | 25 | | Czech Republic | 7 | | | | 1 | | | 2 | | 3 |
| 26 | 26 | | South Korea | -3 | 1 | | -3 | -1 | 1 | 3 | -8 | -4 | -2 |
| 27 | 27.1 | ↘ | Israel | | -1 | | | -3 | -8 | | | 2 | -2 |
| 28 | 27.2 | ↗ | Hungary | -1 | 2 | | | 1 | 1 | -2 | -6 | -1 | -1 |
| 31 | 29 | ↗ | Poland | -2 | 2 | | -1 | | 3 | 4 | 6 | 5 | 3 |
| 30 | 30 | | Greece | -3 | -1 | | | 3 | 2 | -1 | 2 | -1 | -1 |
| 29 | 31 | ↘ | Estonia | -10 | -1 | | -1 | -1 | 3 | 1 | -6 | -1 | -4 |
| 32 | 32 | | Costa Rica | 7 | -1 | | | -2 | -4 | | | | -2 |
| 33 | 33 | | Uruguay | -1 | -1 | | | -2 | -1 | | 2 | | -3 |
| 34 | 34 | | Slovakia | 2 | | | | 1 | -1 | -1 | 1 | 2 | 2 |
| 35 | 35 | | Croatia | 3 | -1 | | | 2 | 2 | 1 | 6 | 3 | 5 |
| 36 | 36 | | Chile | -2 | -2 | | | -2 | 5 | | 1 | -4 | -2 |
| 37 | 37 | | Latvia | | 2 | | | 4 | 6 | -1 | -4 | -1 | |
| 39 | 38 | ↗ | Argentina | -2 | -1 | | | -1 | -2 | | 4 | 3 | -2 |
| 38 | 39 | ↘ | Malaysia | 2 | | | | -1 | | -1 | -6 | -4 | -3 |
| 40 | 40 | | Trinidad and Tobago | -1 | -1 | | | 4 | 1 | -6 | | | -1 |
| 41 | 41 | | Brazil | -1 | -1 | | | -3 | 6 | 3 | 5 | -1 | -1 |
| 42 | 42 | | Panama | -3 | -3 | | | -5 | -5 | 3 | 7 | -5 | -3 |
| 43 | 43 | | Mexico | -1 | | | | 7 | -5 | -3 | 1 | -1 | -2 |
| 44 | 44 | | Thailand | -1 | | | 1 | -1 | 3 | -1 | -1 | | -2 |
| 46 | 45 | ↗ | India | 2 | -1 | | | -2 | -6 | | 7 | 1 | |
| 48 | 46 | ↗ | Bulgaria | | 3 | | | | 1 | 4 | 2 | -1 | 3 |
| 47 | 47 | | United Arab Emirates | | | | -2 | -1 | | 1 | 3 | | |
| 51 | 48 | ↗ | Romania | 5 | | | | -2 | -1 | | 2 | | |
| 50 | 49 | ↗ | Jamaica | 1 | | | | 3 | 5 | -2 | 3 | -3 | 2 |
| 45 | 50 | ↘ | Mongolia | -9 | 6 | | | -4 | -5 | -6 | -33 | 9 | -3 |
| 49 | 51 | ↘ | South Africa | -8 | | | | -8 | -3 | -3 | 3 | 5 | -2 |
| 56 | 52.1 | ↗ | Belize | 3 | 5 | | -1 | 3 | 8 | | -1 | -1 | 1 |
| 53 | 52.2 | ↗ | Kuwait | 1 | -2 | | 2 | | -2 | -2 | -1 | 3 | -1 |
| 52 | 54 | ↘ | Dominican Republic | | | | -1 | -4 | -2 | -1 | -7 | -1 | -6 |
| 54 | 55 | ↘ | Philippines | 3 | | | | 1 | -4 | 1 | 2 | 5 | 4 |
| 55 | 56 | ↘ | Botswana | -1 | -1 | | | -3 | -8 | | 15 | | -3 |
| 57 | 57 | | Paraguay | 2 | -2 | | | -2 | 1 | 7 | | | 1 |
| 59 | 58 | ↗ | Sri Lanka | -4 | 1 | | | 4 | | | 11 | | 2 |
| 62 | 59 | ↗ | Macedonia | 2 | 3 | | -1 | | 3 | -3 | 5 | 2 | 3 |
| 61 | 60 | ↗ | El Salvador | 8 | -2 | | | -3 | 2 | | 3 | -3 | |
| 60 | 61.1 | ↘ | Indonesia | 6 | -3 | | 1 | 1 | 2 | 4 | 1 | -3 | 4 |
| 64 | 61.2 | ↗ | Ukraine | -1 | 2 | | | 2 | 11 | 3 | | 3 | 4 |
| 58 | 63 | ↘ | Namibia | -4 | -1 | | | 1 | -3 | 1 | 6 | 1 | 1 |

| 2008 Rank | 2009 Rank | | Country | Economic Fundamentals | Entrepreneurship & Innovation | Democratic Institutions | Education | Health | Safety & Security | Governance | Personal Freedom | Social Capital | Better/Worse Tally |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 65 | 64 | ↗ | Peru | 7 | -5 | | | -1 | -3 | 2 | 1 | | |
| 66 | 65 | ↗ | Colombia | -3 | 1 | | | -1 | | 8 | | | |
| 68.2 | 66 | ↗ | Honduras | -1 | -9 | | 1 | 1 | -5 | 3 | 3 | | 1 |
| 71.2 | 67 | ↗ | Guatemala | -3 | -2 | | | 3 | 5 | 5 | 4 | 3 | 3 |
| 74 | 69.1 | ↗ | Russia | 2 | 1 | | 1 | 3 | 1 | 8 | 4 | 1 | 8 |
| 67 | 69.2 | ↘ | Turkey | -1 | -5 | | | 1 | 1 | 4 | -3 | -6 | -1 |
| 71.1 | 70 | ↗ | Ecuador | 5 | 5 | | 1 | -3 | 1 | -1 | -3 | 1 | 2 |
| 73 | 71 | ↗ | Nicaragua | -4 | 1 | | | 1 | 5 | | 1 | -3 | 2 |
| 70 | 72 | ↘ | Bolivia | -3 | 2 | | 1 | -2 | 2 | -1 | -5 | -1 | -2 |
| 63 | 73 | ↘ | Venezuela | -3 | -1 | | -3 | -11 | -2 | -14 | -14 | -14 | -8 |
| 78 | 74 | ↗ | China | 1 | | | 1 | 6 | -9 | 1 | 10 | -1 | 3 |
| 76.1 | 75 | ↗ | Kazakhstan | -5 | 6 | | | 5 | | 1 | -4 | 1 | 2 |
| 79.2 | 76 | ↗ | Vietnam | 5 | 2 | | | | 8 | 2 | 1 | 4 | 6 |
| 82 | 77 | ↗ | Moldova | 2 | 6 | | 1 | 3 | 7 | -1 | -3 | 4 | 4 |
| 76.2 | 78 | ↘ | Ghana | 2 | | | 1 | 2 | | -3 | -1 | -1 | |
| 68.1 | 79 | ↘ | Jordan | -3 | -13 | | 1 | -11 | -2 | -7 | -5 | -5 | -6 |
| 75 | 80 | ↘ | Saudi Arabia | -2 | 1 | | 1 | -2 | -4 | 1 | -2 | -1 | -2 |
| 83 | 81 | ↗ | Mali | 1 | | | | 1 | -1 | -7 | 8 | -1 | |
| 84 | 82 | ↗ | Morocco | 9 | -1 | | | 4 | 9 | 1 | 3 | -4 | 3 |
| 81 | 83 | ↘ | Senegal | -3 | -1 | | 1 | -3 | -5 | -2 | -3 | 3 | -4 |
| 86 | 84 | ↗ | Belarus | 1 | -1 | | -1 | | 2 | -2 | -2 | 3 | -1 |
| 79.1 | 85 | ↘ | Lebanon | -6 | | | | | -2 | -3 | -9 | -7 | -5 |
| 85 | 86 | ↘ | Bangladesh | -6 | 3 | | 1 | -1 | 6 | 2 | 4 | -4 | 2 |
| 87 | 87 | | Egypt | -1 | 2 | | -1 | 5 | -5 | 1 | -1 | 3 | |
| 88 | 88 | | Zambia | -1 | -1 | | | 2 | -6 | 7 | -4 | | -2 |
| 94 | 89 | ↗ | Nepal | | 1 | | | 1 | 4 | 5 | 12 | | 5 |
| 89 | 90 | ↘ | Mozambique | 3 | -4 | | | -2 | 3 | 2 | -19 | -2 | -1 |
| 92 | 91 | ↗ | Uzbekistan | -3 | | | | 5 | -3 | 5 | 2 | 4 | 2 |
| 95 | 92 | ↗ | Cambodia | 2 | -1 | | -1 | 3 | 2 | 6 | 13 | -3 | 2 |
| 93 | 93 | | Iran | | 5 | | | | 1 | | 2 | -3 | 2 |
| 90.1 | 94 | ↘ | Kenya | 2 | 3 | | 1 | 3 | -1 | -9 | -5 | | 1 |
| 90.2 | 95 | ↘ | Tanzania | -3 | -2 | | -1 | 1 | -8 | -11 | -7 | 21 | -4 |
| 96 | 96 | | Nigeria | | 2 | | -1 | -1 | | -2 | -4 | -1 | -4 |
| 97 | 97 | | Pakistan | | -1 | | | 1 | | | | 1 | 1 |
| 98 | 98 | | Cameroon | 7 | | | | -3 | | | -1 | -2 | -2 |
| 100 | 101.1 | ↘ | Central African Republic | 2 | | | | | 1 | | | 2 | 3 |
| 101 | 101.2 | ↘ | Yemen | -1 | 5 | | | 3 | -4 | | 3 | 3 | 2 |
| 99 | 101 | ↘ | Sudan | -3 | 1 | | | 1 | | -4 | 3 | -2 | |
| 102 | 102 | | Zimbabwe | | 1 | | -1 | -3 | | | -3 | -1 | -3 |

# 6. REFERENCES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