

# WORLD POLL METHODOLOGY

October 2008

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## Methodology Overview

The Gallup World Poll continually surveys residents in more than 140 countries, representing 95% of the world's adult population, using randomly selected, nationally representative samples. Gallup typically surveys 1,000 individuals in each country, using a standard set of core questions that has been translated into the major languages of the respective country. In some regions, supplemental questions are asked in addition to core questions. Face-to-face interviews are approximately 1 hour, while telephone interviews are about 30 minutes. In many countries, the survey is conducted once per year, and fieldwork is generally completed in two to four weeks. Appendix E displays each country's sample size, month/year of the data collection, mode of interviewing, languages employed, design effect, margin of error, and details about sample coverage.

Gallup is entirely responsible for the management, design, control, and funding of the Gallup World Poll. For the past 70 years, Gallup has been committed to the principle that accurately collecting and disseminating the opinions and aspirations of people around the globe is vital to understanding our world. Gallup's mission is to provide information in an objective, reliable, and scientifically grounded manner. Gallup is not associated with any political orientation, party, or advocacy group and does not accept partisan entities as clients. Any individual, institution, or governmental agency may access the Gallup World Poll regardless of nationality. The identities of clients and all surveyed respondents will remain confidential.

## Preparing for Data Collection

### Question Design

Many of the World Poll questions are items that Gallup has used for years. When developing additional questions, Gallup employed its worldwide network of research and political scientists<sup>1</sup> to better understand key issues with regard to question development and construction and data gathering. Hundreds of items were developed, tested, piloted, and finalized. The best questions were retained for the core questionnaire and organized into indexes. Most items have a simple dichotomous (“yes or no”) response set to minimize contamination of data because of cultural differences in response styles and to facilitate cross-cultural comparisons.

The World Poll measures key indicators such as Law and Order, Food and Shelter, Work, Personal Economy, Personal Health, Citizen Engagement, and Well-Being and demonstrates their correlations with world development indicators such as GDP and Brain Gain. These indicators assist leaders in understanding the broad context of national interests and establishing organization-specific correlations between leading indexes and lagging economic outcomes.

Gallup organizes its core group of indicators into the Gallup World Path (see Appendix A). The Path is an organizational conceptualization of the seven indexes and is not to be construed as a causal model. The individual indexes have many properties of a strong theoretical framework. A more in-depth description of the questions and Gallup indexes is included in the indexes section of this document. In addition to World Path indexes, World Poll questions also measure opinions about national institutions, corruption, youth development, community basics, diversity, optimism, communications, violence, religiosity, and numerous other topics. For many regions of the world, additional questions that are specific to that region or country are included in surveys. Region-specific questions have been developed for Muslim nations, former Soviet Union countries, the Balkans, sub-Saharan Africa, Latin America, China and India, South Asia, and Israel and the Palestinian Territories.

### Translation

The questionnaire is translated into the major languages of each country. The translation process starts with an English, French, or Spanish version, depending on the region. A translator who is proficient in the original and target languages translates the survey into the target language. A second translator reviews the language version against the original version and recommends refinements.

### Training

Gallup selects vendors that have experience in nationwide public opinion studies and conducts in-depth training sessions with experienced, local field staff prior to the start of data collection. A training manual is also provided to assist the fieldwork team with training and to ensure consistency and structure. Topics covered in training include the questionnaire and field procedures.

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<sup>1</sup> The Brookings Institute, World Bank, USAID, United Nations, Daniel Kahneman, Ed Diener, Deepak Chopra, Richard Florida, John Hallowell, Jeffrey Sachs, and Arthur Stone were consulted as part of the World Poll project.

## Sampling and Data Collection Methodology

With few exceptions, all samples are probability based and nationally representative of the resident population aged 15 and older. The coverage area is the entire country including rural areas, and the sampling frame represents the entire country. Exceptions include areas where the safety of interviewing staff is threatened, scarcely populated islands in some countries, and areas that interviewers can reach only by foot, animal, or small boat.

Telephone surveys are used in countries where telephone coverage represents at least 80% of the population or is the customary survey methodology (see Appendix E for detailed information for each country). In central and eastern Europe, as well as in the developing world, including much of Latin America, the former Soviet Union countries, nearly all of Asia, the Middle East, and Africa, an area frame design is used for face-to-face interviewing. The Gallup Panel is used in the United States.

The typical World Poll survey includes at least 1,000 surveys of individuals. In some countries, oversamples are collected in major cities or areas of special interest. Although rare, there are some instances in which the sample size is between 500 and 1,000. See Appendix E for detailed information for each country.

### Face-to-Face Survey Design

#### First Stage

In countries where face-to-face surveys are conducted, census listings of Primary Sampling Units (PSUs), consisting of clusters of households, are the main way of selecting the sample. Typically, the PSUs are stratified this way:

- I. Cities with population = 1,000,000 or more
- II. Cities with population = 500,000 to 999,999
- III. Cities with population = 100,000 to 499,999
- IV. Cities with population = 50,000 to 99,999
- V. Towns with population = 10,000 to 49,999
- VI. Towns/Rural villages with populations under 10,000

In areas where census data are not available, PSUs are stratified by regions. PSUs are proportionally allocated to the population in each stratum, and typically, 125 PSUs are sampled with an average of eight interviews, one interview per sampled household. If maps of the PSUs are available, then they are used; otherwise, the selected PSUs must be mapped.

#### Second Stage

Random route procedures are used to select sampled households. Unless an outright refusal occurs, interviewers must make at least three attempts to survey the sampled household. Attempts are made on different days, and if local custom permits, at least one attempt is made on a weekend. After three attempts, if an interview cannot be obtained at the initial sampled household, the household to the immediate right of the initial household is selected. If the first attempt at this household is unsuccessful, then the house immediately to the left of the initial household is selected. Refer to Appendix B for a more in-depth description of random route procedures.

#### Third Stage

Respondents are randomly selected within the selected households. Interviewers list all eligible household members and their ages or birthdays. The respondent is selected by means of the

Kish grid (refer to Appendix C) in countries where face-to-face interviewing is used. The person who answers the door is not informed of the selection criteria until after the respondent has been identified.

### **Telephone Survey Design**

In countries where telephone interviewing is employed, Random-Digit-Dial (RDD) or a nationally representative list of phone numbers is used. In select countries where cell phone penetration is high, a dual sampling frame is used. Random respondent selection is achieved by using either the latest birthday or Kish grid method. At least three attempts are made to reach a person in each household, spread over different days and times of day. Appointments for call-backs that fall within the survey data collection period are made.

### **Panel Survey Design**

The Gallup Panel is a probability based, nationally representative panel, for which all members are recruited via Random-Digit-Dial methodology and is only used in the United States. Participants who elect to join the panel are committing to the completion of two to three surveys per month, with the typical survey lasting 10 to 15 minutes. The World Poll panel survey is conducted over the telephone and takes approximately 30 minutes. No incentives are given to panel participants.

## Data Preparation

The data set goes through a rigorous quality assurance process before being publicly released. Gallup’s directors of survey research in each region of the world review the data for consistency and stability by interviewer and region. If the regional director suspects a problem, it may be necessary to collect new data. After review by the regional directors, Gallup scientists perform additional validity reviews. The data are centrally aggregated and cleaned, ensuring correct variable codes and labels are applied. The data are then reviewed in detail for logical consistency and trends over time. Once the data are cleaned, weighted, and vetted, the final step is to calculate approximate study design effect and margin of error.

### Data Weighting

Data weighting is used to ensure a nationally representative sample for each country and is intended to be used for calculations within a country.

First, base sampling weights are constructed to account for oversamples and household size. If an oversample has been conducted, the data are weighted to correct the disproportionate sample. Weighting by household size (number of residents aged 15 and older) is used to adjust for the probability of selection, as residents in large households will have a disproportionately lower probability of being selected for the sample. (Weighting by household size was introduced for data collected in 2008.)

Second, post-stratification weights are constructed. Population statistics are used to weight the data by gender, age, and, where reliable data are available, education or socioeconomic status. Finally, approximate study design effect and margin of error are calculated (calculations are presented in Appendix E). The design effect calculation reflects the influence of data weighting and does not incorporate the intraclass correlation coefficients.

### Margin of Error

The maximum margin of error is calculated around reported proportions for each country-level data set, assuming a 95% confidence level. The margin of error also includes the approximate design effect for the total country sample.

Figure 1: Excerpt of data from Appendix E

Country	Data Collection Date (month completed)	Number of Interviews	Design Effect	Margin of Error
Argentina	August-07	1,000	1.11	3.3
Armenia	July-07	1,000	1.35	3.6
Australia	April-07	1,205	1.31	3.2
Azerbaijan	December-07	1,000	1.24	3.5

Figure 1 displays the design effect and margin of error for each country data set. As an example, use the country data for Argentina collected August 2007. For reported percentages based on the total country data set (not subset), the margin of error is  $\pm 3.3$  percentage points. This means that if the survey was conducted 100 times using the exact same procedures, the

“true value” around a reported percentage of 50 would fall within the range of 46.7% to 53.3% in 95 out of 100 cases.

Other errors that can affect survey validity include measurement error associated with the questionnaire, such as translation issues, and coverage error, where a part of the target population has a zero probability of being selected for the survey. Additionally, because of authoritarian governments in select countries, respondents may be less than forthcoming in their assessments, leading to the potential for inflated scores.



## Education and Income: Creating Worldwide Comparability

The manners in which income and education are reported vary by country, making equivalent cross-cultural comparisons difficult. Gallup harmonized education variables and consulted with Angus Deaton<sup>2</sup> to create income variables. In doing so, Gallup has created a worldwide data set with standardized respondent-level income data.

### Education

Countries have unique ways of classifying education levels, and these classifications need to be preserved during data collection for weighting purposes. However, to make comparisons across countries by educational attainment, consistent categories also needed to be created. There are three categories in which all education descriptions can be placed: elementary, secondary, and tertiary. All responses regarding education are coded into their relevant category for global comparison.

- **Elementary:** Completed elementary education or less (up to eight years of basic education)
- **Secondary:** Completed some education beyond secondary education (9 to 15 years of education)
- **Tertiary:** Completed four years of education beyond “high school” and/or received a four-year college degree.

### Income

The following income variables are calculated:

- annual household income in international dollars (ID)
- annual household income in international dollars divided into 35 brackets
- household income U.S. \$2 a day or less
- annual household income in local currency divided into quintiles
- annual income a household needs to get by in international dollars
- annual income a household receives from relatives outside the country in international dollars

For 2008 data sets, annual household income in international dollars (ID) is calculated using the Individual Consumption Expenditure by Household PPP ratio from table 1 of the **World Bank Global Purchasing Power Parities and Real Expenditures 2005 International Comparison Program (ICP-iceh)** report. The ICP-iceh 2005 PPP values are adjusted for inflation relative to the United States for years 2006 and 2007 to arrive at the 2008 PPP. Household income values in local currency are divided by the ICP-iceh PPP ratio to obtain ID. For those countries not covered by the World Bank ICP, GDP-based PPPs from the CIA *World Factbook* are used.

For data sets collected prior to 2008, ID were calculated using the best available PPP figures from World Bank or the CIA *World Factbook*.

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<sup>2</sup> Thank you to Angus Deaton for his expertise and input during the creation of income variables. Angus Deaton, Ph.D., is a Gallup Senior Scientist and the Dwight D. Eisenhower Professor of International Affairs and Professor of Economics and International Affairs at the Woodrow Wilson School of Public and International Affairs and the Economics Department at Princeton University.

Most respondents in 2008 reported their household income in the form of continuous data. However, when respondents reported their income as falling in a range between an upper- and lower-bound (brackets), the bracket midpoint is used as the best estimate of HH income and ID calculated as described previously.

The result is a final measure of household wealth comparable across all respondents, communities, local regions, countries, and global regions. A respondent reporting a household income of \$1,000 ID has twice the income of one reporting \$500 ID.

In addition to the continuous ID variable, categorical income variables are constructed. One such variable divides annual household income in international dollars into 35 brackets and assigns respondent-level income to the appropriate bracket. Bracket "0" represents no income, while brackets "1" and "2" correspond to \$1 and \$2 a day, respectively. These three brackets (0, 1, and 2) are combined to create an additional variable, which represents household with incomes of \$2 (U.S.) per day or less.

A measure of annual household income in local currency, divided into quintiles, is also created. This measure of wealth is relative to the country in which one lives. It provides a within-country measure of wealth, as opposed to the continuous ID variable, which provides an absolute look at wealth in a worldwide context. The local currency variable for each country is cleaned and each respondent assigned to one of five categories based on the respondent's position in the income distribution of the country. Refer to Appendix D for more specific information about the income brackets.

Finally, variables are created for the reported income a household needs to get by in ID and the reported income a household receives from relatives outside the country in ID. Refer to Appendix D for more detailed income variable information.

## Overview of World Poll Indexes

The Gallup World Poll global indexes span multiple economic, political, and social topics that correlate with real-world outcomes. Seven performance indexes have been identified for the Gallup World Path: Law and Order, Food and Shelter, Work, Personal Economy, Personal Health, Citizen Engagement, and Well-Being. The Well-Being Index is composed of five separate indexes: Thriving, Struggling, Suffering, Positive Experience, and Negative Experience.

The vast amount of data has allowed for the calculation of numerous other indexes, which include the national indexes (National Institutions, Corruption, and Youth Development), community indexes (Community Basics, Diversity, and Optimism), and personal indexes (Communications, Violence, and Religiosity). Because of government restrictions in some countries, select questions were not permitted to be asked. If the missing question is part of an index, it may not have been possible to calculate an index score for that country.

Each index was carefully considered by Gallup scientists before being included. Index reliability was evaluated using Cronbach's Alpha on country-level data. For all indexes, this measure is .69 or greater, and for many it exceeds .85. Additionally, indexes were correlated at the country level with a host of World Poll indexes. Further, World Bank, CIA, United Nations, and Freedom House measures were used to validate the indexes against external measures. The most relevant relationships for each index are detailed. Most of the correlations are significant at the .01 level, and except in a few noted instances, all are significant at least at the .05 level.

## Law and Order Index

The Law and Order Index represents the security level that citizens report for themselves and their families. It incorporates two questions that gauge respondents' sense of personal security and two questions that specifically address the incidence of crime. Higher scores on this index indicate that more citizens report feeling secure.

Recent studies have demonstrated that high crime rates suppress social cohesion at the community level<sup>3</sup> and negatively affect regional economic performance<sup>4</sup>. The Law and Order Index reinforces these findings, correlating highly with external measures related to economic and social development such as per-capita GDP (PPP), poverty rates, life expectancy for males, and the United Nations Human Development ranking. The Law and Order Index also significantly correlates with other World Poll indexes, such as National Institutions, Community Basics, Personal Economy, Corruption, and Youth Development, as well as household income. Additionally, the Law and Order Index strongly relates to homicide rates, adding validity to the measure.

### Index Questions

- *In the city or area where you live, do you have confidence in the local police force?*
- *Do you feel safe walking alone at night in the city or area where you live?*
- *Within the last 12 months, have you had money or property stolen from you or another household member?*
- *Within the last 12 months, have you been assaulted or mugged?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The four items are recoded so that positive (or favorable) answers are scored a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has at least three valid scores out of the four possible. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Law and Order Index has a Cronbach's Alpha of .50 at the individual record level and .77 when aggregated at the country level.

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<sup>3</sup> Ayers, R.L. (1998). Crime and violence as development issues in Latin America and the Caribbean. Washington, D.C.: World Bank.

<sup>4</sup> Entorf, H., & Spengler, H. (2000). Criminality, social cohesion, and economic performance. Wuerzburg Economic Papers No. 00-22.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• National Institutions	.66
• Community Basics	.52
• Personal Economy	.44
• Youth Development	.64
• Corruption	-.48
• Household Income	.39
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.47
• Poverty Rate	-.41
• Unemployment	-.33
• Income Earned by Males	.51
• Human Development Index Ranking (United Nations)	-.38
• Homicides	-.45
• Male Life Expectancy	.44

## Food and Shelter Index

The Food and Shelter Index assesses the capability people have to meet basic needs for food and shelter. Lower scores on this index indicate that more respondents reported struggling to afford food and shelter in the past year, while higher scores indicate fewer respondents reported such struggles. As would be expected, respondents in wealthier countries are more likely than those in lesser developed nations to give positive answers. However, even in the wealthiest countries, some percentage of the population indicates a struggle to provide food or adequate shelter. The Food and Shelter Index serves as an effective summary measure and indicator of the prevalence of poverty across individuals in a group, country, or region.

The validity of the Food and Shelter Index is supported by a pattern of strong correlations with wealth and health measures, particularly those that focus on poverty. Externally, the index correlates strongly with per-capita GDP (PPP), the poverty rate, the United Nations Human Development Index, the percentage of the population undernourished, infant mortality, and life expectancy. The Food and Shelter Index also correlates with other World Poll indexes: Community Basics, Personal Economy, Youth Development, and Corruption, as well as household income. In addition, the index negatively correlates with the Suffering Index.

### Index Questions

- *Have there been times in the past 12 months when you did not have enough money to buy food that you or your family needed?*
- *Have there been times in the past 12 months when you did not have enough money to provide adequate shelter or housing for you and your family?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The two items are recoded so that positive (or favorable) answers are scored a “1” and all other answers (including don’t know and refused) are assigned a score of “0.” If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for both questions. A record’s final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Food and Shelter Index has a Cronbach’s Alpha of .66 at the individual record level and .78 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	.58
• Personal Economy	.44
• Youth Development	.64
• Corruption	-.48
• Household Income	.39
• Suffering	-.21
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.72
• Poverty Rate	-.72
• Percentage of Population Undernourished	-.67
• Infant Mortality Rate	-.74
• Life Expectancy of Females/Males	.72/.76
• Human Development Index Ranking (United Nations)	-.77

## Work Index

The Work Index measures personal engagement at work among those who say they currently have a job (either paid or unpaid). In developing a standardized worldwide measure of work, Gallup researchers considered the historical research, as well as the varying contexts and types of work, from subsistence farming, to family rearing, to working in a modern corporation. Because of such broad variances, Gallup researchers sought to use questions applicable to a variety of work situations across the globe.

At its base, having a job or work, whether paid or unpaid, may fulfill individuals' need for importance, relevance, or purpose. For those who are paid, work also fills obvious pecuniary needs. People who have work are, on average, more likely to give favorable responses to questions gauging well-being than those who do not have work. Beyond simply having a job, being engaged in work that one finds satisfying is better for the worker and (where applicable) the organization for which he or she works. Gallup research has found that the optimal situation is one in which workers feel they have an opportunity to do what they do best every day. The latter is a higher-level need related to the psychological fit of the worker to the job he or she is asked to do, an important element in efficient work and fulfilling lives.

As would be expected, the Work Index strongly relates to measures of wealth and poverty such as GDP, infant mortality, life expectancy, and Gallup's Food and Shelter and Communications indexes. Relationships with external measures support the idea that engaged workers report higher levels of well-being. The index significantly correlates with Gallup's Well-Being indexes. In addition, the Work Index also relates to the quality of life in the community. Measures of net migration, education expenditures and enrollment, Human Development rankings, as well as the Community Basics and Citizen Engagement indexes are all strongly related to the Work Index.

### Index Questions

- *Do you currently have a job or work, either paid or unpaid?*
- *Are you satisfied or dissatisfied with your job or the work you do?*
- *In your work, do you have an opportunity to do what you do best every day, or not?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The three items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores (either a "1" or a "0") for all three questions. Individuals who have "1" for all three items are assigned a score of 100. Respondents who do not have "1" for all three items are assigned a score of 0. This produces an individual index score of either 0 or 100. The final country-level index score is the mean of all individual records for which an index score was calculated, resulting in the percentage of people in the population with a "1" on all three items. Country-level weights are applied to this calculation.



## Reliability

The Work Index has a Cronbach's Alpha of .60 at the individual record level and .73 when aggregated at the country level.

## Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	.61
• Food and Shelter	.69
• Suffering	-.54
• Struggling	-.64
• Thriving	.76
• Citizen Engagement	.72
• Communications	.74
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.68
• Net Migration	.37
• Female Life Expectancy	.62
• Infant Mortality	-.58
• Human Development Index Ranking (United Nations)	-.71
• Enrollment in Tertiary Education	.57
• Percentage of Females Enrolled in School	.68

## Personal Economy Index

The Personal Economy Index measures respondents' personal economic situations and the communities where they live. The subjective measures of personal economy that make up the index are an important complement to traditional macroeconomic indicators such as GDP and unemployment rates, particularly in cases in which these data are difficult to obtain or the quality is suspect.

Even in developed regions where traditional economic indicators are highly reliable, survey data represent complementary measures that can compensate for existing "blind spots." GDP, for instance, is an important measure of rising or falling economic activity in the monetized sector, but an imprecise indicator of how such changes translate to living conditions for the bulk of the country's population. Survey data on satisfaction with living standards, on the other hand, help complete the picture with a bottom-up perspective that accounts for individual-level judgments of welfare. Furthermore, expressions of sentiment often serve as leading indicators of economic conditions. Perhaps the greatest promise of these data is their potential to predict economic progress.

External relationships with World Bank measures are strongest with those measures sensitive to the lower end of the wealth distribution such as infant mortality and poverty rates.

Also enlightening are the relationships that the index shares with other World Poll indexes. National Institutions, Community Basics, Work, Personal Health, Citizen Engagement, Youth Development, Corruption, Optimism, and Suffering are all strongly related to the Personal Economy Index, illustrating the importance of subjective economic circumstances in almost all other facets of everyday life.

### Index Questions

- *Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?*
- *Right now, do you feel your standard of living is getting better or getting worse?*
- *Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?*
- *Thinking about the job situation in the city or area where you live today, would you say that it is now a good time or a bad time to find a job?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The four items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for at least three questions. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Personal Economy Index has a Cronbach's Alpha of .62 at the individual record level and .83 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• National Institutions	.66
• Community Basics	.62
• Work	.54
• Personal Health	.62
• Citizen Engagement	.57
• Youth Development	.63
• Optimism	.79
• Suffering	-.74
• Corruption	-.53
• Household Income	.48
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.23
• Unemployment	-.20
• Infant Mortality	-.39
• Poverty Rate	-.45
• Human Development Index Ranking (United Nations)	-.28
• Percentage of Children in Labor Force	-.31

## Personal Health Index

The Personal Health Index measures perceptions of one's own health, both physical and mental. Attempts to assess the state of a country's overall health usually involve the accumulation of health-related statistics such as life expectancy, infant mortality, and disease infection rates. Additionally, many government studies in individual countries collect health data via surveys from their own residents. Less numerous are survey projects that collect consistent health-related data from respondents across several countries, and in most cases those multinational efforts focus on Western countries.

The Gallup World Poll has now measured self-reported personal health using the same questions and representative sample frames in more than 140 countries and areas. The object of the Personal Health Index was to produce an overview of respondents' perceptions of their own health status and incidence of pain, worry, sadness, and rest.

Of particular concern during the construction of the items were two objectives: 1) high face validity and 2) correlation with respondents' objectively measured state of health. A respondent needed to be able to understand the question easily and answer with as little ambiguity as possible. Thus, the questions were kept simple (for example, "Did you experience the following feelings during a lot of the day yesterday? How about physical pain?"). Additionally, the concept in question (such as pain) needed to be clearly related to objectively measured health conditions.

The Personal Health Index is correlated with Community Basics, Personal Economy, and Citizen Engagement indexes. Individuals with high Personal Health scores also tend to be more optimistic about the future and in terms of well-being are less likely to be "suffering" or "struggling." Correlations with World Bank measures are present where face validity suggests they would be: health expenditures per capita, infant mortality rates, and life expectancy. Additionally, health is positively correlated with GDP, earned income, and net migration.

### Index Questions

- *Are you satisfied or dissatisfied with your personal health?*
- *Do you have any health problems that prevent you from doing any of the things people your age normally can do?*
- *Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt. Did you feel well-rested yesterday?*
- *Did you experience the following feelings during a lot of the day yesterday? How about physical pain?*
- *Did you experience the following feelings during a lot of the day yesterday? How about worry?*
- *Did you experience the following feelings during a lot of the day yesterday? How about sadness?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: All items are recoded so that favorable answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. Respondents must have answered the first two questions and at least three of the four "experience" questions for an individual index to be calculated. A record's final index score is the mean of the "experience" group. This is then combined with the first two questions to calculate an overall mean, which is then multiplied by 100. The final country-level index score is

the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Personal Health Index has a Cronbach's Alpha of .64 at the individual record level and .75 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	.58
• Personal Economy	.62
• Citizen Engagement	.48
• Youth Development	.46
• Optimism	.59
• Suffering	-.56
• Struggling	-.32
<b>External Measures</b>	
• Health Expenditures Per Capita	.27
• Infant Mortality	-.28
• Poverty Rate	-.28
• Life Expectancy Males/Females	.32/.22
• Net Migration	.31
• Per-Capita GDP (PPP)	.27
• Earned Income (Males)	.33

## Citizen Engagement Index

The Citizen Engagement Index assesses respondents' satisfaction with their communities and their inclination to volunteer their time and money and assist others in need. It is designed to measure a respondent's attachment and commitment to the community in which he or she lives. Engaged citizens are positive about the communities they live in and actively give back to them.

The Citizen Engagement Index is strongly correlated with community-focused World Poll indexes: Community Basics, Work, Youth Development, and all measures of well-being. Externally, the Citizen Engagement Index is linked to per-capita GDP (PPP) and unemployment as well as measures that are indicative of a wealthier community such as personal computers per 1,000 people, healthcare expenditures, and enrollment in education. Also of interest are the relationships between this index and measures of personal and political freedoms and net migration.

### Index Questions

- *If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?*
- *Are you satisfied or dissatisfied with the city or area where you live?*
- *In the next 12 months, are you likely or unlikely to move away from the city or area where you live?*
- *Would you recommend the city or area where you live to a friend or associate as a place to live, or not?*
- *Have you done any of the following in the past month? How about donated money to an organization?*
- *Have you done any of the following in the past month? How about volunteered your time to an organization?*
- *Have you done any of the following in the past month? How about helped a stranger or someone you didn't know who needed help?*
- *In the city of area where you live, do you have confidence in the local police force?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The eight items are recoded so that positive (or favorable) answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. The items are divided into two groups for calculation purposes. The first five questions make up the first group and the last three questions make up the second group. An individual record is not calculated if it is missing more than one question from each group. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Citizen Engagement Index has a Cronbach's Alpha of .52 at the individual record level and .60 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	.71
• Work	.72
• Youth Development	.50
• Corruption	-.35
• Thriving	.70
• Struggling	-.58
• Suffering	-.51
• Household Income	.60
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.59
• Computers Per 1,000 People	.60
• Health Expenditures Per Capita	.59
• Unemployment	-.36
• Net Migration	.25
• Gender Empowerment Value (United Nations)	.58
• Percentage of Females/Males Enrolled in School	.53/.51
• Civil Liberties (Freedom House 1997)	-.43
• Human Rights (Freedom House 2005)	-.35
• Political Rights (Freedom House 2004)	-.37

## Overview of Well-Being Indexes

The items that make up the Well-Being Index reflect a broad view of the well-being concept; they include measure of life satisfaction, optimism, meaning and purpose, domain satisfaction, optimism, and positive and negative affect. Well-Being is broken down into five indexes: Thriving, Struggling, Suffering, Positive Experience, and Negative Experience.

Nobel laureate Daniel Kahneman and University of Illinois psychology professor Ed Diener have been influential in conceiving the contemporary views of well-being. Hedonic psychology, as defined by Kahneman, Diener, and University of Michigan psychology professor Norbert Schwarz “is the study of what makes experiences and life pleasant or unpleasant. It is concerned with feelings of pleasure and pain, of interest and boredom, of joy and sorrow, and of satisfaction and dissatisfaction. It is also concerned with the whole range of circumstances, from the biological to the societal, that occasion suffering and enjoyment<sup>5</sup>.”

Kahneman makes note of the distinction between “experienced well-being” and “evaluative well-being.” As described by Kahneman, experienced well-being is concerned with momentary affective states and the way people feel about experiences in real-time, while evaluative well-being is the way they remember their experiences after they are over. Evaluative well-being may include individual assessments of life domains such as standard of living, housing, job, marriage, and personal health. On the other hand, experienced well-being seeks to bypass the effects of judgment and memory and capture feeling and emotions as close to the subject’s immediate experience as possible. The Thriving, Struggling, and Suffering indexes are rooted in the “remembering self,” while the Positive and Negative Experience indexes are based on the “experiencing self.”

Across countries, measures of well-being correlate highly with income, education levels, and reported disease conditions. Individuals who are Thriving have fewer disease conditions, fewer sick days, higher incomes, are more highly educated, and have better work environments. Countries with a higher percentage of Thriving respondents also report that the area they live is a good place to live for different races, religions, and lifestyles. In comparison to Thriving respondents, Struggling respondents are much more likely to worry about money on a daily basis, and Suffering respondents are less likely to have basic necessities such as food and shelter.

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<sup>5</sup> Kahneman, D., Diener, E., Schwarz, N. (Eds.) (1999). *Well-being: the foundations of hedonic psychology*. New York: Russell Sage Foundation.



## Well Being Indexes: Thriving, Struggling, Suffering

The Thriving, Struggling, and Suffering Indexes measure respondents' perceptions of where they stand, now and in the future, on a "ladder" from 0 to 10, where "0" represents the worst possible life and 10 represents the best possible life. Individuals who rate their current lives a "7" or higher and their future an "8" or higher are "Thriving." Those who rate their current lives as greater than "4" but less than "7" and their future lives as less than "8" and greater than "4" are "Struggling." Individuals are "Suffering" if they report their current or future lives as a "4" and lower.

### Index Questions

- *Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. 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 do you feel you personally stand at the present time?*
- *Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. 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. Just your best guess, on which step do you think you will stand on in the future, say about five years from now?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedures applies: An individual record has three indexes (Thriving, Struggling, Suffering) calculated by scoring "1" if inclusion criteria are met and "0" if they are not. A respondent must have answered both questions to have indexes calculated. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Thriving Index – Reliability

The Thriving Index has a Cronbach's Alpha of .76 at the individual record level and .81 when aggregated at the country level.

### Thriving Index – Relationships With Other Measures

World Poll Index Measures	Pearson's r
• Food and Shelter	.70
• Work	.76
• Citizen Engagement	.70
• Personal Health	.39
• Personal Economy	.55
• Household Income	.81

<b>External Measures</b>	<b>Pearson's r</b>
• Per-Capita GDP (PPP)	.78
• Enrollment in Tertiary Education	.64
• Health Expenditures Per Capita	.73
• Poverty Rate	-.53
• Human Development Index Ranking (United Nations)	-.79
• Gender Empowerment Value (United Nations)	.66
• Corruption Index (2007 Transparency International)	.74
• Freedom of the Press (Freedom House 2007)	-.55

### **Struggling Index – Reliability**

The Struggling Index has a Cronbach's Alpha of .74 at the individual record level and .87 when aggregated at the country level.

### **Struggling Index – Relationships With Other Measures**

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	-.46
• Food and Shelter	-.63
• Work	-.64
• Citizen Engagement	-.58
• Communications	-.73
• Household Income	-.75
<b>External Measures</b>	
• Per-Capita (GDP (PPP)	-.73
• Enrollment in Tertiary Education	-.68
• Health Expenditures Per Capita	-.69
• Poverty Rate	.40
• Human Development Index Ranking (United Nations)	.79
• Gender Empowerment Value (United Nations)	-.75
• Corruption Index (2007 Transparency International)	-.71
• Freedom of the Press (Freedom House 2007)	.55

### Suffering Index – Reliability

The Suffering Index has a Cronbach’s Alpha of .74 at the individual record level and .87 when aggregated at the country level.

### Suffering Index – Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson’s r</b>
• Community Basics	-.42
• Food and Shelter	-.42
• Work	-.54
• Personal Economy	-.74
• Personal Health	-.54
• Citizen Engagement	-.51
• Household Income	-.47
<b>External Measures</b>	
• Per-Capita GDP (PPP)	-.46
• Health Expenditures Per Capita	-.43
• Percentage of GDP Spent on Education	-.32
• Unemployment	.33
• Percentage of Population Undernourished	.34
• Human Development Index Ranking (United Nations)	.38
• Gender Empowerment Value (United Nations)	-.36
• Corruption Index (2007 Transparency International)	-.41
• Freedom of the Press (Freedom House 2007)	.25

## Well-Being Indexes: Positive Experience

The Positive Experience Index is a measure of respondents' experienced well-being on the day before the survey. The index provides a real-time measure of respondents' positive experiences.

### Index Questions

- *Did you feel well-rested yesterday?*
- *Were you treated with respect all day yesterday?*
- *Did you smile or laugh a lot yesterday?*
- *Did you learn or do something interesting yesterday?*
- *Did you experience the following feelings during a lot of the day yesterday? How about enjoyment?*

### Index Construction

Index scores are calculated at the individual record level. For each individual the following procedure applies: The five items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are scored as a "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has at least four out of five valid scores (0 or 1). The record's final score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Positive Experience Index has a Cronbach's Alpha of .67 at the individual record level and .85 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Personal Economy	.54
• Personal Health	.64
• Optimism	.38
• Citizen Engagement	.66
• Community Basics	.50
• Negative Experience	-.21
<b>External Measures</b>	
• Corruption Index (2007 Transparency International)	.31
• Gender Empowerment Value (United Nations)	.32
• Human Rights (Freedom House 2005)	-.34
• Civil Liberties (Freedom House 2005)	-.33

## Well-Being Indexes: Negative Experience

The Negative Experience Index is a measure of respondents' experienced well-being on the day before the survey. The index provides a real-time measure of respondents' negative experiences.

### Index Questions

- *Did you experience the following feelings during a lot of the day yesterday? How about physical pain?*
- *Did you experience the following feelings during a lot of the day yesterday? How about worry?*
- *Did you experience the following feelings during a lot of the day yesterday? How about sadness?*
- *Did you experience the following feelings during a lot of the day yesterday? How about stress?*
- *Did you experience the following feelings during a lot of the day yesterday? How about depression?*
- *Did you experience the following feelings during a lot of the day yesterday? How about anger?*

### Index Construction

Index scores are calculated at the individual record level. For each individual the following procedure applies: The six items are recoded so that affirmative answers are scored as a "1" and all other answers (including don't know or refused) are a "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has at least five out of six valid scores (0 or 1). The record's final score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Negative Experience Index has a Cronbach's Alpha of .73 at the individual record level and .78 when aggregated at the country level.

### Relationships With Other Measures

World Poll Index Measures	Pearson's r
• Personal Health	-.47
• Positive Experience	-.21
• Personal Economy	-.31
• Optimism	-.28
• Food and Shelter	-.26
External Measures	
• Gross National Income (PPP)	-.21
• Information/Communications Technology Expenditure Per Capita	-.24
• Corruption Index (2007 Transparency International)	-.21

## National Institutions Index

The National Institutions Index reflects citizens' confidence in key institutions prominent in a country's leadership: the military, the judicial system, the national government, and the honesty of elections.

When the relationships of the National Institutions Index to other World Poll indexes are examined, it gives insight into the aspects of life for which people hold national institutions responsible. Correlation analysis indicates strong relationships between the National Institutions Index and Community Basics, Law and Order, Personal Economy, Youth Development, Corruption, and Personal Health indexes. These relationships suggest there are gains to be made in understanding the formation of attitudes about national institutions through understanding perceptions of these more functionally oriented indexes. In other words, if one desires to know how public attitudes are formed concerning confidence in national institutions, then it would be fruitful to focus on the perceived performance on indexes of a more basic nature.

The National Institutions Index is related to measures of wealth: World Bank per-capita GDP (PPP), percentage of GDP spent on education, and personal computers per 1,000 population. Lastly, but still of interest, is the relationship of the National Institutions Index to World Bank net migration figures. It appears the higher the confidence in national institutions, the greater the influx of migrants.

### Index Questions

- *Do you have confidence in each of the following, or not? How about the military?*
- *Do you have confidence in each of the following, or not? How about the judicial system and courts?*
- *Do you have confidence in each of the following, or not? How about national government?*
- *Do you have confidence in each of the following, or not? How about honesty of elections?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The four items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for at least three questions. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The National Institutions Index has a Cronbach's Alpha of .74 at the individual record level and .87 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Community Basics	.51
• Law and Order	.66
• Personal Economy	.66
• Personal Health	.42
• Youth Development	.70
• Corruption	-.53
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.29
• Percentage of GDP Spent on Education	.29
• Unemployment	-.29
• Net Migration	.33
• Personal Computers Per 1,000	.31
• Parliament Seats Held by Women	.30
• Corruption Index (2007 Transparency International)	.36

## Corruption Index

The Corruption Index is a measure of the pervasiveness of corruption that citizens perceive in their country’s government and businesses. Higher scores on the Corruption Index indicate more residents perceive corruption as widespread. Countries that score high on the index tend to have less confidence in their national institutions and in law and order, and less satisfaction with community basics and their personal economic situations. Further, the Index has a strong negative correlation with the Thriving Index and a strong positive relationship with the Struggling Index.

The external validity of the index is demonstrated by the significant relationship with the World Bank and Transparency International Corruption indicators. The Corruption Index is negatively related to GDP, health expenditures per person, percentage of GDP spent on education, and gender empowerment.

### Index Questions

- *Is corruption widespread within businesses located in (country), or not?*
- *Is corruption widespread throughout the government in (country), or not?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The two items are recoded so that positive (or favorable) answers are scored as a “1” and all other answers (including don’t know and refused) are assigned a score of “0.” If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for both items. A record’s final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Corruption Index has a Cronbach’s Alpha of .74 at the individual record level and .94 when aggregated at the country level.

### Relationships With Other Measures

World Poll Index Measures	Pearson’s r
• National Institutions	-.53
• Community Basics	-.42
• Law and Order	-.48
• Personal Economy	-.53
• Youth Development	-.48
• Thriving	-.47
• Struggling	.43
• Household Income	-.53



## Gallup World Poll Methodology

External Measures	Pearson's r
• Corruption Index (2007 Transparency International)	-.61
• Corruption Index (World Bank)	.33
• Per-Capita GDP (PPP)	-.53
• Percentage of GDP Spent on Education	-.34
• Health Expenditures Per Person	-.50
• Gender Empowerment Value (United Nations)	-.53

## Youth Development Index

The Youth Development Index was designed to measure citizens' perceptions of the focus their communities and countries have on the welfare of children. General measures of learning opportunities for young people and whether young people are treated with dignity are included in this index, along with residents' satisfaction with the educational system. The Youth Development Index has correlations with almost all World Poll indexes, though the strongest are with the National Institutions, Community Basics, Personal Economy, Law and Order, and Citizen Engagement indexes.

Externally, correlations with numerous youth-related measures demonstrate the index's validity. The percentage of GDP spent on education, infant mortality rate, percentage of adolescent births, percentage of males and females enrolled in school, as well as the percentage of children who labor, are all significantly correlated with the Youth Development Index. In addition, GDP per capita, unemployment, and net migration are all related to the index, suggesting the importance of developing and investing in a society's young population.

### Index Questions

- *In the city or area where you live, are you satisfied or dissatisfied with the educational system or the schools?*
- *Do you believe that children in (country) are treated with respect and dignity, or not?*
- *Do most children in (country) have the opportunity to learn and grow every day, or not?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The three items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for all items. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Youth Development Index has a Cronbach's Alpha of .62 at the individual record level and .86 when aggregated at the country level.

### Relationships With Other Measures

World Poll Index Measures	Pearson's r
• National Institutions	.70
• Community Basics	.74
• Law and Order	.64
• Personal Economy	.63
• Citizen Engagement	.50

## Gallup World Poll Methodology

<b>External Measures</b>	<b>Pearson's r</b>
• Per-Capita GDP (PPP)	.50
• Percentage of GDP Spent on Education	.35
• Unemployment	-.42
• Infant Mortality Rate	-.36
• Net Migration	.35
• Percentage of Adolescent Births	-.44
• Percentage of Females/Males Enrolled in School	.38/.33
• Percentage of Children Who Labor	-.23

## Community Basics Index

The Community Basics Index evaluates everyday life in a community from the perspective of the people who live there. The questions that make up this index ask about specific community components that individuals encounter in their everyday lives. Infrastructure, housing, and education are some of the factors that contribute to community satisfaction.

Community Basics is a theoretical contributor to Well-Being and the World Path. Because of the functional nature of the items that make up the index, it is practical to view it as a driver of more abstract constructs such as overall satisfaction with life in a community, or the likelihood that one is to recommend the community as a place to live, or the likelihood one is to leave the community. This approach is apparent in the relationships the index has with other World Poll indexes such as National Institutions and the Well-Being indexes.

From an external perspective, the index correlates with a long list of quality of life measures, including personal communications measures, sanitation and water quality, education and literacy measures, infant mortality and adolescent birth rates, and unemployment.

### Index Questions

- *In the city or area where you live, are you satisfied or dissatisfied with the public transportation systems?*
- *In the city or area where you live, are you satisfied or dissatisfied with the roads and highways?*
- *In the city or area where you live, are you satisfied or dissatisfied with the educational system or schools?*
- *In your city or area where you live, are you satisfied or dissatisfied with the quality of air?*
- *In your city or area where you live, are you satisfied or dissatisfied with the quality of water?*
- *In your city or area where you live, are you satisfied or dissatisfied with the availability of quality healthcare?*
- *In your city or area where you live, are you satisfied or dissatisfied with the availability of good affordable housing?*
- *In your city or area where you live, are you satisfied or dissatisfied with the beauty or physical setting?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The eight items are recoded so that positive answers are scored as a “1” and all other answers (including don’t know and refused) are assigned a score of “0.” If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for at least six of the eight items. A record’s final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Community Basics Index has a Cronbach’s Alpha of .74 at the individual record level and .92 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• National Institutions	.51
• Work	.61
• Personal Economy	.62
• Citizen Engagement	.71
• Youth Development	.74
• Thriving	.55
<b>External Measures</b>	
• Per-Capita GDP (PPP)	.55
• Adult Literacy Rate	.53
• Unemployment	-.37
• Infant Mortality Rate	-.56
• Net Migration	.26
• Percentage of Adolescent Births	-.50
• Percentage of Females/Males Enrolled in School	.50/.47
• Personal Computers Per 1,000	.54
• Percentage of Population With Improved Sanitation	.46

## Diversity Index

The Diversity Index was designed to measure a community’s acceptance of people from different racial, ethnic, or cultural groups. Relationships with other World Poll indexes indicate that citizens of countries with higher scores on the Diversity Index are more likely to be considered “thriving” and are more engaged in their communities. Individuals who live in accepting societies also report lower Corruption Index scores and higher Community Basics Index scores.

Countries that score highly on the Diversity Index also tend to rank more favorably on Freedom House measures of civil liberties and freedom of the press, have more parliament seats held by women, and rank higher on the United Nations gender empowerment value and Human Development Index.

### Index Questions

- *Is the city or area where you live a good place or not a good place to live for racial and ethnic minorities?*
- *Is the city or areas where you live a good place or not a good place to live for gay or lesbian people?*
- *Is the city or area where you live a good place or not a good place to live for immigrants from other countries?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The three items are recoded so that positive answers are scored as a “1” and all other answers (including don’t know and refused) are assigned a score of “0.” If a record has no answer for an item then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for all items. A record’s final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Diversity Index has a Cronbach’s Alpha of .63 at the individual record level and .71 when aggregated at the country level.

### Relationships With Other Measures

World Poll Index Measures	Pearson’s r
• Community Basics	.43
• Thriving	.60
• Citizen Engagement	.59
• Corruption	-.46

External Measures	Pearson's r
• Per-Capita GDP (PPP)	.54
• Health Expenditures Per Capita	.58
• Urban Population	.46
• Gender Empowerment Value (United Nations)	.64
• Human Development Index Ranking (United Nations)	-.42
• Civil Liberties (Freedom House 1996)	-.48
• Freedom of the Press (Freedom House 2007)	-.43
• Parliament Seats Held by Women (United Nations)	.40

## Optimism Index

The Optimism Index measures respondents' positive attitudes about the future and is related to several other World Poll indexes. Countries with higher Optimism Index scores report more confidence in national institutions and better youth development. Individual factors such as Personal Economy and Personal Health are also related to Optimism. As would be expected, the Suffering Index has a strong negative relationship with the Optimism Index.

Externally, the measure is related to measures of wealth such as poverty rate, unemployment, and earned income. Optimism is also related to foreign aid per capita and social contributions as percentage of revenue. This relationship suggests that the social conditions that prompt an influx of foreign aid also result in less optimism for the future. Finally, the Optimism Index is also significantly related to the World Bank Corruption Index.

### Index Questions

- *Right now, do you feel your standard of living is getting better or getting worse?*
- *Is the city or area where you live getting better or getting worse as a place to live?*
- *Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?*
- *Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. 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. Just your best guess, on which step do you think you will stand on in the future, say about five years from now?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record, the following procedure applies. The first three items are recoded so that favorable answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item then that item is not eligible for inclusion in the calculations. The score on a World Poll question that asks respondents where their lives stand currently is subtracted from the result on the question that asks them about where they will stand in the future. If the result is positive, meaning the respondent feels the future is going to be better than the present, the new variable is scored as a "1." If the difference is 0 or negative, the temporary variable is scored as a "0." An individual record has an index calculated if it has valid scores for at least three of the four items. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Optimism Index has a Cronbach's Alpha of .57 at the individual record level and .93 when aggregated at the country level.



### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• National Institutions	.55
• Personal Economy	.79
• Suffering	-.55
• Youth Development	.36
• Personal Health	.36
<b>External Measures</b>	
• Foreign Aid Per Capita	-.28
• Social Contributions as Percentage of Revenue	-.26
• Corruption Index (World Bank)	-.24
• Poverty Rate	-.31
• Unemployment	-.30
• Income Earned by Males (United Nations)	-.52

## Communications Index

The Communications Index assesses the degree to which respondents are connected via electronic communications. As would be expected, the index is strongly correlated with other wealth-related measures. World Poll's measures of Food and Shelter, Work, and household income are all significantly correlated with the index. Strong relationships with external measures, such as Internet users per 1,000 residents, provide validity to the measure. The Communications Index also correlates with poverty rate, GDP per capita, and the United Nations' Human Development Index.

### Index Questions

- *Does your home or the place you live have a landline telephone in working order?*
- *Does your home or the place you live have television?*
- *Does your home or the place you live have access to the Internet?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record, the following procedure applies: The first question is used to determine whether a respondent has a phone and is used to create the phone component of the index. If respondents answer "yes" to the question, they are assigned a score of "1" for the phone component and a "0" if they do not have a phone. For the remaining two questions, positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." A respondent must have a score for the phone component and the other two questions for an index score to be calculated. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Communications Index has a Cronbach's Alpha of .67 at the individual record level and .87 when aggregated at the country level.

### Relationships With Other Measures

World Poll Index Measures	Pearson's r
• Community Basics	.52
• Food and Shelter	.86
• Work	.74
• Household Income	.75

## Gallup World Poll Methodology

External Measures	Pearson's r
• Personal Computers Per 1,000	.77
• Internet Users Per 1,000	.82
• Cell Phone Subscriptions Per 1,000	.83
• Per-Capita GDP (PPP)	.84
• Poverty Rate	-.62
• Communications Technology	.87
• Human Development Index Ranking (United Nations)	-.93

## Violence Index

The Violence Index assesses respondents' acceptance of violence by others as a means to an end. High scores on this index reflect higher acceptance of violence. The index is strongly related to measures of poverty, and countries that score highest on this index (with some exceptions) tend to be in a period of transition and unrest.

At the individual level, the Violence Index correlates with the Optimism, Religiosity, and Struggling indexes. Externally, societies that are more accepting of violence tend to have lower school enrollment, higher percentages of children who labor, smaller urban populations, more individuals living in poverty, and lower life expectancy.

### Index Questions

- *Some people think that for the military to target and kill civilians is sometimes justified, while others think that kind of violence is never justified. Which is your opinion?*
- *Some people think that it is justified for an individual person or a small group of persons to target and kill civilians while others think that kind of violence is never justified. Which is your opinion?*
- *Some people believe that groups that are oppressed and are suffering from injustice can improve their situation by peaceful means alone. Others do not believe that peaceful means alone will work to improve the situation for such oppressed groups. Which is your opinion?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The three items are recoded so that answers that affirm violence are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for all three items. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

### Reliability

The Violence Index has a Cronbach's Alpha of .69 at the individual record level and .88 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Optimism	.30
• Religiosity	.28
• Struggling	.24
<b>External Measures</b>	<b>Pearson's r</b>
• Life Expectancy Males/Females	-.28/-.35
• Percentage of Population Living on Less Than \$2/Day	.55
• Percentage of Population Undernourished	.37
• Urban Population	-.41
• Percentage Males/Females Enrolled in School	-.28/-.33
• Maternal Mortality Rate	.46
• Percentage of Children Who Labor	.47

## Religiosity Index

The Religiosity Index is a measure of the importance of religion in respondents' daily lives, their self-reported attendance of religious services, and their confidence in religious organizations in their countries. For religions in which attendance at services is limited, care must be used in interpreting the data. Two of the index's elements are focused on organized religious structures; therefore, the index reflects a traditional view of religion.

The index displays a pattern of negative correlations with wealth-sensitive World Poll measures. For instance, the Religiosity Index is negatively correlated with Food and Shelter, Work, and Communications indexes, as well as household income, and is positively correlated with the Corruption Index. It is also positively related to the Struggling Index and negatively related to the Thriving Index.

It has similar relationships with variables from the World Bank and other sources. It has a negative relationship with wealth-related measures such as GDP and positive relationships with measures aligned with poverty. Additionally, the Religiosity Index has a negative relationship with literacy rates and enrollment in tertiary education. Finally, there is a significant correlation between the Religiosity Index and Freedom House measures of civil liberties.

### Index Questions

- *Is religion an important part of your daily life?*
- *Have you attended a place of worship or religious service within the last seven days?*
- *In (country), do you have confidence in each of the following or not? How about religious organizations (churches, mosques, temples, etc.)?*

### Index Construction

Index scores are calculated at the individual record level. For each individual record the following procedure applies: The three items are recoded so that positive answers are scored as a "1" and all other answers (including don't know and refused) are assigned a score of "0." If a record has no answer for an item, then that item is not eligible for inclusion in the calculations. An individual record has an index calculated if it has valid scores for all three items. A record's final index score is the mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied to this calculation.

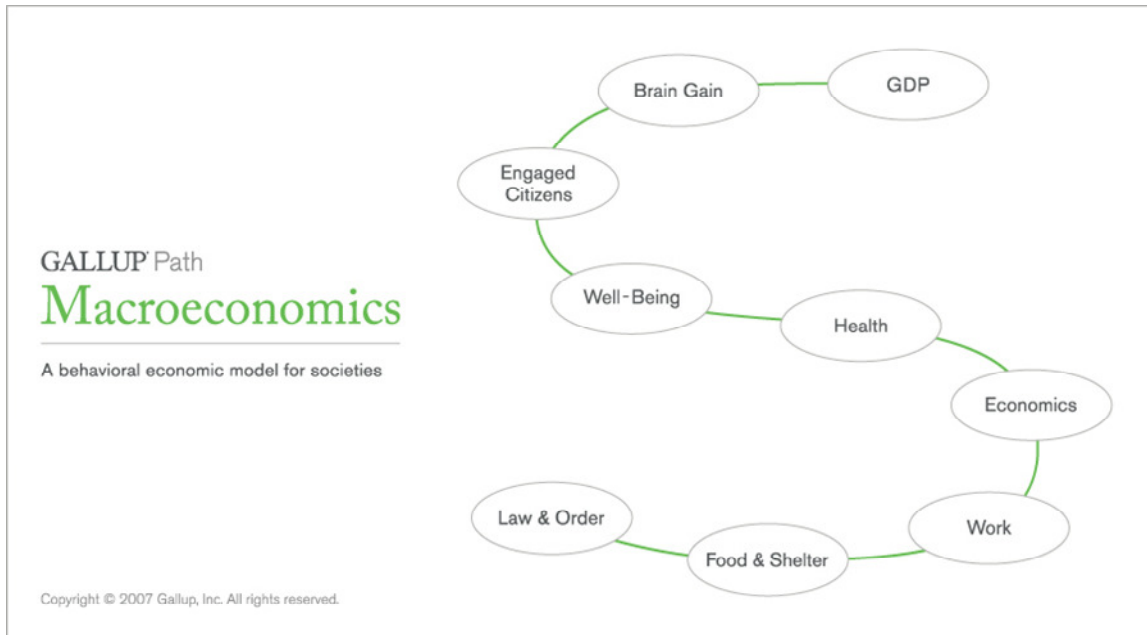
### Reliability

The Religiosity Index has a Cronbach's Alpha of .59 at the individual record level and .85 when aggregated at the country level.

### Relationships With Other Measures

<b>World Poll Index Measures</b>	<b>Pearson's r</b>
• Food and Shelter	-.53
• Communications	-.73
• Corruption	.42
• Work	-.46
• Struggling	.52
• Thriving	-.47
• Household Income	-.56
<b>External Measures</b>	
• Per-Capita GDP (PPP)	-.63
• Doctors Per 1,000	-.84
• Enrollment in Tertiary Education	-.75
• Infant Mortality	.60
• Literacy Rate Male/Female	-.57/-.60
• Percentage of Adolescent Births	.66
• Civil Liberties (Freedom House 1997)	.44

## Appendix A: Gallup World Path







There are several possible options with different rules. If there are multiple mailboxes or doorbells attached to a dwelling, the interviewer always chooses the uppermost bell or mailbox on the right-hand side as the first bell to ring. In apartment buildings, the interviewer systematically chooses apartments just as they would private households. The top floor apartment nearest the entry is the starting point and the interviewer walks in a clockwise direction around the floor and selects the third apartment.

### **Step 3: Select a specific respondent.**

If someone answers the door, the interviewer must fill out the Kish grid (see Appendix C) and ask to speak to the member of the family who is at least 15 years old and had the last birthday. It is extremely important that the interviewer select the respondents based on this method to secure that each member has an equal chance of selection.

The person interviewed must be:

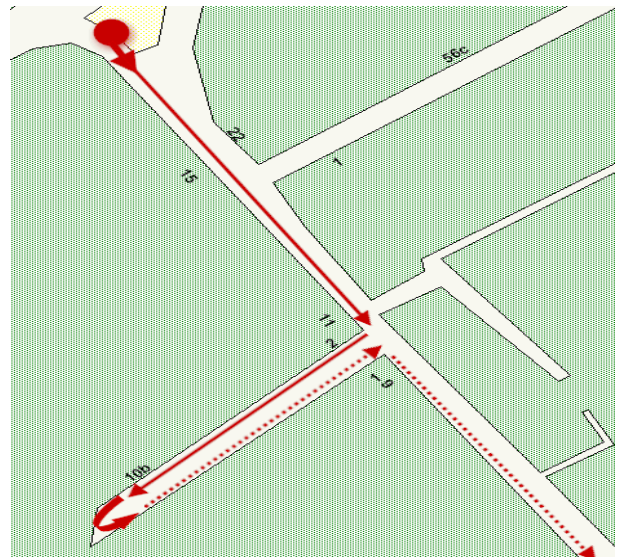
- 15 years of age or older
- A permanent resident of the household contacted (she/he only has to live there, we do not care whether she/he administratively registered as living elsewhere)
- The only household member interviewed
- Interviewed individually without disturbances or suggestions from anyone else

There may be cases of drunkenness, severe physical handicap, mental disorder, or senility, which will prevent the respondent from being able to take part in the interview.

### **Step 4: Proceed with the walk – select additional dwelling units.**

The interviewer continues to proceed on the right-hand side and select every third household. If the interviewer arrives at a crossing, he or she turns right and stays to the right-hand side to continue the search. If the interviewer walks the entire route without conducting the required number of interviews, he or she starts over, selecting the first dwelling unit instead of the third.

Dead-end streets are an exception. If there is a dead-end street within the block assigned, the interviewer will need to cross the street at the dead end and continue on the right-hand side.



## The Route Administration Sheet

Every populated residence is approached three times to obtain an interview. If the respondent is not home, the interviewer attempts two more times.

### Filling in the Administration Sheet:

Attempt ID	exact address (street, house number, door number)	visits	Date of visit	Time of visit	anybody seem to live there		anybody at home	
					yes	no	yes	no
1	34th Sun Street. II/3A	1st	01/19	16:17	1	2	1	2
		2nd					1	2
		3rd					1	2
		1st			1	2	1	2
		2nd					1	2

**Step 1:** The interviewer enters an Attempt ID for the first try, which will be "1." The interviewer finds the third door and writes down the date and time of the visit and the exact address, with the street name, house number, floor, and door number. If there is a residence with no one living there, the sheet is marked with a circle and the interviewer moves on.

**Step 2:** If people are living at the residence, but they are not at home, the interviewer marks the sheet accordingly and revisits the dwelling unit up to two times. Revisits on the same day must be made at least one hour later than the first visit. The interviewer adjusts the times according to local customs (work, meals, etc).

exact address (street, house number)	visits	Date of visit	anybody seem to live there		anybody at home	
			yes	no	yes	no
34th Sun Street.	1st	01/19	1	2	1	2
	2nd				1	2
	3rd				1	2
	1st		1	2	1	2
	2nd				1	2

**Step 3:** If someone is at home, the interviewer uses the Kish grid to determine the respondent and fills out the administration sheet accordingly.

m to	anybody at home		respondent at home		respondent participates		If n ar doe wan
	yes	no	yes	no	yes	no	
2	1	2	1	2	1	2	1
	1	2	1	2	1	2	1
2	1	2	1	2	1	2	1
	1	2	1	2	1	2	1

**Step 4:** If the interviewer finds an eligible participant but is unable to complete the interview, the interviewer fills out the chart accordingly. 1 = refusal, 2 = not eligible, 3 = can't answer (language, drunk, ill, etc), 4 = other reasons.

Attempt at no	respondent participates		If not willing to answer, why				Interview ID
	yes	no	doesn't want to,	other reason*	2	3	
2	1	2	1	2	3	4	# 01
2	1	2	1	2	3	4	#
2	1	2	1	2	3	4	#
2	1	2	1	2	3	4	#
2	1	2	1	2	3	4	#

**Step 5:** If the respondent agrees to the interview, the interviewer fills in the interview ID field, beginning with 1.

This is a complete first page of a properly filled out Route Administration Sheet.

**AC-EB Route Administration Sheet**

Settlement name: Surville Settlement ID: 1052

Name of interviewer: István Grajczár Page: 1

Attempt ID	exact address (street, house number, door number)	visits	Date of visit	anybody seem to live there		anybody at home		respondent at home		respondent participates		If not willing to answer, why		Interview ID	
				yes	no	yes	no	yes	no	yes	no	doesn't want to,	other reason*		
1	34th Sun Street. II/3A	1st	01/19	1	2	1	2	1	2	1	2	1	2 3 4	# 01	
		2nd	01/19			1	2	1	2	1	2	1	2 3 4		
		3rd					1	2	1	2	1	2	1		2 3 4
2	34th Sun Street. I/2A	1st	01/19	1	2	1	2	1	2	1	2	1	2 3 4	#	
		2nd	01/19			1	2	1	2	1	2	1	2 3 4		
		3rd	01/21			1	2	1	2	1	2	1	2 3 4		
3	36th Sun Street.	1st	01/19	1	2	1	2	1	2	1	2	1	2 3 4	#	
		2nd					1	2	1	2	1	2	1		2 3 4
		3rd					1	2	1	2	1	2	1		2 3 4
4	42th Sun Street.	1st	01/19	1	2	1	2	1	2	1	2	1	2 3 4	#	
		2nd					1	2	1	2	1	2	1		2 3 4
		3rd					1	2	1	2	1	2	1		2 3 4
5	48th Sun Street.	1st	01/19	1	2	1	2	1	2	1	2	1	2 3 4	#	
		2nd	01/19			1	2	1	2	1	2	1	2 3 4		
		3rd	01/25			1	2	1	2	1	2	1	2 3 4		

\* possible other reasons are: 2 - not eligible (not at home); 3 - can't answer (ill, drunk, deaf, etc); 4 - other

### When Maps Are Not Available

There are many small villages or settlements that are not mapped. In these settlements, the following starting points are rotated. Some points may not be in a town and other special characteristics may be included.

- a) the church/mosque
- b) the train station
- c) the city hall
- d) the first house the interviewer sees when entering the village
- e) the bus station

### Communal Living

Communal living occurs when distinct families, usually unrelated, live in the same apartment, flat, or house. For example, an interviewer may come across a dwelling unit with more than one doorbell. Generally, a family is associated with each bell. The three families inside have separate sleeping quarters but can share cooking or bathroom quarters. The families can know one another well or not know one another at all or perhaps not even like one another. The interviewer will have to probe to determine the relationship among families. Unrelated families will be treated as separate households. Related families will be treated as one household.

In situations in which there are unrelated families, the interviewer will list all families on the unrelated Communal Family Sheet.

Unrelated Communal Family Sheet	Name of Family	Selected Family	
		Yes	No
<b>Family 1 (The family of the person the interviewer is talking to.)</b>			
Family 2		Yes	No
Family 3		Yes	No
Family 4		Yes	No
Family 5		Yes	No
Family 6		Yes	No
Family 7		Yes	No
Family 8		Yes	No
Family 9		Yes	No

To select the family to be interviewed, the interviewer should use the Random Number Tables. The first two rows of random numbers in this example and Interviewer ID No. 372 is selecting which unrelated family should be interviewed.

### Excerpt from Random Numbers Table:

Interviewer ID No.	372
39634 62349 74088 65564 16379 19713 39153 69459 17986 24537	
14595 35050 40469 27478 44526 67331 93365 54526 22356 93208	

Because there are four unrelated families, Interviewer 372 looks for the first number less than or equal to 4 to select the family. In this case, it is the first number in the row, 3. So the third family listed on the sheet is selected for the interview. Interviewer 372 then crosses out the number used for the family selection, that is, Interviewer 372 crosses out the first 3 in the first row.

Suppose the next unrelated communal living situation that Interviewer 372 encounters has two unrelated families. After listing the families on an Unrelated Communal Family Sheet, Interviewer 372 uses the first row of the Random Number Table, starting with the digit 9 that immediately follows the 3 used for the first family selection. Because there are two unrelated families, Interviewer 372 looks for the next number less than or equal to 2. This is the digit 2, which is preceded by the number 6 and followed by the number 3 in the table. The interviewer then crosses out the number 2, and the second family is interviewed.

### Group Quarters

Group quarters are generally institutions and other group living arrangements such as rooming houses, dormitories, and military barracks. Group quarters are excluded from this survey.

## Appendix C: The Kish Grid

Implementation of the Kish grid uses the following procedure.

Could you tell me the names of all adults **aged 15 years and over in the household including yourself in order, starting from the eldest to the youngest (15 years).**

**INT:**

- A. RECORD THE NAMES IN THE BOX BELOW IN ORDER, STARTING FROM THE ELDEST TO THE YOUNGEST**
- B. CIRCLE THE SEX FOR EACH NAME**
- C. LEAVE EXTREME RIGHT-HAND COLUMN BLANK FOR THE MOMENT**

HOUSEHOLD BOX		GENDER		PERSON TO BE INTERVIEWED
SR.#	Name	Male	Female	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

**INT: TO CHOOSE THE PERSON FOR INTERVIEW YOU SHOULD DO THE FOLLOWING IN THE SUBSEQUENT TABLE.**

- A. FIRST take the TOTAL number of lines used up in the Household Box, and then write the number on the top line below.**
- B. Now circle the last digit in questionnaire serial number in the left-hand side of the grid. Draw a line down from the circled code at the top of the grid and across from the circled questionnaire serial code.**
- C. When these two lines meet, you will have a number that indicates the REF. NUMBER of the person in the Household Box above whom you must interview.**
- D. Tick this person’s name in the “PERSON TO BE INTERVIEWED” column in the previous Household Box.**

<b>LAST FIGURE IN QR.</b>	<b>SELECTION TABLE TO IDENTIFY PERSON TO BE INTERVIEWED NUMBER OF FAMILY MEMBERS IN HOUSEHOLD BOX</b>											
1	1	2	1	2	4	4	2	5	7	8	8	7
2	1	1	2	3	5	5	3	6	8	9	9	8
3	1	2	3	4	1	6	4	7	9	10	10	9
4	1	1	1	1	2	1	5	8	1	1	11	10
5	1	2	2	2	3	2	6	1	2	2	1	11
6	1	1	3	3	4	3	7	2	3	3	2	12
7	1	2	1	4	5	4	1	3	4	4	3	1
8	1	1	2	1	1	5	2	4	5	5	4	2
9	1	2	3	2	2	6	3	5	6	6	5	3
0	1	1	1	3	3	1	4	6	7	7	6	4



## Appendix D: Income Variables

Gallup has created a worldwide income variable (WP7969: Income in International Dollars continuous data [Inc\_ID]), that estimates household wealth on equal footing among all World Poll respondents. In addition to the continuous ID variable, three categorical income variables were constructed. The effort has been largely successful, particularly when comparing the income variable with external measures at the country level. An R-square of larger than .82 with the World Bank estimate of per-capita GDP (PPP) has been achieved.

The International Dollars (ID) measure is comparable across all respondents, communities, local regions, countries, and global regions. One respondent reporting a household income of \$1,000 ID has twice the income of one reporting \$500 ID. In addition to the continuous ID variable, three categorical income variables were constructed.

The calculations and coding for each variable are described in detail below. It is advised that the variables be used with weighting turned on.

### **WP7969: Income in International Dollars continuous data [Inc\_ID]**

Purchasing power parity (PPP) ratios were used to convert local currency to international dollars (ID).

#### Calculation Procedures:

1. For 2008 data sets, annual household income in international dollars (ID) is calculated using the Individual Consumption Expenditure by Household PPP ratio from table 1 of the ***World Bank Global Purchasing Power Parities and Real Expenditures 2005 International Comparison Program (ICP-iceh)*** report. The ICP-iceh 2005 PPP values are adjusted for inflation relative to the United States for years 2006 and 2007 to arrive at the 2008 PPP. Household income values in local currency are divided by the ICP-iceh PPP ratio to obtain ID. For those countries not covered by the World Bank ICP, GDP-based PPPs from the CIA *World Factbook* are used.
2. For data sets collected prior to 2008, ID were calculated using the best available PPP figures from World Bank or the CIA *World Factbook*.
3. Respondents answering the household income question with continuous data values are divided by the PPP ratio to obtain ID.
4. Household incomes for those respondents giving their income using brackets are estimated by using the midpoint of each bracket as HH income. The bracket midpoint is then divided by the PPP ratio to obtain the best estimate of household income in ID for each respondent.

For example, a country with five brackets might have a produced the following results:

<b>Bracket</b>	<b>Low</b>	<b>High</b>	<b>Midpoint LOG Dist</b>	<b>ICP-iceh PPP</b>	<b>ID</b>
1	Less than	100 LC	50 LC	2.5	\$20
2	101 LC	500 LC	300 LC	2.5	\$120
3	501 LC	2,000 LC	1,250 LC	2.5	\$500
3	2,001 LC	5,000 LC	3,500 LC	2.5	\$1,400
5	5,001 LC	Or More	6,250 LC	2.5	\$2,500

So a respondent with a score of 2 in the raw income data was assigned a household income of \$120 ID. The distribution was trimmed of values larger than \$300,000 ID.

The distribution of income for a given country is determined using only the data at hand. An ID score is calculated for every World Poll respondent that answered the income question. No attempts are currently made to estimate missing data. In both cases of continuous and bracketed data, incomes are adjusted to reflect annual estimates.

**WP7967: Income in International Dollars bracketed [Inc\_ID\_WWB]**

All respondent level ID incomes are assigned a bracket score of 0 through 34 based on their position in the following categorization scheme, which is also the coding used in the data set. Brackets 1 and 2 correspond to \$1 and \$2 a day, respectively.

00	=	0-0 ID
01	=	0-365 ID
02	=	366-730 ID
03	=	731-1000 ID
04	=	1001-1500 ID
05	=	1501-2000 ID
06	=	2001-2500 ID
07	=	2501-3000 ID
08	=	3001-3500 ID
09	=	3501-4000 ID
10	=	4001-4500 ID
11	=	4501-5000 ID
12	=	5001-6000 ID
13	=	6001-7500 ID
14	=	7501-10000 ID
15	=	10001-12500 ID
16	=	12501-15000 ID
17	=	15001-20000 ID
18	=	20001-25000 ID
19	=	25001-30000 ID
20	=	30001-35000 ID
21	=	35001-40000 ID
22	=	40001-45000 ID
23	=	45001-50000 ID
24	=	50001-60000 ID
25	=	60001-70000 ID
26	=	70001-80000 ID
27	=	80001-90000 ID
28	=	90001-100000 ID
29	=	100001-125000 ID
30	=	125001-150000 ID
31	=	150001-175000 ID
32	=	175001-200000 ID
33	=	200001-250000 ID
34	=	250001-or more ID

**WP8122: Income Less Than US\$2 a Day**

Brackets 00, 01, and 02 from above are combined to create a variable that represents household income of US\$2 or less per day. The following coding is used in the data set:

- 0 = More than US\$2 a day
- 1 = US\$2 or less a day

**WP7966: Income in local currency divided into quintiles [Inc\_LC\_Q]**

This measure of wealth is relative to the country in which one lives. It provides a within country measure, as opposed to the continuous ID variable, which provides a more absolute look at wealth in a worldwide context. The local currency variable for each country is cleaned, and each respondent assigned to one of five categories based on the respondent's position in the income distribution of the country.

1 – Poorest 20%

2 – 21% - 40%

3 – 41% - 60%

4 – 61% - 80%

5 – Richest 20%

**WP8219: Income household needs to get by (international dollars)**

This variable represents the reported amount of income a household needs to get by, in annualized, continuous international dollars. Data for this variable are being collected in 2008 across most countries.

**WP8220: Income household receives from relatives outside country (international dollars)**

This variable is a measure of the reported income a household receives from relatives outside their country in annualized, continuous international dollars. Data for this variable are being collected in 2008 across most countries.

## Appendix E: Country Data Set Details

### Gallup World Poll Data Collected in 2005-2006 (Wave 1)

Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Afghanistan	October-06	1,196	1.08	3.0	Face-to-Face	Dari, Pashto	Nationally Representative		Sampled 6 of 34 provinces, covering all major regions of the country: Kabul, Logar, Bamyan, Kunduz, Kandahar, and Herat.
Albania	January-07	981	1.61	4.0	Face-to-Face	Albanian	Nationally Representative		
Angola	June-06	1,000	2.87	5.2	Face-to-Face	Portuguese	Urban Areas Only		Eastern part of the country and rural areas inaccessible due to land mines. Only rural areas around cities were covered. The excluded areas represent approximately 40% of the population.
Argentina	May-06	1,000	1.12	3.3	Face-to-Face	Spanish	Nationally Representative		
Armenia	July-06	1,000	1.06	3.2	Face-to-Face	Armenian, Russian	Nationally Representative		
Australia	December-05	1,001	1.30	3.5	Landline Telephone	English	Nationally Representative		
Austria	April-06	1,004	1.40	3.7	Landline Telephone	German	Nationally Representative		
Azerbaijan	September-06	1,000	1.14	3.3	Face-to-Face	Azeri, Russian	Nationally Representative, Some Areas Excluded		Nagorno-Karabakh and territories not included for safety of interviewers. These areas represent less than 10% of the total population.
Bangladesh	September-05	1,048	1.11	3.2	Face-to-Face	Bengali	Nationally Representative With oversample	Urban oversample	
Belarus	June-06	1,092	1.04	3.0	Face-to-Face	Russian, Belarusian	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Belgium	July-05	1,003	1.50	3.8	Landline Telephone	Dutch, French	Nationally Representative		
Benin	July-06	1,000	1.51	3.8	Face-to-Face	French, Fon, Bariba	Nationally Representative		
Bolivia	June-06	1,000	1.01	3.1	Face-to-Face	Spanish	Nationally Representative		
Bosnia and Herzegovina	January-07	2,002	1.49	2.7	Face-to-Face	Bosnian, Croatian, Serbian	Nationally Representative		
Botswana	May-06	1,000	1.20	3.4	Face-to-Face	English, Setswana	Nationally Representative, some areas excluded		Scarcely populated cattle posts were excluded. These areas represent less than 1% of the population.
Brazil	November-05	1,029	1.31	3.5	Face-to-Face	Portuguese	Nationally Representative		
Burkina Faso	June-06	1,000	1.03	3.1	Face-to-Face	French, Moore, Dioula, Fulfulde	Nationally Representative		
Bulgaria	January-07	1,003	1.15	3.3	Face-to-Face	Bulgarian	Nationally Representative		
Burundi	September-06	1,000	2.03	4.4	Face-to-Face	French, Kirundi	Nationally Representative, some areas excluded		Some areas excluded due to poor security and occupation by rebels. The excluded area represents approximately 10% of the population.
Cambodia	August-06	1,000	1.42	3.7	Face-to-Face	Khmer	Nationally Representative with oversample	Urban oversample	
Cameroon	June-06	1,000	1.74	4.1	Face-to-Face	French, English, Fulfulde	Nationally Representative		
Canada	December-05	1,355	1.20	2.9	Landline Telephone	English, French	Nationally Representative with oversample	Toronto	
Chad	November-06	1,000	2.17	4.6	Face-to-Face	French, Chadian Arabic, Ngambaye	Nationally Representative, some areas excluded		Eastern part of country not covered due to conflict on border with Sudan. The excluded area represents approximately 20% of the population.

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Chile	May-06	1,007	1.33	3.6	Face-to-Face	Spanish	Nationally Representative		
China	October-06	3,730	1.92	2.2	Face-to-Face	Chinese	Nationally Representative with oversample	Shanghai, Beijing, Guangzhou	
Colombia	June-06	1,000	1.11	3.3	Face-to-Face	Spanish	Nationally Representative		
Costa Rica	July-06	1,002	1.09	3.2	Face-to-Face	Spanish	Nationally Representative		
Croatia	January-07	1,000	1.18	3.4	Face-to-Face	Croatian	Nationally Representative		
Cuba	September-06	1,000	1.07	3.2	Face-to-Face	Spanish	Urban areas only		Sample only included Havana and Santiago, representing approximately one-third of the population.
Cyprus	September-06	1,000	1.17	3.3	Landline Telephone	Greek	Nationally Representative		
Czech Republic	July-05	1,001	1.35	3.6	Face-to-Face	Czech	Nationally Representative		
Denmark	July-05	1,004	1.72	4.1	Landline Telephone	Danish	Nationally Representative		
Dominican Republic	July-06	1,000	1.09	3.2	Face-to-Face	Spanish	Nationally Representative		
Ecuador	June-06	1,067	1.23	3.3	Face-to-Face	Spanish	Nationally Representative		
Egypt	September-05	999	1.20	3.4	Face-to-Face	Arabic	Nationally Representative		
El Salvador	June-06	1,000	1.19	3.4	Face-to-Face	Spanish	Nationally Representative		
Estonia	July-06	1,003	1.03	3.1	Face-to-Face	Estonian, Russian	Nationally Representative		
Ethiopia	May-06	1,000	1.94	4.3	Face-to-Face	Amharic, Tigrinya, Oromiya	Nationally Representative		
Finland	April-06	1,010	1.38	3.6	Landline and Cellular Telephone	Finnish	Nationally Representative		
France	July-05	1,002	1.45	3.7	Landline Telephone	French	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Georgia	February-06	1,000	1.28	3.5	Face-to-Face	Georgian, Russian, Armenian	Nationally Representative, some areas excluded		South Ossetia, Abkhazia not included for safety of interviewers. The excluded area represents about 10% of the population.
Germany	July-05	1,001	1.10	3.3	Landline Telephone	German	Nationally Representative with oversample	Berlin	
Ghana	March-06	1,000	3.51	5.8	Face-to-Face	English, Hausa, Ewe, Twi	Nationally Representative		
Greece	July-05	1,002	1.38	3.6	Landline Telephone	Greek	Nationally Representative		
Guatemala	June-06	1,021	1.29	3.5	Face-to-Face	Spanish	Nationally Representative		
Haiti	October-06	505	1.00	4.4	Face-to-Face	Creole	Nationally Representative		
Honduras	June-06	1,000	1.09	3.2	Face-to-Face	Spanish	Nationally Representative		
Hong Kong	December-06	800	1.15	3.7	Landline Telephone	Chinese	Nationally Representative		
Hungary	July-05	1,025	1.70	4.0	Face-to-Face	Hungarian	Nationally Representative		
India	February-06	2,100	2.88	3.6	Face-to-Face	English, Hindi, Tamil, Kannada, Telugu, Marathi, Gujarati, Bengali, Malayalam	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded population living in Northeast states and remote islands. The excluded areas represent less than 10% of the population.
Indonesia	July-06	1,180	1.38	3.3	Face-to-Face	Bahasa Indonesia	Nationally Representative with oversample	Jakarta	
Iran	November-05	1,300	1.37	3.2	Face-to-Face	Farsi	Nationally Representative with oversample	Tehran	



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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Iraq	April-06	3,444	1.09	1.7	Face-to-Face	Arabic	Nationally Representative, some areas excluded		The sample represented 16 of the 18 governorates. Irbil and Dohouk were excluded.
Ireland	May-06	1,000	1.73	4.1	Landline Telephone	English	Nationally Representative		
Israel	July-06	1,002	1.26	3.5	Face-to-Face	Hebrew, Arabic, Russian	Nationally Representative		The sample does not include the area of East Jerusalem. This area is included in the sample of Palestine.
Italy	July-05	1,002	2.08	4.5	Landline Telephone	Italian	Nationally Representative		
Jamaica	November-06	543	1.13	4.5	Face-to-Face	English	Nationally Representative		
Japan	November-05	1,000	1.07	3.2	Landline Telephone	Japanese	Nationally Representative		
Jordan	September-05	1,000	1.02	3.1	Face-to-Face	Arabic	Nationally Representative		
Kazakhstan	September-06	1,000	1.25	3.5	Face-to-Face	Russian, Ukrainian	Nationally Representative		
Kenya	April-06	1,000	2.33	4.7	Face-to-Face	English, Kiswahili	Nationally Representative, some areas excluded		Northeastern region excluded due to insecurity. The excluded area represents less than 5% of the population.
Kosovo	January-07	1,046	1.55	3.8	Face-to-Face	Albanian, Serbian	Nationally Representative		
Kuwait	August-06	1,000	1.42	3.7	Face-to-Face	Arabic	Nationally Representative of the Arab population		Includes Kuwaitis and Arab expatriates, non-Arabs were excluded.
Kyrgyzstan	March-06	1,000	1.16	3.3	Face-to-Face	Kyrgyz, Russian, Uzbek	Nationally Representative		
Laos	July-06	1,001	1.28	3.5	Face-to-Face	Lao	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded remote rural areas. The excluded areas represent approximately 10% of the population.

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Latvia	July-06	1,000	1.03	3.1	Face-to-Face	Latvian, Russian	Nationally Representative		
Lebanon	September-05	996	1.07	3.2	Face-to-Face	Arabic	Nationally Representative		
Lithuania	July-06	1,015	1.05	3.2	Face-to-Face	Lithuanian	Nationally Representative		
Macedonia	January-07	1,042	1.42	3.6	Face-to-Face	Macedonian, Albanian	Nationally Representative		
Madagascar	July-06	1,000	1.31	3.5	Face-to-Face	French, Malagasy	Nationally Representative, some areas excluded		The sample did not cover areas that required more than one day of travel on foot. The excluded areas represent approximately 10% of the population.
Malawi	October-06	1,000	1.92	4.3	Face-to-Face	English, Chichewa, Tumbuka	Nationally Representative		
Malaysia	July-06	1,012	1.43	3.7	Face-to-Face	Bahasa Malay, Chinese, English	Nationally Representative		
Mali	June-06	1,000	1.10	3.3	Face-to-Face	French, Bambara, Peul, Sonhai	Nationally Representative, some areas excluded		The Northern region was excluded due to war. The excluded areas represent approximately 5% of the population of Mali.
Mauritania	September-06	1,000	1.07	3.2	Face-to-Face	French, Arabic, Pulaar, Wolof	Nationally Representative		
Mexico	November-05	1,007	1.32	3.6	Face-to-Face	Spanish	Nationally Representative		
Moldova	April-06	1,000	1.21	3.4	Face-to-Face	Romanian, Russian	Nationally Representative, some areas excluded		Transnistria (Prednestrovia) excluded for safety of interviewers. The excluded area represents approximately 5% of the population.
Montenegro	January-07	834	1.64	4.3	Face-to-Face	Serbian, Montenegrin	Nationally Representative		
Morocco	August-05	999	1.10	3.2	Face-to-Face	Moroccan Arabic, French	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Mozambique	May-06	1,000	1.10	3.3	Face-to-Face	Portuguese	Nationally Representative		
Myanmar	September-06	1,047	1.33	3.5	Face-to-Face	Burmese	Urban areas only		Sample included Sagaing, Shan, Bago, Chin, Yangon, Mon, Tanintharyi, Kachin, Rakhine, and Mandalay. The sampled area represents approximately 45% of the population.
Nepal	June-06	1,002	1.40	3.7	Face-to-Face	Nepali	Nationally Representative with oversample	Urban oversample	
Netherlands	July-05	1,000	2.58	5.0	Landline Telephone	Dutch	Nationally Representative		
New Zealand	March-06	1,028	2.15	4.5	Landline Telephone	English	Nationally Representative		
Nicaragua	June-06	1,001	2.07	4.5	Face-to-Face	Spanish	Nationally Representative		
Niger	June-06	1,000	1.18	3.4	Face-to-Face	French, Zarma, Hausa	Nationally Representative		
Nigeria	May-06	1,000	1.47	3.8	Face-to-Face	English, Yoruba, Hausa, Igbo	Nationally Representative		
Norway	May-06	1,001	1.50	3.8	Landline Telephone	Norwegian	Nationally Representative		
Pakistan	September-05	1,001	1.25	3.5	Face-to-Face	Urdu	Nationally Representative		
Palestinian Territories	January-06	1,000	1.19	3.4	Face-to-Face	Arabic	Nationally Representative		The sample includes East Jerusalem
Panama	July-06	1,005	1.35	3.6	Face-to-Face	Spanish	Nationally Representative		
Paraguay	May-06	1,001	1.56	3.9	Face-to-Face	Spanish	Nationally Representative		
Peru	June-06	1,000	1.24	3.4	Face-to-Face	Spanish	Nationally Representative		
Philippines	March-06	1,200	2.71	4.7	Face-to-Face	Tagalog	Nationally Representative with oversamples	Oversampled urban areas & ARMM (autonomous region of Muslim Mindanao)	

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Poland	July-05	1,000	2.70	5.1	Face-to-Face	Polish	Nationally Representative		
Portugal	September-06	1,007	1.62	3.9	Face-to-Face	Portuguese	Nationally Representative		
Puerto Rico	June-06	500	1.33	5.1	Face-to-Face	Spanish	Nationally Representative		
Romania	July-05	1,022	1.82	4.1	Face-to-Face	Romanian	Nationally Representative		
Russia	March-06	2,011	1.03	2.2	Face-to-Face	Russian	Nationally Representative with oversample	Moscow	
Rwanda	May-06	1,504	1.72	3.3	Face-to-Face	Kinyarwanda	Nationally Representative		
Saudi Arabia	September-05	1,004	1.16	3.3	Face-to-Face	Arabic	Nationally Representative of Saudi National population		Includes Saudis only. Arab expatriates and non-Arabs were excluded
Senegal	May-06	1,000	1.06	3.2	Face-to-Face	French, Wolof	Nationally Representative		
Serbia	January-07	1,556	1.66	3.2	Face-to-Face	Serbian	Nationally Representative		
Sierra Leone	July-06	1,000	2.06	4.4	Face-to-Face	French, Mende, Krio, Temne	Nationally Representative		
Singapore	March-06	1,095	2.05	4.2	Face-to-Face	English, Chinese, Bahasa Malay	Nationally Representative		
Slovakia	April-06	1,018	1.22	3.4	Face-to-Face	Slovak	Nationally Representative		
Slovenia	April-06	1,009	1.45	3.7	Face-to-Face	Slovene	Nationally Representative		
South Korea	March-06	1,100	3.71	5.7	Landline Telephone	Korean	Nationally Representative with oversample	Seoul	
Spain	July-05	1,000	1.05	3.2	Landline Telephone	Spanish	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Sri Lanka	March-06	1,033	1.59	3.8	Face-to-Face	Tamil, Sinhalese	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded areas under conflict in the Northern and Eastern parts of Sri Lanka. The excluded area represents approximately 10% of the population.
Sweden	July-05	1,000	1.05	3.2	Landline Telephone	Swedish	Nationally Representative		
Switzerland	May-06	1,000	1.27	3.5	Landline Telephone	German, French, Italian	Nationally Representative		
Taiwan	November-06	1,002	1.32	3.6	Face-to-Face	Chinese	Nationally Representative		
Tajikistan	June-06	1,000	1.19	3.4	Face-to-Face	Tajik, Uzbek, Russian	Nationally Representative		
Tanzania	March-06	1,000	2.98	5.3	Face-to-Face	Kiswahili	Nationally Representative		
Thailand	July-06	1,410	1.45	3.1	Face-to-Face	Thai	Nationally Representative with oversample	Bangkok	
Togo	August-06	1,000	1.06	3.2	Face-to-Face	French, Ewe, Kabye	Nationally Representative		
Trinidad and Tobago	November-06	508	1.26	4.9	Face-to-Face	English	Nationally Representative		
Turkey	August-05	995	1.03	3.2	Face-to-Face	Turkish	Nationally Representative		
Uganda	March-06	1,000	1.78	4.1	Face-to-Face	English, Luganda, Ateso, Runyankole	Nationally Representative, some areas excluded		Northern region excluded due to presence of LRA rebels. The excluded area represents approximately 10% of the population.
Ukraine	June-06	1,102	1.76	3.9	Face-to-Face	Russian, Ukrainian	Nationally Representative		
United Arab Emirates	August-06	1,013	1.08	3.2	Face-to-Face	Arabic	Nationally Representative of the Arab population		Includes Emiratis and Arab expatriates. Non-Arabs were excluded
United Kingdom	June-06	1,037	1.55	3.8	Landline Telephone	English	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
United States	July-06	1,001	1.26	3.5	Panel	English	Nationally Representative		
Uruguay	June-06	1,004	1.18	3.4	Face-to-Face	Spanish	Nationally Representative		
Uzbekistan	June-06	1,000	1.14	3.3	Face-to-Face	Uzbek, Tajik, Russian	Nationally Representative		
Venezuela	November-05	1,000	1.08	3.2	Face-to-Face	Spanish	Nationally Representative		
Vietnam	March-06	1,023	1.79	4.1	Face-to-Face	Vietnamese	Nationally Representative with oversample	Urban oversample	
Yemen	January-07	1,000	1.33	3.6	Face-to-Face	Arabic	Nationally Representative		
Zambia	April-06	1,001	1.45	3.7	Face-to-Face	English, Bemba, Silozi, Kaonde, Tonga	Nationally Representative		
Zimbabwe	April-06	1,000	1.93	4.3	Face-to-Face	English, Shona, Ndebele	Nationally Representative		

<sup>a</sup> The design effect calculation reflects the weights and does not incorporate the intraclass correlation coefficients. Design effect calculation:  $n * (\text{sum of squared weights}) / [(\text{sum of weights}) * (\text{sum of weights})]$

<sup>b</sup> Margin of error is calculated around a proportion at the 95% confidence level. The maximum margin of error was calculated assuming a reported percentage of 50% and takes into account the design effect. Margin of error calculation:  $\sqrt{(0.25/N) * 1.96 * (DE)}$

<sup>c</sup> Areas with disproportionately high number of interviews in the sample.

## Appendix E: Country Data Set Details

## Gallup World Poll Data Collected in 2007 (Wave 2)

Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Argentina	August-07	1,000	1.11	3.3	Face-to-face	Spanish	Nationally Representative		
Armenia	July-07	1,000	1.35	3.6	Face-to-face	Armenian, Russian	Nationally Representative		
Australia	April-07	1,205	1.31	3.2	Landline Telephone	English	Nationally Representative		
Azerbaijan	December-07	1,000	1.24	3.5	Face-to-face	Azeri, Russian	Nationally Representative, some areas excluded		Nagorno-Karabakh and territories not included for safety of interviewers. These areas represent less than 10% of the total population.
Bangladesh	April-07	1,200	1.36	3.3	Face-to-face	Bengali	Nationally Representative with oversample	Dhaka	
Belarus	July-07	1,114	1.07	3.0	Face-to-face	Russian, Belarusian	Nationally Representative		
Belgium	May-07	1,022	1.46	3.7	Landline Telephone	Dutch, French	Nationally Representative		
Belize	October-07	502	1.05	4.5	Face-to-face	English	Nationally Representative		
Bolivia	July-07	1,000	1.45	3.7	Face-to-face	Spanish	Nationally Representative		
Brazil	August-07	1,038	1.27	3.4	Face-to-face	Portuguese	Nationally Representative		
Burkina Faso	July-07	1,000	1.19	3.4	Face-to-face	French, Moore, Dioula, Fulfulde	Nationally Representative		
Cambodia	August-07	1,000	1.38	3.6	Face-to-face	Khmer	Nationally Representative with oversample	Urban oversample	
Cameroon	June-07	1,000	1.23	3.4	Face-to-face	French, English, Fulfulde	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Canada	September-07	1,010	1.69	4.0	Landline Telephone	English, French	Nationally Representative with oversample	Toronto	
Central African Republic	November-07	1,000	1.21	3.4	Face-to-face	French, Sangho	Nationally Representative, some areas excluded		Areas bordering Sudan and Chad excluded due to high rates of insecurity. Excluded areas represent approximately 2% of the population.
Chad	November-07	1,000	1.70	4.0	Face-to-face	French, Chadian, Arabic, Ngambaya	Nationally Representative, some areas excluded		Eastern part of country not covered due to conflict on border with Sudan. The excluded area represents approximately 20% of the population.
Chile	August-07	1,023	1.68	4.0	Face-to-face	Spanish	Nationally Representative		
China	October-07	4,238	2.04	2.1	Face-to-face	Chinese	Nationally Representative with oversample	Beijing, Shanghai, Guangzhou	
Colombia	July-07	1,000	1.24	3.5	Face-to-face	Spanish	Nationally Representative		
Congo (Kinshasa)	June-07	1,000	1.05	3.2	Face-to-face	French, Lingala, Kiswahili	Urban areas only		Half of the country excluded due to insecurity, poor infrastructure and dense forestation and disease outbreak (Ebola). Cities covered: Kinshasa, Boma, Matadi, Goma, Kinsangani, Mbuji-Mayi, Lubumbashi and rural areas directly around those cities.
Costa Rica	September-07	1,002	1.05	3.2	Face-to-face	Spanish	Nationally Representative		
Czech Republic	June-07	1,072	1.09	3.1	Face-to-face	Czech	Nationally Representative		
Denmark	May-07	1,009	1.26	3.5	Landline Telephone	Danish	Nationally Representative		
Dominican Republic	September-07	1,000	1.79	4.1	Face-to-face	Spanish	Nationally Representative		
Ecuador	July-07	1,061	1.07	3.1	Face-to-face	Spanish	Nationally Representative		
Egypt	July-07	1,024	1.03	3.1	Face-to-face	Arabic	Nationally Representative		



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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
El Salvador	September-07	1,001	1.01	3.1	Face-to-face	Spanish	Nationally Representative		
Estonia	August-07	1,001	1.02	3.1	Face-to-face	Estonian, Russian	Nationally Representative		
Ethiopia	July-07	1,000	1.66	4.0	Face-to-face	English, Amharic	Nationally Representative, some areas excluded		Ogaden region excluded due to insecurity. The excluded areas represent approximately 10% of the population.
France	December-06	1,220	1.43	3.4	Landline Telephone	French	Nationally Representative with oversample	Paris	
Georgia	May-07	1,000	1.19	3.4	Face-to-face	Georgian, Russian, Armenian	Nationally Representative		South Ossetia, Abkhazia not included for safety of interviewers. The excluded area represents approximately 10% of the population.
Germany	January-07	1,221	1.24	3.1	Landline Telephone	German	Nationally Representative with oversample	Berlin	
Ghana	February-07	1,000	2.99	5.4	Face-to-face	English, Hausa, Ewe, Twi	Nationally Representative		
Greece	May-07	1,000	1.03	3.1	Landline Telephone	Greek	Nationally Representative		
Guatemala	September-07	1,000	1.03	3.1	Face-to-face	Spanish	Nationally Representative		
Guinea	December-07	1,000	1.32	3.6	Face-to-face	French, Malinde, Soussou, Poulah	Nationally Representative		
Guyana	October-07	501	1.12	4.6	Face-to-face	English	Nationally Representative, some areas excluded		Jungle areas of the country were excluded. Excluded area represents approximately 10% of the population.
Honduras	September-07	1,000	1.01	3.1	Face-to-face	Spanish	Nationally Representative		
Hungary	May-07	1,010	1.29	3.5	Face-to-face	Hungarian	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
India	May-07	3,186	3.23	3.1	Face-to-face	English, Hindi, Tamil, Kannada, Telugu, Marathi, Gujarati, Bengali, Malayalam	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded population living in Northeast states and remote islands. The excluded areas represent less than 10% of the population.
Indonesia	April-07	1,000	1.04	3.2	Face-to-face	Bahasa Indonesia	Nationally Representative		
Iran	July-07	1,004	1.12	3.3	Face-to-face	Farsi	Nationally Representative with oversample	Tehran	
Israel	August-07	1,001	1.14	3.3	Face-to-face	Hebrew, Arabic	Nationally Representative		The sample does not include the area of East Jerusalem. This area is included in the sample of Palestine.
Italy	May-07	1,008	1.18	3.4	Landline Telephone	Italian	Nationally Representative		
Japan	August-07	1,150	1.06	3.0	Landline Telephone	Japanese	Nationally Representative		
Jordan	October-07	1,016	1.03	3.1	Face-to-face	Arabic	Nationally Representative		
Kazakhstan	December-07	1,000	1.42	3.7	Face-to-face	Russian, Kazakh	Nationally Representative		
Kenya	June-07	1,000	2.20	4.6	Face-to-face	English, Kiswahili	Nationally Representative, some areas excluded		North-eastern region excluded due to insecurity. The excluded area represents less than 5% of the population.
Kyrgyzstan	May-07	1,000	1.27	3.5	Face-to-face	Kyrgyz, Russian, Uzbek	Nationally Representative		
Laos	July-07	1,000	1.10	3.2	Face-to-face	Lao	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded remote rural areas. The excluded areas represent approximately 10% of the population.

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Latvia	July-07	1,017	1.03	3.1	Face-to-face	Latvian, Russian	Nationally Representative		
Lebanon	October-06	1,000	1.07	3.2	Face-to-face	Arabic	Nationally Representative		
Liberia	February-07	1,000	1.20	3.4	Face-to-face	English	Nationally Representative		
Lithuania	August-07	1,007	1.05	3.2	Face-to-face	Lithuanian	Nationally Representative		
Malawi	June-07	1,000	1.46	3.7	Face-to-face	English, Chichewa, Tumbuka	Nationally Representative		
Malaysia	June-07	1,233	1.13	3.0	Face-to-face	Bahasa Malay	Nationally Representative with oversample	Kuala Lumpur	
Mauritania	August-07	1,000	1.10	3.3	Face-to-face	French, Arabic, Poular, Wolof	Nationally Representative		
Mexico	July-07	999	1.50	3.8	Face-to-face	Spanish	Nationally Representative		
Moldova	June-07	1,000	1.10	3.2	Face-to-face	Romanian, Russian	Nationally Representative, some areas excluded		Transnistria (Prednestrovia) excluded for safety of interviewers. The excluded area represents approximately 5% of the population.
Mongolia	September-07	1,000	1.26	3.5	Face-to-face	Mongol	Nationally Representative with oversample	Ulan Bator	
Morocco	December-07	1,042	1.01	3.1	Face-to-face	Moroccan Arabic, French	Nationally Representative		
Mozambique	July-07	1,000	1.24	3.4	Face-to-face	Portuguese	Nationally Representative		
Namibia	September-07	1,000	1.27	3.5	Face-to-face	English, Afrikaans, Oshivambo	Nationally Representative		
Nepal	July-07	1,000	1.45	3.7	Face-to-face	Nepali	Nationally Representative, with oversample	Urban oversample	

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Netherlands	May-07	1,000	1.33	3.6	Landline Telephone	Dutch	Nationally Representative		
New Zealand	February-07	750	1.09	3.7	Landline Telephone	English	Nationally Representative		
Nicaragua	September-07	1,000	1.01	3.1	Face-to-face	Spanish	Nationally Representative		
Niger	August-07	1,000	1.60	3.9	Face-to-face	French, Zarma	Nationally Representative, some areas excluded		The Northern part of the country (Agadez region) was excluded due to insecurities. The excluded area represents approximately 2% of the population.
Nigeria	May-07	1,000	1.19	3.4	Face-to-face	English, Yoruba, Hausa, Igbo	Nationally Representative		
Pakistan	March-07	1,502	1.54	3.1	Face-to-face	Urdu	Nationally Representative with oversample, some areas excluded	Karachi	Did not include FATA or AJK. The excluded areas represent approximately 5% of the population.
Palestinian Territories	July-07	1,000	1.20	3.4	Face-to-face	Arabic	Nationally Representative		The sample includes East Jerusalem.
Panama	September-07	1,000	1.02	3.1	Face-to-face	Spanish	Nationally Representative		
Paraguay	July-07	1,000	1.15	3.3	Face-to-face	Spanish	Nationally Representative		
Peru	July-07	1,000	1.40	3.7	Face-to-face	Spanish	Nationally Representative		
Philippines	August-07	1,000	1.36	3.6	Face-to-face	Tagalog	Nationally Representative with oversample	Urban oversample	
Poland	May-07	1,000	1.23	3.4	Face-to-face	Polish	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Romania	May-07	1,000	1.33	3.6	Face-to-face	Romanian	Nationally Representative		
Russia	May-07	2,949	1.65	2.3	Face-to-face	Russian	Nationally Representative with oversample	Dagestan, Tatarstan	
Saudi Arabia	July-07	1,006	1.03	3.1	Face-to-face	Arabic	Nationally Representative of Saudi National population		Includes Saudis only. Arab expatriates and non-Arabs were excluded.
Senegal	February-07	1,000	1.02	3.1	Face-to-face	French, Wolof	Nationally Representative		
Sierra Leone	June-07	1,000	1.23	3.4	Face-to-face	French, Mende, Krio, Temne	Nationally Representative		
Singapore	May-07	1,000	1.34	3.6	Face-to-face	English, Chinese, Malay	Nationally Representative		
South Africa	September-07	1,000	1.55	3.9	Face-to-face	English, Afrikaans, Zulu, Xhosa	Nationally Representative		
South Korea	May-07	1,000	1.50	3.8	Landline Telephone	Korean	Nationally Representative		
Spain	April-07	1,004	1.16	3.3	Landline Telephone	Spanish	Nationally Representative		
Sri Lanka	May-07	1,000	1.43	3.7	Face-to-face	Tamil, Sinhalese	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded areas under conflict in the Northern and Eastern parts of Sri Lanka. The excluded area represents approximately 10% of the population.

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Sudan	January-08	1,000	1.12	3.3	Face-to-face	Arabic	Nationally Representative, some areas excluded		Southern and Southwestern part, including the Darfur region, excluded due to insecurity. The excluded areas represent approximately 25% of the population.
Tajikistan	November-07	1,000	1.29	3.5	Face-to-face	Tajik, Uzbek, Russian	Nationally Representative		
Tanzania	June-07	1,000	2.51	4.9	Face-to-face	Kishwahili	Nationally Representative		
Thailand	August-07	1,006	1.36	3.6	Face-to-face	Thai	Nationally Representative with oversample	Bangkok	
Turkey	May-07	1,001	1.30	3.5	Face-to-face	Turkish	Nationally Representative		
Uganda	June-07	1,000	1.41	3.7	Face-to-face	English, Luganda, Ateso, Runyankole	Nationally Representative, some areas excluded		Due to insecurities in the North, the following areas were excluded: Gulu, Kitgum, Pader, Moroto, Djumani, and Moyo. The excluded areas represent approximately 10% of the population.
Ukraine	July-07	1,066	1.74	4.0	Face-to-face	Russian, Ukrainian	Nationally Representative		
United Kingdom	January-07	1,204	1.33	3.3	Landline Telephone	English	Nationally Representative, with oversample	London	
United States	August-07	1,225	2.10	4.1	Panel	English	Nationally Representative		
Uruguay	July-07	1,004	1.07	3.2	Face-to-face	Spanish	Nationally Representative		
Venezuela	December-06	1,000	1.22	3.4	Face-to-face	Spanish	Nationally Representative		
Vietnam	July-07	1,018	1.32	3.5	Face-to-face	Vietnamese	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Zambia	July-07	1,000	2.45	4.9	Face-to-face	English, Bemba, Silozi, Kaonde, Tonga	Nationally Representative		
Zimbabwe	July-07	1,000	1.82	4.2	Face-to-face	English, Shona, Ndebele	Nationally Representative		

<sup>a</sup> The design effect calculation reflects the weights and does not incorporate the intraclass correlation coefficients. Design effect calculation:  $n * (\text{sum of squared weights}) / ((\text{sum of weights}) * (\text{sum of weights}))$

<sup>b</sup> Margin of error is calculated around a proportion at the 95% confidence level. The maximum margin of error was calculated assuming a reported percentage of 50% and takes into account the design effect. Margin of error calculation:  $\sqrt{(0.25/N) * 1.96 * \sqrt{DE}}$

<sup>c</sup> Areas with disproportionately high number of interviews in the sample.

## Appendix E: Country Data Set Details

## Gallup World Poll Data Collected in 2008 (Wave 3)

Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Algeria	June-08	1,101	1.54	3.7	Face-to-face	Arabic	Nationally Representative		
Australia	July-08	1,005	1.47	3.8	Landline Telephone	English	Nationally Representative		
Austria	April-08	1,000	1.47	3.8	Landline and Cellular Telephone	German	Nationally Representative		
Bangladesh	June-08	1,000	1.23	3.4	Face-to-face	Bengali	Nationally Representative		
Belgium	June-08	1,002	1.56	3.9	Landline Telephone	Dutch and French	Nationally Representative		
Botswana	July-08	1,000	1.85	4.2	Face-to-face	English, Setswana	Nationally Representative		
Burkina Faso	April-08	1,000	1.74	4.1	Face-to-face	French, Moore, Dioula, Fulfulde	Nationally Representative		
Burundi	July-08	1,000	1.53	3.8	Face-to-face	French, Kirundi	Nationally Representative		
Cameroon	May-08	1,000	1.51	3.8	Face-to-face	French, English, Fulfulde	Nationally Representative		
Canada	September-08	1,005	1.61	3.9	Landline Telephone	English, French	Nationally Representative		Yukon, Northwest Territories, and Nunavut were excluded from the sample.
Denmark	April-08	1,000	1.52	3.8	Landline Telephone	Danish	Nationally Representative		
Egypt	May-08	1,105	1.31	3.4	Face-to-face	Arabic	Nationally Representative		
Estonia	July-08	601	1.15	4.3	Face-to-face	Estonian, Russian	Nationally Representative		



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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Finland	April-08	1,005	1.52	3.8	Landline and Cellular Telephone	Finnish	Nationally Representative		
Georgia	June-08	1,018	1.36	3.5	Face-to-face	Georgian, Russian, Armenian	Nationally Representative, some areas excluded		South Ossetia and Abkhazia not included for safety of interviewers. The excluded area represents approximately 10% of the population.
Germany (Quarter 1)	June-08	1,011	1.41	3.7	Landline Telephone	German	Nationally Representative		
Ghana	March-08	1,000	1.58	3.9	Face-to-face	English, Hausa, Ewe, Twi	Nationally Representative		
India	July-08	2,000	2.37	3.4	Face-to-face	English, Hindi, Tamil, Kannada, Telugu, Marathi, Gujarati, Bengali, Malayalam	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded population living in Northeast states and remote islands. The excluded areas represent less than 10% of the population.
Indonesia	April-08	1,050	1.37	3.5	Face-to-face	Bahasa Indonesia	Nationally Representative		
Iran	May-08	1,040	1.32	3.5	Face-to-face	Farsi	Nationally Representative		
Iraq	June-08	990	1.38	3.7	Face-to-face	Arabic	Nationally Representative		
Japan (Qtr 1)	April-08	750	1.55	4.5	Landline Telephone	Japanese	Nationally Representative		
Japan (Qtr 2)	July-08	750	1.53	4.4	Landline Telephone	Japanese	Nationally Representative		
Lebanon	May-08	1,000	1.48	3.8	Face-to-face	Arabic	Nationally Representative		
Kenya	August-08	2,200	1.48	2.6	Face-to-face	English, Swahili	Nationally Representative	Nairobi	
Kyrgyzstan	July-08	1,000	1.44	3.7	Face-to-face	Kyrgyz, Russian, Uzbek	Nationally Representative		
Latvia	August-08	513	1.18	4.7	Face-to-face	Latvian, Russian	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Liberia	May-08	1,000	3.02	5.4	Face-to-face	English	Nationally Representative		
Mali	May-08	1,000	1.53	3.8	Face-to-face	French, Bambara	Nationally Representative		
Mexico	August-08	1,000	1.49	3.8	Face-to-face	Spanish	Nationally Representative		
New Zealand	August-08	750	1.23	4.0	Landline Telephone	English	Nationally Representative		
Niger	June-08	1,000	1.23	3.4	Face-to-face	French, Zarma, Hausa	Nationally Representative, some areas excluded		The Northern part of the country (Agadez region) was excluded due to insecurities. The excluded area represents approximately 2% of the population.
Nigeria	April-08	1,000	1.77	4.1	Face-to-face	English, Yoruba, Hausa, Igbo	Nationally Representative		
Pakistan	June-08	804	1.48	4.2	Face-to-face	Urdu	Nationally Representative, some areas excluded		FATA and AJK were excluded. The excluded area represents approximately 5% of the population.
Philippines	July-08	1,000	1.43	3.7	Face-to-face	Tagalog	Nationally Representative with oversample	Urban oversample	
Russia	May-08	2,019	1.27	2.5	Face-to-face	Russian	Nationally Representative		
Saudi Arabia	May-08	1,150	1.59	3.6	Face-to-face	Arabic	Nationally Representative of Saudi National population		Includes Saudis only. Arab expatriates and non-Arabs were excluded.
Senegal	April-08	1,000	2.14	4.5	Face-to-face	French, Wolof	Nationally Representative		
Sierra Leone	June-08	1,000	1.45	3.7	Face-to-face	English, Mende, Krio, Temne	Nationally Representative		
Singapore	February-08	1,003	1.27	3.5	Face-to-face	English, Chinese, Bahasa Malay	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Spain	April-08	1,009	1.55	3.8	Landline Telephone	Spanish	Nationally Representative		
Sri Lanka	July-08	1,000	1.46	3.3	Face-to-face	Tamil, Sinhalese	Nationally Representative with oversample, some areas excluded	Urban oversample	Excluded areas under conflict in the Northern and Eastern parts of Sri Lanka. The excluded area represents approximately 10% of the population.
Sweden	April-08	1,000	1.43	3.7	Landline Telephone	Swedish	Nationally Representative		
Tunisia	June-08	1,100	1.36	3.4	Face-to-face	Arabic	Nationally Representative		
Turkey	July-08	1,004	1.26	3.5	Face-to-Face	Turkish	Nationally Representative		
Uganda	July-08	1,000	2.61	5.0	Face-to-face	English, Luganda, Ateso, Runyankole	Nationally Representative, some areas excluded		Northern region was excluded due to presence of LRA rebels. The excluded area represents approximately 10% of the population.
Ukraine	May-08	1,074	1.54	3.7	Face-to-face	Russian, Ukrainian	Nationally Representative		
United Kingdom	June-08	1,001	1.34	3.6	Landline Telephone	English	Nationally Representative		
United States	August-08	1,004	1.31	3.5	Panel	English	Nationally Representative		
Uzbekistan	July-08	1,000	1.37	3.6	Face-to-face	Uzbek, Tajik, Russian	Nationally Representative		
Vietnam	June-08	1,016	1.46	3.7	Face-to-face	Vietnamese	Nationally Representative with oversample	Urban oversample	
Zambia	June-08	1,000	2.43	5.8	Face-to-face	English, Bemba, Nyanja, Tonga, Lozi	Nationally Representative		

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Country	Data Collection Date (month completed)	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Sample	Over-sample <sup>c</sup>	Exclusions
Zimbabwe	March-08	1,000	2.04	4.4	Face-to-face	English, Shona, Ndebele	Nationally Representative		

<sup>a</sup> The design effect calculation reflects the weights and does not incorporate the intraclass correlation coefficients. Design effect calculation:  $n * (\text{sum of squared weights}) / [(\text{sum of weights}) * (\text{sum of weights})]$

<sup>b</sup> Margin of error is calculated around a proportion at the 95% confidence level. The maximum margin of error was calculated assuming a reported percentage of 50% and takes into account the design effect. Margin of error calculation:  $\sqrt{(0.25/N) * 1.96 * \sqrt{DE}}$

<sup>c</sup> Areas with disproportionately high number of interviews in the sample.