

Comparing Elite and Citizen Assessments of  
Media Freedom Using Data from the Gallup World Poll

Cynthia English  
Gallup  
Social and Economic Analysis Division  
1001 Gallup Drive  
Omaha, NE 68102

Lee B. Becker  
James M. Cox Jr. Center for International Mass Communication Training  
and Research  
Grady College of Journalism and Mass Communication  
University of Georgia  
Athens, GA 30602

Tudor Vlad  
James M. Cox Jr. Center for International Mass Communication Training  
and Research  
Grady College of Journalism and Mass Communication  
University of Georgia  
Athens, GA 30602

Abstract: Media freedom is officially recognized as a fundamental human right in Article 19 of the Universal Declaration of Human Rights, yet the extent to which nations enjoy freedom of expression through media varies considerably. This conclusion is based on elite evaluations of press freedom. This paper uses a new and unique data set to examine the relationship between elite evaluations of media systems by elite evaluators and evaluations from the general population.

Keywords: Media Freedom, Public Opinion, Gallup World Poll

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Media freedom is recognized as a fundamental human right in Article 19 of the Universal Declaration of Human Rights; however, the extent to which nations enjoy freedom of expression through media varies considerably. Independent organizations like Freedom House, the International Research & Exchanges Board (IREX), and Reporters Without Borders, evaluate and compare levels of press freedom between countries, relying heavily on expert assessments. These evaluators assess characteristics of the media systems, such as whether the media in a country are able to operate independently of political or economic pressure and whether they actually do operate in service of the democratic goals of societies.

The information provided by these organizations is invaluable to governments, non-governmental organizations, and academic institutions concerned with monitoring freedom of expression. These evaluations are often criticized by those who are evaluated (France Presse, 2006; Font de Matas, 2010), as well as some in the academic community (Holtz-Bacha, forthcoming). The criticism ranges from lack of conceptual clarity and completeness to lack of methodological detail and rigor.

Recent research has shown that these established systemic measures

of media characteristics are internally consistent and highly intercorrelated, providing initial data on their reliability (Becker, Vlad & Nusser, 2007; Becker & Vlad, 2009; Becker & Vlad, 2010). So far, only limited efforts have been made at validation (Becker, Vlad & Nusser, 2007). One option for validation of the elite measures comes from comparing the professional evaluations with citizen assessments of their media systems as reflected in answers to questions from national public opinion surveys in the evaluated countries. Preliminary work has been limited by the questions asked in surveys and by the small number of countries for which data were available (Becker & Vlad, 2010; Becker, Vlad & English, 2010).

This paper uses a new and unique data set from a larger number of countries than has been possible in the past to look at the link between elite evaluations of media systems and evaluations from the general population. The findings indicate that elites and the general public agree in general. The differences are informative and suggest that, in the future, evaluations of media systems that incorporate both elite assessments and assessments by the general public may be preferable to evaluations based solely on professional evaluators or the general public.

## **Media Freedom**

The concept of media freedom has a long history both in the political science and in the mass communication literature. Linz (1975), for example, listed freedoms of association, information, and communication as essential components of democracy. Gunther and Mughan (2000, p. 1) called mass media the “connective tissue of democracy.” O’Neil (1998) wrote that without the freedom of communication mass media provide, the foundation of democratic rule is undermined.

Early definitions of press freedom focus primarily on freedom from government control. In their classic work, *Four Theories of the Press*, Siebert, Peterson and Schramm (1956) identified four models or theoretical types of media. The first, historically, was the authoritarian type, where the government controlled the press through prior censorship and through punishment after publication. They labeled a more current variant of the authoritarian model the Soviet Communist type. The libertarian model was seen as the counterpoint to the authoritarian model. The primary feature is the absence of government control. The fourth model, social responsibility, holds that the media have obligations to society that accompany their freedom. According to Lowenstein (1970), a completely free press is one in

which newspapers, periodicals, news agencies, books, radio and television have absolute independence and critical ability, except for minimal libel and obscenity laws. The press has no concentrated ownership, marginal economic units or organized self-regulation.

Weaver (1977) distinguished three components of press freedom: the relative absence of government restraints on the media, the relative absence of nongovernmental restraints, and the existence of conditions to insure the dissemination of diverse ideas and opinions to large audiences. Piccard (1985) distinguished between negative press freedom (the absence of legal controls, such as censorship) and positive press freedom (the ability of individuals to use the media).

Some have argued that definitions of media freedom should include other concepts, such as the role of media in nation building, economic development, overcoming illiteracy and poverty, and building political consciousness. Hachten (1987) and Hagen (1992) focused on media democratization and proposed altering the top-down, one-way flow of messages from contemporary mass media to the public by increasing citizen participation. Breunig (1994) called press freedom one type of freedom of communication. Others were freedom of speech, freedom of opinion and

information freedom.

Curran (1996) has distinguished between the classic liberal perspective on media freedom and the radical democratic perspective. The classic liberal perspective focuses on the freedom of the media to publish or broadcast. The radical democratic perspective focuses on how mass communications can mediate in an equitable way conflict and competition between social groups in society. Within the classical liberal perspective, according to Curran, is a “strand” arguing that the media should serve to protect the individual from the abuses of the state. Within the radical democratic perspective is a “strand” that argues that the media should seek to redress the imbalances in society.

According to McQuail (2005), the concept of media freedom includes both the degree of freedom enjoyed by the media and the degree of freedom and access of citizens to media content. Price (2002, p. 54) has argued that the “foundation requirement” for media freedom is that government does not have a monopoly on information. For Rozumilowicz (2002), the question of who controls the media is critical to consideration of whether it is free and independent. She argued that there must be a diffusion of control and access supported by a nation’s legal, institutional, economic and

social-cultural systems. Thus, free and independent media “exist within a structure which is effectively demonopolized of the control of any concentrated social groups or forces and in which access is both equally and effectively guaranteed” (Rozumilowicz, 2002, p. 14).

Whether mass media lead or follow change, whether they mirror or mold society, and whether they should be conceptualized as agents of change or of the status quo are questions that permeate the discussion of media freedom (Jakubowicz, 2002). Gunther, Montero, and Wert (2000) found evidence in their research in Spain that media aided in the transition to a consolidated democracy by helping to legitimate the new regime and by contributing to the socialization of the public in ways of democratic behavior. Ette (2000), based on research in Nigeria, argued that media can undermine democracy and that it is not even clear the press has a common understanding of how it should serve the cause of democracy.

In the view of Downing (1996), the media are pivotal in the determination of power in both nondemocratic and democratic regimes. He argued that in the process of change from authoritarian to nonauthoritarian regimes, the media are integral in the struggle that emerges between political movements and the authoritarian state. The media continue to play

a role through the transition stage into the consolidation stage. Gunther and Mughan (2000) argued that political elites in various types of regimes believe the media are important in shaping the views of the public and they attempt to develop policies according to their economic, social, and political purposes.

Rozumilowicz (2002) argued that a media structure that is free of interference from government, business or dominant social groups is better able to maintain and support the competitive and participative elements that define democracy and to contribute to the process of democratization. According to her argument, free and independent media also buttress the societal objectives of democracy, help create a complementary economic structure, foster greater cultural understanding and provide for general human development. In this view, independent media also allow individuals to find a public forum in which to express opinions, beliefs and viewpoints to their fellow citizens and they inform, entertain and enrich the lives of the citizen through the profusion of ideas, opinions and visions. Free and independent media also provide for an expression of options so that meaningful decisions can be made to guarantee access to the less privileged in society, giving them voice.



## **Empirical Links for Media Freedom**

Researchers have been creating measures of press freedom and linking those measures to both antecedents and consequences of that freedom since at least the 1960s. Nixon (1960) demonstrated a positive relationship between press freedom as measured by International Press Institute (IPI) classifications of media systems around the world and per capita income, proportion of adults that are literate, and level of daily newspaper circulation. Gillmor (1962) used the same IPI and found little evidence that the religious tradition of a country was associated with press freedom. In a later study, Nixon (1965) employed a panel (rather than the IPI ratings) to rank press freedom in countries around the world and replicated his earlier findings of the importance of economic development, literacy, and growth of the mass media. Farace and Donohew (1965) used the Nixon press freedom measures to show that life expectancy, population, and education also were related to press freedom.

Lowenstein (1970) empaneled judges around the world to rate Press Independence and Critical Ability based on 23 separate indicators, including restraints on media through legal and extra-legal controls, ownership of news agencies or their resources, self-censorship, and economic hardship

that could extinguish some voices. He found that the resultant classification of the media closely matched that of Nixon. Kent (1972) examined the Lowenstein measures and argued that they measured a single dimension of press freedom. Nam and Oh (1973) used Nixon's press freedom measure to show that political systems in which the various players have freedom of activity also have a free press. Weaver (1977) used the Lowenstein (1970) and Kent (1972) classification of press freedom and showed that increases in economic productivity lead to less stress in the political system. Weaver also showed that decreased political stress leads to increased press freedom. Weaver, Buddenbaum and Fair (1985) attempted to replicate these findings but concluded instead that increases in economic productivity in developing countries may have negative effects on press freedom rather than positive ones. For the 1985 analyses, Weaver and his colleagues used the measures of press freedom developed by Freedom House, a nongovernmental organization based in Washington, D.C.

Breunig (1994) gathered data on offenses against communication freedom through a content analysis of the Bulletins of the International Journalism Institute in Prague between January 1, 1988, and October 9, 1991. He also examined the legal protection of communication freedom, as

written into the constitutions and related documents of nations of the world, and another measure of press freedom, namely offenses against communication freedom. He found that states that guarantee communication freedom in their legal documents did not necessarily provide for more freedom. Van Belle (1997, 2000) developed a measure of press freedom by coding the International Press Institute's annual reports and historical documents and showed that this measure correlated highly with the Polity III measure of democracy. Democracy is one of the two measures of regime type in Polity III (Jagers & Gurr, 1995). Van Belle next showed that the free press measure was a better predictor than the Polity III democracy measure of conflict between countries. The data show that countries that have a free press do not go to war with each other. Van Belle (1997, 2000) found that his measures of press freedom correlated highly with those of Freedom House.

Using the Freedom House measures of press freedom, Besley and Prat (2001) found that press freedom was negatively related to corruption and to political longevity of office holders. Using these same measures, Brunetti and Weder (2003) replicated the finding of a negative relationship between press freedom and corruption in a cross-sectional study. They also

used panel data to show that the direction of the relationship was from press freedom to decreases in corruption. Jacobsson and Jacobsson (2004) used the Freedom House index of press freedom to show that press freedom is the outcome of economic wealth and of low market concentration in the consumer goods industries. Islam (2002) used both the Freedom House measures of Press Freedom and its measures of democracy to demonstrate a relationship between the two concepts. Carrington and Nelson (2002) used the Money Matters Institute Wealth of Nations Triangle Index to empirically link media “strength” and “strength” of the local economy.

Gunaratne (2002) also used the Freedom House measures of press freedom in an examination of the relationship between press freedom and political participation, as measured by voter turnout at national elections, and found that no such relationship existed. (Gunaratne did find evidence of a relationship between the Freedom House measures of press freedom and the UNDP Human Development Index, which measures a country's achievements in health, knowledge and standard of living). Gunaratne argued that the failure of the Freedom House measures to show a relationship with citizen participation indicates that the measures are faulty. First, he said, the measures are of nation-states, rather than the global

communication system. Second, the measures focus too heavily on traditional print and broadcast media. Third, they focus almost exclusively on freedom from government. Fourth, the freedom should be viewed as an individual, rather than an organizational, right.

Norris and Zinnbauer (2002) used the Freedom House measures of press freedom from 2000 and World Bank measures of development and found that press freedom is associated with good governance and human development. Nations with high scores on the Freedom House measures of press freedom were found to have less corruption, greater administrative efficiency, higher political stability, and more effective rule of law. The countries with a free press also had better development outcomes such as higher per capita income, greater literacy, less economic inequality, lower infant mortality rates, and greater public spending on health.

Guseva, Nakaa, Novel, Pekkala, Souberou and Stouli (2008) built on the earlier work of Norris and Zinnbauer (2002). They produced a comprehensive overview of correlations between “indicators of environments conducive to media freedom and independence” and indicators of human development, human security, stability, poverty reduction, good governance and peace. The analysis again used the

Freedom House measures of press freedom and World Bank statistics on governance for 1996, 1998, 2000, 2002 and 2004. The team concluded that press freedom is strongly associated with both the degree of development and the level of poverty in a country. Press freedom also was found to be positively correlated with governance; countries without press freedom had governance problems. Press freedom also was positively correlated with low levels of military expenditures.

Finkel, Perez-Liñam, Siligson and Azpuru (2008) have compared countries where USAID provided democracy assistance from 1990 to 2003 with those that did not and used the Freedom House press freedom measures to show that USAID media assistance produced effects on the media sectors. The team also concluded that media freedom led to development of civil society and democratization. Norris and Inglehart (2009) used the Freedom House measures in their examination of the effects of global media on cultural convergence around the world. They concluded that these effects are greatest in what they call cosmopolitan societies and use the Freedom House measures to index cosmopolitanism. Both Finkel et al. and Norris and Inglehart combined the Freedom House measure of press freedom with other measures of media to create a new

index for their analysis.

Whitten-Woodring (2009), using the Van Belle (1997) measures, found that media freedom was associated negatively with government respect for human rights in the most autocratic states while media freedom is positively related to respect for human rights only in the most democratic regimes.

Odugbemi and Norris (2010) find that the relationship between press freedom as measured by Freedom House and good governance is dependent on the type of political regime, measured by the separate Freedom House measure of Freedom in the World. In free countries, press freedom is positively correlated with good governance, but in party free countries it is not, and press freedom and good governance are only slightly correlated in nondemocratic states. Press freedom and spending on public health are slightly positively correlated in free states and uncorrelated in others.

Sobel, Dutta and Roy (2010) used the Freedom House Press Freedom measures from 1995 to 2003 examine whether press freedom spreads across borders. They conclude that press freedom does, in fact, have significant spillover effects on media reform in neighboring countries.

Van de Vliert (2011) created an index of cultural press repression

using the Freedom House and Reporters without Borders measures in combination with a fear of censorship item from a survey of national partner organizations of the World Economic Forum. He found that press freedom is most prevalent in rich countries, while repression is most common in poor countries.

Tran, Mahmood, Du and Khrapavitski (2011), use both the Freedom House and Reporters without Borders measures of press freedom to examine the relationship between media freedom and development among 65 countries. They find contradictory results in some of their analyses, but both indices show a positive relationship between press freedom and good governance.

The normative work of Siebert, Peterson and Schramm (1956) on media systems generally and press freedom specifically spurred Hallin and Mancini (2004) to attempt an empirical classification of media systems today. Their analysis goes far beyond that earlier framework and compares media systems in terms of the development of media markets, the extent to which the media system reflects the major political divisions in society, the development of journalistic professionalism, and the degree and nature of state intervention in the media system. In their examination of 18 European



and North American states, they found evidence of three different types of media systems, even though all of the countries examined were considered to have a free media. They called the models the Mediterranean or Polarized Pluralist Model, the North/Central European or Democratic Corporatist Model, and the North Atlantic or Liberal Model. Hallin and Mancini's central argument is that media freedom is part of a broader set of political, social and even geographic characteristics of nations.

### **Elite Measures of Media Freedom**

Three organizations currently are producing quantitative measures of media freedom based on the work of professional or elite evaluators. The best known and most widely used measure of the press freedom is that of Freedom House. A non-governmental organization based in Washington, D.C., Freedom House was founded in 1941 to promote democracy globally. Since 1978, Freedom House has published a global survey of freedom, known as *Freedom in the World*, now covering 194 countries and 14 related or disputed territories (Freedom House, 20011). This indicator is widely used by policy makers, academics, and journalists. In 1980, as a separate undertaking, Freedom House began conducting its media freedom survey—*Freedom of the Press: A Global Survey of Media*

*Independence*—which in 2010 covered 196 countries and territories (Freedom House, 2010).

To measure the press freedom concept, Freedom House attempts to assess the political, legal, and economic environments of each country and evaluate whether the countries promote and do not restrict the free flow of information. In 2010, the research and ratings process involved several hundred analysts and senior-level advisers (Freedom House, 2010). These analysts and advisers gather information from professional contacts, staff and consultant travel, international visitors, the findings of human rights and press freedom organizations, specialists in geographic and geopolitical areas, the reports of governments and multilateral bodies, and a variety of domestic and international news media. The ratings are reviewed individually and on a comparative basis in a series of six regional meetings with the analysts, ratings advisers with expertise in each region, other invited participants and Freedom House staff. Freedom House then compares the ratings with the previous year's findings. Major proposed numerical shifts or category changes are subjected to more intensive scrutiny. These reviews are followed by cross-regional assessments in which efforts are made to ensure comparability and consistency in the findings. Freedom House asks

the raters to use 23 questions divided into three broad categories covering the legal environment, the political environment and the economic environment. Each country is rated in these three categories and assigned a value, with the higher numbers indicating less freedom.

Reporters without Borders (RWB) has released annually since 2002 a Worldwide Press Freedom (RWB, 2002) report and ranking of individual nations. Based in Paris, RWB defends journalists and media outlets by condemning attacks on press freedom worldwide, by publishing a variety of annual and special reports on media freedom, and by appealing to governments and international organizations on behalf of journalists and media organizations.

RWB (2008) bases the score for each country on responses of its selected panelists to a questionnaire with 49 criteria. Included are measures of actions directly affecting journalists, such as murders, imprisonment, physical attacks and threats, and activities affecting news media, such as censorship, confiscation of newspaper issues, searches and harassment. The questionnaire also measures the extent to which those who commit acts against the journalists and the media organizations are prosecuted, the amount of self-censorship, and the ability of the media to investigate and

criticize. It also assesses financial pressure imposed on journalists and the news media. It examines the legal framework for the media, including penalties for press offences, the existence of a state monopoly for certain kinds of media and how the media are regulated, and the level of independence of the public media. It also examines violations of the free flow of information on the Internet.

In 2008, the questionnaire was sent to 18 freedom of expression groups, to its network of 130 correspondents around the world, and to journalists, researchers, jurists and human rights activists. In 2008, RWB received completed questionnaires from a number of independent sources for 173 countries. RWB said some countries were not included because of a lack of reliable, confirmed data.

A third organization, International Research & Exchanges Board (IREX), also conducts elite evaluations of media systems. IREX is a nonprofit organization based in Washington, D.C., that was founded in 1968 by U.S. universities to promote exchanges with the Soviet Union and Eastern Europe. In 2001, IREX, in cooperation with USAID, prepared its first Media Sustainability Index (MSI) to evaluate the global development of independent media (IREX, 2001). The report rated independent media

sustainability in 20 states in four regions: Southeast Europe, Russia and Western Eurasia, Caucasus, and Central Asia.

IREX (2008) says its MSI measures five criteria of a successful, independent media system. First, IREX measures the extent to which legal and social norms protect and promote free speech and access to public information. Second, IREX measures whether the journalism in the media system meets professional standards of quality. Third, the MSI determines whether the system has multiple news sources that provide citizens with reliable and objective news. The fourth criterion is whether the media are well-managed businesses, allowing editorial independence. Finally, MSI examines the supporting institutions in society to determine if they function in the professional interests of independent media.

Media systems are scored in two steps. First, IREX assembles a panel of experts in each country, drawn from representatives of local media, nongovernmental organizations (NGOs), professional associations and media-development implementers. Each panelist individually reviews the criteria and scoring scheme and creates an individual score. The panelists then meet with a moderator and create combined scores and analyses. The panel moderator prepares a written analysis of the discussion, which is

subsequently edited by IREX representatives. The panelists' scores are reviewed by IREX, in-country staff and/or Washington, DC, media staff, which then score the countries independently of the MSI panel. IREX says that the final scores are a combination of these two scores. According to IREX (2008) this method allows the MSI scores to reflect both local media insiders' views and the views of international media-development professionals.

IREX began its MSI in 2001, tracking development of independent media in a limited number of countries in Eastern Europe and Eurasia. Efforts to expand MSI have continued, but, at present, it currently is measured in about half the countries covered by the Freedom House and RWF measures.

### **Citizen Measures of Characteristics of Media Systems**

Becker and Vlad (2010) used two different surveys to look at the relationship between press freedom as measured by the elite evaluators and press freedom as measured by survey respondents. In 2007, The BBC World Service Poll included five questions, one with two parts, dealing with the media in a survey conducted in 14 countries (BBC World Service Poll, 2007). Included was a question that asked respondents to use a 5-point

scale to indicate how free they thought the media in their country was to report the news accurately, truthfully and without bias. The surveys were conducted by GlobeScan Incorporated and Synovate, with fieldwork taking place in October and November of 2007. Samples were national in nine of the 14 countries and urban in the remaining five. Interviews were conducted face-to-face in eight of the countries and by telephone in the remaining six. Sample sizes ranged from 500 to 1,500.

In 2008, WorldPublicOpinion.Org (2008), based at the University of Maryland, included a series of questions dealing with the media on surveys conducted in 28 countries and territories around the world. Not all questions were asked in all countries, but in a majority of countries those interviewed were asked how much freedom the media in their country have. Sample sizes varied from a low of 597 to a high of 2,699. Surveys were conducted via telephone, face-to-face interviews, and the Internet.

The relationship between the measure of public perceptions of press freedom and the Freedom House measure of press freedom for the 14 countries included in the 2007 BBC World Service Poll is slight at best. The Pearson Product Moment Correlation Coefficient was .31, while the Spearman rho was .23. The correlations between the BBC World Service

Poll measures and the Reporters Without Borders are similar, with a .37 Pearson r and a .25 Spearman rho.

The relationship between the WorldPublicOpinion.Org measure of press freedom from the point of view of the citizens and the Freedom House measure is considerably stronger, a .81 with Pearson r and a .76 with Spearman rho. Clearly for the 20 countries included in the analysis, those countries that the elite evaluators found to have a free press are those where the citizens also feel the press is free. The Reporters Without Borders evaluations produced a similar .70 (Pearson) and .71 (Spearman).

Becker and Vlad (2010) speculated that the different findings were the result of different measurement of public assessments of press freedom. The BBC World Service Poll used an anchored scale and the WorldPublicOpinion.Org measure used simple verbal descriptions. The BBC question also was unusual in that it is reverse coded, that is, respondents were asked to go from 5 to 1 rather than the reverse, which is more common.

English (2007), Becker and Vlad (2009), and Becker, Vlad and English (2010) have examined the relationship between confidence in the media and press freedom using data from the Gallup World Poll. At the zero-order, the researchers found that there is no relationship between the two concepts.



Based on analyses of surveys conducted in approximately 100 countries in each of three years, however, the research found that public beliefs about the openness of the society mask a real relationship between confidence in the media and press freedom. In 2007, 2008 and 2009, confidence in the media relative to confidence in other institutions in society was found to be negatively associated with press freedom when the society is open. When the society is closed, however, confidence in the media relative to confidence in other institutions actually is positively related to press freedom.

### **Expectations**

These findings suggest that elite assessments of media freedom are in fact shared by the public, though not necessarily always in a straightforward way. The most robust relationship has been found between the simple measure of press freedom in the WorldPublicOpinion.org survey and press freedom as assessed by the professional evaluators. Those findings were from a diverse set of countries, but the relatively small number—20—limits the confidence that can be placed in the findings.

Research from 48 countries surveyed in early 2010 on the Gallup World Poll relied on a modified, simplified measure of press freedom. A positive relationship between citizen assessments of media freedom and

elite evaluations was found among this non-probabilistically selected group of countries (Becker, English, & Vlad, 2010). In this study, using a much larger number of countries, the expectation is for a replication of the earlier findings of a positive relationship between elite and public assessments of media freedom.

## **Methods**

Gallup regularly surveys adult residents in more than 150 countries and areas, representing more than 98% of the world's adult population. In most cases, randomly selected, nationally representative samples of the entire civilian, non-institutionalized, age 15 and older population of each country are used. 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. Gallup typically surveys 1,000 individuals in each country, with at least 2,000 surveys being conducted in large countries like China, India and Russia.

Telephone surveys are used in countries where telephone coverage represents at least 80% of the population or is the customary survey methodology. 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.

Once collected, the data set goes through a rigorous quality assurance process before being publicly released. 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.

Gallup is entirely responsible for the management, design, and control of the Gallup World Poll (GWP) and 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.

In each country, a standard set of core questions is fielded in each of the major languages of the respective country. In 2010 a new idea was added to the Core: “Do the media in this country have a lot of freedom, or not?” Data from 112 countries are available and used in this analysis. (See

Appendix A for detailed information on the data collected in these countries.) Unfortunately, this item was not approved for fielding in four countries where Gallup interviewed in 2010: Algeria, Saudi Arabia, Tajikistan, and Uzbekistan.

## **Findings**

As a first step in the analysis, an aggregate data file was created for the 112 countries from the Gallup World Poll where responses to the media freedom were collected and for which press freedom scores either by Freedom House or Reporters without Borders existed. The countries were scored according to the percentage of respondents who indicated that the media in their country were free. The Freedom House and Reporters without Borders scores were next added to this data file.

The simple correlation (Pearson) between press freedom as measured by Reporters Without Borders in 2010 and the aggregated data for the 112 countries for whom the citizen evaluation was available was .59. The evaluation period for the RWB measure was Sept. 1 of 2009 through Sept. 1 of 2010. The Spearman rho is .70.

**Table 1:**

	<b>Yes, Media Have a lot of Freedom</b>	
	<i>Pearson's R</i>	<i>Spearman's Rho</i>
Freedom House Press Freedom 2011	-.738**	-.746**
Reporters sans Frontieres Score 2010	-.589**	-.695**

Chart 1 (below) shows a scatterplot of these same data, with each data point labeled. The pattern of a relationship is obvious, as is the variance from that relationship. The relationship is shown as a negative here because the RWB measure is reverse scored. The same is true for the Freedom House measure. Since these measures are known to be negatively scored by those who use them, the scores have not been reversed here.

The Freedom House measure of press freedom for 2011 was released in the spring of 2011 and available for this analysis. Chart 2 shows the relationship between the 2010 Freedom House measure of press freedom and the Gallup data. The Pearson  $r$  is .74- considerably greater than the same relationship for the Reporters Without Borders measure. The Spearman rho is .75.

It is easy to see some of the differences between the RWB and

Freedom House measure and their impact on the correlation coefficient. Belarus is coded more extremely in the Freedom House measure, consistent with the public opinion data. The Freedom House measure, in general, uses the higher ends of the score more than does the Reporters Without Borders measure, and that higher end seems to be more reflective of the public opinion data.

Discrepant cases from the point of view of the Gallup data are evident. Cambodia has a high score for press freedom on the Gallup World Poll measure but bad scores on both the RWB and Freedom House measures. Vietnam, Tunisia and China also do better in terms of citizen assessments than they do on the elite evaluation measures. Lithuania and Haiti, in contrast, score well on the elite evaluations, but the citizens of those countries do not think the media are free. It is easier to explain the former deviations than the latter. It seems likely either that the citizens in the four latter countries do not know how constrained their media is- 1-in-4 in China (25%) and Vietnam (26%) say they “don’t know” whether the media in their country have a lot of freedom- or they are unwilling (or unable) to answer honestly.

These same analyses were repeated with the aggregated percent

“No” responses to the Gallup item, and the correlations were somewhat lower.

Awareness of press freedom in general can vary within and across countries, but one factor worth considering is the delay between *changes* in the level of press freedom in a country and the public’s awareness of those changes. While elite evaluations of media freedom combine evidence compiled from throughout a given year, public opinion measures are a snapshot of sentiment at a given point in time. It is quite likely that there is a lag between changes in media freedom and the public’s awareness of these changes. Additional analyses were conducted to investigate any effect this might have on perceptions. There was found to be little difference in the relationship between the elite evaluations and citizen assessment when using Freedom House and Reporters Without Borders data from the previous year .

## **Conclusions**

Some researchers raised doubts in the past about the accuracy of the press freedom and media sustainability measures produced by Freedom House, Reporters Without Borders, and IREX evaluations. An analysis (Becker, Vlad & Nusser, 2007) of the internal and across time reliability of

these measures, of the internal consistency of the components of the Freedom House and IREX measures, of the relationships among those three measures, and of the ability of the Freedom House measures to identify dramatic changes across found that the measures were reliable across time. The measures were internally consistent, and they largely measured the same concept or at least highly correlated concepts. The Freedom House measures reflected the major changes in the media environment associated with the collapse of communism in eastern and central Europe in the last decade of the last century.

One additional way to validate these experts' evaluations is to compare them with citizen assessments of their media systems. Our findings show that the elite evaluations of press freedom are correlated with the evaluations of the media system by the general public, as reflected in the public opinion data. The relationship is stronger for the Freedom House measure (2010) than for the Reporters without Borders measures for 2010. The evidence is that the Freedom House measure is slightly more reflective of public opinion than are the RWB measures. In other words, if the standard is the public opinion data, there is a slight nod in favor of the Freedom House measure.



The deviant cases here are informative, and they merit further analysis. The suggestion at present, however, is that something is gained both by knowing what the elite evaluators think of the media and what the general public believe. A country like Vietnam, for example, which gets low scores from evaluators but not from the general public, might rightly be considered to have a more free media system than a country, such as Russia, that scores poorly on both. At least that is a possibility worth considering.

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### Biographical Notes

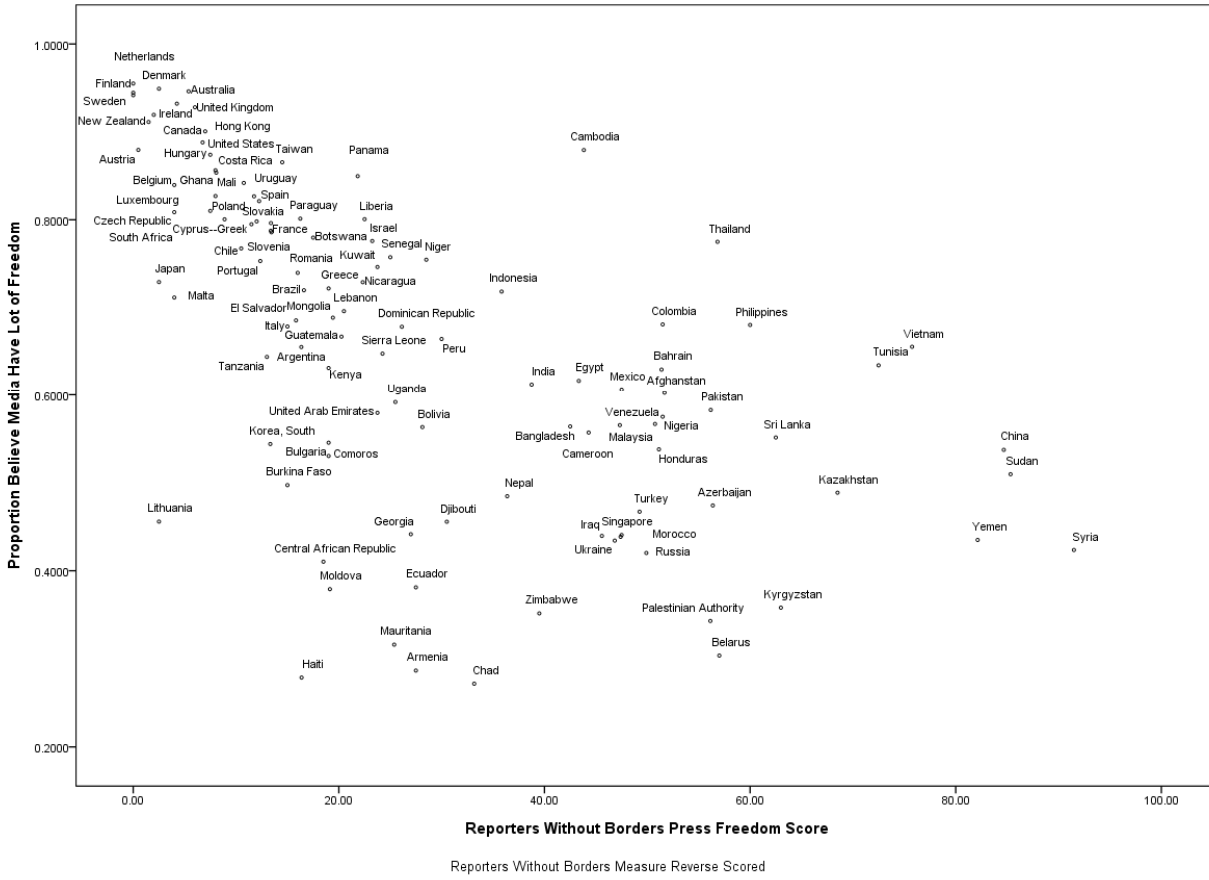
Cynthia English is a consultant with Gallup, Social and Economic Analysis Division, 1001 Gallup Drive, Omaha, NE 68102 USA (Cynthia\_English@gallup.com)

Lee B. Becker is professor and director of the James M. Cox Jr. Center for International Mass Communication Training and Research, Grady College of Journalism and Mass Communication, University of Georgia, Athens, GA 30602 USA (lbbecker@uga.edu)

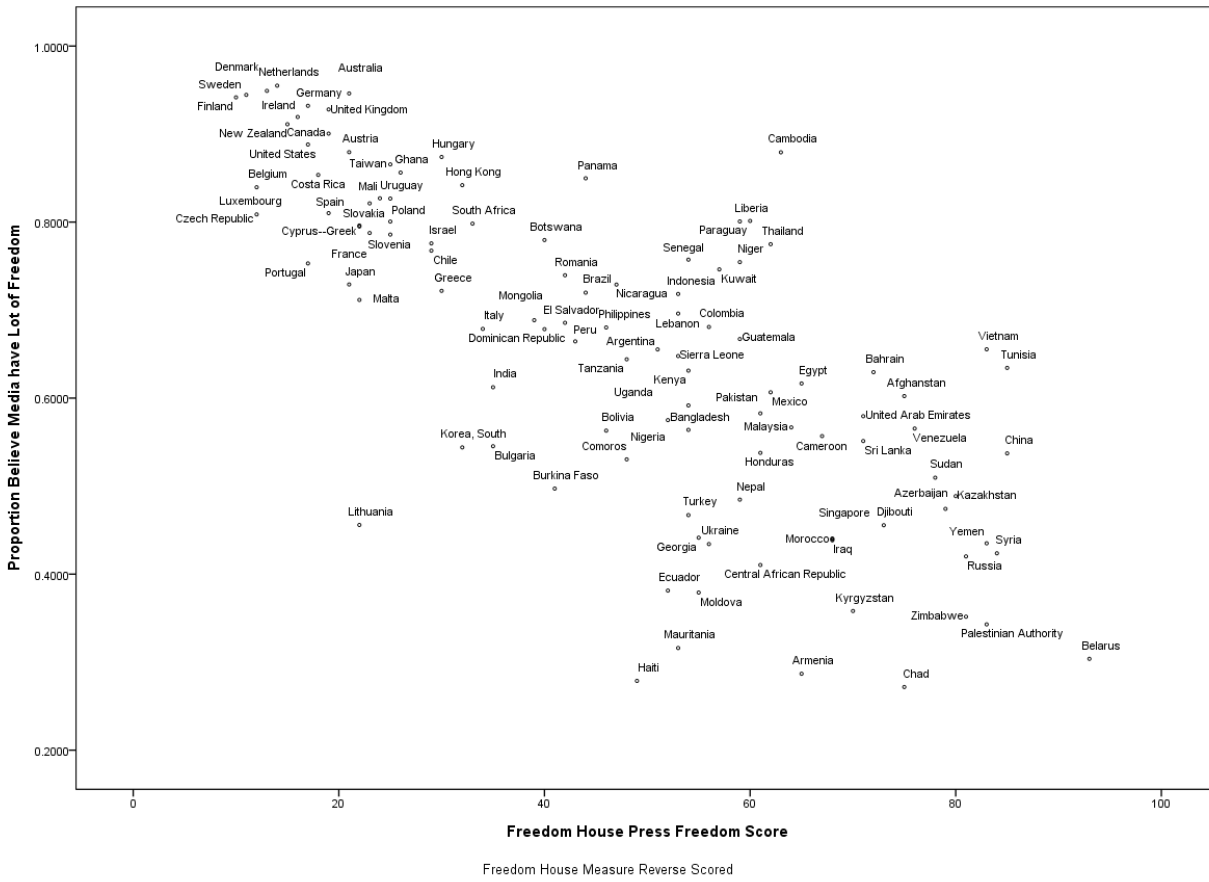
Tudor Vlad is senior research scientist and associate director, James M. Cox Jr. Center for International Mass Communication Training and Research, Grady College of Journalism and Mass Communication, University of Georgia, Athens, GA 30602 USA (tvlad@uga.edu)

Chart 1  
Public Assessment of Media Freedom by Reporters Without Borders Assessment

Year 2010



**Chart 2**  
**Public Assessment of Media Freedom by Freedom House Assessment**  
**Year 2010**



## Appendix A: Country Data Set Details

### Gallup Worldwide Research Data Collected in 2010 (Wave 5)

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Afghanistan	Apr 13 – Apr 22, 2010	1,000	1.72	4.1	Face-to-Face	Dari, Pashto		Gender-matched sampling was used during the final stage of selection.
Argentina	Jul 1 - Jul 30, 2010	1,000	1.45	3.7	Face-to-Face	Spanish		
Armenia	Jun 26 - Jul 28, 2010	1,000	1.25	3.5	Face-to-Face	Armenian		
Australia	Feb 17 – Mar 10, 2010	1,000	1.5	3.8	Landline and Cellular Telephone	English		
Austria	May 6 - Jul 6, 2010	1,000	1.69	4	Landline and Cellular Telephone	German		
Azerbaijan	Jul 14 - Jul 28, 2010	1,000	1.3	3.5	Face-to-Face	Azeri, Russian		Nagorno-Karabakh and territories not included for safety of interviewers. These areas represent less than 10% of the total population.
Bahrain (5.2)	Sep 20 – Oct 30, 2010	1,031	1.46	3.7	Face-to-Face	Arabic		Includes Bahrainis and Arab expatriates; non-Arabs were excluded. It's estimated that approximately one-fourth of the adult population is excluded.
Bangladesh	Apr 12 – Apr 24, 2010	1,000	1.25	3.5	Face-to-Face	Bengali		
Belarus	Jun 8 – Jul 7, 2010	1,013	1.23	3.4	Face-to-Face	Russian		
Belgium	May 6 – Jul 6, 2010	1,003	1.57	3.9	Landline and Cellular Telephone	Dutch, French		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Bolivia	Jul 10 – Aug 11, 2010	1,000	1.4	3.7	Face-to-Face	Spanish		
Botswana	Nov 22 – Dec 2, 2010	1,000	1.59	3.9	Face-to-Face	English, Setswana		The sample has a larger than expected proportion of respondents who have reported completed secondary education when compared with the data used for post-stratification weighting. <sup>d</sup>
Brazil	Aug 10 – Aug 27, 2010	1,043	1.24	3.4	Face-to-Face	Portuguese		
Bulgaria	May 27 - July 16, 2010	1,000	1.31	3.5	Face-to-Face	Bulgarian		
Burkina Faso	Apr 29 – May 10, 2010	1,000	1.35	3.6	Face-to-Face	Dioula, French, Fulfulde, Moore		
Cambodia	May 21 - May 30, 2010	1,000	1.62	3.9	Face-to-Face	Khmer		
Cameroon	Feb 15 – Mar 1, 2010	1,200	1.62	3.6	Face-to-Face	English, French, Fulfulde		
Canada	Jul 19 – Sep 5, 2010	1,007	1.66	4	Landline Telephone	English, French		Yukon, Northwest Territories, and Nunavut were excluded from the sample.
Central African Republic	Nov 2 - Nov 20, 2010	1,000	1.23	3.4	Face-to-Face	French, Sangho		Areas bordering Sudan and Chad excluded due to high rates of insecurity. Excluded areas represent approximately 35% of the population.

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Chad	Oct 10 – Oct 20, 2010	1,000	1.67	4	Face-to-Face	French, Chadian Arabic, Ngambay		Eastern part of the country was not covered because of conflict on the border with Sudan. The excluded area represents approximately 20% of the population. The sample has a larger than expected proportion of respondents who have reported completed secondary education when compared with the data used for post-stratification weighting. <sup>d</sup>
Chile	Jul 30 – Sep 4, 2010	1,007	1.45	3.7	Face-to-Face	Spanish		
China	Jun 13 – Jul 29, 2010	4,151	2.06	2.2	Face-to-face and Landline Telephone	Chinese		
Colombia	Jun 18 – Jul 30, 2010	1,000	1.36	3.6	Face-to-Face	Spanish		
Comoros (5.2)	Sep 16 – Oct 4, 2010	1,000	1.18	3.4	Face-to-Face	French, Comorian		
Costa Rica	Jul 28 – Aug 15, 2010	1,006	1.14	3.3	Face-to-Face	Spanish		
Cyprus	May 20 – Jun 28, 2010	1,005	1.39	3.6	Landline Telephone	Greek		
Czech Republic	Jun 6 – Jun 25, 2010	1,005	1.15	3.3	Face-to-Face	Czech		
Denmark	Apr 28 – May 23, 2010	1,000	1.52	3.8	Landline Telephone	Danish		
Djibouti	Sep 25 – Oct 4, 2010	1,000	1.15	3.3	Face-to-face	French, Afar, Somali		The 2010 sample better represents the educational distribution of the country than previous waves. Previous waves skewed upper education.
Dominican Republic	Aug 6 – Aug 30, 2010	1,000	1.73	4.1	Face-to-Face	Spanish		
Ecuador	Jul 1 – Aug 10, 2010	1,000	1.68	4	Face-to-Face	Spanish		



**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Egypt (5.2)	Sep 25- Oct 26, 2010	1,011	1.22	3.14	Face-to-Face	Arabic		
El Salvador	Jul 29 – Aug 17, 2010	1,001	1.17	3.4	Face-to-Face	Spanish		
Finland	May 6 – Jun 7, 2010	1,005	1.35	3.6	Landline and Cellular Telephone	Finnish		
France	May 10 – Jun 7, 2010	1,004	1.73	4.1	Landline Telephone	French		
Georgia	Jun 8 – Jun 28 2010	1,000	1.21	3.4	Face-to-Face	Georgian, Russian		South Ossetia and Abkhazia were not included for the safety of the interviewers. The excluded area represents approximately 7% of the population.
Germany	Apr 28 – Jun 12, 2010	1,007	1.29	3.5	Landline Telephone	German		
Ghana	Sep 4 – Sep 20, 2010	1,000	1.61	3.9	Face-to-Face	English, Twi, Hausa, Ewe, Dagbani		
Greece	Jun 2 – Jun 22, 2010	1,000	1.42	3.7	Face-to-Face	Greek		
Guatemala	Jul 1 – Jul 31, 2010	1,014	1.18	3.3	Face-to-Face	Spanish		
Haiti	Jul 22 – Jul 26, 2010	504	1.15	4.7	Face-to-Face	Creole		
Honduras	Jul 28 – Aug 17, 2010	1,000	1.14	3.3	Face-to-Face	Spanish		
Hong Kong	June 11 – Jun 26, 2010	756	1.62	4.5	Landline Telephone	Chinese		
Hungary	May 11 – May 27, 2010	1,008	1.33	3.6	Face-to-Face	Hungarian		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
India	May 1 – Jun 17, 2010	6,000	1.72	1.66	Face-to-Face	Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Tamil, Telugu, Oriya, Punjabi		Excluded population living in Northeast states and remote islands. The excluded areas represent less than 10% of the population.
Indonesia	Apr 4 – Apr 24, 2010	1,080	1.36	3.5	Face-to-Face	Bahasa Indonesia		
Iraq (5.2)	Sep 2 – Oct 8, 2010	1,000	1.34	3.6	Face-to-Face	Arabic, Kurdish		
Ireland	May 6 – Jun 10, 2010	1,001	1.63	4	Landline Telephone	English		
Israel	Oct 1 - Nov 20, 2010	1,000	1.24	3.46	Face-to-Face	Arabic, Hebrew		
Italy	May 4 – May 19, 2010	1,008	1.71	4	Landline and Cellular Telephone	Italian		
Japan	June 5 – Jun 24, 2010	1,000	1.37	3.6	Landline Telephone	Japanese		
Jordan (5.2)	Sep 4 – Oct 30, 2010	1,000	1.3	3.5	Face-to-Face	Arabic		
Kazakhstan	Jun 3 – Jun 20, 2010	1,000	1.43	3.7	Face-to-Face	Kazakh, Russian		
Kenya	Feb 5 – Feb 17, 2010	1,000	1.51	3.8	Face-to-Face	English, Swahili		
Kuwait (5.2)	Oct 11 - Dec 1, 2010	1,004	1.37	3.6	Face-to-Face	Arabic		Includes Kuwaitis and Arab expatriates; non-Arabs were excluded. It's estimated that approximately one-fifth of the adult population is excluded.
Kyrgyzstan	Aug 7 – Aug 23, 2010	1,000	1.51	3.8	Face-to-Face	Kirgiz, Russian, Uzbek		
Lebanon (5.2)	Sep 7 – Oct 28, 2010	1,019	1.21	3.4	Face-to-Face	Arabic		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Liberia	April 24 – May 13, 2010	1,000	1.42	3.7	Face-to-Face	English		
Lithuania	Jul 16 – Aug 7, 2010	1,001	1.46	3.7	Face-to-Face	Lithuanian		
Luxembourg	May 21 – Jun 21, 2010	1,002	1.45	3.7	Landline Telephone	French, German		
Malaysia	May 15 – Jun 17, 2010	1,000	1.34	3.6	Face-to-Face	Bahasa Malay, Chinese, English		
Mali	Oct 9 – Oct 22, 2010	1,000	1.33	3.6	Face-to-face	French, Bambara		The northern part of the country, mainly extreme desert with difficult access, and nomadic population is excluded (total coverage of about 90% to 95%).
Malta	May 20 – Jun 7, 2010	1,008	1.32	3.6	Landline Telephone	Maltese, English		
Mauritania (5.2)	Sep 20 – Sep 30, 2010	1,000	1.65	4	Face-to-face	Arabic, French, Poular, Wolof, Soninke		The northern region (Tiris) and the eastern region (Adrar) were excluded because of insecurity. The excluded areas represent approximately 5% of the population.
Mexico	Jul 22 – Aug 5, 2010	1,000	1.42	3.7	Face-to-Face	Spanish		
Moldova	Jun 1 – Jun 25 2010	1,000	1.29	3.3	Face-to-Face	Romanian, Russian		Transnistria (Prednestrovie) excluded for safety of interviewers. The excluded area represents approximately 13% of the population.
Mongolia	Jun 20 – Jul 17, 2010	1,000	1.20	3.4	Face-to-Face	Mongol		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Morocco (5.2)	Nov 3 - Nov 15, 2010	1,002	1.26	3.5	Face-to-Face	Moroccan Arabic, French		
Nepal	Apr 4 – May 4, 2010	1,000	1.65	4	Face-to-Face	Nepali		
Netherlands	May 6 – Jun 11, 2010	1,001	1.57	3.9	Landline Telephone	Dutch		
New Zealand	Feb 11 – Mar 10, 2010	750	1.38	4.2	Landline Telephone	English		
Nicaragua	Jul 29 – Aug 19, 2010	1,000	1.25	3.5	Face-to-Face	Spanish		
Niger	Oct 25 - Nov 7, 2010	1,000	1.3	3.5	Face-to-Face	French, Hausa, Zarma		The Northern part of the country (Agadez region) was excluded due to insecurities. The excluded area represents approximately 5% of the population.
Nigeria	Mar 19 – Apr 4, 2010	1,000	1.32	3.5	Face-to-Face	English, Hausa, Igbo, Yoruba, Pidgin		
Pakistan	May 5 – May 25, 2010	1,030	1.51	3.7	Face-to-Face	Urdu		FATA/FANA were excluded. The excluded area represents less than 5% of the population. Gender-matched sampling was used during the final stage of selection. Note: Improved sample coverage and change in data collection agency beginning June 2009 measurement.
Palestinian Territories (5.2)	Jul 22 – Aug 1, 2010	1,000	1.4	3.7	Face-to-Face	Arabic		The sample includes East Jerusalem.
Panama	Jul 27 – Aug 24, 2010	1,000	1.17	3.4	Face-to-Face	Spanish		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Paraguay	Jul 10 – Aug 31, 2010	1,000	1.35	3.6	Face-to-Face	Spanish		
Peru	Jun 23 – Jul 23, 2010	1,000	1.44	3.7	Face-to-Face	Spanish		
Philippines	Apr 9 – Apr 15, 2010	1,000	1.41	3.7	Face-to-Face	Tagalog, Iluco, Cebuano, Hiligaynon, Bicol, Waray, Maranao		
Poland	May 28 – Jun 23, 2010	1,000	1.29	3.5	Face-to-Face	Polish		
Portugal	May 11 – June 24, 2010	1,000	1.53	3.8	Landline and Cellular Telephone	Portuguese		
Romania	Jun 4 – Jul 24, 2010	1,000	1.41	3.7	Face-to-Face	Romanian, Moldovian		
Russia (5.1)	April 29 – Jun 16, 2010	2,000	1.62	2.8	Face-to-Face	Russian		
Russia (5.2)	Sep 18 - Nov 8, 2010	2,000	1.71	2.9	Face-to-Face	Russian		
Senegal	Apr 5 – Apr 15, 2010	1,000	1.66	4	Face-to-Face	French, Wolof		The sample has a larger than expected proportion of respondents who have reported completed secondary education when compared to the data used for post-stratification weighting. <sup>d</sup>
Sierra Leone	Oct 21 - Oct 30, 2010	1,000	1.29	3.5	Face-to-Face	English, Krio, Mende, Temne		
Singapore	May 15 – Jun 9, 2010	1,001	1.42	3.7	Face-to-Face	Chinese, English		
Slovakia	May 12 – Jun 16, 2010	1,007	1.4	3.6	Face-to-Face	Slovak		

**Gallup Worldwide Research Data Collected in 2010 (Wave 5)**

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Slovenia	May 24 – Jul 3, 2010	1,002	1.66	4	Landline Telephone	Slovene		
Somaliland region (5.2)	Jul 23 – Aug 3, 2010	1,000	1.16	3.3	Face-to-Face	Somali		
South Africa	Sep 11 – Oct 3, 2010	1,000	1.48	3.8	Face-to-face	Afrikaans, English, Sotho, Zulu, Xhosa		
South Korea	Jun 7 – Jul 16, 2010	1,000	1.29	3.5	Landline Telephone	Korean		
Spain	May 18 – May 28, 2010	1,005	1.64	4	Landline and Cellular Telephone	Spanish		
Sri Lanka	April 24 – May 21, 2010	1,030	1.68	4	Face-to-Face	Sinhalese, Tamil		
Sudan (5.2)	Jul 23 – Aug 4, 2010	1,000	1.81	4.2	Face-to-Face	Arabic, English		The Darfur region was excluded because of insecurity and fighting. The excluded areas represent approximately 15% of the population. The sample has a larger than expected proportion of respondents who have reported completed secondary education when compared to the data used for post-stratification weighting. <sup>d</sup>
Sweden	May 20 – Jul 4, 2010	1,002	1.49	3.8	Landline Telephone	Swedish		
Syria (5.2)	Sep 12 - Oct 30, 2010	1,006	1.23	3.4	Face-to-Face	Arabic		
Taiwan	Jul 30 – Aug 27, 2010	1,000	1.34	3.6	Landline Telephone	Chinese		
Tanzania	Jun 13 – Jun 23, 2010	1,000	1.63	4	Face-to-Face	English, Kiswahili		

## Gallup Worldwide Research Data Collected in 2010 (Wave 5)

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Thailand	Nov 4 – Dec 23, 2010	1,000	1.61	3.9	Face-to-Face	Thai		
Tunisia (5.2)	Sep 10 – Oct 25, 2010	1,026	1.16	3.3	Face-to-Face	Arabic		
Turkey	Jul 11 – Jul 27, 2010	1,000	1.24	3.5	Face-to-Face	Turkish		
Uganda	Mar 19 – Mar 30, 2010	1,000	1.45	3.7	Face-to-Face	Ateso, English, Luganda, Runyankole		Northern region was excluded due to presence of LRA rebels. The excluded area represents approximately 10% of the population. The sample has a larger than expected proportion of respondents who have reported completed secondary education when compared to the data used for post-stratification weighting. <sup>d</sup>
Ukraine	Jul 3 – Aug 8, 2010	1,000	1.61	3.9	Face-to-face	Russian, Ukrainian	Urban	
United Arab Emirates (5.2)	Sep 8 - Nov 30, 2010	1,029	1.39	3.6	Face-to-Face	Arabic		Includes Emiratis and Arab expatriates; non-Arabs were excluded. It's estimated that more than half of the adult population is excluded.
United Kingdom	May 18 – Jun 9, 2010	1,000	1.46	3.7	Landline Telephone	English		
United States	Jul 19 – Aug 15, 2010	1,005	1.59	3.9	Landline and Cellular Telephone	English		
Uruguay	Jul 4 – Aug 22, 2010	1,000	1.34	3.6	Face-to-Face	Spanish		
Venezuela	Jul 1 – Aug 31, 2010	1,000	1.71	4.1	Face-to-Face	Spanish		
Vietnam	Apr 6 – May 11, 2010	1,000	1.35	3.6	Face-to-Face	Vietnamese		

### Gallup Worldwide Research Data Collected in 2010 (Wave 5)

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Yemen (5.2)	Sep 22 – Oct 2, 2010	1,000	1.45	3.7	Face-to-Face	Arabic		Gender-matched sampling was used during the final stage of selection.
Zimbabwe	Mar 12 – Mar 25, 2010	1,000	1.19	3.38	Face-to-Face	English, Ndebele, Shona		

<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.

<sup>d</sup> Reasons for these differences could include household sampling, respondent sampling in the household, errors in self-reports of actual attainment, or dated population information.



## Appendix F: Country Data Set Details

### Gallup Worldwide Research Data Collected in 2011 (Wave 6)

Country	Data Collection Dates	Number of Interviews	Design Effect <sup>a</sup>	Margin of Error <sup>b</sup>	Mode of Interviewing	Languages	Over-sample <sup>c</sup>	Exclusions (Samples are Nationally Representative unless noted otherwise)
Egypt (6.1)	Mar 25 – Apr 2, 2011	1,005	1.28	3.5	Face-to-Face	Arabic		
Iran	Feb 26 – Mar 30, 2011	1,003	1.41	3.7	Landline Telephone	Farsi		
Iraq (6.1)	Feb 21 – Mar 3, 2011	1,000	1.39	3.7	Face-to-Face	Arabic, Kurdish		
Mauritania	Feb 11 – Feb 24, 2011	1,000	1.66	4	Face-to-face	Arabic, French, Poulaar, Wolof, Soninke		
Palestine (6.1)	Feb 18 – Feb 28, 2011	1,000	1.41	3.7	Face-to-Face	Arabic		The sample includes East Jerusalem.
Somaliland region	Mar 12 – Mar 21, 2011	1,000	1.18	3.4	Face-to-Face	Somali		
Sudan (6.1)	Mar 11 – Mar 20, 2011	1,000	1.68	4	Face-to-Face	Arabic, English		<p>The Darfur region was excluded due to insecurity and fighting. The excluded areas represent approximately 15% of the population.</p> <p>The sample has a larger than expected proportion of respondents that have reported completed secondary education when compared to the data used for post-stratification weighting.<sup>d</sup></p>
Yemen (6.1)	Feb 15 – Mar 3, 2011	1,000	1.48	3.8	Face-to-Face	Arabic		Gender-matched sampling was used during the final stage of selection.
Zimbabwe	Feb 26 - Mar 5, 2011	1,000	1.21	3.4	Face-to-Face	English, Ndebele, Shona		

<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.

<sup>d</sup> Reasons for these differences could include household sampling, respondent sampling in the household, errors in self-reports of actual attainment, or dated population information.