



D3 – Designs, Data, Decisions

“Global Public Opinion Research: Thinking about the Who, What, Where, and How”

**Presented at the 70th Annual Congress of the World Association of Public Opinion
Research,
July 15-17, 2017, Lisbon, Portugal.**

**By Dr. David A. Jodice (Founder & CEO) and
David Peng (Chief Statistician and VP for Research)**

Introduction

Globalization has been advancing over the past 60 years, accelerated by the collapse of most communist systems, the expansion of regional markets and free trade agreements, and the declining real costs of travel, transportation and communication. This expansion has fueled both the growth of the global market research sector and the concentration of the industry into several large research multinationals, such as Kantar/TNS, IPSOS/Synovate, Nielsen, and GfK.

While the market research industry has been able to expand and operate almost without limits, the same cannot be said for public opinion research in its fullest sense: collecting data on privately held opinions and behavior and presenting the results to the public. In fact, political opposition to public opinion polling is widespread and growing, putting survey practitioners who conduct polls (even if they are not releasing them) at serious risk to their business, their liberty and, in some cases, their personal safety. These are among the issues we will address in this paper.

There are four key dimensions to thinking about Global Public Opinion Surveys: **WHO, WHAT, WHERE, and HOW.**

With regard to the **WHO** question, that the nation-state is likely to remain the focus of policy, research, and opinion polling for the foreseeable future. Two important considerations are:

- Which countries must be included in any global survey, and which countries or territories could be excluded without undermining the global coverage?
- What populations must be included in order to have representative samples of each country or territory in our design and what populations or sub-populations can we exclude?

The **WHAT** question also falls into two parts:

- What questions do we *want* to ask?
- What questions *can* we ask?

To determine what we should be asking, we need to look at three dimensions of the acceptability and relevance of opinion polling:

- Do the questions have intrinsic value to the funding organization(s)?
- Will the results be seen as relevant and valuable by those who will consume it (government, academe, the media (old and new) and the general public)?
- Will the questionnaire be accepted by and be comprehensible to a diversity of respondents?

WHERE should we conduct a global survey of public opinion? The environment for opinion polling varies substantially by country, and multiple indices are explored to identify countries with high ratings of freedom to conduct research.

Then, the major design choices relate to the sampling methodologies are:

- Geographic coverage by countries
- Sample sizes by countries
- Sample design, particularly probability vs. non-probability sampling
- Data collection method(s), particularly the choices between traditional F2F, F2F with tablets, CATI within country, CATI across borders, online panels and new media such as Facebook

The **HOW** is addressed at the end of this paper in a 10 Step Plan.

Reinventing the Wheel?

We recognize that a large number of global and/or regional surveys have been conducted over a long-period of time by many prestigious organizations. These include but are not limited to *The World Values Survey*, the Pew Research Center, the *Gallup World Poll*, *The Voice of the People Survey* and *The End of the Year Survey* both of which have been conducted by the Gallup International Association, The European Barometer and multiple regional barometers, including the Eurasia Barometer, the Central Asia Barometer, the Asia Barometer, the Arab Barometer, the Africa Barometer and the Latinobarometro. The founders of the Latinobarometro have also created a Global Barometer to merge the results of many of the regional survey programs.¹

Many of the survey results are available from the original collector or from social science archives (ICPSR, at the University of Michigan, The Roper Center for Public Opinion, at Cornell University, the Zentralarchiv in Cologne, Germany).

Of course there are many issues in merging results from multiple sources including questionnaire content, question wording, response categories, the mix of quantitative and qualitative questions, demographics, sampling procedures, quality control including but not limited to field work, actual data methods, etc.

Thinking about Global Public Opinion – WHO

There are really two dimensions to the **WHO** question. We agree that the nation-state is likely to remain the focus of policy, research, and opinion polling for the foreseeable future. The reasons are multiple, including how research is funded and how research is consumed.

- Which countries must be included in any global survey, and which countries or territories could be excluded without undermining the global coverage and utility of data and conclusions?
- What populations must be included in order to have representative samples of each country in our design, and what populations or sub-populations can we exclude?

For the moment, we are leaving aside the newer idea of true global polling – where the population of the entire planet is the sampling frame and data collection is organized around larger geographic areas than the nation-state and by linguistic and cultural zones. Changing the

¹ The Gallup International Association was founded in 1947 by George Gallup Sr. It is not affiliated with the Gallup Organization USA.

design from a collection of surveys of nation-states ranging across the globe to one global survey does not eliminate the need to define coverage, draw samples, agree on questionnaire content, and implement field work. And, obtaining funding for that type of global poll would be much more difficult than the current practice of country-by-country research.²

Most survey practitioners think of public opinion research as the collection of data in a systematic, replicable, and explainable way on the private opinions of the general population, generally representative of one or more nation-states. We expect this to continue for at least four reasons:

- The structure of the demand for and supply of market research (which often provides the continuing infrastructure on which opinion research operates, particularly in less developed countries)
- The organization of national governments and international bodies, which are the major funders of opinion polling and closely related research on media usage & attitude and development
- Media audience measurement and analysis, which is organized around countries, are in themselves regulatory environments
- The structure of the academic community, which places great emphasis on subject matter expertise organized around countries, languages, and cultures³

In addition to the issue of coverage by nation and/or cultural groupings, we have the concern of the exclusion of substantial sub-groups due to design and implementation issues (they cannot be reached by telephone, for example) or by their refusal to participate, even in well-designed and well-funded F2F surveys, with higher than the average (3-5) contact attempts.

As Doug Miller observed, the

“problem of representation relates to the under-representation of marginal groups within countries surveyed, especially the very poor. This is due to a number of factors including methodologies (for example, those that rely on mobile telephone ownership or especially Internet connectivity); endemically high refusal rates among those with no

² With a global population of approximately 7,255,000,000 spread over 223 countries and territories, 37% are living in the top ten countries by population: China, India, USA, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria, Russia and Japan. To be credible and interesting outside of the survey countries, any global survey would have to include a wider array of nations. The survey of 100 top nations in terms of population which we propose below would cover 93% of the global population.

³ D3 conducted two series of opinion polls in conflict environments (Afghanistan and Iraq) for ABC News’ award-winning “Where Things Stand” series. While the surveys were very well received and used across a variety of media platforms within and outside of ABC News, this was a relatively short-term effort reflecting the then high level of US public attention to Afghanistan and Iraq. This research was co-sponsored by the BBC, *USA Today* and ARD (a leading German TV channel).

formal education; and the infrequent use of plain-language questionnaires where the level of comprehension is appropriate for ultra-poor respondents.”

Even with the best efforts by our field partners in Africa, South Asia, and the Middle East, we know that many of our surveys under-represent the poorest and least-educated portion of the national populations. This is due largely, but not entirely, to differential refusal rates across household or respondent socio-economic status and possible over-statement of educational achievement by those who choose to participate in our F2F and CATI surveys.

While the expansion of mobile telephone ownership gives us greater access to both rural and deep rural areas at much lower cost, it does not solve the problem of differential refusal rates. In addition, the under-representation of low status groups is more likely to occur when we use true probability sampling through respondent selection. The use of a mixed methodology (random selection of sampling points and households followed by quota selection of respondents) will reduce the demographic bias (and increase field costs) but has implications for the interpretation of the results, especially any ability to provide sampling error with point estimates. Any survey which claims to be a global opinion poll needs to address the inclusion of the poorest populations.⁴

Thinking about Global Public Opinion – WHAT

The **WHAT** question falls into two parts:

- What questions do we *want* to ask?
- What questions *can* we ask?

To determine what we should be asking, we need to look at three dimensions of the acceptability and relevance of opinion polling:

- Do the questions have intrinsic value to the funding organization(s)?
- Will the results be seen as relevant and valuable by those who will consume it (government, academe, the media (old and new) and the general public)?
- Will the questionnaire appeal to and be comprehended by a diversity of respondents?

The first group of questions we should ask would be drawn from the long-standing practice of media, academic, and foundation polling on such topics as key issues of the day; right/wrong direction for the country; top problems facing the country; and economic outlook for the respondent, the family, and the country as a whole. Of course, these questions show a Western

⁴ For more on these topics see [Hard to Survey Populations](#), edited by Roger Tourangeau, Brad Edwards, Timothy P. Johnson, Kirk M. Wolter and Nancy Bates (Cambridge University Press, 2014).

bias, but so does the entire enterprise of scientifically measuring private opinions and reporting the aggregate results in various public formats.

The second group of questions we should ask would be how information and insights are distributed to a global audience (TV, radio, the internet, social media) and how the use of these media and exposure to their messages is trending over time.

The third group of questions would be modules specific to regions or individual countries. Recent examples would be public health concerns such as SARS and Ebola, a concern to countries where the diseases originated and to those countries where they might spread. Other countries would have modules that address issues of importance to their own society – increasing the appeal of the survey in specific countries or regions.

The fourth group of questions would be demographics, defining the sampled population and shed some light on their awareness of issues: gender, age or age group, education (categories or years of formal education, residence (urban/rural, geographic areas such as region/state/province/governorate/oblast, etc.), household size and composition, religious affiliation, and ethnic group or tribe. Other key demographics would be useful for constructing SES indicators and marketing the products: appliance ownership, ownership of technology (computers, mobile phones, tablets), and ownership of motor vehicles. While household income is a problematic question, we could certainly ask people to rate themselves or their household on a generic SES scale. We would also ask respondents if they would be willing to join a panel and participate in one or more future surveys (collecting mobile and landline numbers and email addresses).

The fifth group of questions is much more problematic, both on the political side (voting, political orientation, rating the performance of political leaders, elected officials and governments, instability, terrorism and violence) and the social side (marriage and divorce, women's rights, birth control, sexual behavior, and gay and lesbian rights). These questions could face opposition by governments in certain countries, by field teams, and by the respondents themselves.

These possible and very sensitive topics lead to our next major issue: what questions *can* we ask? This issue also falls into two dimensions:

- Comprehension of the questions by the respondents
- Governmental or non-governmental opposition to the surveys or certain topics and questions

The first issue is long-standing and common. As a profession of well-educated people, who supply information and insights to a similarly well-educated client group, pollsters often write questions that are much too difficult for the average person to understand or they simply lack,

through no fault of their own, the information needed to shape an opinion. Of course, in most cases they want to respond, so opinions are voiced and duly recorded. It's our responsibility, working with clients and funding organizations, to shape questions that fit the general public's level of knowledge across a range of countries and levels of development and across educational achievement within each country.⁵

As we will document below, government opposition to polling (and other forms of political expression) is on the rise in many countries. Two of the three developments that gave us much optimism about polling across the globe (economic globalization, the collapse of the Soviet Union, and the Arab Spring) have trended in the opposite direction, at least in terms of government acceptance of polling without censorship of questionnaire content and limits on public distribution. While polling remains an open and free activity in North America, the European Union, much of Latin America, and countries of English-settlement, freedom for opinion pollsters is on the decline in portions of the former Soviet Union (particularly Russia and Belarus), South Asia, Central Asia, the Middle East, and Africa. And, if polling is not censored by government, the work of pollsters and their field teams can be threatened by terrorists and insurgents, as D3 and its research partners have experienced in countries such as Afghanistan, Iraq, and Pakistan.

D3 has experienced both ends of the censorship continuum in Afghanistan and China. In Afghanistan, we successfully negotiated in 2005 with the national government to conduct surveys in ways that would be culturally-sensitive but not subject to any prior review of the questionnaire or post field review of the data. Of course, many of our surveys are conducted in support of the Western aid missions, funded in particular by the US and the UK governments, as well as the United Nations and the World Bank. The Afghan leadership has, in general, seen the benefit of the programs and the research. The fact that our Afghan subsidiary (ACSOR Surveys) is staffed 99% with Afghans is another factor in building that relationship.

The same cannot be said for China, where D3's work has been subject to a censorship regime initiated in 1999 by the National Bureau of Statistics. While Chinese research firms enjoy a general approval of all market research studies (and typically file a quarterly activity report with the NBS), there is a requirement for prior review of any public opinion survey questionnaire conducted by Chinese firms, with or without foreign sponsorship. Key topics typically banned from surveys in China are opinions of the Communist Party; attitudes toward ethnic minorities, military, and foreign policy; and rating government performance. Of course, public opinion surveys are conducted by or on behalf of the Chinese government, and the results are sometimes in the public domain. Any global survey should include China in its sample and would need

⁵ Of course we can filter the questionnaire by respondent education and/or their willingness and ability to respond to certain topics and then follow-up with modules of questions.

some cooperation from the Chinese government or a government approved institution in order to conduct F2F or CATI surveys within China.

Thinking about Global Public Opinion – WHERE

The major design questions when conducting a global survey of public opinion are:

- Coverage by countries
- Sample sizes by countries
- Sample design, particularly probability vs. and non-probability sampling
- Data collection, particularly the choices between F2F with or without tablets, CATI (within country and cross-border) and new media such as Facebook (1.23 billion daily users and almost 2 billion monthly active users as of February 2017)

In an ideal world, funding would be available from a variety of sources to conduct surveys on the ground in each country or territory and sustain the effort over a multi-year period. Of course, samples of 1,000 persons (18+) conducted in 223 countries and territories would result in a sample of 223,000 respondents with a very high cost. And, in some countries (based less on their population size but more on their internal diversity) nationally-representative samples of 1,000 persons would be inadequate. So, we need to think about the countries we could cover and how large the sample sizes should be.

There are a number of substantial efforts already underway to measure public opinion on a regional or global basis that definitely provide examples of how to fund, institutionally structure, field and report on a global survey. In addition to Gallup's World Poll, the Pew Research Center's Global Attitudes Project, the EuroBarometer, and the World Values Survey, there are five regional surveys of great interest: the Americas Barometer,⁶ the Asia Barometer,⁷ the Central Asia Barometer,⁸ and the AfroBarometer.⁹

⁶ The Americas Barometer, administered by Vanderbilt University, USA, has been surveying from 2004-2014 and covers 26 countries in both North and South America. These countries are: Argentina, Bahamas, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Suriname, Trinidad & Tobago, United States, Uruguay and Venezuela. We also reference the Santiago, Chile based Latinobarometro, covers 18 countries across the region. This team is also leading the Global Barometer, a merging of the results of regional barometers.

⁷ The AsiaBarometer operated by the University of Niigata Prefecture, Japan, to the best of our knowledge, only during the period 2003-2007 and covered Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines and Thailand

⁸ The Central Asia Barometer has been conducted for several years by M-Vector, based in Bishkek, with field (F2F and CATI) operations in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.

⁹ The AfroBarometer, growing steadily in country coverage from 1998 to 2015, is led by Michigan State University and Democracy in Africa Research Unit (DARU), Center for Social Science Research, the University of Cape Town

While we do not expect to be able to add all our questions onto existing regional and global surveys, they do serve as a model for thinking about how we would organize the research and actually conduct the surveys. If we select the top 100 countries by population, at this point solely for purposes of discussion and cost estimation, the Top 100 Global Opinion Survey would be distributed as follows and would cover 93% of the global population, according to the US Bureau of the Census (Table 1).

However, the environment for opinion polling varies substantially by country. As Freedom House has clearly indicated in its highly-respected annual reports, freedom is on the decline. In 2014 compared to the previous year, 54% of the countries rated experienced a decline in freedoms (defined in terms of two dimensions: political liberty and civil rights), 40% improved, and 6% were unchanged. In the 2014 report (rating countries for 2013) 45% of the countries were rated as free, 30% as partly free and 25% as not free at all. Based on population sizes, 40% of the global population lived in countries rated free, 25% in partly free countries and 35% in countries where are not free at all.¹⁰

Thinking about the environment for polling in the Top 100, a number of factors can affect our ability to draw a probability sample and ask the full range of desirable questions. In most cases, sensitive (or censored) questions tend to focus on topics that are perceived by repressive governments to be critical of their performance or a threat: leader ratings, vote intentions, party identification, government performance indicators, and, to a lesser extent, religious affiliation and social issues. A wide range of questions can be asked of the citizens in each of the Top 100, but it is often not possible to ask the most sensitive questions using traditional means: F2F or in-country CATI surveys.

in cooperation with local African research partners. Field work for Round 6 began in March 2015 and will run for about two years. Round 5 was fielded in 2011-13 and is the largest in terms of number of countries covered (35): Algeria, Benin, Botswana, Burkino Faso, Burundi, Cameroon, Cape Verde, Cote D'Ivoire, Egypt, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe.

¹⁰ For more on these influential rates see Freedom House, *Freedom in the World, 2014*. www.freedomhouse.org.

**Table 1:
Countries in the Global Opinion Survey (Top 100 by Population)**

Rank	Country	Population	Rank	Country	Population	Rank	Country	Population
1	China	1,343,239,923	35	Canada	34,300,083	68	Cambodia	14,952,665
2	India	1,205,073,612	36	Sudan	34,206,710	69	Guatemala	14,099,032
3	United States	313,847,465	37	Uganda	33,640,833	70	Zambia	13,817,479
4	Indonesia	248,645,008	38	Morocco	32,309,239	71	Senegal	12,969,606
5	Brazil	199,321,413	39	Iraq	31,129,225	72	Zimbabwe	12,619,600
6	Pakistan	190,291,129	40	Afghanistan	30,419,928	73	Rwanda	11,689,696
7	Nigeria	170,123,740	41	Nepal	29,890,686	74	Cuba	11,075,244
8	Bangladesh	161,083,804	42	Peru	29,549,517	75	Chad	10,975,648
9	Russia	142,517,670	43	Malaysia	29,179,952	76	Guinea	10,884,958
10	Japan	127,368,088	44	Uzbekistan	28,394,180	77	Portugal	10,781,459
11	Mexico	114,975,406	45	Venezuela	28,047,938	78	Greece	10,767,827
12	Philippines	103,775,002	46	Saudi Arabia	26,534,504	79	Tunisia	10,732,900
13	Vietnam	91,519,289	47	Yemen	24,771,809	80	South Sudan	10,625,176
14	Ethiopia	91,195,675	48	Ghana	24,652,402	81	Burundi	10,557,259
15	Egypt	83,688,164	49	Korea, North	24,589,122	82	Belgium	10,438,353
16	Germany	81,305,856	50	Mozambique	23,515,934	83	Bolivia	10,290,003
17	Turkey	79,749,461	51	Taiwan	23,234,936	84	Czech Rep	10,177,300
18	Iran	78,868,711	52	Syria	22,530,746	85	Dominican Rep	10,088,598
19	Congo, Dem Rep	73,599,190	53	Australia	22,015,576	86	Somalia	10,085,638
20	Thailand	67,091,089	54	Madagascar	22,005,222	87	Hungary	9,958,453
21	France	65,630,692	55	Cote d'Ivoire	21,952,093	88	Haiti	9,801,664
22	United Kingdom	63,047,162	56	Romania	21,848,504	89	Belarus	9,643,566
23	Italy	61,261,254	57	Sri Lanka	21,481,334	90	Benin	9,598,787
24	Burma	54,584,650	58	Cameroon	20,129,878	91	Azerbaijan	9,493,600
25	Korea, South	48,860,500	59	Angola	18,056,072	92	Sweden	9,103,788
26	South Africa	48,810,427	60	Kazakhstan	17,522,010	93	Honduras	8,296,693
27	Spain	47,042,984	61	Burkina Faso	17,275,115	94	Austria	8,219,743
28	Tanzania	46,912,768	62	Chile	17,067,369	95	Switzerland	7,925,517
29	Colombia	45,239,079	63	Netherlands	16,730,632	96	Tajikistan	7,768,385
30	Ukraine	44,854,065	64	Niger	16,344,687	97	Israel	7,590,758
31	Kenya	43,013,341	65	Malawi	16,323,044	98	Serbia	7,276,604
32	Argentina	42,192,494	66	Mali	15,494,466	99	Hong Kong	7,153,519
33	Poland	38,415,284	67	Ecuador	15,223,680	100	Bulgaria	7,037,935
34	Algeria	37,367,226						

Table 2:
A Subjective Rating of the Environment for Public Opinion Polling
in the Top 100 Countries, Ranked by Population

Rank	Country	D3 Score	Rank	Country	D3 Score	Rank	Country	D3 Score
1	China	2	35	Canada	3	68	Cambodia	3
2	India	3	36	Sudan	1	69	Guatemala	3
3	United States	3	37	Uganda	2	70	Zambia	3
4	Indonesia	3	38	Morocco	2	71	Senegal	3
5	Brazil	3	39	Iraq	2	72	Zimbabwe	1
6	Pakistan	3	40	Afghanistan	2	73	Rwanda	2
7	Nigeria	3	41	Nepal	2	74	Cuba	1
8	Bangladesh	3	42	Peru	2	75	Chad	2
9	Russia	2	43	Malaysia	3	76	Guinea	2
10	Japan	3	44	Uzbekistan	1	77	Portugal	3
11	Mexico	3	45	Venezuela	1	78	Greece	3
12	Philippines	3	46	Saudi Arabia	1	79	Tunisia	3
13	Vietnam	1	47	Yemen	2	80	South Sudan	2
14	Ethiopia	2	48	Ghana	3	81	Burundi	2
15	Egypt	2	49	Korea, North	1	82	Belgium	3
16	Germany	3	50	Mozambique	2	83	Bolivia	3
17	Turkey	2	51	Taiwan	3	84	Czech Rep	3
18	Iran	1	52	Syria	2	85	Dominican Rep	3
19	Congo, Dem Rep	2	53	Australia	3	86	Somalia	2
20	Thailand	3	54	Madagascar	3	87	Hungary	3
21	France	3	55	Cote d'Ivoire	3	88	Haiti	3
22	United Kingdom	3	56	Romania	3	89	Belarus	1
23	Italy	3	57	Sri Lanka	3	90	Benin	2
24	Burma	2	58	Cameroon	3	91	Azerbaijan	3
25	Korea, South	3	59	Angola	3	92	Sweden	3
26	South Africa	3	60	Kazakhstan	2	93	Honduras	3
27	Spain	3	61	Burkina Faso	3	94	Austria	3
28	Tanzania	3	62	Chile	3	95	Switzerland	3
29	Colombia	3	63	Netherlands	3	96	Tajikistan	2
30	Ukraine	3	64	Niger	3	97	Israel	3
31	Kenya	2	65	Malawi	3	98	Serbia	3
32	Argentina	3	66	Mali	2	99	Hong Kong	2
33	Poland	3	67	Ecuador	3	100	Bulgaria	3
34	Algeria	2	35	Canada	3			

D3 has developed a subjective rating of each of the 100 countries in terms of the degree of polling freedom (Table 2). D3 has experience conducting surveys in 71 of the 100 top countries. Key factors in this subjective rating are official repression of polling (from the political/state security or religious institutions), instability (insurgency and terrorism), and social limit on participation (for example, access to women in Muslim countries can be limited).

- Countries rated “3” have no political or other limits on polling. Of course, among this larger group, many of the industrial democracies have very low cooperation rates, which increase the costs of research (hence the surge of online panels in North America and Western Europe) and raise questions about representativeness.
- The relatively few countries (still significant at 10) rated “1” prevent opinion surveys within the country (Belarus, Cuba, Iran, North Korea, Saudi Arabia, Sudan, Uzbekistan, Venezuela, Vietnam, and Zimbabwe.)
- Countries with a rating of “2” provide a blend of limits and opportunities. In some cases, it is worthwhile to conduct surveys in those environments (for example Kenya), where we can draw probability samples and ask wide-ranging questions. However, there are informal constraints to what can be asked about internal politics, and there is the rising threat of terrorism, which reduces cooperation rates and threatens both the interviewers and the respondents.

Multiple Ratings of Freedom by Key Institutions

As many prestigious institutions develop indices of freedom (political, speech/expression, civil rights, economics), D3 has chosen to profile our Top 100 countries by those created by Freedom House,¹¹ the CATO Institute,¹² and the Heritage Foundation¹³ (Table 3). The CATO Institute and Freedom House present multiple indices, but we are using this smaller set to explore the concept of rating the environments for public opinion polling.

- For the CATO Institute and the Heritage Foundation, the higher the score, the more free the country is and, for our purposes, more supportive of political polling. For Freedom House, the lower scores on their 1-7 scale are indicative of greater freedom.
- The CATO Institute’s four indicators (Personal Freedom, Economic Freedom, Freedom Index, and a Democracy Index) are very consistent. Their correlations are in the range of .58 to .95.
- Freedom House’s two indicators (Political Rights and Civil Liberties) are correlated at the .94 level among our Top 100 countries.
- The Heritage Foundation’s one indicator (Economic Freedom) correlates closely with the CATO’s Institute Economic Freedom index (.87) and their Freedom index (.78), but it is

¹¹ Arch Puddington and Tyler Roylance, *Freedom in the World 2016: Anxious Dictators, Wavering Democracies: Global Freedom Under Pressure*, Freedom House, 2016.

¹² Ian Vasques and Tanja Porcnik, *The Human Freedom Index, 2016: A Global Measurement of Personal, Civil and Economic Freedom*, The CATO Institute, 2016.

¹³ Terry Miller and Anthony Kim, *2017 Index of Economic Freedom*, The Heritage Foundation, 2017.

less correlated with D3's subjective index of polling environments and the other institutes' political, civil, or democracy indicators.

- The subjective index applied by D3 correlates most strongly with Freedom House's Political Rights (-.71), Civil Rights (-.67), and their Aggregate Score (.71); somewhat less with the CATO Institute's Personal Freedom (.53), Freedom Index (.55) and Democracy Index (.59); and less so with the CATO Institute's Economic Freedom Index (.42) and the Heritage Foundation's Economic Freedom Index (.48).

In Table 4 we rank the countries from high to low according to the CATO Institute's Freedom Index. We profile them with population size, share of global population, and cumulative share of the global population as we descend the Freedom index from high to low. If we were interested only in countries with a score of 7 or more, we would be limited to 17% of the global population. If we accepted countries with a score of 6 or more, the share rises to 57% and to 87% if we accepted countries with ratings of 5 or higher.

The 19 countries (among our Top 100) with at least 1% of the population (shown in red in Table 4) cover a wide range of the CATO Institute's Freedom Index, from a low of 4.63 for Iran (ranked 97th from the top) to a high of 8.49 for Germany (ranked 8th from the top). Among the nine countries that were not rated by the CATO Institute, D3 has conducted surveys in surveys in four of them: Afghanistan, Iraq, South Sudan, and Uzbekistan.¹⁴ We are aware of survey firms working in Belarus, Cuba, Somalia, and Sudan, despite local government restrictions, violence, and US or UN sanctions. We are unaware of any polling conducted within or into North Korea.

Table 3
Freedom Indicators for the Top 100 Countries, Ranked by Population
(Empty Cells Indicate Non-Coded Countries)

Rank	Country	Population	CATO Institute Freedom Index	Heritage Foundation Freedom Index	Freedom House Political Rights	Freedom House Civil Liberties
1	China	1,343,239,923	5.6	57.4	7.00	6.00
2	India	1,205,073,612	6.8	52.6	2.00	3.00
3	USA	313,847,465	8.3	75.1	1.00	1.00
4	Indonesia	248,645,008	7.0	61.9	2.00	4.00
5	Brazil	199,321,413	6.8	52.9	2.00	2.00
6	Pakistan	190,291,129	5.3	52.8	4.00	5.00
7	Nigeria	170,123,740	5.8	57.1	4.00	5.00
8	Bangladesh	161,083,804	5.8	55	4.00	4.00
9	Russia	142,517,670	6.4	57.1	6.00	6.00
10	Japan	127,368,088	8.0	69.6	1.00	1.00
11	Mexico	114,975,406	6.9	63.6	3.00	3.00
12	Philippines	103,775,002	6.5	65.6	3.00	3.00

¹⁴ For our work in Afghanistan and Iraq, D3 tracks our ability to reach the sub-provincial levels of each country on a monthly basis. There are substantial intra-national differences in both countries in terms of political violence, our ability to reach both men and women for interviews and our ability to reach localities because of weather.

13	Vietnam	91,519,289	6.1	52.4	7.00	5.00
14	Ethiopia	91,195,675	5.5	52.7	7.00	6.00
15	Egypt	83,688,164	5.3	52.6	6.00	5.00
16	Germany	81,305,856	8.5	73.8	1.00	1.00
17	Turkey	79,749,461	7.0	65.2	3.00	4.00
18	Iran	78,868,711	4.6	50.5	6.00	6.00
19	Congo, Dem Rep	73,599,190	5.1	56.4	6.00	6.00
20	Thailand	67,091,089	6.5	66.2	6.00	5.00
21	France	65,630,692	8.1	63.3	1.00	1.00
22	United Kingdom	63,047,162	8.6	76.4	1.00	1.00
23	Italy	61,261,254	8.1	62.5	1.00	1.00
24	Burma	54,584,650	4.9	52.5	6.00	5.00
25	Korea, South	48,860,500	8.0	74.3	2.00	2.00
26	South Africa	48,810,427	6.9	62.3	2.00	2.00
27	Spain	47,042,984	8.0	63.6	1.00	1.00
28	Tanzania	46,912,768	6.6	58.6	3.00	4.00
29	Colombia	45,239,079	6.4	69.7	3.00	4.00
30	Ukraine	44,854,065	6.4	48.1	3.00	3.00
31	Kenya	43,013,341	6.8	53.5	4.00	4.00
32	Argentina	42,192,494	6.5	50.4	2.00	2.00
33	Poland	38,415,284	8.3	68.3	1.00	1.00
34	Algeria	37,367,226	5.0	46.5	6.00	5.00
35	Canada	34,300,083	8.61	78.5	1.00	1.00
36	Sudan	34,206,710		48.8	7.00	7.00
37	Uganda	33,640,833	6.54	60.9	6.00	5.00
38	Morocco	32,309,239	6.09	61.5	5.00	4.00
39	Iraq	31,129,225			5.00	6.00
40	Afghanistan	30,419,928		48.9	6.00	6.00
41	Nepal	29,890,686	6.79	55.1	3.00	4.00
42	Peru	29,549,517	7.36	68.9	2.00	3.00
43	Malaysia	29,179,952	6.39	73.8	4.00	4.00
44	Uzbekistan	28,394,180		52.3	7.00	7.00
45	Venezuela	28,047,938	4.91	27	5.00	5.00
46	Saudi Arabia	26,534,504	5.31	64.4	7.00	7.00
47	Yemen	24,771,809	4.56		7.00	6.00
48	Ghana	24,652,402	7.25	56.2	1.00	2.00
49	Korea, North	24,589,122		4.9	7.00	7.00
50	Mozambique	23,515,934	6.52	49.9	4.00	4.00
51	Taiwan	23,234,936	8.18	76.5	1.00	2.00
52	Syria	22,530,746	4.72		7.00	7.00
53	Australia	22,015,576	8.61	81	1.00	1.00
54	Madagascar	22,005,222	7.05	57.4	3.00	4.00
55	Cote d'Ivoire	21,952,093	6.42	63	4.00	4.00
56	Romania	21,848,504	8.06	69.7	2.00	2.00
57	Sri Lanka	21,481,334	6.10	57.4	4.00	4.00
58	Cameroon	20,129,878	6.13	51.8	6.00	6.00
59	Angola	18,056,072	5.19	48.5	6.00	6.00

60	Kazakhstan	17,522,010	6.64	69	6.00	5.00
61	Burkina Faso	17,275,115	6.75	59.6	4.00	3.00
62	Chile	17,067,369	8.08	76.5	1.00	1.00
63	Netherlands	16,730,632	8.54	75.8	1.00	1.00
64	Niger	16,344,687	6.04	50.8	3.00	4.00
65	Malawi	16,323,044	6.51	52.2	3.00	3.00
66	Mali	15,494,466	6.21	58.6	5.00	4.00
67	Ecuador	15,223,680	6.60	49.3	3.00	3.00
68	Cambodia	14,952,665	7.08	59.5	6.00	5.00
69	Guatemala	14,099,032	7.01	63	4.00	4.00
70	Zambia	13,817,479	6.52	55.8	3.00	4.00
71	Senegal	12,969,606	6.41	55.9	2.00	2.00
72	Zimbabwe	12,619,600	5.24	44	5.00	5.00
73	Rwanda	11,689,696	6.78	67.6	6.00	6.00
74	Cuba	11,075,244		33.9	7.00	6.00
75	Chad	10,975,648	5.28	49	7.00	6.00
76	Guinea	10,884,958	5.22	47.6	5.00	5.00
77	Portugal	10,781,459	8.32	62.6	1.00	1.00
78	Greece	10,767,827	7.47	55	2.00	2.00
79	Tunisia	10,732,900	6.23	55.7	1.00	3.00
80	South Sudan	10,625,176			7.00	6.00
81	Burundi	10,557,259	6.26	53.2	7.00	6.00
82	Belgium	10,438,353	8.38	67.8	1.00	1.00
83	Bolivia	10,290,003	6.98	47.7	3.00	3.00
84	Czech Rep	10,177,300	8.34	73.3	1.00	1.00
85	Dominican Rep	10,088,598	7.16	62.9	3.00	3.00
86	Somalia	10,085,638			7.00	7.00
87	Hungary	9,958,453	7.92	65.8	2.00	2.00
88	Haiti	9,801,664	7.17	49.6	5.00	5.00
89	Belarus	9,643,566		58.6	7.00	6.00
90	Benin	9,598,787	6.82	59.2	2.00	2.00
91	Azerbaijan	9,493,600	6.12	63.6	7.00	6.00
92	Sweden	9,103,788	8.42	74.9	1.00	1.00
93	Honduras	8,296,693	6.53	58.8	4.00	4.00
94	Austria	8,219,743	8.53	72.3	1.00	1.00
95	Switzerland	7,925,517	8.83	81.5	1.00	1.00
96	Tajikistan	7,768,385	6.80	58.2	7.00	6.00
97	Israel	7,590,758	7.37	69.7	1.00	2.00
98	Serbia	7,276,604	7.02	58.9	2.00	2.00
99	Hong Kong	7,153,519	9.06	89.8	5.00	2.00
100	Bulgaria	7,037,935	7.86	67.9	2.00	2.00

Table 4

**Freedom and Polling in the Top 100 Countries
(Ranked by the CATO Institute Freedom Index)¹⁵**

Population Rank	Country	Population (2014/5)	CATO Institute - Freedom Index	% of World Population	Cumulative Population % with CATO Ranking
99	Hong Kong	7,153,519	9.06	0.10%	0.10%
95	Switzerland	7,925,517	8.83	0.11%	0.21%
22	United Kingdom	63,047,162	8.61	0.87%	1.08%
35	Canada	34,300,083	8.61	0.47%	1.55%
53	Australia	22,015,576	8.61	0.30%	1.85%
63	Netherlands	16,730,632	8.54	0.23%	2.08%
94	Austria	8,219,743	8.53	0.11%	2.20%
16	Germany	81,305,856	8.49	1.12%	3.32%
92	Sweden	9,103,788	8.42	0.13%	3.44%
82	Belgium	10,438,353	8.38	0.14%	3.59%
84	Czech Rep	10,177,300	8.34	0.14%	3.73%
77	Portugal	10,781,459	8.32	0.15%	3.88%
33	Poland	38,415,284	8.30	0.53%	4.41%
3	USA	313,847,465	8.27	4.33%	8.73%
51	Taiwan	23,234,936	8.18	0.32%	9.05%
23	Italy	61,261,254	8.09	0.84%	9.90%
62	Chile	17,067,369	8.08	0.24%	10.13%
56	Romania	21,848,504	8.06	0.30%	10.43%
21	France	65,630,692	8.05	0.90%	11.34%
10	Japan	127,368,088	8.04	1.76%	13.09%
25	Korea, South	48,860,500	7.98	0.67%	13.77%
27	Spain	47,042,984	7.95	0.65%	14.41%
87	Hungary	9,958,453	7.92	0.14%	14.55%
100	Bulgaria	7,037,935	7.86	0.10%	14.65%
78	Greece	10,767,827	7.47	0.15%	14.80%
97	Israel	7,590,758	7.37	0.10%	14.90%
42	Peru	29,549,517	7.36	0.41%	15.31%
48	Ghana	24,652,402	7.25	0.34%	15.65%
88	Haiti	9,801,664	7.17	0.14%	15.78%
85	Dominican Rep	10,088,598	7.16	0.14%	15.92%
68	Cambodia	14,952,665	7.08	0.21%	16.13%
54	Madagascar	22,005,222	7.05	0.30%	16.43%
98	Serbia	7,276,604	7.02	0.10%	16.53%
69	Guatemala	14,099,032	7.01	0.19%	16.73%
83	Bolivia	10,290,003	6.98	0.14%	16.87%
4	Indonesia	248,645,008	6.97	3.43%	20.30%
17	Turkey	79,749,461	6.96	1.10%	21.40%

¹⁵ For the nine countries which were not coded by the CATO Institute (empty cells in Table 3) we coded them with a low score of 1.00, resulting in their ranking at the bottom of the list.

26	South Africa	48,810,427	6.92	0.67%	22.07%
11	Mexico	114,975,406	6.85	1.58%	23.65%
90	Benin	9,598,787	6.82	0.13%	23.79%
5	Brazil	199,321,413	6.81	2.75%	26.53%
96	Tajikistan	7,768,385	6.80	0.11%	26.64%
41	Nepal	29,890,686	6.79	0.41%	27.05%
73	Rwanda	11,689,696	6.78	0.16%	27.21%
2	India	1,205,073,612	6.76	16.61%	43.82%
31	Kenya	43,013,341	6.75	0.59%	44.42%
61	Burkina Faso	17,275,115	6.75	0.24%	44.65%
60	Kazakhstan	17,522,010	6.64	0.24%	44.90%
67	Ecuador	15,223,680	6.60	0.21%	45.11%
28	Tanzania	46,912,768	6.57	0.65%	45.75%
37	Uganda	33,640,833	6.54	0.46%	46.22%
12	Philippines	103,775,002	6.53	1.43%	47.65%
93	Honduras	8,296,693	6.53	0.11%	47.76%
32	Argentina	42,192,494	6.52	0.58%	48.34%
50	Mozambique	23,515,934	6.52	0.32%	48.67%
70	Zambia	13,817,479	6.52	0.19%	48.86%
65	Malawi	16,323,044	6.51	0.22%	49.08%
20	Thailand	67,091,089	6.49	0.92%	50.01%
55	Cote d'Ivoire	21,952,093	6.42	0.30%	50.31%
29	Colombia	45,239,079	6.41	0.62%	50.93%
30	Ukraine	44,854,065	6.41	0.62%	51.55%
71	Senegal	12,969,606	6.41	0.18%	51.73%
9	Russia	142,517,670	6.39	1.96%	53.69%
43	Malaysia	29,179,952	6.39	0.40%	54.10%
81	Burundi	10,557,259	6.26	0.15%	54.24%
79	Tunisia	10,732,900	6.23	0.15%	54.39%
66	Mali	15,494,466	6.21	0.21%	54.60%
58	Cameroon	20,129,878	6.13	0.28%	54.88%
13	Vietnam	91,519,289	6.12	1.26%	56.14%
91	Azerbaijan	9,493,600	6.12	0.13%	56.27%
57	Sri Lanka	21,481,334	6.10	0.30%	56.57%
38	Morocco	32,309,239	6.09	0.45%	57.01%
64	Niger	16,344,687	6.04	0.23%	57.24%
8	Bangladesh	161,083,804	5.81	2.22%	59.46%
7	Nigeria	170,123,740	5.75	2.34%	61.80%
1	China	1,343,239,923	5.63	18.51%	80.32%
14	Ethiopia	91,195,675	5.53	1.26%	81.58%
15	Egypt	83,688,164	5.31	1.15%	82.73%
46	Saudi Arabia	26,534,504	5.31	0.37%	83.10%
6	Pakistan	190,291,129	5.28	2.62%	85.72%
75	Chad	10,975,648	5.28	0.15%	85.87%
72	Zimbabwe	12,619,600	5.24	0.17%	86.04%
76	Guinea	10,884,958	5.22	0.15%	86.19%
59	Angola	18,056,072	5.19	0.25%	86.44%

19	Congo, Dem Rep	73,599,190	5.09	1.01%	87.46%
34	Algeria	37,367,226	5.04	0.52%	87.97%
24	Burma	54,584,650	4.94	0.75%	88.72%
45	Venezuela	28,047,938	4.91	0.39%	89.11%
52	Syria	22,530,746	4.72	0.31%	89.42%
18	Iran	78,868,711	4.63	1.09%	90.51%
47	Yemen	24,771,809	4.56	0.34%	90.85%
36	Sudan	34,206,710	1.00	0.47%	91.32%
39	Iraq	31,129,225	1.00	0.43%	91.75%
40	Afghanistan	30,419,928	1.00	0.42%	92.17%
44	Uzbekistan	28,394,180	1.00	0.39%	92.56%
49	Korea, North	24,589,122	1.00	0.34%	92.90%
74	Cuba	11,075,244	1.00	0.15%	93.05%
80	South Sudan	10,625,176	1.00	0.15%	93.20%
86	Somalia	10,085,638	1.00	0.14%	93.34%
89	Belarus	9,643,566	1.00	0.13%	93.47%

Moving Forward to a Globally-Representative Opinion Poll

How do we move ahead in designing a field operation given the declining in-country environment for global polling? We see four basic strategies:

- Strategy 1: Conduct surveys within each country (by F2F or CATI, as best suited to reaching the most extensive and representation sample of the national general population). Supplement in-country surveys with new approaches, as discussed below, particularly for countries where polling is formally restricted, threatened by instability, or suffer from very low cooperation rates.
- Strategy 2: Conduct all of the surveys from outside each country using cross-border, multi-lingual call centers with a common software platform and consistent dual-frame sampling, dialing procedures, quality control practices, and reporting standards.
- Strategy 3: Shift to online panels suitable for opinion polling. Key issues here are confirmation of the respondent demographics, country coverage by the panels, cooperation rates, and quality control procedures.
- Strategy 4: Transition away from traditional F2F/CATI polling or online panels to social media. Poll via Facebook with opt-in respondents and/or panels. Key issues here would also be confirmation of the respondent demographics, country coverage by the panels, cooperation rates, and quality control procedures.

Strategy 1 has a number of advantages. The techniques (at least the in-country F2F and CATI surveys) are well accepted in the industry. They typically produce surveys based on excellent household and respondent sampling of the national population and, for CATI surveys, of the national telephone-owning population, which easily reaches 80-100% in most of the Top 100. However, there are a number of disadvantages to diversified traditional polling, including government repression, incomparability of sampling and field procedures, political risks to practitioners and respondents, and generally higher cost than Strategies 2 and 3.

Strategy 2 is our preferred approach, taking advantage of diverse, multi-lingual population groupings in areas with high quality call centers (and affordable to varying degrees). As Marita Carballo has observed, “(g)lobalization is not just an economic phenomenon, but a political and cultural one as well, and it is not new. What distinguishes globalization today is the speed and volume of cross-border contacts.” The best method of cross-border surveys contacts is dual-frame telephone research, dialing both landline and, increasingly, mobile numbers.¹⁶

In addition to concentrated call centers with on-site interviewers, we see a growth of home-based interviewers logging into the call center and dialing with VOIP. The interviewers may or may not be in the same country. Call centers that meet these criteria can be found in the US (New York, Los Angeles and Miami), Europe (London, Paris, Amsterdam/Rotterdam), the Middle East (Istanbul, Tunis), and Asia (New Delhi/Mumbai, Kuala Lumpur, Singapore). While it is not necessary to organize the field teams by language, four centers would be able to cover much of the world (English and other European languages, Arabic, Spanish, and Mandarin/ other Chinese dialects). We would need some specialization within the survey country or from regional call centers for such languages as Japanese, Korean, Portuguese, Swahili, Hausa, Yoruba, etc.¹⁷

Strategy 3 could be a lower cost alternative, the utility of which would depend on the level of coverage. As of May 2, 2017, drawing from the Survey Monkey website, their 30+ million customers work in 15 different languages – and this may be the best way to think about a global survey: Chinese (Mandarin), Danish, Dutch, English (and UK English), Finnish, German, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, and Turkish. Clearly, large swathes of the planet are not yet in this online service, with key gaps being Arabic, the major languages of Africa, and those of South/South-East Asia. Key online panels include YouGov, SurveyMonkey, GfK Knowledge Panel, IPSOS I-Say, and many other smaller and/or specialized panel providers.

¹⁶ The development of the sampling frames will be country specific, including but not limited to dual mode distributions that best fit each country. For more on this see Burton Levine and Rachel Harter, “Optimal Allocation of Cell-Phone and Landline Respondents in Dual-Frame Surveys,” *Public Opinion Quarterly* (Spring 2015).

¹⁷ Language coverage will be complex. There are 11 official languages in South Africa alone and hundreds across India, although the top 15 languages there cover over 90% of the population.

Strategy 4 would be a centralized approach, operating outside of all of the survey countries but one (presumably the United States), but the research can be managed anywhere.¹⁸ Its success would depend on access to Facebook users and the representativeness of those who opt-in to the research. These would be non-probability samples, with little or no verification of the demographics of the respondents.¹⁹ The growth of non-probability sampling, largely over the internet in the US (and other countries), is a response to increasingly high refusal rates in CATI surveys (reaching 91% in the United States as reported by the Pew Research Center in 2014) and the prospect of substantially-reduced field costs.²⁰

How Do We Get There from Here?

There are at least 10 steps in developing a Top 100 global polling program:

Step 1: Develop the concept for a large-scale global opinion survey based on country coverage, sample design, field methods, survey reporting, and data distribution and archiving. This would be a one year effort involving a multi-national mix of survey practitioners, university-based subject matter experts, and representatives from possible funding organizations.

Step 2: Identify (or, if necessary, create) a non-profit organization that would (a) conduct the Global Top 100 Survey, (b) manage relations with the funding organizations, and (c) handle the distribution and archiving of results. This non-profit organization would be small-scale but would draw on the expertise of commercial firms, consultants (particularly in sampling and languages), and university-based subject matter experts.²¹

Step 3: Secure funding for a five-year effort, with two waves of Top 100 surveys per year. We project a rough estimate of \$5-7.5 million per year for the program, or \$25 million plus for the recommended five year commitment. As other multi-country survey programs have done, the country coverage of this program could grow with funding over time. Funding would be heavily weighted to data collection, recognizing that a substantial commitment to sampling and data

¹⁸ Even Twitter is subject to repression. The Turkish courts banned Twitter in April 2015.

¹⁹ For more on the debate in the profession over probability vs. non-probability sampling methods, see Reg Baker, et al., "Summary Report of the AAPOR Task Force on Non-Probability Sampling," *Journal of Survey Statistics and Methodology* (November 2013).

²⁰ For more on the impact of social media on the research profession, see Michael W. Link, et al., "Social Media in Public Opinion Research: Executive Summary of the AAPOR Task Force on Emerging Technologies in Public Opinion Research," *Public Opinion Quarterly* (Winter 2014).

²¹ The Roper Center for Public Opinion, currently based at Cornell University, is an excellent example of a possible candidate – a non-profit organization, over 30 years in operation, a strong membership base with support from scholars and practitioners and a rich history of data archiving and distribution. The Roper Center has been expanding its collection of international survey results. WAPOR itself could also be a viable grant applicant for such an effort, particularly if members/survey organizations will also contribute to the effort.

processing is also essential. Depending on funding, other countries could be added on an ad hoc basis to cover new issue and explore research opportunities.

Step 4: Develop the baseline survey questionnaire, allowing space in each wave for (a) essential trend questions, (b) country-specific questions, and (c) global issues of the day.

Step 5: Develop the sampling frames for Wave 1 countries.

Step 6: Select multiple call centers for Wave 1 with common sampling, dialing, and reporting procedures.

Step 7: Implement Wave 1 (Field, Data Processing, Data Visualization, Analytic Reports, Archiving, and Distribution of Data Files).

Step 8: Release the results through the organizations website, traditional and social media, and organize one or more global/regional conferences.

Step 9: Further distribute findings through normal professional conferences, articles, and books.

Step 10: Review lessons learned, and begin Wave 2.