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Abstract

This paper evaluates existing measures of political regimes and political freedom with respect to their desirability as indicators of political capabilities. It argues that the focus of desirable measures should be on the political and civil institutions that affect individuals' opportunities to pursue their goals (their capabilities). Attempts to capture "actual" capabilities are misleading since they replicate what the existing HDI already does and muddle a measure that derives power from its simplicity. The paper then suggests indicators that are intuitive, clear and sufficiently encompassing to capture the political and civil environment within which individuals must pursue their goals.

Keywords: democracy, regime classification, civil and political freedom

JEL classification: C80, O15

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1. Introduction

One of the key insights of the theory of development underlying the Human Development Index (HDI) is that economic growth is only a limited indicator of development. Per capita income alone may provide a distorted view of development since high levels are equally compatible with extremely different patterns of income distribution and access to the conditions that impact an individual's life chances. Examples of such disparities abound: think of Brazil, that combined one of the fastest rates of economic growth in the world during the 1966-1974 years of military dictatorship, with a highly regressive policy of income redistribution; think of African-Americans in the United States, a country with one of the highest per capita incomes in the world, whose life expectancy is lower than that found in many extremely poor countries; think of Sri Lanka or Kerala, where the population's welfare conditions are higher than what their low levels of per capita income would lead one to expect.

These are well-known examples of disparities between income-based indicators of development and the actual welfare of the relevant population. They have been widely studied and frequently used in debates about development and there is no need to rehearse them here. I mention them to emphasize the point that the idea of the HDI is to provide an indicator of development that is broader than the one provided by per capita income; an indicator that provides a corrective, if you wish, of what per capita income alone might suggest in terms of actual welfare.

It was not until the work of Amartya Sen that this well-known limitation of per capita income as a measure of development was incorporated into a broader concept, which informed, as is well known, the elaboration of the HDI. Again, there is no need to

rehearse Sen's theory here, as it is well known by this paper's intended audience. It matters, however, to explicitly say that it is a theory of development that should be assessed in terms of individuals' concrete capabilities to formulate and achieve their life goals, whatever they are.

The HDI, now in its 20th year, is a successful expression of this broader conception of development. Part of its success is that it does exactly what one expected it to do, that is, it "corrects" the distorted reading that income-based measures of development provided in a way that conforms with widely accepted intuitions. Thus, tables comparing countries ranked by their per capita income and HDI values – one of the most popular instruments to support arguments in favor of a broader measure of development – place countries such as Brazil and Kuwait at lower levels of development and countries such as Sri Lanka and Botswana at higher levels of development.

In practical terms, thus, the HDI achieves its goal of providing a summary measure that captures a broader conception of development. It lacks, however, any information about the political and institutional environment where the material capabilities included into the HDI can be exercised. This has been noted from the very beginning and correcting it is the purpose of the current effort. This paper seeks to contribute to it by evaluating existing measures of political and civil freedom as potential candidates to be used in the extension of the HDI.

I will argue that however the extension is implemented, it should focus on the political and civil institutions that affect individuals' opportunities to pursue their goals, that is, that affect their capabilities. I argue that attempts to capture "actual" capabilities or to capture them directly, whatever this means, are misleading since they

replicate what the existing HDI already does and muddle a measure that derives power from its simplicity. I then suggest a few indicators that are intuitive, clear and sufficiently encompassing to indicate the political and civil environment within which individuals must pursue their goals. Such indicator should be able to modify the reading of countries based on existing HDI much in the same way that the HDI modified the reading of countries based on per capita income. It should “compensate” for the fact that India, poor as it is, allows its citizens to pursue their own goals and influence the goals to be pursued by the communities they live in, and to “penalize” Cuba for providing such an opportunity to its citizens, even if it provides for a relatively high level of material opportunities.

But this is an argument that is developed in the last section of the paper. I start the paper (section 2) by comparing existing measures of political and civil freedoms. Even though some of these claim to be conceptually closer to what one would want in a measure of political capabilities, they fail on other grounds and should be, I argue, eliminated from consideration. I then proceed to describe temporal and geographic patterns that three of the most widely used measures generate (section 3). I show that, with one exception, these patterns are broadly equivalent, which might suggest that one should be indifferent as to which measure should be used (even in spite of the flaws some of them contain, as noted in section 2). In section 4 I argue that the notion that these measures are interchangeable is misguided and address (and hopefully convincingly dismiss) each of the arguments that are used to support it. Finally, in section 5 I try to develop a more positive argument for how to extend the HDI, suggesting specific variables, some of which, but not all, are already available.

2. Existing Measures

There is a relatively large number of measures purporting to capture democracy or political and civil freedoms in a given country at a specific point in time.¹ In this section I review existing measures and evaluate them according to dimensions I consider to be important in any measure of democracy and, consequently, in any measure that should be used for augmenting the HDI.

Minimally, a measure of political and civil freedoms, or a measure of democracy, needs to have broad temporal and geographic coverage. It should be current, with information up to at least the previous calendar year; and, preferably but not necessarily, it should provide data for a retrospective calculation of the original HDI. All existing measures are somehow related to the political and civil freedoms of citizens in a given country. Depending on the measure, this may mean the occurrence of competitive elections, or the existence of a menu of practices that indicate the ability of citizens to express their opinions and act on them, or specific patterns of authority, or government accountability.

Appendix 1 lists existing measures of political regime. It should be immediately apparent that several of them should be eliminated on the grounds that they do not meet the minimal criteria stipulated in the previous paragraph. The GASIOROWSKI, the MAINWARING/BRINKS/PÉREZ-LIÑÁN (MBP), and the AFRICAN RESEARCH

¹ I use “democracy” and “political and civil freedoms” interchangeably. Strictly speaking, of course, these two things are related but not the same. My own view is this: democracy is a method for deciding who will be authorized to make public decisions; political and civil liberties entail a bundle of “rights” granted to citizens of a country to actively participate in politics and be protected against arbitrary actions by the state and fellow citizens. Democracy cannot exist without some liberties. Even the most minimal definitions of democracy imply the ability to compete for the votes of citizens, which entail some or all of the following: the organization of the competition into groups such as political parties, the ability to “sell” one’s proposals, the ability to listen to them and ponder which one is preferred, and so on. Any operationalization of “minimal” definitions of democracy, therefore, necessarily involves these liberties. Conversely, measures of political and civil freedoms are used to construct scales or indices of democracy.

PROGRAM (ARP) measures are limited in their geographic coverage. They focus, respectively, on developing countries, Latin America and Africa. Additionally, they are not current. The last year in GASIOROWSKI is 1992; MBP' published data stop in 1999, although it has been extended to 2004;² and ARP stops in 1995. The EIU's index of democracy also falls into this group; it has a broad geographic coverage, but it only exists for the years 2006 and 2008. Of course had these measures offered a methodology that could be employed in augmenting the HDI, they might have been useful, even if not updated. However, I contend, although I do not show, that these measures do not represent particularly attractive solutions to the coding of political regimes and are, at best, equivalent to measures that are geographically broad and currently active.

One thing that the remaining measures have in common is the fact that they are current and that they have broad temporal and geographic coverage.³ But what are the main differences among them?

Levels of measurement

The first difference has to do with the level of measurement. Some measures are explicitly and intentionally discrete (e.g., DD, GASIOROWSKI, MBP); others are explicitly and intentionally continuous (e.g., COPPEDGE/ALVAREZ/MALDONADO –

² The extended data can be found in Pérez-Liñán's website: <http://www.pitt.edu/~asp27/>

³ Geographic coverage is a surprisingly complicated issue. Existing measures do not agree 100% on the countries that they cover. Polity IV, for example, excludes countries with a population less than 500,000 in the most recent year. Freedom House, in turn, includes territories and other non-independent entities. The coverage of the WBGI varies over the years depending on the availability of data. In 2008, there were data for 210 countries; in 1996 for 191. Even when no countries are explicitly excluded, there is no agreement about how the world is composed. Variation exists as to the treatment of countries that merge and break up or of countries that disappeared; it also varies depending on whether the criterion for inclusion is countries that claim to be independent (which includes Somaliland), or countries that belong to the United Nations (no Taiwan), or if includes entities that are not fully independent entities (such as Monaco, the Vatican, and Puerto Rico), and so on.

CAM and WBGI); but others are considered to be continuous when they are, in fact, discrete (POLITY and Freedom House - FH). This is very explicit in FH, which assigns values from 1 through 7 depending on the number of points a country gets in the political or civil rights “check list.” Thus, countries that score between 36 and 40 points in the political rights checklist are coded as 1. In Freedom House’s words, a value of 1 corresponds to countries where “political rights come closest to ensuring the freedoms embodied in the checklist questions, beginning with free and fair elections. Those who are elected rule, there are competitive parties or other political groupings, and the opposition plays an important role and has actual power. Minority groups have reasonable self-government or can participate in the government through informal consensus.”⁴ In turn, countries that score between 0 and 5 are coded as 7, a value indicating that “political rights are absent or virtually nonexistent as a result of the extremely oppressive nature of the regime or severe oppression in combination with civil war. States and territories in this group may also be marked by extreme violence or warlord rule that dominates political power in the absence of an authoritative, functioning central government.”⁵

One source of controversy regarding the level of measurement of political regimes involves what I consider to be a misunderstanding and is mostly directed against the DEMOCRACY/DICTATORSHIP (DD) measure, which is a discrete, dichotomous measure of political regime. The charge is against the use of a dichotomous level of measurement on the grounds that higher levels of measurement are to be preferred over

⁴ http://www.freedomhouse.org/template.cfm?page=351&ana_page=341&year=2008, accessed on January 19, 2010.

⁵ http://www.freedomhouse.org/template.cfm?page=351&ana_page=341&year=2008, accessed on January 19, 2010).

lower levels of measurement: if one can measure democracy using a continuous, or even an ordinal, scale, the argument goes, then using a nominal, dichotomous measure implies an unnecessary loss of information (e.g., Bollen 1991, Collier and Adcock 1999, Elkins 2000).

At first glance this seems to be a valid argument. Yet, it is incorrect. As we have seen, FH simplifies its measures by grouping the cases that score between 1 and 40 in its political rights checklist into seven categories. Many scholars, in turn, have chosen to simplify the measurement of political regime by “dichotomizing” an existing measure, for example POLITY, by using an arbitrary cutoff point along the –10 to +10 scale, such as +5, +6, or +7. This can be highly problematic (as will be seen below) and does entail a loss of information. But not all nominal dichotomous measures represent a simplification of the process of measurement and a loss of information. DD, for example, is not driven by the desire to simplify the measurement process. It does not imply imposing a cut-off point of any sort over an underlying, latent distribution of political regimes. Rather, it is based on the notion that political regimes can be directly observed and that one can distinguish two main regime *types*, depending on whether the government is chosen through contested elections or not.

Thus, the proper level of measurement is, in part, a function of how one conceives of political regimes and what one thinks should be measured. The question is not simply whether one should choose to measure democracy with a discrete or continuous instrument. Prior to that one must decide whether one believes that political regimes come in types (e.g., democracies and dictatorships) or whether democracy is a (continuous) attribute of all political regimes.

Aggregation procedure

Existing measures of political regime are based on multiple basic variables. DD, for example, uses information about the selection of the chief executive, the legislature, the number of parties or candidates competing in elections and the occurrence of an alternation in power to classify regimes as democracies or dictatorships. FH uses answers to ten questions about political rights and fifteen questions about civil rights to generate their 7-point scale of political and civil rights. POLITY is based on seven original variables and BOLLEN uses information on suffrage, party legitimacy, legislative selection and political rights to generate his index of democracy. Finally, in its 2008 version, WBI uses information from thirty-three different surveys to generate measures of each of its six dimensions of governance.

The procedures that are used to aggregate these different data sources vary in each of these measures. DD uses a conditional rule, according to which countries that fail in at least one of the four necessary requirements for democracy are classified as a dictatorship. In this sense, “dictatorship” in DD represents a residual type of regime, more properly labeled “non-democracy.”⁶ FH and POLITY use a simple additive model, according to which each of the component variables has the same weight in the final measure. There are literally *billions* of possible combinations of political or civil rights that are distilled into the two 7-point scales of political and civil rights in the FH measure. With five alternatives for each of 10 and 15 categories, there are $5^{10}=9,765,625$ possible ways to obtain a sum of scores between 0 and 40 in political rights, and $5^{15}=30,517,578,125$ possible ways to obtain a sum of scores between 0 and 60 in civil

⁶ In its latest version DD offers a classification of non-democracies into “civilian,” “military,” and “monarchic,” depending on the nature of the effect chief executive.

liberties. In the case of POLITY, with 6 possible scores on the first dimension, 3 on the second, 4 on the third, 3 on the fourth, and 7 on the fifth, the possible combinations total $6 \times 3 \times 4 \times 3 \times 7 = 1,512$. In addition to being arbitrary (Treier and Jackman 2008), this aggregation procedure has implications for the validity of these two measures. Gleditsch and Ward (1997) show that only a small portion of these combinations actually appear in the data and show with factor analysis of the component variables that most of the variation in POLITY is driven by changes in the Chief Executive Constraints dimension. CAM and WBGI, in turn, use statistical models (factor analysis in the former and unobserved components model in the latter) to generate indices that are based on existing measures. Note that in both cases some of the datasets that are used as inputs are, themselves, already the result of some aggregation procedure (e.g., FH enters in both measures).

There are two main problems with these indices. First, the indices offered by POLITY, FH, COOPEDGE and WBGI, as with all indices, do not really correspond to any identifiable event in the real world. What is it that happened in, say, Bahrain in 2001 that made it move from -9 to -8, and then to -7 in 2002 in Polity? What did the regimes in Albania, Burkina Faso, Jordan, Paraguay, Russia and Turkey had in common in 1999 to receive a 4 in FH? Finally, what happened between the last full year of president Ricardo Lagos in 2005 and the first full year of president Michelle Bachelet in 2007 for Chile's score in the Voice and Accountability dimension of the WBGI to decline from 1.209 to 0.975? Second, they make assumptions about the relative importance of each dimension that are not really justified. Thus, in all of these indices (with the exception of the WBGI

and, less so, CAM, the assumption is that all dimensions are equally important, whether they are the occurrence of elections or the banning of fringe parties.

Type of data

The last aspect along which existing regime measures differ is the nature of the data that they use. The usual distinction is between subjective and objective data. However, this is not a good way to characterize existing measures since it focuses the discussion on a straw man; after all, a measure of anything will necessarily involve some degree of subjectivity and it is really not productive to keep pointing this out.⁷

A more productive distinction is the one between data generated by subjective judgments and data that are based on the application of rules to observable events. Measures based on data generated by subjective judgments are the most common of all. These judgments can be those of observers (experts) or those of people living in the country whose regime is being assessed. FH, for example, uses the judgment of expert observers; WBGI uses the judgment of both expert observers and individuals in the country (both elites and the mass public). POLITY, in turn, seeks to position itself in the middle with respect to subjective judgment and application of rules to observables. It recognizes the limitations of subjective judgments and the desirability of clear coding rules and has, over the years, considerably expanded the instructions to coders about how to proceed in specific circumstances. Yet, rather than generate rules that coders can apply to specific cases, POLITY offers “ostensible” definitions of their categories, listing

⁷ See Mainwaring et al. 2001 and Fish 2005 for this kind of argument.

examples and expanding, year after year, the list of cases to be included in each category.⁸

Of the existing measures, DD is the only one that adopts an alternative approach. In this case, from the definition of democracy as regimes in which governmental offices are filled as a consequence of contested elections, the authors proceed to define which offices they care about (executive and legislative) and what they mean by *contested* elections (elections in which there is ex ante uncertainty, ex post irreversibility and repeatability). They then proceed to operationalize the notion of contestation so that one may distinguish between contested and non-contested elections and, therefore, identify democratic from non-democratic systems. They conclude that a regime is democratic if all the following four conditions are met: (1) the chief executive is chosen by popular election or by a body that is itself popularly elected; (2) the legislature is popularly

⁸ For example, the variable XRCOMP - Competitiveness of Executive Recruitment contains three categories: selection, dual/transitional, election. The instructions for coding a case as "selection" reads: "Chief executives are determined by hereditary succession, designation, or by a combination of both, as in monarchies whose chief minister is chosen by king or court. Examples of pure designative selection are rigged, unopposed elections; repeated replacement of presidents before their terms end; recurrent military selection of civilian executives; selection within an institutionalized single party; recurrent incumbent selection of successors; repeated election boycotts by the major opposition parties, etc." (Marshall and Jagers 2005: 20). In turn, the variable PARCOMP – Competitiveness of Participation, may take six values, one of which is "suppressed." The instruction to coders reads as follows: "Some organized, political competition occurs outside government, without serious factionalism; but the regime systematically and sharply limits its form, extent, or both in ways that exclude substantial groups (20% or more of the adult population) from participation. Suppressed competition is distinguished from Factional competition (below) by the systematic, persisting nature of the restrictions: large classes of people, groups, or types of peaceful political competition are continuously excluded from the political process. As an operational rule, the banning of a political party which received more than 10% of the vote in a recent national election is sufficient evidence that competition is "suppressed." However, other information is required to determine whether the appropriate coding is (2) Suppressed or (3) Factional competition. This category is also used to characterize transitions between Factional and Repressed competition. Examples of "suppression" are: i. Prohibiting some kinds of political organizations, either by type or group of people involved (e.g., no national political parties or no ethnic political organizations). ii. Prohibiting some kinds of political action (e.g., Communist parties may organize but are prohibited from competing in elections). iii. Systematic harassment of political opposition (leaders killed, jailed, or sent into exile; candidates regularly ruled off ballots; opposition media banned, etc.). This is evidence for either Factional, Suppressed, or Repressed, depending on the nature of the regime, the opposition, and the persistence of political groups.

elected; (3) there are more than one party competing in the elections; (4) an alternation in power under electoral rules identical to the ones that brought the incumbent to office must have taken place. Furthermore, rules about who should be considered the chief executive, how to identify legislatures, how to count political parties and how to identify an alternation in power are also specified (Alvarez et al . 1996, Przeworski et al. 2000, Cheibub, Gandhi and Vreeland 2009).

One need not agree with these rules, or believe that they are sufficient to characterize what one believes must be part of a measure of political regime. As a matter of fact, DD recognizes that the four rules are not sufficient to distinguish some cases. This will be further discussed below. What matters at this point is that there are rules, which have been defined *ex ante*, which are applied to each country in each year. Although the majority of cases are unambiguously classified by this rule, there are a few that are not. The measure is defensible from a theoretical point of view (that is, it does capture an aspect that most people will agree should be part of a measure of democracy) and is reproducible – anyone who applies the rules correctly should reach the same coding.

One last aspect the data used as input in measures of political regimes has to do with whether these data are original or not. DD, FH, POLITY, EIU, BANKS, MBP and GASIOROWSKI generate their own data, whether they are based on subjective judgments or not. COPPEDGE and WBGI, in turn, process existing data into a new measure of regime.

There are, thus, four aspects along which measures can be evaluated: level of observation (categorical or continuous), aggregation procedure (additive, conditional,

statistical), type of data (based on subjective judgment or on the application of rules); and whether the data used as input are original or not. Table 1 summarizes where each of the existing measures falls in each of these aspects.

Dataset	Level of Observation	Aggregation Rule	Type of Data 1	Type of Data 2
ARP	Categorical	-	Subjective	Original
BANKS	Ordinal	-	Mixed	Original
BOLLEN	Continuous	Additive	Subjective	Mixed
CAM	Continuous	Statistical	Mixed	Unoriginal
DD	Categorical	Conditional	Observational	Original
EIU	Ordinal	Additive	Subjective	Original
FH	Ordinal	Additive	Subjective	Original
GASIOROWSKI	Categorical	-	Subjective	Original
MBP	Categorical	Conditional	Mixed	Original
POLITY	Continuous	Additive	Subjective	Original
VANHANEN	Continuous	Additive	Observational	Original
WBGI	Continuous	Statistical	Subjective	Unoriginal

See appendix for information about each dataset

3. Geographic and Temporal Patterns

There are several papers offering a description of the geographic and temporal evolution of democracy in the world according to different measures. Here I will simply trace these patterns in broad strokes and show that, painted with such broad strokes, the measure that one uses does not really provide drastically different pictures. I will concentrate on three measures – DD, POLITY and FH. The other measures are not active (GASIOROWSKI, MBP), or have limited temporal coverage (BOLLEN, EIU, WBGI), or have limited geographic coverage (GASIOROWSKI, ARP, MBP), are not based on original data (WBGI, CAM), or do not provide a direct measure of political regime (BANKS, DPI). In any event, all these measures are relatively highly correlated with one

another, and the patterns that they would describe would not differ from the ones that emerge out of DD, POLITY and FH. (Table 2 contains a correlation matrix of all these measures).

Table 2
Correlation Among Regime Measures

	FH	POLITY	DD	CAM	WBGI	VANHANEN
FH	1					
POLITY	0.9065	1				
DD	0.7905	0.8078	1			
CAM	0.9566	0.9579	0.833	1		
WBGI	0.9549	0.8453	0.7265	0.9113	1	
VANHANEN	0.8423	0.8057	0.7525	0.8467	0.8413	1

WBGI refers to the component "Voice and Accountability;" CAM refers to the contestation dimension

The aggregate patterns provided by DD, POLITY and FH are remarkably similar and, for most readers, already familiar. As we can see in figure 1, both POLITY and DD are compatible with what we know about the evolution of democracy in the post-WWII period: the reduction in the proportion or the level of democracy beginning in the mid-1950s; the low proportion and level of democracy that characterized the 1960s and 1970s; and the so-called third wave of democratization that had fully started by the end of the 1970s. FH, which only starts in 1973, follows a pattern similar to DD and POLITY.

It is interesting to note that the data do not show a decline in the level of democracy in the world. In 2007, the last year for which POLITY is available, the level of democracy in the world was the same as in 2005 and 2006: 0.68. This level, in turn, is the highest observed in the world since 1946 according to POLITY. The same is true with DD: in 2008, the proportion of democracies in the world was 0.61, again, the highest ever recorded since 1946. Of the three measures, FH is the only one that displays a downward

fluctuation in the levels of democracy in the world at the end of the period. This fluctuation is so minuscule (it exists only at the third decimal point) that it must be disregarded. Rounding to the second decimal point yields the same level of democracy for the 2005-2008 period, 0.68, which is the highest ever recorded by this measure.

Thus, although the expansion of democracy in the world has slowed down, the level or proportion of democracy has certainly not been reversed. This is true whether the measure one uses is DD, which focuses exclusively on the occurrence of competitive elections, or POLITY or FH, which are based on thicker definitions of democracy.

Regional patterns are noticeable. The core OECD countries started the post-1945 period with the highest level of democracy, which became even higher (100% democratic according to DD) in the mid-1970s with the democratization of Portugal, Greece and Spain. Eastern Europe and Central Asia (that is, the countries that were either part of the Soviet Union or under its influence in the post-war era) experienced significant increases in the level of democracy only after 1989, as we know. According to DD, the proportion of democracies was zero until 1989, shooting up to around 60% in 1990. It is interesting to note that according to both FH and POLITY the communist countries of Eastern Europe and the Soviet Union had positive levels of democracy. It is hard, in my view, to understand what this positive reading indicates.

The evolution of democracy in the other regions was similar to the global pattern, albeit at different levels of democratization or proportions of democracy. In all these regions we see a decline in democracy in the 1960s and 1970s and the subsequent increase in democratization at the beginning of the 1980s. The two regions where the assessments provided by DD, POLITY and FH are incongruent are South Asia and the

Middle East and North Africa. In the former, DD depicts a relatively small decrease in the proportion of democracies between the end of the 1950s and the beginning of the 1970s. This is mostly due to the combination of a relatively small number of countries in the region (6 in 1957, 8 in 1971) and the emergence of two new countries as dictatorships (Maldives in 1965 and Bangladesh in 1971). POLITY, in turn, registers a sharp decline in the level of democracy from 1957 to 1960 (from 0.500 to 0.325 in the normalized scale, mostly due to the sharp drop in the score for Pakistan and Nepal), but then an increase in the level of democracy beginning in 1962 and continuing until 1973. Similarly, in the 1980–1992 period, POLITY sees an upward tendency while FH sees a downward tendency in the level of democracy in South Asia.

As to the Middle East and North Africa, the disparity seems to be between DD and POLITY, on one hand, and FH on the other. The former measures, but particularly POLITY, identify a pattern that is not unlike the global one: a decline in the level of democracy throughout the 1960s and 1970s and an increase after 1980, which continues until after 2000. FH, in turn, sees a relatively constant level of democracy between 1973 and the early 1990s, with a decline between 1991 and 1994.

Note that while the measures are highly correlated in levels of democracy, they are not so when it comes to changes in political regimes. Here the relevant comparison is between FH and POLITY since DD is dichotomous.⁹What we find is striking: the correlation between the annual percentage change between the two measures is only 0.34. Thus, the reading about the direction of regime change provided by FH and POLITY does not always coincide, as table 3 indicates. Regime change, of any magnitude, is

⁹ But, as we will see below, when we discuss table 5, the correspondence between DD and POLITY when it comes to regime change is not high.

relatively rare: it occurs in 25% of the country-years in FH and in 14% in POLITY. In 67% of the cases (country-years), the two measures agree that nothing happened from one year to the other when it comes to changes in the political regime. In 4% of the cases they agree that changes occurred and that they were in the direction of more democracy, and in 1% they agree that the changes were in the direction of less democracy. In the rest of the cases - 2,227 country-years, or 28% of all cases - the reading about the direction of change provided by the two measures is different: either one of the measures sees changes when the other sees the maintenance of the status quo or, worse, one sees a change in the direction of more (less) democracy when the other sees a change in the direction of less (more) democracy.

Table 3				
Yearly Change in POLITY and FH				
		FH		
POLITY	Positive	No change	Negative	Total
Positive	199	305	50	554
No change	496	3352	424	4272
Negative	17	67	69	153
Total	712	3724	543	4979

It is not surprising, thus, that the measures disagree in the identification of regime transitions. Categorical measures such as DD allow for the identification of the point in time at which the political regime changed. The regime changes when a new chief executive takes office (either simultaneously or after a legislative assembly) after competitive elections have taken place. Thus, as table 4 shows, according to DD, there were 174 regime transitions between 1946 and 2008, 67 from a dictatorship to a democracy and 107 from a democracy to a dictatorship. Latin America (and the

Caribbean), as we would expect, is the region with the highest level of regime instability: whereas in the world there was 0.861 transitions per country, in Latin America there were 2.030. If we exclude the Caribbean (and Guyana and Haiti, which have remained non-democratic throughout the period), every Latin American country experienced at least one regime transition. Some of them experienced several: Argentina 9, Peru 8, Guatemala and Ecuador 6 each, and Honduras and Panama 5 each. South Asia is the other region where regime instability is relatively high, although 60% of them took place in Pakistan and Nepal (6 and 3, respectively, out of 15).

	Transition to Dictatorship	Transition to Democracy	Total Transitions	Number of Countries	Transitions/Country
Subsaharan Africa	19	30	49	47	1.04
South Asia	6	9	15	9	1.67
East Asia and the Pacific	9	12	21	29	0.72
"Core" OECD	1	5	6	24	0.25
Middle East and North Africa	2	3	5	22	0.23
Latin America and the Caribbean	29	38	67	33	2.03
Eastern Europe and Central Asia	1	9	10	33	0.30
Europe	0	1	1	5	0.20
World	67	107	174	202	0.86

Ordinal or continuous measures of political regimes allow for the identification of the process of democratization or the process of deterioration of democracy before the actual transition actually happens, or even if it does not really happens. To cite only one example, the long period of liberalization that preceded the transition to democracy in Brazil is captured in POLITY by the fact that the scores change from -9 in 1973 to -4 in 1974 to -3 in 1980 to 7 in 1985.

Thus, while DD provides a reading of the precise point in time when a transition occurred, POLITY and FH allow the observer to measure the processes of change that are

either aborted or lead to a regime change. The solutions to these limitations of each type of measure, however, also differ. If one is interested in identifying moments of change in the overall political climate or in institutions that preceded regime change, one could collect additional data, or even use the data that was originally collected to generate DD to characterize these changes. Thus, it is possible to trace the history of “liberalization” of (some) authoritarian regimes by using information about the election of the chief executive, the legislature and the number of parties competing. It is only when these three things come together and an alternation in power occurs that a transition to democracy will have occurred. Similarly, aborted processes of liberalization may be captured through the observation of these same variables: they change, but they never come together to generate a transition to democracy. If this is not sufficient to characterize what the user wants, then further data may be necessary and can reasonably be collected.

Yet, if one wants to characterize the gradual changes, or lack thereof, that might have occurred prior to a transition from dictatorship to democracy using, say, POLITY, one will have to establish, first, a criterion for deciding when one will consider that a regime change actually occurred. One solution is to stipulate that a certain magnitude of change must occur in order for a regime change to have occurred. For instance, a regime change occurs if the POLITY score changes by, say, 6 or more points. Table 5 compares regime transitions coded in this way with the regime transitions coded by DD. We can see that the level of disagreement is high. According to DD, there were 154 regime transitions in the world between 1946 and 2007, 67 to dictatorship and 107 to democracy. According to POLITY, there were 201, 84 to dictatorship and 117 to democracy. The mismatch, however, is larger. There are 129 instances of regime transitions according to

POLITY and DD does not identify as a regime transition; and there are 82 cases of transitions according to DD that would not have been identified as a transition by POLITY. These cases include military coups in Argentina (1955 and 1962) and Uruguay (1973) and the restoration of democracy in Chile (1990), Czechoslovakia (1989) and

Table 5
Regime Transitions According to Polity and DD

Polity _(t) -Polity _(t-1)	DD		Total
	No Transition	Transition	
-18	1	0	1
-15	1	5	6
-14	2	7	9
-13	0	4	4
-12	5	3	8
-11	3	5	8
-10	4	2	6
-9	10	0	10
-8	8	3	11
-7	12	0	12
-6	6	3	9
-5	15	4	19
-4	13	3	16
-3	35	5	40
-2	46	1	47
-1	97	2	99
0	6,830	39	6,869
1	163	7	170
2	75	9	84
3	46	3	49
4	30	6	36
5	24	3	27
6	13	6	19
7	24	9	33
8	12	2	14
9	8	2	10
10	4	3	7
11	6	6	12
12	3	3	6
13	2	1	3
14	3	2	5
15	2	3	5
16	0	3	3
Total	7,503	154	7,657

Transition in POLITY is defined as $6 > \text{Polity}_{(t)} - \text{Polity}_{(t-1)} < -6$. Thus, there are 6 cases in which the difference in the POLITY score from one year to the other was -15; of these, 5 are coded by DD as a regime transition, 1 is not. The total number of regime transition in DD is smaller than the one in table 3 (154 instead of 174) because POLITY covers fewer countries and does not cover 2008

Liberia (2006). The problem is not that DD is right and POLITY is wrong. The issue is that whereas DD maps specific events in the world to the concept of regime transitions – the four conditions for democracy came together in that year or one of them disappeared – POLITY does not.

Another solution is to categorize the scale by identifying a cutoff point. POLITY, for instance, recommends “a three-part categorization of "autocracies" (-10 to -6), "anocracies" (-5 to +5 and the three special values: -66, -77, and -88), and "democracies" (+6 to +10),”¹⁰ a recommendation that has been widely accepted. Doing this is only natural since many of the questions motivating research are concerned with being in or out of a given state such as the political regime, and not with incremental changes over a gradation. The entire “transitions” literature, for example, is predicated on the notion that one can identify the point at which a political regime stops being a dictatorship and becomes a democracy. Since scale measures or the categories of the existing multinomial measures do not represent any of the states that are theoretically identified, researchers are required to collapse regimes into categories so that they can study what brings these states about and the consequences of being in them.

Yet, adopting arbitrary cut-off points is not entirely innocuous. Cheibub, Gandhi and Vreeland (2009) replicated published studies that use POLITY as their main regime measure to demonstrate the importance of sharply defined and meaningful instruments to observe political regimes. They replicate one study in each of the following three central areas of research in political science: the effect of political regime on economic growth; the relationship between political regimes and civil wars; and the impact of economic

¹⁰ <http://www.systemicpeace.org/polity/polity4.htm>

development on democratization. They show that while the arbitrariness of cut-points may produce results that are not robust to relatively small changes in coding rules, it may also lead to the opposite, namely, to a situation in which results are just too robust.

Whereas we are generally expected to test for the former case, we tend to disregard the possibility of the latter. Thus, Epstein et al. (2006), seek to restore the causal impact of economic development on democratization by demonstrating that development matters once countries are classified as autocracies, democracies and “partial democracies,” which they “define” as the cases falling, respectively, in the $[-10, 0]$, $[+8, +10]$, and $[+1, +7]$ POLITY intervals. The replication of the Epstein et al. study, however, demonstrates that their findings do not change regardless of how partial democracies are coded. They remain virtually unchanged as the lower bound of the “partial democracy” category is moved from +1 all the way to -9, and the upper bound is moved from +7 to +9.

Epstein et al (2006:566) assert that partial democracies are “critical to the understanding of democratic transitions.” As they argue, “More volatile than either straight autocracies or democracies, their movements seem at the moment to be largely unpredictable. One of our major conclusions, then, is that it is this category – the partial democracies – upon which future research should focus.” (p.566). But what is this category? Is it the category that contains the 811 observations that fall in the $[+1, +7]$ POLITY interval, or the 4,205 that fall in the $[-9, +8]$ interval? Unless we have a theoretical reason to classify regimes in a particular way – something substantive that tells us that regimes that are between +1 and +6 are different from regimes that are below +1 and above +6 – then the very notion of “partial democracy” makes no sense.

4. Augmenting HDI

Two facts emerge from the discussion in previous two sections: (a) that there exists several alternative candidate measures to be used if the HDI were to be augmented to incorporate political factors; and (b) that these measures offer broadly similar readings of the geographic and temporal evolution of democracy. This raises the following questions:

- Does it follow from these facts that the existing measures of democracy or freedom are interchangeable? Is it irrelevant whether one uses FH, POLITY, or DD to augment the HDI?
- Does it mean that, in spite of their imperfections, these measures are adequate and no further resources should be spent either improving them or generating new data?

Here I want to argue the following points:

- A. The measures are not interchangeable.
- B. The argument about the adequacy of existing measures is fallacious. Spending resources to improve existing measures or to collect new data is not wasteful; it all depends on which improvements are to be made and what new data will be collected. Moreover, the amount of resources is not very large.
- C. The choice is between a “maximalist” and a “parsimonious” approach to augmenting the HDI.
- D. Assuming a preference for a parsimonious approach, there is one existing measure that could be used; and additional resources should be used to collect some specific new data.

4.1. Are Existing Measures Interchangeable?

No, they are not. This is particularly so if we evaluate them from the perspective of an augmented HDI.

We have already seen that different measures generate quite different data about regime transition. Here we will focus on another issue. One of the main arguments for their interchangeability is that the existing measures are highly correlated. As table 2 indicates, the correlations among the three main measures are, indeed, high. The correlation between FH and POLITY is 0.89; FH predicts correctly 87.5% of democracies and 92.6% of dictatorships classified by DD; POLITY predicts, respectively, 86.5% and 94.8%. These correlations are high; but not high enough, I believe, to see the regime measures as interchangeable.

There are other issues, however. In arguing that the different measures can be used interchangeably, issues of possible bias in these measures are neglected as unimportant. Although the possibility of bias is often admitted, particularly in those measures that are based on subjective judgments, they are brushed aside, usually by invoking the argument that the bias is not large enough to cause serious distortions. This assertion, in turn, is supported by the fact that all the measures are highly correlated with one another. This fact is offered as evidence that the particular measure at stake must be capturing the true concept of interest, as if the other measures were, themselves, a good yardstick to evaluate the validity of what is being measured.

Bias, however, cannot be simply brushed aside as unimportant. There is bias of information, which emerges from the limited number of sources used in coding the cases. There is perception bias, which emerges because of the position occupied by those who

perform the subjective judgment. For example, in a study of three measures of liberal democracy (one of which was the early version of FH), Bollen and Paxton (2000) found that each measure has its own specific component (a method-factor), which represents a source of systematic error in the evaluation of liberal democracy; that this component persists over time; and that the most likely sources for these error are extraneous information about the country being judged, which enters the judge's evaluation process. For example, they conclude that "the Gastil [FH] method factor tends to favor countries that are non-Marxist-Leninist, Christian, monarchies, and older" (2000:77)

The high correlation of the measures is driven by the fact that their distribution is strongly bi-modal. There is a group of countries that always score high or low in all measures. Countries such as Sweden, Norway, England, the United States, the Netherlands, or New Zealand, will score high across all measures of democracy. Countries such as North Korea, Cuba, Sudan under the current regime, Albania under Hoxa, Iraq under Saddam, or Afghanistan under the Taliban will always score low across all measures. These countries are placed together at the high and or low points of the democracy measures, whereas the middle values are taken by cases such as Guatemala, Mali, Benin, Botswana, Malaysia, and so on, where the distinction between democracy and dictatorship, the amount of freedom effectively granted the population to participate in politics, or the degree of responsiveness of the government to the demands of citizens, is not clear cut. Once we remove the "unproblematic" countries from the dataset (e.g., countries coded at the extremes, countries that have never changed their code), we find that the correlation between the measures is, after all, not that high, as we can see in table 6.

Table 6
Comparing Correlations between FH, POLITY and DD in Different Samples

Panel 1 - Correlation between FH and POLITY

Sample (percentile)	Correlation	N
10th - 90th	0.88	4,497
20th - 80th	0.82	2,819
30th - 70th	0.68	1,795
40th - 60th	0.28	656
Below 80th	0.83	4,179
Below 70th	0.74	3,494
Below 60th	0.48	2,866
Above 10th	0.88	4,497
Above 20th	0.87	3,796
Above 30th	0.85	3,456
Above 40th	0.79	2,934

Panel 2 - Proportion of DD Classification Correctly Predicted by FH

Sample	Democracy	Dictatorship	All	N
10th - 90th	87.5	91.2	89.2	5,730
20th - 80th	81.7	89.6	85.8	4,322
30th - 70th	76.3	86.5	81.7	3,239
40th - 60th	67.6	80.1	75.5	1,774

Panel 3 - Proportion of DD Classification Correctly Predicted by POLITY

Sample	Democracy	Dictatorship	All	N
10th - 90th	86.5	94.4	91	7,536
20th - 80th	77.0	92.9	87.1	5,027
30th - 70th	68.1	92.9	87.1	4,187
40th - 60th	0.0	85.2	85.2	1,914

Thus, it is the uncontroversial cases that may be driving the high correlation among different measures of political regimes. Existing measures that allegedly provide a more nuanced gauge of political regimes do not agree on where the countries located in the middle of the distribution should be placed. But these are the countries of greatest interest, both theoretically and practically. These are the countries where we see the most action, that is, where the measures are changing the most. It is important to evaluate what these changes mean. But if different measures provide different interpretations of these

changes, how is one to trust that the measure one is using is the one providing a correct reading of these changes?

But even if all the changes occurred in the same direction, there would still be a problem at the middle of measures of democracy such as POLITY, FH and WBGI. What does progress mean in a given country? What happened in country X in year Y that led to a change from 3 to 4 in FH or from -1 to +1 in Polity? What does this mean and how would that orient decision-making about policies?

Thus, the argument that it does not matter which measure one uses since they provide the same broad patterns of freedom across the globe is not correct. They do so, in part because of their bi-modal distribution and the fact that the countries at the extreme are the ones that are “unproblematic,” in the sense that they receive the same scores across all the measures.

4.2. Are Existing Measures Adequate? Are Additional Efforts Wasteful?

This is, perhaps the hardest argument to refute. The idea is that existing measures, by and large, “get things right” most of the time; investing resources to correct eventual mistakes would be inefficient. It would require too much to obtain too little.

This argument fails on two grounds. First, it assumes that what matters is simply general patterns and that whatever inaccuracies the data contain are innocuous. Second, it disregards the fact that any augmentation of the HDI with a political component will be subject to attacks by interested parties that were not placed where they believe they should have been placed, and that the best defense to such attacks is precision in the

ranking. Precision is obtained with better data and that better data, in this context, I argue, must be data on observables.

The argument that existing measures are sufficient because they describe general patterns well assumes that this is all that matters for the constituency for an augmented HDI. That is, for those who will consume the augmented HDI, it does not really matter if country X was placed closer to country W than it is in reality since all that is necessary to know is their relative position. I believe that this is not really true. Countries will want to know *why* they were placed below some other countries and this is not the kind of answer that can be provided with general patterns. Moreover, the general patterns, as we have seen above, are mostly driven by the fact that the existing measures have a bi-modal distribution: not only do they have little to tell us about what distinguishes the countries that are in the middle of the distributions, but they do not agree with one another about where the countries are placed.

Finally, the inaccuracies hidden by general and broad patterns are far from being innocuous. As was seen in section 3, different measures can yield different conclusions, or no conclusion at all, regarding even general patterns.

One can anticipate that an HDI augmented by political factors will be controversial and that countries dissatisfied with their location in the index will become vocal about the flaws of the index. It is important, therefore, that the index be defensible. In the next section I argue that it will be defensible if it is based on a parsimonious approach. Here I want to simply state that the addition of a political component to the HDI that is defensible in terms of observable phenomena probably stands a better chance than a component that is based on subjective judgments.

This is true even if one tries to carefully estimate the margin of errors associated with the point estimates one provides about the location of countries. The WBGI, for instance, provides information about the margin of error for every country in each of the six dimensions that are aggregated into the governance indicator (it also provides the margin of error for the overall index). Although statistically correct, however, this procedure is also the indicator's source of weakness. Consider the following story:

The Director of the Great Lakes Center for Strategic Studies accused the World Bank of making severe blunders when ranking countries in central Africa (<http://www.bloggernews.net/2006/10/world-bank-governance-report-blunders.html>). Specifically, the director of the GLCSS complained about the specific rating of the Central African Republic on Political Stability/No Violence (higher than Kenya, Rwanda and Uganda), and about the CAR's overall directional trend (it improved in five of the six rating areas since 2004, including Voice and Accountability, the dimension closest to capturing democracy).

The World Bank's response revealed the difficulties in defending such an index. It blames the critic for failing to take into consideration the margin of error associated with the rankings of the CAR. Had the critic considered this information he would have seen that the differences between the CAR, Kenya, Rwanda and Uganda are in fact very small and that "one should not interpret any of the small differences he identifies between countries as being at all practically meaningful." The critic, in turn, retorts: "There are very large differences between Uganda and the Central African Republic and the Central African

Republic and Rwanda. Their statistical results even with a margin of error factors should have revealed these differences.” (<http://www.bloggernews.net/19>)

Thus, in order to defend the indicator’s placement of countries at a particular location the authors of the WBGI had to argue that these differences should, in fact, be disregarded as having any practical consequence since their margin of errors imply that they cannot be distinguished from one another. Since they could not point to anything that might justify the placement of these countries in their indicator, they remained open to the criticism that the differences are indeed very large (and presumably not in the direction that they stated) and that the indicator should have captured them.

One final point about the efficiency of spending resources to collect new information of a particular type: it is not true that the amount of resources necessary for generating an augmented HDI on the basis of better data would require a large amount of resources. The issue is not about spending all possible resources to collect the very last piece of information with the largest amount of precision possible. The issue is one of making choices about how to conceptualize the political component, to generate explicit coding rules that are based on observables, and to incorporate the information into the existing HDI. The issue is between a maximalist approach, where everything is packed into the political component, or an approach that is parsimonious both in terms of what it seeks to measure and in terms of the information necessary to execute the measurement. I develop this point in the next section.

4.3. Maximalist and Parsimonious Approaches to Augmenting HDI

Expanding the HDI entails a choice between, for a lack of a better phrase, “maximalism” and “minimalism” or, perhaps more appropriately, parsimony.

A parsimonious approach is, I believe, in keeping with the original HDI, as well as with its extensions. Indices of any type will always be criticized, in part because the use of indices is, to a certain degree, a matter of preference or of the specific way one sees the world. The HDI has not been exempt from criticisms; yet, it has been widely accepted and used both in academic research and in policy arenas.

I submit that a large part of the HDI’s value is derived from the simplicity with which it captures an extremely broad and complex concept. As we know, the HDI is meant to operationalize a view of human development as the expansion of people’s choices to lead the lives they value. As the 2002 HDR states, “Fundamental to enlarging human choices is building human capabilities: the range of things that people can do or be. The most basic capabilities for human development are leading a long and healthy life, being educated, having access to the resources needed for a decent standard of living and being able to participate in the life of one’s community” (p. 13). The HDI operationalizes this view of human development by using information about life expectancy, education (literacy and enrollment rates) and per capita income. Each of these indicators is admittedly insufficient to capture all that is entailed in “leading a long life,” “making choices,” and “having the necessary resources.” It can be argued that a long life is not necessarily an indicator of happiness; that functional literacy does not necessarily open up one’s horizon, or that universal primary and secondary school enrollment does not mean universal abilities (as the content of education varies), and that

equally high average per capita incomes are compatible with drastically different patterns of income distribution. One could, therefore, pack all sorts of things into the HDI that would allegedly help provide a more nuanced or realistic view of a country's situation with respect to material well-being. Yet, the HDI adopts a parsimonious approach; it is based on choices that were made to select indicators that, even if not perfect, have a clear and obvious correspondence to the concepts that they are meant to capture.

Maximalism is the current practice in most of the thinking about measuring political freedom or democracy, and is reflected in most of the existing measures. It is usually justified with statements that freedom (or democracy) is such a complex concept that “any system of measurement will diminish it” (Political Freedom and Human Development, p. 27). Consequently, as much as possible is packed into the measure as if aggregating as many angles as possible would make the final number truer to what actually exists. Thus, the UNDP's early attempt to generate a political freedom index identified 21 factors grouped into five dimensions that capture the many kinds of freedom that exist. FH, as we have seen, uses 10 and 14 categories of political and civil rights respectively. And several other examples can be given.

Some of the reasons why this kind of approach is problematic have already been alluded to. Here I just want to add that a “maximalist” (or substantive if one prefers) approach to the measurement of democracy/political freedom runs two very apparent risks: (1) of including in the measure a number of outcomes of the thing one wants to capture (e.g., accountability, participation, satisfaction, etc.); (2) of either diluting the meaning of the concept of democracy or political freedom to something that cannot be

recognized in the real world, or raising the bar so high that no really existing political system will ever meet the requirements to be considered free or democratic.

4.4. Competitive Elections

A parsimonious approach to measuring democracy with the goal of augmenting the HDI consists of identifying one or a few aspects in a country that indicates some kind of movement with respect to the political capabilities of its population. The constraint is that whatever is identified as being the aspect of interest must be observable; and that its observability must be stated in terms of rules; that is, there must be explicit rules that operationalize the concept that describes the political capabilities of interest. I contend that the occurrence of *competitive elections* is a good candidate.

Let me start by saying that, paradoxically, elections have become a devalued commodity in the democracy trade, even though it is universally recognized as a necessary ingredient in any democratic regime. There is a lot of talk about the limitations of “electoralism,” the practice of equating democracy with the holding of elections. There is widespread recognition that the post-Cold War world is a different world, one in which the “norm” of elections has been absorbed by all (Donno 2008, Hyde 2010) and in which dictators cannot openly rule as such. Consequently, what we see is the emergence of regimes that hold the “trappings” of democracy but which are not really democratic (Levitsky and Way 2002), that have at their disposal and employ a large menu of manipulation to make sure that their power is not at risk even when the façade of democracy has to be erected (Schedler 2002). Democracy, it is said, in part as a reaction to the perceived emergence of this phenomenon, is much more than simply elections. Therefore, measures such as DD, which is strictly based on the observation of contested

elections, are criticized for the excessive, misguided and naïve focus it places on the holding of elections.

This criticism, I contend, is itself misguided. For one, by giving short shrift to elections, it devalues an event that is, or can be, considerably empowering to the population that experiences it. The holding of *multiparty* elections in a non-democratic regime should not be underestimated. Consider the following:

- Perhaps the peacefulness of the transition to democracy in Mexico, or the fact that Mexico did not experience the kind of military dictatorship that the similarly more economically developed Latin American countries experienced in the 1970s, has to do with the fact that elections, even if non-competitive elections, were being regularly held.
- It is likely that the last elections held under many Communist regimes, in which non-communist candidates were able to compete against regime candidates not only had large consequences for subsequent developments, but probably made the population who voted for these candidates feel differently about their political capabilities.
- Regimes in Africa that held multi-party elections as a result of external pressure at the end of the Cold War did so reluctantly; but many accounts of these elections indicate an increase in the sense of empowerment or the political mobilization in the population.

The point is that these events – multiparty elections – are of great significance to those who participate in them, either as contenders or simply as voters. True, they do not

necessarily imply that democracy, let alone “true” democracy, is in place; but their effect on the population’s sense of empowerment should not be neglected.

Most importantly, what is being suggested is not the use of elections pure and simple as a criterion for democracy, or for the presence of a degree of freedom that qualitatively changes the opportunities of the population to participate in the political process. What is being suggested is that the criterion be the holding of *competitive* elections. This is not a trivial detail. Rather, the qualifier that is used to describe elections that characterize a regime as democratic is of central importance in any concept of democracy. This is the crucial element underlying the DD measure of democracy.

5. How to Augment the HDI?

I believe that any component used for augmenting the HDI with political information should meet the following minimum criteria:

- It should be descriptive (just as 78 and 38 years are descriptive of how long an average individual in the United States and Angola, respectively, could expect to live,¹¹ or as \$34,200 and \$10,200 are descriptive of the average income an average citizen of Germany and Brazil, respectively, could expect to have to fund his or her life projects¹²).
- It should be reliable, in the same sense that “illiteracy” or “per capita income” or “life expectancy” are. That is, it should be operationalized so that rules for

¹¹ CIA, The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html>. 2009 estimates.

¹² CIA, The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/fields/2004.html?countryName=&countryCode=®ionCode=A>. Figures are GDP per capita, purchasing power parity, in 2009 US dollars.

identifying specific cases are defined which, if applied correctly, would yield similar readings for the same country.

- It should be “implementable,” in the sense that it should be viable as the object of a data collection effort; certainly prospectively, but also retrospectively.

DD meets these requirements and, as I argued in the previous section, it should be incorporated, if not serve as the basis for the augmentation of the HDI with political information. In any respects, DD should be sufficient as a measure of democracy. For instance, a measure of democracy based on a minimalist conception, is compatible with most of the theoretical issues that animate empirical research on political regimes. Thus, democracy is considered to undermine economic development because governments heed voters’ short-term interests (DeSchwinitz 1964, O’Donnell 1973), or they are considered to promote development because the possibility of punishment at the ballot box induces leaders to manage the economy well (Olson 1993). Additionally, macroeconomic performance may suffer because of governments’ attempts to manipulate the economy for electoral purposes (Nordhaus 1975 and Tufte 1978 for early formulations, and Drazen 2000 for a review of recent development) or, alternatively, long-term economic performance may improve because voters can sanction incumbents at the polls (Paldan 1991, Powell and Whitten 1993, Wilkin et al. 1997). Because elections allow citizens to influence policy by their control over leaders, they should result in lower inequality (Meltzer and Richard 1981, Przeworski 1990), better provision of public goods (Buena de Mesquita et al. 2003, Lake and Baum 2001), greater involvement in trade agreements (Mansfield, Milner, and Rosendorff 2002), and the avoidance of catastrophes such as famine (Sen 2000). Market-oriented reforms, in turn, may not be attempted or

implemented consistently because governments fear voter's reaction to them (Przeworski 1991, Haggard and Kaufman 1995) or, on the contrary, they may be attempted and implemented consistently because governments will be rewarded in future elections (Hellman 1998). Finally, the connection of voters to the government through elections is also central in arguments about the effect of political regime on the entry into and performance in war (Fearon 1994, Reiter and Stam 1998, Schultz 1999). In all of these areas of research, and many others, the mechanism that links political regimes to outcomes is the presence or the absence of contested elections.

Yet, I also recognize that for the purpose of expanding the HDI, DD is not sufficient since however it is done, the augmented HDI must be able to identify progress or reversals in the direction of more or less democracy. But this requirement does not imply the abandonment of the three conditions stated above. It does imply, however, that some kind of aggregation of the multiple pieces of information about each country will have to be adopted. And this is a serious challenge.

Partial order ranking may solve what is now one of the most important deficiencies of existing measures that aggregate multiple pieces of information. This is so because it does not make any assumptions about the weight of each source of information. This alone is a great advantage of partial ordering. There may be others, as there may be limitations that are still not apparent. At the moment, however, I feel I can better contribute by suggesting some of the data that meet the requirements above and, consequently, could be considered as inputs for the partial ordering of countries in terms of their broad political conditions.

Let me start by stating that I am in broad agreement with the position articulated in the HDR 2010 Briefing Note (2010) regarding the definition of agency and empowerment. I find it helpful to start from Sen's definition ("what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important") and then think about how it can be captured once it is stipulated that the level of observation should be the national level.

Yet, I found the distinction between "agency itself" and "the preconditions for the exercise of agency" to miss something important already present in the HDR. My understanding of this distinction is that it refers to the differentiation between "formal" empowerment and "actual" empowerment, with the former referring to the opportunities and the latter to the exercise of agency. Thus, as stated in the Briefing Note (2010:32), formal structures may allow empowerment but other factors may prevent it from actually occurring. In view of the existence of these two polar positions, the Briefing Note suggests that an intermediate position be taken, which considers both the institutional structures necessary for the exercise of agency and whether individuals actually exercise agency ("agency itself"). Under this conception, a measure of empowerment should include information about political and civil structures (the conditions) and direct measures of agency (which "seem to best capture prevailing perceptions on a large scale," p. 34).

I would like to argue that introduction of "direct" measures of agency is not a good idea and that whatever measure is created to capture empowerment should stick to the conditions for exercising empowerment, or the political and civil liberties *available*

for citizens to pursue whatever goals and values they find important. There are two justifications for this position.

First, as indicated in the Briefing Notes, existing direct data on agency are about individuals' perceptions regarding the possibility of agency, which come primarily from the World Values surveys. These data, however, do not necessarily provide a direct measure of agency. In addition to the issues of cross-country comparability that the Briefing Note raises, there are other problems stemming from psychological factors that cannot be accounted for in these surveys. Thus, people may suffer from some form of delusion, even if mild, and believe that they control the outcomes in their lives when they really do not (e.g., younger people, high achieving people); they can be pessimists and believe that they do not control the outcomes in their lives, even when these outcomes are the result of their own choices (e.g., married people with children, recently unemployed people). Thus, reliance on perception of agency can be clouded by the fact that these perceptions can be distorted by psychological traits that may or may not be randomly distributed across the population.

Second, and more importantly, we must ask if we really want to measure agency directly. Or, to state it more precisely, we need to ask if we really want to measure agency again. For this is what we would be doing if we were to add to the HDR measures of people's perception of how much control they have over their lives. The constraints that prevent agency – which a direct measure of agency would ideally capture – are, in a sense, the constraints already captured by the three components of the HDI as it exists now. Poverty (or very low income) constraints agency, just like education and a short life do. The HDI, thus, is meant to be a measure of capabilities, of people's ability to shape

their lives according to the goals they value, in other words, a measure of agency. What is missing from it is the political constraint: whether the political community in which the individual lives allows that individual to exercise the capabilities expressed in his or her income, level of education and life expectancy.

Thus, expanding the HDI is not necessarily about introducing measures of empowerment into the index; the index *is* already a measure of empowerment. The expansion should introduce new information, such as, for instance, the political constraints individuals face. This kind of information would complement, and not duplicate, the information about the material constraints that are already present in the index.

With this in mind, thus, I believe that the kind of information that is needed refers to the opportunities individuals have to influence public decisions, and to the guarantees that others (fellow citizens and/or the state) will not prevent them from exercising that influence. Thus, what is needed is information about the formal framework for political and civil liberties. Finding indicators of political liberties – opportunities for influencing a community’s public decision-making – is easier than finding indicators of civil liberties. In the remainder of this section I make some suggestions, indicating, to the best of my knowledge, whether they are already available and, if not, how they could become available.

Political liberties

- Chief executive is popularly elected, directly or indirectly: 0 for not elected executive, 1 for elected executive.

- An indirect executive election counts as a popular election if a body that is itself elected elects the executive. Thus, parliamentary systems in which the popularly elected legislature elects the president and supports the prime minister has a popularly elected chief executive; a presidential democracy such as the US has a popularly elected executive; but under the communist regimes, the party secretary, the effective chief executive, was not chosen by an elected body.
- Legislature is elected: 0 if no legislature, 1 if appointed legislature, 2 if elected legislature.
- Political parties: 0 if there are no parties, 1 if there is one party, and 2 if there are two or more parties.
 - These are the only quantities that matter. Having two or three or ten parties does not make the election any more competitive or democratic; but having two parties, as opposed to one or none, is the condition for the election to be competitive.
- Alternation in power: 1 if it has happened, 0 if it has not happened.

These four variables are already coded in the DD dataset. They are the input for the classification of countries as democracy or dictatorship. One does not need to commit to the DD definition of democracy in order to use these variables as indicators of formal capabilities. Each of these measures can be justified as indicating significant differences in individuals' capacity to influence their countries' decisions. Thus, it is plausible to believe that an individual who lives in a country in which the chief executive and the legislature are popularly elected and in which two or more political parties compete for

their votes, are more capable to influence public decisions than individuals who live in countries with an unelected executive and legislature and no political parties.

The alternation variable deserves a separate discussion. In the DD measure it is part of the operationalization of the particular view of democracy that it adopts (see section 2, “Type of Data”). Note that the task is to find rules that operationalize “competitive” in the competitive elections phrase. A regime in which elections are held for the chief executive and the legislature, and in which more than two parties compete, cannot be considered competitive if we know that the only reason that they are being held is that the incumbent knows he will not lose. Since we cannot enter the heads of incumbents and discover their true intentions, we need to devise alternative ways to observe competitiveness.

As Przeworski et al. (2000) and Cheibub, Gandhi and Vreeland (2009) extensively discuss, there are instances in which history provides information about which type of regime we are facing. Thus, when the LDP in Japan loses elections after having ruled for a long time and yields office to the opposition, we are confronted with evidence that incumbents were willing to yield power in case they lost. When the government in Malaysia wins an election but not by as much as it was used to (it won “only” a plurality in 1969) and, as result, declares a state of emergency, closes parliament, issues a harsh internal-security law, and rewrites the constitution in such a way as to guarantee that it will never lose again, we are confronted with evidence that the government was not prepared to yield power and that elections were being held just as long as the incumbents were assured to win. Unfortunately there are cases about which we do not know whether the regime is like Japan or like Malaysia. The typical case is

Botswana, where elections have been held regularly since before independence, and the incumbent has won every one of them. Since we have not observed the incumbent yielding power or closing the political system, we cannot tell whether Botswana is like Japan or like Malaysia. Botswana is not a middle case between democracy and dictatorship. It is not a partial democracy or a partial dictatorship. Botswana is either a democracy or a dictatorship. The problem is that we simply do not know which one.

Since the objective of DD was to produce a measure of democracy, we made a decision about what to do with cases such as Botswana. We decided, first, to explicitly identify them (the variable “type2” in the dataset flags these cases). Second, we decided that we would call these systems non-democratic, knowing that we were making a conscious choice to err in a particular way: even though there would be cases of true democracies we would be calling a dictatorship, we knew that there would be no cases of true dictatorships that we would call a democracy. This feature of the measure is frustrating and has led many to criticize it. Many people have argued with me that “we know” that Botswana is really democratic, and that Mexico at least before the Zedillo government (1994 – 2000) was not democratic. Except that when pressed to formulate the base on which that judgment was made, the only thing that could be invoked were “authorities:” all leading organizations classify Botswana as a democracy; as any African and you will hear that Botswana is a democracy; everyone knows that Mexico was not a democracy before Zedillo; the PRI could never lose; and so on.

Now, in the present context alternation in power would be used as one among several indicators of capabilities. The point that needs to be clear, however, is that it will always contain an ambiguity that can only be resolved as new historical information is

produced. This is so because, assuming two countries identical on everything except that one has experienced an alternation in power while the other has not, while we will know that in the first citizens can remove an unpopular incumbent, we will never know if in the latter they can but do not want to or simply cannot. A further implication of the uncertainty around alternation is that the coding of specific cases may change over time as history provides new information. Thus, the coding of some years in Mexico between the original classification (released in 1996 covering the 1950-1990 period) and the current one (released in 2009 covering the 1946-2008 period) has changed from non-democracy to democracy.¹³ This happens, I want to emphasize, not because we changed our opinion about what kind of regime Mexico was, but because we now have the information necessary to make a decision on the basis of our rules.

Some may consider the possibility of using the four basic variables used to code DD to create an ordinal variable, which would categorize the countries that meet all the conditions to be coded as a democracy, those that meet all but one, those that meet all but two, etc. Part of the reason for this would be to address the fact that using DD to generate a partial ordering of countries yields just too few categories.¹⁴ This alternative, however, uses DD in a way that is not conceptually equivalent to it. In itself this is not a problem. The real problem comes from recent research on authoritarianism, which has shown that dictatorships that have legislatures and political parties - that is, dictatorships that "look like" a democracy - may be in equilibrium and can last for a long time. As a matter of fact, there is research showing that dictatorships with "democratic" institutions tend to

¹³ There is a rule, specified in Przeworski et al. (2000) and in Cheibub, Gandhi and Vreeland (2009) to decide how far back one must recode a country that experience an alternation but that was previously coded as a non-democracy on the grounds of the alternation rule.

¹⁴ This issue was raised by the HDRO staff in response to the first draft of this paper.

last longer than those that do not.¹⁵ The implication of this research is that a dictatorship with parties, legislatures and elections - a dictatorship that would be categorized as being closer to democracy - is not necessarily closer to becoming a democracy than a dictatorship without such institutions. This, in a sense, would undermine the reasoning for building an ordinal measure of regime on the basis of the conditions used to code countries as democracy or dictatorship in DD.

Other observable indicators of political liberties include:

- Are there elected sub-national units? 0 for no, 1 for yes.
 - At first thought this variable would be biased by the fact that federations would tend to have sub-national elections more often than non-federations. But I am not sure this is the case as I can think of many non-federal states where mayors or provincial officials are elected (Bolivia, France are two examples that come to mind). But perhaps it would be a good idea to check it.
- Are there legal exclusions (other than age, incarceration and profession, e.g., military, clerics) from the right to vote?
 - The coding of this variable is not simple. There are two approaches.
 - Przeworski, in a dataset not yet released for public use, codes (at least since the 19th century), legal exclusion on the basis of social class, education and ethnicity.

¹⁵ The literature on authoritarian regimes is vast and rapidly increasing. Magaloni (2006) analyzes México and shows that the regime survived for a long period in an equilibrium that did not depend on the use of force; it was the "democratic" institutions of the regime that allowed it to sustain itself in power. Gandhi (2008) and Gandhi and Przeworski (2007) show that dictators that allow for multiparty legislative elections last considerably longer in office than those that limit or abolish legislative elections. For a review of the recent literature on authoritarianism, see (Gandhi and Lust-Okar 2009).

- Paxton et al. (2003) adopt an approach according to which estimated population shares of existing exclusions are subtracted from 100 to produce a figure that is meant to represent the extent of suffrage.
 - I personally have a preference for the first approach as I find it less subject to error. But both meet the criteria for an indicator to be included in the HDI expansion.
- Percentage of female participation in the legislature or ratio of female representation in the legislature to that of male representation.
 - One problem with this variable is that it is discontinuous. It ranges from 0% to 100%, or from -1 to 1. But 0 may mean the absence of any female in the legislature and the absence of a legislature.

Civil liberties

Finding adequate indicators for civil liberties is harder than finding adequate indicators for political liberties. As far as I know, all the indicators currently in use are based on subjective judgments and, for this reason alone, should be rejected. It may help to think of civil liberties as consisting on the ability to pursue one's individual goal in the context of a community. Violations of this liberty may come from the state (the focus of most of the existing literature) or from fellow citizens. These liberties are also more likely to be present if there is an environment of rule of law, however it is expressed.

With these considerations in mind, here are some candidates:

- Murder rates in capital cities.

- Murder rates indicate the extent to which citizens can act in their community without fear of being attacked by fellow citizens. It seems to me to be intuitive that citizens in Oslo or Stockholm feel better protected in pursuing whatever their goals are than citizens in Rio de Janeiro or Washington, DC.
- I do not know of any datasets that contain this information, but I must also say that I have never looked for it. Focus on the capital city can be justified in terms of data availability. But it is also likely that this would be the place better protected since this is where the political class circulates. It, in this sense, reflects the best case for the country and represents an upper bound of protection. It just occurred to me, however, that Rio de Janeiro, for example, is not Brazil's capital city and that murder rates there are considerably higher than in Brasília.
- Are there restrictions on women's rights to own property or to divorce?
 - These are restrictions that clearly limit the freedom of a significant part of the population. Including divorce, however, may be an issue given that marriage is interpreted differently across religions. I am not sure if there is a religious justification for restricting property rights to men.
- Weighted (by population or some other factor) number of legal periodicals published in the country.
- Weighted (by population or some other factor) number of law schools in the country.
 - Collection of information on these two variables is about to be completed by Peter Nardulli at the Cline Center for Democracy at the University of Illinois.

It is part of larger project on the rule of law, which includes attempting to generate indicators that meet the requirements stipulated above.

- Constitutional provisions that explicitly guarantee civil liberties (e.g., entrenchment of individual rights, judicial structure). This information can be extracted from original constitutional documents, assembled by the Comparative Constitutions Project at the Cline Center for Democracy. These documents are available for consultation, but are also coded for over 800 variables that can be readily used. Information about the CCP can be found at

<http://www.comparativeconstitutionsproject.org/>

Finally, I would like to call attention to a large project, also being developed at the Cline Center for Democracy at Illinois that may generate a wealth of information to be used in measures of political and civil freedom, as well as related concepts. This is the SPEED project (Social, Political, Economic Events Dataset). Here is not the place for me to discuss all the details of this project,¹⁶ the usable outcome of which is still at least a couple of years ahead (if funds are secured for its continuation). But the main highlights include:

- It is an events database; it focuses on things that actually happened in a country and on not what a given actor thinks happened.
- It uses two massive source of information: the reports of the Foreign Broadcast Information Service (FBIS), which have existed from at least 1945, and the Summary of World Broadcast (SWB), which covers the 1979-2008 period. The

¹⁶ An 8-minute video overview of the SPEED project as a whole, the process, and its eventual applications may be found at: <http://crisismapping.ning.com/video/iccm-2009-automated-crisis>><http://crisismapping.ning.com/video/iccm-2009-automated-crisis>

Cline Center has access to all of these reports (an estimated 4,393,121 from FBIS only), had digitized all of them and is now in the process of developing a protocol to treat the information they provide.

- Because of its extensive coverage, the reporting bias in the FIBS and SWB reports are not large, and certainly orders of magnitude smaller than the bias present in event data bases that rely on one or just a few Western journalistic sources (see Leetaru 2010 for a detailed analysis of the geographic and language distribution of these reports).

The kinds of information that we will be able to get from this dataset that we do not now have include information about the conduct of elections, a count of all sorts of popular demonstrations, violations of individual rights, disputes over property, just to cite a few.

* * *

To conclude, then, the main point is, in my view, the following: it is important to keep the concept of capabilities “clean,” and not bring into it more than it can meaningfully handle. If we consider that the HDI is already an attempt to measure “material” capabilities, the extension under consideration should entail information about the political opportunities individuals have to exercise their capabilities. Partial order ranking seems to provide a solution to one of the most vexing problems in multidimensional measures of political and civil liberties. It makes no assumptions about the weights of each element in the measure and yields sufficient differentiation among the countries to allow for the identification of several “stages” of political capabilities. There are several existing variables that can enter into such a measure of political

capabilities, which meet the requirements of being descriptive, reliable (reproducible) and feasible.

APPENDIX

Measures of Democracy and/or Political Freedom

1 – ARP – AFRICAN RESEARCH PROGRAM

Producers

Robert Bates and others.

Coverage

46 Sub-Saharan countries, 1970 – 1995.

Measure

Categorical measure (six categories) of electoral institutions.

Location

<http://africa.gov.harvard.edu/>

2 – BANKS - CROSS-NATIONAL TIME SERIES DATA ARCHIVE

DATABANKS INTERNATIONAL

e-mail: support@datbanksinternational.com

mobile phone: +972-52-521-1523

phone: +972-2-566-9340

fax: +972-72-233-4160

contact person: Ken Wilson, Technical Support

Coverage

As of January 2010, 234 entities, that is, contemporary and historical countries since 1815.

Measure

Does not contain a direct measure of political regime. But offers a number of variables that can be used, and have been used, to construct regime measures. For example, Bollen directly takes variables from this dataset to use in the construction of his liberal democracy measure. DD starts with two of the Banks variables but considerably changes and recodes them. The variables of interest are: Number of Seats, Largest Party in Legislature; Size of Legislature (Lower House); Effectiveness of Legislature; Competitiveness of Nominating Process; Party Coalitions; Party Legitimacy; Size of Legislature/Number of Seats, Largest Party; Party Fractionalization Index; Type of Regime (coded as civilian, military-civilian, military and other); Number of Coups d'état; Number of Major Constitutional Changes; Head of State; Premier; Effective Executive (Type); Effective Executive (Selection); Degree of Parliamentary Responsibility; Size of Cabinet; Number of Major Cabinet Changes; Changes in Effective Executive; Legislative Effectiveness; Legislative Selection; Number of Legislative Elections.

Location

<http://www.databanksinternational.com/53.html>

Observation

This is a proprietary dataset and it is of relatively high quality (in the sense that once one examines specific variables, one does not find many coding mistakes. However, sources are not provided.

3 – BOLLEN

Producer

Kenneth Bollen

Coverage

187 countries for 1972 through 1988

Measure

A measure of liberal democracy (LIBDEM), defined as:

$LIBDEM = (X1 + X2)/2$, where $X1 = SUFF$ if $SUFF < [(POLRT + LEG)/0.2]$, otherwise $X1 = (POLRT + LEG)/0.2$; $X2 = PARTY*10$; $SUFF$ = Percent of adult population over 20 years of age who have the right to vote in a national election (with no consideration of whether the election was free or fair) (from Kenneth A, Bollen, Robert W, Jackman and Hyojoung Kim, 1997, "A Comparative Analysis of Suffrage, Registration, and Turnout." University of North Carolina, Chapel Hill, NC.); $POLRT$ = political rights, a seven-category variable based on Gastil/Freedom House; LEG = legislative effectiveness*legislative selection (from Banks); and $PARTY$ = party legitimacy (from Banks)

Location

ICPSR study no. 2532.

4 – CAM - COOPEDGE, ALVAREZ AND MALDONADO

Producers

Michael Coppedge, Angel Alvarez, and Claudia Maldonado, "Two Persistent Dimensions of Democracy: Contestation and Inclusiveness," *Journal of Politics* 70:3 (July 2008): 632-647.

Coverage

203 countries for 1950 through 2000

Measure

Two continuous measures reflecting contestation and inclusiveness of political regimes (following Dahl 1971), produced by a factor analysis using 19 variables coming from 9 different datasets.

Location

<http://www.nd.edu:80/~mcoppedg/crd/datacrd.htm>

5 – DATABASE OF POLITICAL INSTITUTIONS

Producers

Philip Keefer and others. Development Research Group, the World Bank.

Coverage

181 countries between 1975 and 2006.

Measure

A regime indicator can be derived from the variable EIEC (Executive Index of Derivative Competitiveness). According to the authors, when coding a variable that indicates the tenure of the political regime (democratic or autocratic), "if EIEC is below 6, the country is deemed autocratic or a country in which democratic institutions are not consolidated and leadership is personality-based" (p. 19). EIEC of 6 or 7 is, therefore, democratic.

Location:

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20649465~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html>

6 – DD - Democracy and Dictatorship

Producers

José Antonio Cheibub (University of Illinois), Jennifer Gandhi (Emory University), and James Raymond Vreeland (Georgetown University)

Coverage

202 countries between 1946 and 2008

Measure

Dichotomous classification of political regimes as democracy or dictatorship.

Location

https://netfiles.uiuc.edu/cheibub/www/DD_page.html

7 – EIU'S INDEX OF DEMOCRACY

Producer

Economist Intelligence Unit

Coverage

165 countries for 2006 and 2008

Measure

An index constructed by averaging scores on 60 indicators grouped into five categories (electoral process and pluralism; civil liberties; the functioning of government; political participation; and political culture).

Location

<http://graphics.eiu.com/PDF/Democracy%20Index%202008.pdf>

8 – FH - FREEDOM IN THE WORLD

Producer

Freedom House

Coverage

Covers the years 1973 (with 151 countries) through 2008 (with 193 countries)

Measure

Two measures: political freedom and civil freedom.. They range from 1 (most free) to 7 (least free). In response to the question: What does Freedom in the World measure? Freedom House states the following in its website: “The survey measures political rights and civil liberties, or the opportunity for individuals to act spontaneously in a variety of fields outside the control of the government and other centers of potential domination. As such, the survey is primarily concerned with freedom from restrictions or impositions on individuals' life pursuits. > “While the survey considers restrictions on freedom imposed by governments, it does not measure government performance per se. Rather, it measures the wider state of freedom in a country or territory, reflecting both governmental and non-governmental constraints. > “Similarly, the survey does not explicitly measure democracy or democratic performance. Rather, it measures rights and freedoms

integral to democratic institutions.”

(<http://www.freedomhouse.org/template.cfm?page=277>)

A large number of scholars uses freedom in the world as a measure of democracy.

Location

<http://www.freedomhouse.org/template.cfm?page=15>

9 – GASIOROWSKI

Producer

Mark J. Gasiorowski. 1996. “An Overview of the Political Regime Change Dataset.” *Comparative Political Studies*, vol. 29, no.4, 469 – 483.

Coverage

97 largest Third World countries, from independence through 1992.

Measure

Classifies regimes as democratic, semi-democratic, authoritarian, and transitional.

Location

Article cited above.

10 – MBP – Mainwaring, Brinks and Pérez-Liñán

Producer

Mainwaring, S., Brinks, D, and Pérez-Liñán, A. (2001). “Classifying Political Regimes in Latin America, 1945-1999.” *Studies in Comparative International Development* 36 (1): 37-65.

Coverage

Nineteen Latin American countries between 1945 and 1999.

Measure

Trichotomous classification (Democracy, Semi-democracy, Authoritarian)

Location

Article cited above.

11 – POLITY

Producers

Monty G. Marshall, director and principal investigator (George Mason University), Keith Jagers, principal investigator (Colorado State University) and Ted Robert Gurr, founder (University of Maryland)

Coverage

“Major independent states in the global system,” which means 163 countries with total population of 500,000 or more in the most recent year, for the 1800 – 2008 period.

Measure

Measures of democratic and autocratic authority patterns, ranging from 0 through 10 and the Polity Score, generated by subtracting the autocratic from the democratic measures of authority patterns, thus ranging from -10 (least democratic) to +10 (most democratic).

12 – VANHANEN

Producer

Tatu Vanhanen, Democratization and Power Resource, 1850 – 2000.

Coverage
187 countries between 1810 and 2000

Measure
Three regime measures: (1) Competition, which is calculated by subtracting the percentage of votes/seats gained by the largest political party in parliamentary elections and/or in presidential (executive) elections from 100%; (2) Participation, which is an aggregate of the turnout in elections (percentage of the total population who voted in the same election) and the number of referendums. Each national referendum raises the value of Participation by five percentage points and each state referendum by one percentage point for the year of the referendum. The upper limit for both variables is 70%; (3) Index of Democratization, which consists of (Competition X Participation)/100.

Location
<http://www.fsd.uta.fi/english/data/catalogue/FSD1216/meF1216e.html>

13 – WBGI (World Bank Governance Indicators)

Producers
Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi

Coverage
212 countries and territories for 1996, 1998, 2000, and annually for 2002-2008

Measure
A continuous indicator of six dimensions of governance, constructed with an unobserved components model based on a large number of variables coming from a large number of datasets. All variables are subjective judgments by elites and/or mass publics. The five dimensions are: (1) Voice and Accountability (VA) – capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. (2) Political Stability and Absence of Violence (PV) – capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. (3) Government Effectiveness (GE) – capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. (4) Regulatory Quality (RQ) – capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (5) Rule of Law (RL) – capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. (6) Control of Corruption (CC) – capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Location

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