

THE POLITICAL CAPITAL OF ELECTORATES: A COMPARISON OF FIFTY COUNTRIES

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Abstract:

Institutions comprise the formal and informal rules that govern the behavior of individuals and organizations. Several branches of economics are interested in the influence of institutions on growth. Regarding informal institutions, they have focused on social capital. Public Choice scholars share in this research program. However, the most important question for Public Choice is that of the ability of formal political institutions to translate the preferences of citizens into political decisions. In this direction, however, attention has focused almost exclusively on formal political institutions, with little attention to informal ones. As a result, Public Choice hasn't developed a concept that may be the analogous of social capital in political life. In this paper we make a first attempt to reverse this situation. Using two multivariate methods of analysis, we have constructed an index that attempts to measure the ability of individuals, in 50 countries and during the 2005-to-2008 period, to translate their intrinsic preferences into political action. To this we call the Index of Political Capital of electorates. Our results indicate that this Index is correlated with the quality of formal political institutions, as well as with features of the corresponding national cultures.

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1. Introduction

For years, economists inquiring on the wealth of nations have increasingly turned their attention to institutions as potential determinants of international differences in GDP levels and GDP growth.

General dictionaries and encyclopedias are at pains with the definition of institutions. To our surprise, for instance, the 15th edition of the *New Encyclopædia Britannica* (1974-1989) simply doesn't include the term in its 32 volumes. Therefore, economists have had to produce their own definitions. In a fortunate expression, D. C. North (1990) applies the term to the full array of formal and informal rules that govern the behavior of individuals and organizations. More recently, North, Wallis and Weingast (2009:10) have gone deep in the same direction, by stating that "Institutions include formal rules, written laws, formal social conventions, informal norms of behavior, and shared beliefs about the world, as well as the means of enforcement". The World Bank (1998) and authors of review articles on the subject like Aron (2000) have given very similar definitions.

These definitions are ample enough to embrace institutions of different quality, though. For this same reason, they don't shed light on that aspect of institutions that is at the root of the recent interest of economists towards them. The distinctive feature of good institutions is that they lead individuals to behave in ways that make own interest compatible with the interest of others. Or, as put by Nee (2005), institutions are social structures that provide a conduit for collective action that allows not only alignment but also facilitation of human interests. One of the merits of the above cited definitions, however, is the distinction they make between formal and informal institutions.

Though the focus of economists was initially put on formal institutions, it has moved in recent times to informal institutions, as exemplified by social capital or by its indicator generalized trust. Looking at the trajectory followed by growth economics since its very birth, one gets the impression that it has been painstakingly tracing the whole causal chain that links growth to its ultimate determinants. First was the identification of the proximate causes of growth –factor increase and TFP growth–; next came the search for the determinants of these including the setting of formal institutions, and so on until the more recent discovery of social capital. When seen in this perspective, it seems as if beliefs, values and internalized norms of behavior were implicitly considered to be at the roots of formal institutions. And, to tell the truth, it is difficult to imagine how any given formal institution could be created and survive in opposition to the values and beliefs of the corresponding society.

The recent interest shown by growth economists towards institutions implies recognition of –and provides new stimuli for– the efforts deployed by those economists who, since long, have been applying the methodology of economics to their analysis. Indeed, public choice scholars, specialists in empirical constitutional political economy and other defendants of institutional economics show signs of having felt such stimuli, judging from the fact that they have joined growth economists and contributed with their mastery to the analysis of the roles played by the freedoms –economic, civil and political–, by public sector size, by the constitution, governance or trust when it comes to explaining growth.

However, public choice and constitutional political economy are not only –and not primarily– concerned with economic performance as such. Rather, since their origins these schools of thought have tried to discern the extent to which the extant institutions of representative democracy are able to produce outcomes that truly reflect the preferences of voters. It is true that economic performance may provide an indirect measure for this success, as it is sensible to think of individuals as having a preference for growth, but this is not the sole indicator that we may imagine, and by no means the best one. Political stability and convergence of programs and policies are other proposed measures for the working of political markets, and we shouldn't drop our efforts to find an operational equivalent of the abstract concept of voters' true preferences. The important fact, in any case, is that, both in their theoretical constructions and in empirical estimations, public choice and constitutional political economy have been almost exclusively concerned with *formal* political institutions. Much of the same can be also said in relation to political science.

In our view, this may be a major shortcoming of these disciplines. Disregard for those informal institutions that may have a bearing on the behavior of political actors may greatly diminish our ability to properly assess the effects of different constitutional arrangements, or of different variants of any other formal political institution. Depending on their beliefs and values, political actors may behave in quite different manners on any given setting of formal rules, with the degree of enforcement and effectiveness of these rules varying accordingly. Thus, without proper control of these beliefs and values, our estimates for the roles of formal institutions may suffer from omitted-variable bias, or, more generally, may fail at identifying the real determinants of institutional performance, no matter how we measure it.

If this were the case, our lack of attention to those informal institutions that influence political behavior would necessarily hinder our capacity to give political advice with a respect to formal political institutions. Informal institutions may be also the missing piece in our attempts to understand why, in most studies about the effects of democracy on economic growth and on life satisfaction, a blunt contrast appear between the positive role it seems to play in developed nations, and the seemingly absence of similar effects in developing ones.

In this respect, other branches of institutional economics seem to be more aware of the importance of informal political institutions. North *et al.* (2009:15) serve again as an example when they write: “The same institution produces different results depending on the context. Take the case of elections. [...] The institution of elections does not inherently produces democracy. Elections require institutions and organizations *along with beliefs and norms* before they produce an open access order with democratic competition for political power” (Italics added). Other institutional economists, as Pejovich (2003), have joined North and his co-authors in stressing the role of informal institutions.

It is fair to admit that a few public choice scholars also have recognized the potential importance of informal institutions, and the following section contains a reference to their work. The general standpoint of this literature is the idea that political actions can be explained not only by narrow “rational choices”, but rather by citizens' ethical models and their principles and norms, psychological and emotional factors as well as by the nature, contents and persistence of political culture. To our knowledge, however, the defendants of these ideas haven't attempted as yet to elaborate a comprehensive list of attitudes, values and beliefs that may have a bearing on political behavior, nor have compiled an index of these for a large sample of countries.

This is precisely the task that we undertake in this paper. What we present here is a composed index of different indicators for social norms, values and beliefs that may influence political behavior. Drawing on existing opinion surveys, we have selected 90 such indicators, and, using multivariate methods of statistical analysis, we have compiled out of these a general index, as well as partial indices, for a sample of half a hundred countries towards 2005. It is our purpose to give continuity to this index in future contributions, as well as expanding it back in time as much as possible.

What we intend to measure by means of these indices is the extent to which the informal rules of the society allow for a correct translation of the *intrinsic* preferences of individuals –about ends– into *extrinsic* preferences –about the means to achieve these ends–, in political markets¹. In search of a name for this concept we have chosen that of *Political Capital of the Electorates*. As a first approximation, we can define it as the ability of the inhabitants of any given polity to make their collective decisions according to democratic rules, and to select thereby the options that are more beneficial to them at every juncture. Or, in a shorter expression, we could also define political capital as the capacity of the civil society to fulfill its needs and to meet its goals through political action. This capacity summarizes the full set of politically relevant beliefs, values and attitudes, that is, the relevant informal rules of that society, plus the political skills, aptitudes and capacities of the citizens. It is constrained by the particular formal rules prevailing in each time and place, and interacts with them. But, in any case, political capital is more related to what citizens are able (and willing) to do than to what they are allowed to do by the existing set of formal institutions.

Our concept of political capital, thus defined, is multi-dimensional by hypothesis. However, one advantage of the multivariate methods employed here is that they permit to assess whether the prospective dimensions that can be distinguished at the theoretical level are also separable in practice. As indicated by Paldam and Gundlach (2009), Knack and Langbein (2010), and Bjørnskov *et al.* (2010), this is not always the case with institutional variables.

Here we explicitly present the concept of political capital as related to those of human capital, social capital, psychological capital, and culture:

Human capital is defined by the OECD as the knowledge, skills, competences and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being. This is a wide definition indeed, into which our idea of political capital that be easily subsumed. Currently, however, the term human capital is used to indicate the stock of knowledge applicable to goods' production of the persons living in a given country. Our concept of political capital also includes a component of knowledge or information –of political contents in this case–, whose origins may lie in education or in experience as in the case of human capital, but it embraces as well those values and beliefs that serve the same end. Thus, the narrow definition of human capital depicts it as related to goods' production, whereas political capital is related to the translation of ultimate preferences and to its peaceful expression in political markets.

Social capital is also related to values and beliefs, and certain definitions of this term also present considerable latitude. This is the case, for instance, of the definition given by Putnam (1993:167), as those “features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions”. However, other authors prefer to restrict the meaning of social capital. In the definition offered by Fukuyama (1995), for instance, social capital expresses “the ability of people to work together for common purposes in groups and organizations”. Our

concept of political capital alludes to the precise combination of values, beliefs and attitudes –determined by them– that help solving the *specific* problem of public goods’ provision, at the level of the full polity –which cannot be termed an organization and hardly a group–, and by means of democratic decision rules.

Some sociologists also use the term “psychological capital” to describe how well one is equipped to cope with the problems of life. As indicated by Veenhoven (2009:8), this definition renders psychological capital into an equivalent to the concepts of “life-ability” used by psychologists, and “capability” in the sense of Sen (1992). As it happens with some definitions of human and social capital, this one is also very general. For this very reason, however, it differs from our specialized definition of political capital. As another difference, it refers primarily to the individual, although we cannot exclude the possibility of finding systematic differences among national means.

Finally, our concept of political capital can be also subsumed in that of culture. This is the conclusion that emerges from applying the definition of the latter given by Hofstede (1991:5), for whom culture is the collective programming of the mind which distinguishes the members of one group or category of people from another; culture determines how common basic problems are dealt with worldwide. To the same conclusion leads the definition of Giddens (1993:41), for whom “culture consists of the values the members of a given group hold, the norms they follow, and the material things they create”. Also speaking about culture, Inkeles (1997) highlights the existence of “enduring national creeds” and “national character traits”, and Inglehart (1990) refers to the “accumulated national experiences that are absorbed in pre-adult socialization”. In the face of such a wide concept, however, political capital retains its personality as a specialized subset of the “collective programming of the minds”, “values”, “norms”, “national creeds”, “national character traits”, or “accumulated national experiences”.

None the less, the evident relation of political capital with the concepts of human, social and psychological capital, as well as with that of culture provide us with sources of inspiration in our attempt to make our concept operational and give it a precise contents.

The rest of the paper is organized as follows: In section 2 we briefly review the efforts made by other scholars in order to identify components and construct indices for concepts related to that of political capital. In section 3 we carry on a similar attempt in relation to the latter. In section 4 we present the sources from which we have taken the corresponding data. Although theory can be very useful regarding the identification of index components, it doesn’t give clues as to how to weight them. Therefore, in section 5 we turn to multivariate methods in order to identify the latent variables behind our indicators, as well as to ascertain the basic unity of what we are trying to measure. In section 6 we submit to test the relationship of our components of *political capital* to economic and (mainly) political outcomes, and to other variables to which they are supposedly related. Section 7 concludes.

2. A look to the (loosely) related literature

As indicated in the precedent section, certain scholars working in public choice and constitutional political economy have acknowledged the importance of informal political institutions and, in some cases, have searched for indicators that allow their explicit inclusion in empirical analyses.

For instance, Mancuso (1995) analyzed the correlations between the institutional ethics of the British House of Commons and the individual ethics of their members, mainly in the context of the transition to a *post-materialistic* society. Caplan (2001) defends that explicitly incorporating irrational expectations into the behavioral assumptions may provide solid micro-foundations for inefficient political failure. Peters and Welch (2002) explore the relationship between state's political culture and the legislative attitudes toward corruption, highlighting some determinants of voters' ethical judgments. The idea that informal institutions determine to some extent the quality of formal institutions is explicit in Knack (2002). Bjørnskov (2003) has also indicated the convenience of including informal institutions among the determinants of growth. Brams (2006) addresses the issue of the mechanisms involved in translating the general principles into optimal political practices in accordance to citizens' preferences. Patty (2007) examines several models of voter behavior, which are consistent with recent works in political psychology, and draws their implications for policy convergence. Brennan (2008) advances some psychological assumptions in regard to voters' behavior and argues that *homo economicus* and *homo politicus* exhibit different behaviors, in the sense that the kinds of considerations that weight with them are likely to be rather different. Tidemann and Munger (2010) stress that, where electoral results are close to a tie, the situation can be managed in very different manners, depending on the "meta-rules" followed by the political class. Hamlin and Jennings (2011) discuss the content of the "expressive choice" in political settings, by distinguishing between moral, social and emotional cases. Finally, similar points have been also risen by Guiso *et al.* (2006), Licht *et al.* (2007), Dorn, Fischer, Kirchgässner and Sousa-Pouza (2007), Tabellini (2008a, 2008b), Williamson (2009), and Williamson and Mathers (2011).

The ideas expressed by all of these authors have been taken into account in our search of valid indicators for the informal institutions that may influence political behavior, and the same can be said about the political science literature dealing with the distinction between "sophisticated" voters and the rest of the electorate. Moreover, the public choice and other literature on free-riding and rent-seeking suggests other indicators for improper political behavior. In a sense, too, some of the instrumental variables devised by economists that investigate the causality issue in the relationship between formal institutions and growth could give ideas about the nature of informal institutions that underlie the former. At the very least, the use –and the statistical significance– of instruments such as the legal origin, the language, the degree of ethno-linguistic fractionalization, or religion seem to point at the importance of cultural peculiarities when it comes to explain differences in national performance.

The relationship between the concept of social capital and our new concept of political capital, highlighted in the precedent section, forces us to also take into account the indicators used by the booming literature on the former. In certain pieces of this literature, as exemplified by Putnam (2000), the reader can find an impressive array of indicators, some of which refer to political behaviors. For most of them, however, it is hard to find equivalents in an international study, constrained to a narrow time period, as is this one. Be it as it may, this literature also has provided guides for our search.

As also indicated in the introductory section, values, beliefs and social norms are important ingredients in the current definitions of culture. Here we can add that precisely those that present a political bearing seem to be relevant for the definition of a "national culture". As an example, in an early review of the literature on the subject Inkeles and Levinson (1969) found that three issues appear to be especially important on this respect. Namely: "relation to authority", "conception of self" –what includes the

relationship between the individual and society and the ideas on the genders' roles–, and “conflicts and their resolution”. For our purposes, much of the literature on culture is of little use, as we are interested only in those works that have made advances in making those concepts operational, and have filled them with statistical contents. In this respect, however, we cannot ignore the work of Hofstede. Starting in the late 1960s, this former director of the personnel research department of IBM-Europe compiled a huge database, out of surveys to IBM employees. From this, he elaborated statistical scores for 50 “national cultures” on four dimensions –later expanded to six– that he considers to grasp the essence of that concept. One of these dimensions is “power distance”, defined as “the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally”. Another is “individualism vs. collectivism”, which indicates “the degree to which individuals are integrated into groups” that protect them in exchange for unquestioning loyalty. Triandis (1989, 1995) has also elaborated his own index for this latter dimension. These ideas contain insights that may be valuable for our own study. We cannot take advantage of Hofstede's database, as it is not updated with the desirable periodicity. But we can look for indicators that may match theirs in other sources that accomplish with this requisite.

Similar limitations are present in relation to other databases, compiled by psychologists specialized in personality and/or personnel selection, which also acknowledge for substantial differences between country means. Whether these have a genetic origin or are entirely due to different national histories, the fact is that they may help to explain diverging political behaviors across countries. Two different enumerations of the basic personality features are popular among personality psychologists. First, Eysenck & Eysenck (1975) distinguish three main personality dimensions: “extraversion vs. introversion”, “neuroticism vs. emotional stability”, and “psychoticism vs. ego control”, to which Steel has added a fourth: “lie scale”. Things such as emotional stability, the control of ego or the tendency to lie may have important consequences on political behavior. In another popular classification, the NEO Personality Inventory, the emphasis is put in the so called “Big Five” personality scales or dimensions: “conscientiousness” –which refers to the sense of duty–, “emotional stability”, “openness to experience”, “agreeableness”, and “extraversion”. Again, the news that there exist perceptible differences among nations in respects such as the sense of duty, emotional stability or even openness to new experiences can be revealing about their possible consequences on public behavior. Finally, side by side with the former we find the so called Criterion-Focused Occupational Personality Scales (COPS), commonly used by firms for personnel selection. Certain scales among these could be useful to our purposes, as it is the case of the “integrity or honesty scale”, or that of the “violence scale”. Once again, however, although some international databases exist for all these variables, they are not renewed every few years. Thus, neither the data they contain nor the concepts that underlie them are very useful to us, except as a source of inspiration for the theoretical construct that we present in the following section.

To sum up, several and very different streams of literature throughout social sciences suggest that values, creeds, informal norms and the like have an impact on all aspects of human behavior. Moreover, many among the elements highlighted by the corresponding authors seem to have evident consequences on political behavior. This coincidence seems to indicate that our research subject may be important indeed. In addition, the reviewed literature contains insights that are useful in the search of indicators for the variables that we are trying to measure. The outcome of this search is presented immediately after.

3. Prospective dimensions of political capital

As indicated in the introductory section, the values, beliefs and other informal norms the citizens are in need of in order to democratically adopt their collective decisions, and to select by these means the options that are more beneficial to them are likely to compose a variegated array. We cannot be sure beforehand that the informal institutions that help peaceful decision making in a polity are fully coincident with those that help citizens to translate their basic preferences into political preferences. Therefore, we tentatively consider our concept of political capital as multidimensional. Accordingly, we have selected a number of prospective dimensions, for that general concept. These dimensions are in part inspired by our reading of public choice theory, political science, and the other streams of thought reviewed in the preceding section, and partly in logic.

- *Political information* seems to be a requisite for individual preferences to be adequately translated into voting decisions. In this respect we explicitly follow the distinction made by von Wright (1963) between intrinsic preferences –equivalent to tastes– and extrinsic preferences, referred to the means to satisfy the former. This distinction is equivalent to that made by Caplan (2001) between preferences and beliefs. Political decisions usually refer to means, and demand information –or beliefs, by want of this. This dimension, thus, measures the cognitive capacities of the electorates. Some voters may possess general knowledge and specific information that, to some extent at least, help them to identify the political option that better serves their intrinsic preferences, whereas others simply lack these capacities. Political scientists dealing with electoral results have coined the term “sophisticated voters” to name the former. In accordance to these considerations, we identify political information, consisting both of general and specific knowledge, as a dimension of political capital.
- *Respect towards others* seems to be a requisite for peacefully living together. As we have just seen, the extent and ways of resolution of conflicts is deemed to be an important ingredient of culture, and the degree of emotional stability, control of ego and the scale of violence are considered by psychologists to be important elements in the definition of national personalities. Moreover, the basis of democracy is the recognition that, *ex ante*, the aspirations of others are as legitimate as our own, and maximization of social welfare seems to be an impossible endeavor in a society where each individual thinks that only his/her own utility or that of his/her kin deserves consideration. From this it follows that widespread respect towards others without exclusion and control of violence constitute another possible dimension of political capital. Therefore, any indicator that may provide information about the extent of beliefs and values in accord with these principles has been considered useful for the construction of our index.
- Whereas respect for others may be a requisite for democracy, this system hardly can come to existence in the absence of widespread belief in the workability of democratic formal institutions. Thus, the prevalence of *Democratic convictions* provides another possible dimension to be taken into account in the construction of our index. The history of 20th century contains many instances of the fact that democracy cannot work without democrats. Wherever an ample segment of society is ready to sacrifice democracy for the sake of a redistribution of wealth in its own benefit, other segments of the same society are also likely to evolve towards heavy hand policies, and democracy crumbles.
- Absence of political radicalism is also important for democracy to work. In the worst case, political beliefs that are both strong and extreme may put democracy at risk. In the best event, political radicalization is hardly compatible with compromise and the stability of policies. Since Downs (1957), public choice scholars have formalized these

ideas in the spatial analysis of politics: The more concentrated is the distribution of voters, the smaller is the uncovered set to which the political parties are said to converge. Thus, information about the distribution of voters on the political space, as well as about the occurrence and seriousness of political conflicts is also valuable in order to quantify political capital. We call this dimension *Political agreement*.

- Societies also differ in the extent to which their members elude their fiscal duties and take advantage of politics to get exclusive goods. If social capital indicates the general capacity of a given society to escape from prisoners' dilemmas and achieve cooperation, rent-seeking and tax evasion express the failure to achieve cooperation and the triumph of *Free-riding* in the precise context of public goods' production and politics. The public choice literature on interest groups and rent-seeking is huge, and, in relation to the construction of our index of political capital, there is little doubt that this is another possible dimension to be accounted for. Direct indicators on the prevalence of tax evasion and rent-seeking behavior are useful in this respect. However, as these seem to be the demonstration, in the particular field of politics, of a deficient social capital, it seems that, by want of sufficient direct indicators for those phenomena, other indicators on the amount of social capital in the corresponding society may be also informative. We have to be careful, however, with such ambiguous indicators as are the numbers of, and membership in associations, that have been used both as measures for the strength of interest groups –by Olson (1982) and other authors that have followed him– and as indicators for the stock of social capital –by Putnam (2000) and others.

- Finally, active *Participation in politics* is another important ingredient, without which democratic convictions are of little value. As indicated by Downs (1957), democracy simply cannot work where individuals abstain to go to polls. Electoral turnout provides an indicator of the political participation of voters although, in an international comparison, we cannot take for granted the *ceteris paribus* condition. Neither the cost of voting nor the value of individual vote is the same in all times and places; on the contrary, they depend on things such as the need of prior registration, the federal vs. unitarian form of government, and the full set of factors that determine the volatility of turnout in the course of time. Thus, information on the extent of other forms of political participation may be at least as valuable as that on turnout.

Thus far we have tentatively distinguished six different aspects, or prospective dimensions, of the phenomenon that we have termed *political capital*. Some of them, in turn, seem to comprise several sub-dimensions, as we have tried to make clear in the precedent paragraphs. The list is by no means closed, and should also include other phenomena that have been highlighted by public choice scholars. For instance, it is not totally clear that our prospective dimension *Political information* totally accounts for the rational ignorance of voters. However, it is difficult to empirically distinguish between rational ignorance and ignorance due to other causes such as a lack of knowledge, skills or capacity to absorb and critically judge information. Just the same, many among us may find the claims about rational irrationality compelling. Or, in a more general manner, we could point at irrationality in politics as a powerful destroyer of political capital. However, not even the proponents of this concept have been very successful in identifying measurable indicators for irrationality that are available for international comparison: Caplan and Miller (2006) resorted to an U. S. survey on economic knowledge for an indicator of irrationality, but this covers only one aspect of a more general phenomenon. Therefore, we can only hope that our dimensions *Political information* and *Political agreement* pick up its influence.

4. Making the concept operational: sources and data

The precedent section gives an idea about which types of indicators should we search for. In this one we present our data sources as well as the precise variables that we have used for index construction.

In principle, we are interested in both opinions and facts. Opinion surveys are irreplaceable as sources of information about the values and beliefs of the respondents. However, expressed opinions are subject to the phenomenon of preference falsification. Expressing an opinion in line with what seem to be the values or beliefs commonly held by politicians, journalists and other celebrities bears no cost; and, rather the opposite, it is moderately rewarding even in the framework of a pool. This is the point stressed by Kuran (1995, 1998), Sunstein (1996) and others, with precedents in Noelle-Neumann (1984). Hirshman (1989) indicates that opinions are also subject to another type of bias, as having and expressing *strong* opinions provides psychological as well as social rewards, no matter how feeble their foundations may be. On his part, Wolgemuth (2002), drawing on Hayek, purports that not only the expressed beliefs, but also the beliefs as such can be falsified, thus speaking of “opinion falsification”. For all of these reasons, the information pieces provided by opinion pools need to be coupled with information about facts. Beliefs and, foremost, values are powerful drivers of human actions, so that from the latter we can infer much about the former.

In this research, all our information about opinions stems from a single source. Namely: the fifth wave of the World Values Survey (WVS), conducted between 2005 and 2008. To our knowledge, no other free-access source provides uniform information for an ample range of countries. To date this is the latest wave of WVS, covering a total of 57 countries in all continents.

Gathering information about relevant facts has been more problematic. Most data of this kind have been taken from the Institutional Profiles Database (IPD), compiled by the French Ministry for the Economy, Industry and Employment, the French Development Agency and Maastricht University. This database offers detailed information on a very big number of topics. Some of these refer to civil society, these being of interest to our purposes, whereas others have to do with government action. The questionnaires have been responded by area experts, but it is unclear whether there these are more than one or only one for each country, and whether they are external to the French Development Agency and the Ministry or members of their personnel. In any event, these data don't refer to proper facts, but rather to the perceptions of experts, whose objectivity and knowledge aren't beyond doubt. Here we have used the 2006 issue of IPD, which provides information for 85 countries, with 42 matches with WVS5. Other sources exist that also report experts' perceptions, some of which are familiar to scholars, but their published data refer to more aggregate concepts than those in IPD, so that we don't make use of them here. Side by side with IPD, our database includes some pieces of information that are truly fact-related, taken from the World Bank (World Development Indicators) and the Barro-Lee database.

In total, we have gathered information on 86 variables for the construction of our Index of Political Capital. The following table presents the variables' list, organized by prospective dimensions and sub-dimensions, with indication of the source and original code of each question.

Table 1. Variables used in the construction of the Index of Political Capital (2005-2008)

| Dimension (Sub-dimension) | Variable | Source | Code (original) |
|----------------------------------------------------------|----------------------------------------------------------------------------------|---------------|---------------------------|
| <i>Respect for others:</i> | | | |
| General violence level: | Intentional homicides per 100,000 h (average 2005-2008) | WDI | — |
| | Security of persons and goods | IPD | A2000 |
| | Organized criminal activity | IPD | A2003 |
| Minorities' discrimination: | Importance of education in respect and tolerance | WVS | V16 |
| | People of another race as non-desired neighbors | WVS | V35 |
| | Immigrants or foreign workers as non-desired neighbors | WVS | V37 |
| | Homosexuals as non-desired neighbors | WVS | V38 |
| | People of another religion as non-desired neighbors | WVS | V39 |
| | Unmarried couples as non-desired neighbors | WVS | V41 |
| | Speakers of another language as non-desired neighbors | WVS | V42 |
| | Job priority of nationals over immigrants | WVS | V45 |
| | Trust in people of other religion | WVS | V129 |
| | Trust in people of other nationality | WVS | V130 |
| | Attitude towards homosexuality | WVS | V202 |
| | Attitude towards prostitution | WVS | V203 |
| | Attitude towards divorce | WVS | V205 |
| | Respect for private contracts with foreigners | IPD | A6033 |
| | Social segregation based on ethnic origin or caste | IPD | A9001 |
| | Social segregation based on religion | IPD | A9002 |
| Segregation in access to private-sector employment | IPD | A9012 | |
| Gender discrimination: | Job priority of men over women | WVS | V44 |
| | Performance of women vs. men as politicians | WVS | V61 |
| | Importance of tertiary education for girls vs. boys | WVS | V62 |
| | Performance of women vs. men as executives | WVS | V63 |
| | Equality of rights between men and women | WVS | V161 |
| | Opinion about husbands beating their wives | WVS | V208 |
| | Social segregation based on gender | IPD | A9000 |
| | Proportion of parliamentary seats held by women in 2005 | WDI | — |
| | Proportion of women in the labor force in 2005 | WDI | — |
| | Female to male ratio of vulnerable employment in 2005 | WDI | — |
| | Proportion of female students in tertiary education, 2005 | WDI | — |
| <i>Democratic convictions:</i> | | | |
| | Inclusion democracy among country aims (1 st /2 nd place) | WVS | V69-70 |
| | Inclusion democracy among personal aims (1 st /2 nd place) | WVS | V71-72 |
| | Opinion on autocracy | WVS | V148 |
| | Opinion on letting decisions to experts (technocracy) | WVS | V149 |
| | Opinion on Army rule | WVS | V150 |
| | Opinion on democracy | WVS | V151 |
| | Importance of democracy | WVS | V162 |
| | Unfitness of non-believers as politicians | WVS | V194 |
| | Right of religious leaders to influence on vote | WVS | V195 |
| | Need of more believers among politicians | WVS | V196 |
| | Right of religious leaders to influence on government | WVS | V197 |
| <i>Political agreement:</i> | | | |
| Distribution of the electorate over the left-right axis: | Self-positioning on left-right axis (standard deviation) | WVS | V114 |
| | Fairness as equality vs. as reward linked to merits (sd) | WVS | V115 |
| | Desirability of (in)equality of income distribution (sd) | WVS | V116 |
| | Opinion on private vs. public property of firms (sd) | WVS | V117 |
| | Opinion on own vs. public responsibility of people (sd) | WVS | V118 |
| | Opinion on competition (sd) | WVS | V119 |
| | Opinion on the sources of personal success (sd) | WVS | V120 |

| | | | |
|---------------------------------------------------|------------------------------------------------------------|-------|-------|
| | Static view of wealth vs. emphasis on growth (sd) | WVS | V121 |
| | Democracy as fiscal progressiveness and subsidies (sd) | WVS | V152 |
| | Democracy as unemployment benefits (sd) | WVS | V155 |
| Level of social and political violence: | Seriousness of ethnic, religious or regional conflicts | IPD | A2001 |
| | Occurrence and seriousness of terrorist outrages | IPD | A2002 |
| | Occurrence and seriousness of violent social conflicts | IPD | A2004 |
| | Power and influence of illegal organizations | IPD | A5017 |
| <i>No free riding:</i> | | | |
| Rent-seeking: | Opinion on claiming undue benefits from government | WVS | V198 |
| | Opinion on avoiding fare in public transport | WVS | V199 |
| | Opinion on tax cheating | WVS | V200 |
| | Opinion on accepting bribes | WVS | V201 |
| General trust: | Standard question (people can be trusted vs. need to care) | WVS | V23 |
| | Fairness question (people fair vs. take advantage of you) | WVS | V47 |
| | Trust in people met for the first time | WVS | V128 |
| Trustworthiness in business: | Respect for oral contracts | IPD | A6030 |
| | Respect for written contracts without mediation | IPD | A6031 |
| | Respect for contracts with private mediation | IPD | A6032 |
| <i>Participation in politics:</i> | | | |
| | Signed a petition (ever) | WVS | V96 |
| | Joined in a boycott (ever) | WVS | V97 |
| | Attended to a legal, peaceful demonstration (ever) | WVS | V98 |
| <i>Information about politics:</i> | | | |
| Interest in politics: | Importance attributed to politics | WVS | V7 |
| | Interest in politics | WVS | V95 |
| (Mis)understanding of democracy: | Democracy as Law interpretation by religious authorities | WVS | V153 |
| | Democracy as free election of leaders | WVS | V154 |
| | Democracy as Army takeover | WVS | V156 |
| | Democracy as protection of civil rights | WVS | V157 |
| (Mis)understanding of the working of the economy: | Opinion on competition (mean) | WVS | V119 |
| | Static view of wealth vs. emphasis on growth (mean) | WVS | V121 |
| Use of media for political information: | Daily newspapers | WVS | V223 |
| | News broadcasts on radio or TV | WVS | V224 |
| | Printed magazines | WVS | V225 |
| | In-depth reports on radio or TV | WVS | V226 |
| | Books | WVS | V227 |
| | Internet, e-mail | WVS | V228 |
| | Talk with friends or colleagues | WVS | V229 |
| General education indicators: | Average years of education of adult population in 2005 | Barro | — |
| | Scientific & technical articles per million h, 2005-2008 | WDI | — |

In sum, out of our 86 variables 65 refer to opinions as reported in WVS5, 14 express the perceptions of the IPD experts, and 7 refer to bare facts as reported by other sources. We would have desired to include more of the latter, but ideas about where to find them haven't come to our minds.

The number of variables also varies among our prospective dimensions, or aspects, of political capital. Under the general heading "respect for others" we have been able to identify up to 31 partial indicators; "information about politics" comprises 17, and "political radicalization" consists of 14. On the other hand, our indicators for "participation in politics" are limited to three.

Questions may arise about the possible inclusion of other dimensions or sub-dimensions, the adequacy of having included certain indicators or even entire sub-dimensions, or the appropriateness of the places they occupy in our classification.

Starting with the possible inclusion of other dimensions, we have considered the cases of political trust, political irrationality and Hofstede's power distance. Political scientists tend to look at trust in government and other political institutions as a civic virtue, so that, according to them, political trust should be considered as another component of political capital. On second thought, however, we can realize that democracy is rooted in mistrust towards the power and the people who holds it. Otherwise, the complicated system of checks and balances which are at the essence of democracy would be pointless. One is free to think that, once these checks and balances have been erected, we can breathe and be confident in our institutions. Unluckily, there is the public choice theory to remind us the existence of multiple failures in the working of political markets. Thus, we have preferred not to include our own index of political trust among the elements of political capital, and spare it for other purposes.

Regarding political irrationality, we have explored the possibility of using inconsistency in survey responses as a possible indicator for it. In the WVS5 questionnaire it is possible to find pairs, or groups, of questions that inquire about similar topics. Therefore, conflicting answers to these questions could be indicative of a lack of reflection that we could interpret as a sign of irrationality. Our attempt, though, has stepped on two obstacles. First, the national totals with which we are working are obviously a poor substitutive for micro-data in order to study this form of inconsistency. Second, it is not easy to distinguish beforehand those pairs of questions that have the same meaning from those others that may look similar to the researcher but present important differences in their nuances. Differences of language and culture obviously make the things worse in this respect. Thus, our efforts in this domain have produced results that make some sense, but they seem to also include too much noise so as to be useful. Other seeming inconsistencies between trust in institutions and participation in them are subject to problems similar to these.

The case of Hofstede's power distance is similar to this one. Simply, our sources didn't contain suitable indicators for this variable, aside from those included in the variable "democratic convictions".

Descending to the levels of sub-dimensions and particular variables, possible inclusions, exclusions or changes of places can be imagined. However, a detailed discussion of each of the 86 included variables is impossible here, not to speak of other possible candidates. Thus, the most we can do is to relegate to footnotes the discussion of the most polemical cases. Regarding possible inclusions, our original list of indicators was much longer, but, for one reason or another, we have rejected many on these. The rejected candidates concentrated for their most part in the dimensions "political radicalism"², and "participation in politics", where we eventually dropped the idea of including turnout due to data heterogeneity³. In relation to possible exclusions, some readers may express their reservations, for instance, towards certain indicators included in the dimensions "free riding"⁴, "respect for others"⁵, or "democratic convictions"⁶. Lastly, the exact localization of certain sub-dimensions is also debatable⁷. However, as we still have to see whether our initial distinctions among prospective dimensions, this discussion runs the risk of being dispensable.

A different question is that of giving a numerical interpretation to the data available.

In the WVS5 questionnaire the respondents are sometimes asked to indicate their favorite position on a 1 to 10 scale. In these cases, we have opted for a cardinal interpretation of these scales. As a result, our scores correspond to weighted averages, where each value –from 1 to 10– is weighted by the number of respondents that have chosen it as her favorite position.

In other cases, the respondents have to choose one answer from a list of three or four. The usual way is to present the respondent with a proposition and ask her whether she “strongly agrees”, “agrees”, “disagrees” or “strongly disagrees”. In cases like this we have to decide whether to compute only those respondents who give one answer in particular –e.g. only the ones who strongly agree–, whether to add up all respondents that seem to approve [disapprove] the corresponding proposition without making further differences among them –e.g. those who strongly agree plus those who agree–, or whether we should better attempt a cardinal interpretation of the ordered possible responses, and calculate a weighted average of the values given to each of these. All options present their pros and cons, and no one looks clearly superior. The “approval criterion” is firmly rooted in logic, but can be objected on the ground that it doesn’t make use of all available information –i.e., of the distinction between those respondents who agree and those who strongly agree, and that between those who disagree and the ones who strongly disagree. Taking the numbers of only one category of respondents further aggravates this problem. This objection cannot be made if we calculate weighted averages, but, in this case, the cardinal interpretation of the ordered categories is always subjective and risky. As there seems to be no clear advantage in favor of any single option, we decided to try both the “approval” criterion, and the cardinal interpretation of the order of responses. These two forms of computing responses to this type of questions give rise to two different versions of the index⁸.

The next problem stems from the different scales in which our indicators are measured. Those originated in the IPD survey usually follow a 1 to 4 scale. The “cardinal” questions of WVS produce weighted averages along a 1 to 10 scale. Those questions in the same sources where respondents have to choose between three or four different categorical responses give rise to results that are given in percentages, when we opt for the “approval” criterion, or in numerical scores whose order of magnitude depends on our own will. Finally, all indicators taken from other sources present their own scales. It is obvious that we need to reduce all indicators to a common scale prior to index calculation. However, there is more than one way to skin this cat.

The most popular way of reducing different variables to a common scale is that of equating to ten the highest value of each –or the value corresponding to some observation unit–, and calculating the rest in proportion. However, this results in variables presenting each a different distribution, with different minima, means and variances. It is dubious, though, whether these reflect indeed intrinsic properties of the variables or, rather, are due to the scales on which they were originally measured.

In the latter case, an alternative is standardizing the variables, so that all of them present identical means and variances. In our case, however, this solution is problematic. We intend to calculate this index for other periods as well, and it is desirable that, when comparing different periods, we could appreciate changes in the course of time. When using the method described in the precedent paragraph this can be easily done, by simply taking the same maximum value for all periods. But a standardization that uses means and SDs of a different year sounds like a strange solution indeed. For this reason, we have devised a method that is almost equivalent to standardization, in the sense that the transformed variables present almost identical means and variances, while, at the

same time, it can be easily adapted to allow for comparison of different time periods. This method consists of equating not only the maxima of all variables, but also their minima, through a linear transformation of the original variables. For this we can solve for 'a' and 'b' in the following two equation system, and calculate accordingly all other values:

$$1 = a + b \cdot x_{\min}$$

$$10 = a + b \cdot x_{\max}$$

For comparisons in the course of time, we only need to hold stable x_{\min} and x_{\max} .

Again, we don't see whether it is better to respect the differences among the means and variances of our indicators or, rather, to make them uniform through all variables. Therefore, we have calculated the two versions of the index.

Two more aspects need to be clarified prior to put an end to this section. One of these is that we have had to translate the answers to some questions in certain countries –like India or Slovenia– where the scale of responses was different. Another is the way we have dealt with missing observations. The multivariate methods we have used in the computation of our index are incompatible with missing observations. Wherever a blank is met, we have to dispense with either the entire variable or the corresponding country. In order not to be left with only a handful of variables or countries, we have had to resort to interpolations. Again, we think that it is healthy to explain with some detail how these have been made. We have estimated all missing observations through regression of the corresponding variable on others, always looking for the best fitting. Almost all of these regressions employ more than one regressor: sometimes up to seven. These sometimes pertain to the data set presented in this section, and sometimes include other variables. In a very few cases, and by want of a better solution, we have simply taken the score of a neighbor country to fill the corresponding gaps. Interpolation always provides an inferior substitute for missing data, and, as the index-computing methods that we present in the next section draw on correlation among variables, our resort to regression could bias the results to some measure. However, as we have needed to interpolate about seven per cent of the data. Moreover, as some part of our regressors doesn't pertain to the database, this problem doesn't seem to be too serious.

Finally, our initial sample of 57 countries included in the fifth wave of WVS had to be reduced to 50. One of the excluded countries is Iraq, for which information on 51 of our 86 variables is missing. Besides, the reliability of an opinion survey conducted during an armed conflict is problematic. The other six cases refer to African Sub-Saharan countries. As indicated in the source, the WVS survey in Ethiopia was limited to the capital city and, as a result, the level of political capital obtained from application of our methods to this country is astonishingly high. Rwanda and Zambia seem to be also subject to similar problems, although not as serious as they are in the case of Ethiopia, and information on these two countries is lacking in the IPD database. For some other country pertaining to the same area, the education levels of the respondents to the WVS questionnaire, as reported in the same source, look suspect, although the lack of adequate information stemming from other sources has prevented a careful checking. Another reason to exclude African countries –at least for the moment– is that the fifth way of WVS was the first one in including them, and, as indicated in the introductory section, we intend to repeat our exercise in other years as well. In view of these arguments, for the moment we have preferred to exclude from the analysis all African Sub-Saharan countries with the sole exception of South Africa.

5. Estimation of the Index

In principle, three main methods are available for the construction of an index as the one we are trying to build:

- First, we can calculate it by simply averaging their assumed components. For this we can calculate averages of the (re-scaled) indicators pertaining to the same sub-dimensions, and repeat this for dimensions and the full index.
- Second, we can try to find out how many different components lie behind the observable variables that make up our database, and to obtain their values for each individual country, by means of principal component analysis (PCA). As it is well-known, PCA calculates these components as linear combinations of the observed variables that are uncorrelated to one another. Under this condition, the sum of the components' variances is equal to the sum of the variances of the original variables and, although their number is in principle equal to that of variables, only those principal components that explain a substantial proportion of that total variance are of interest. Thus, a small number of principal components may convey practically all the information contained in the original dataset. Where only one principal component explains a high proportion of the total variance, and the other PCs explain very little individually, the first principal component can be taken as an index of the phenomenon we are trying to measure. The condition for this is that all pair-wise correlations among the original variables have to be high.
- Third, we can do something similar by means of factor analysis (FA). This form of analysis searches for groups among the original variables that present the following property: When computing their correlation matrix, the figures in any two rows are almost proportional after excluding the units that compose the diagonal. Where this happens, it is obvious that each variable is close to be a (different) linear transformation of an underlying variable called factor. As in PCA, more than one factor can be found in any given dataset and, where only one meets the chosen criterion of statistical significance, this factor can be taken as the overall index for the full set of variables.

In comparison to the traditional way of index computing, consisting of simple average calculation, the other two methods present the advantages of providing a prior checking on the adequacy of combining all variables for a single purpose, as well as an implicit weighting scheme for these variables, if the case comes. Only in the special case where one single principal component or factor is significant and all variables' coefficients are similar, the method of simply averaging the observed variables results into an index that may be similar to the ones obtained through the other, more sophisticated methods.

Whatever the method we use, we have to take a prior decision about the arrays of variables to be submitted to the chosen method. In our case, one possibility is applying it separately to each of our prospective dimensions of political capital, and, at a later stage, doing the same with the dimensions' scores (provided that only one factor or PC adequately describes each dimension). The other possibility is using the full set of variables all at a time. The later choice would imply a confession that we consider our "prospective dimensions" as a tool useful only as a source of inspiration in our search for indicators of political capital, but, once these have been selected, we don't consider it valid any longer. In principle, using the full set of indicators all at a time seems to be

more adequate when one is using methods such as principal component analysis or factor analysis. However, this also entails some disadvantages:

- First, the number of original variables cannot be larger than that of observations. As we only have fifty countries and more than eighty variables, that option would force us to curtail our indicators by half.
- Second, if each prospective dimension indeed grasps a somewhat different aspect of political capital, then, when pooling all variables together, we run the risk of biasing the results in favor of those dimensions that present a higher number of indicators.
- On the other hand, when running computation as a two-step process, the possibly excessive confidence implicitly put in our a priori classification would be mitigated in any case by the check exerted by our multivariate methods.

For these reasons, we have decided to first estimate the components [factors] of our prospective dimensions and, as a second step, to treat them as input variables in another similar exercise, in order to ascertain whether our concept of political capital is indeed feasible.

Still, speaking about factor analysis is not very precise, as there are different procedures to carry it out. All of them start with the search of provisional factors, and the researcher can stop there or proceed to factor rotation in order to refine the analysis. In this research we have restricted our use of factor analysis to the so called *exploratory factor analysis* (EFA).

In the precedent section we have also spoken about different ways of aggregating the responses to the multiple-choice questions included in the WVS questionnaire, as well as of different ways of re-scaling our indicators. With two different aggregation methods (“approval” and cardinal interpretation of categorical data), two distinctive ways of re-scaling (making maximum value equal to ten and linear transformation of the variables), and two different multivariate methods (PCA and EFA), we have calculated eight different versions of our indices.

In order not to embarrass the reader with too many numbers, we don’t present here all results. These are, of course, available from request. What we present here are only certain versions and averages of all eight indices, while providing a quick description of the differences among them.

To start with, Table 2 presents the results of applying PCA and EFA to each of the six dimensions that we have distinguished in a prior section. For reasons of space, here we present only the results obtained from the data re-scaled through linear transformation, after having made the “cardinal” interpretation of the categorical data. The results obtained out of other versions of the data are similar to these, however.

In the first column of the table we present the range of the correlation coefficients between variables inside each dimension. It can be appreciated that these coefficients are rather high, the lowest ones being always above 0.7 whereas the highest ones exceed 0.96 in all six dimensions. Given these high correlations, it is not surprising that a single principal component or factor presents paramount importance in relation to each dimension. The second column presents their eigen-values, making evident that only the first one is (well) above one in all cases. Therefore, applying the Kaiser criterion we can consider that only the first PC of each dimension deserves attention. As shown in the third column of the table, the first principal component explains between 91 and 97

percent of the total variance, depending on dimensions, with the second principal component lagging far behind and never explaining more than 3 percent. With these results, we can confirm that all variables that we tentatively ascribed to any of our prospective dimensions express indeed a single phenomenon, and are thus valid indicators for the corresponding dimension. When using EFA, this impression is further reinforced, as its more elaborated measures for the hidden variables underlying each dimension also identify only one per dimension, able to explain one hundred per cent of common variance.

Table 2. Condensed results of PCA and EFA for the six prospective dimensions of political capital, 2005-2008. (Data re-scaled through linear transformation, cardinal interpretation).

| Range of coefficients in pair-wise correlations among variables | Principal Component Analysis | | | Exploratory Factor Analysis | | |
|-----------------------------------------------------------------|------------------------------|-----------------------------------------------------|-------------------------------------|-----------------------------------------------|---------------------------------|------------------------------------|
| | Eigenvalue of PC1 (PC2) | Proportion of total variance explained by PC1 (PC2) | Range of variables' loadings on PC1 | Proportion of common variance explained by F1 | Range of variables' communality | Range of variables' loadings on F1 |
| <i>Dimension: Respect for others</i> | | | | | | |
| 0.851 to 0.984 | 28.921 (0.537) | 0.933 (0.017) | 0.160 to 0.184 | 1 | 0.872 to 0.985 | 0.857 to 0.992 |
| <i>Dimension: Democratic convictions</i> | | | | | | |
| 0.893 to 0.986 | 10.256 (0.253) | 0.932 (0.023) | 0.292 to 0.307 | 1 | 0.862 to 0.968 | 0.955 to 0.984 |
| <i>Dimension: Political agreement</i> | | | | | | |
| 0.828 to 0.979 | 13.152 (0.227) | 0.940 (0.016) | 0.254 to 0.272 | 1 | 0.837 to 0.974 | 0.928 to 0.986 |
| <i>Dimension: No free-riding</i> | | | | | | |
| 0.890 to 0.973 | 9.314 (0.244) | 0.931 (0.024) | 0.311 to 0.320 | 1 | 0.889 to 0.955 | 0.942 to 0.971 |
| <i>Dimension: Participation in politics</i> | | | | | | |
| 0.938 to 0.968 | 2.908 (0.063) | 0.969 (0.021) | 0.574 to 0.580 | 1 | 0.926 to 0.984 | 0.975 to 0.992 |
| <i>Dimension: Information about politics</i> | | | | | | |
| 0.713 to 0.982 | 15.523 (0.519) | 0.913 (0.030) | 0.222 to 0.250 | 1 | 0.800 to 0.972 | 0.866 to 0.986 |

Another aspect that deserves a comment in this table is that of the variables' loadings. When using PCA, these loadings or eigenvectors represent the variables' coefficients in the linear expression of the corresponding principal components. As, in column 4 of our table, the loadings are always comprised into a small range, this is indicative that all variables present similar coefficients in the PC1 formulae. Since our variables present a common scale, this can be interpreted as all of them having a similar bearing on the component. One corollary is that a simple average of the variables pertaining to any given dimension, as it is the common practice in traditional index construction, would in our case produce results not far from those of PCA at this stage of the analysis. As a matter of fact, this happens in our case. In FA the loadings have a somewhat different meaning. They represent the coefficient of the expression that yields the variable in question out of the factor solely (plus an error term), and indicate the proportion of the variable's variance that is explained by the factor. In all of our dimensions, the close

range of variables' loadings confirms that any of these would perform similarly as an indicator for the underlying factor. The variables' communality is also very similar for all dimensions.

The formulae derived from PCA and EFA allow to calculate the PC1 [F1] scores for each country. As we have eight different versions of the data, here we have to be content with presenting the "compromise" values for each dimension, which result from averaging the eight versions (See Table 3). In most dimensions, the different versions provide highly correlated values and, hence, similar orderings of countries⁹.

The ordering of countries in Table 3 doesn't correspond with that resulting from any dimension in particular. Rather, it is also a compromise of the different orderings that present each of these. Although there is some degree of correspondence among them, differences are also evident. In order to make these differences more apparent, the three highest and the three lowest values in each column have been shaded grey (with different intensities). One advantage of this form of presentation is that it allows to distinguishing different geographical patterns of electorates:

- Western European countries, the US and the former British dominions tend to present evenly high grades in all dimensions. As we move from Northern to Southern Europe, however, the dimensions' scores of each country start to differ: Andorra scores very high in Respect for others and Democratic convictions, but low in No free riding; France and Italy exhibit rather low scores in Information about politics, and Spain's record in this same dimension as well as in Participation in politics is dismal.
- Also in Europe, former communist countries perform badly in Political participation and Democratic convictions, and not very good in the rest of areas.
- Latin American countries do well in Respect for others –even where crime rates are high–, and rather well in Democratic convictions, but fail in Political agreement.
- Eastern Asian countries score distinctively high in Political agreement and, less so, in No free riding. However, their grades in Respect for others and in Democratic convictions are rather low.
- Countries in South-Eastern Asia also share in these features, although less markedly, and with lower grades in general.
- And, Arab countries, India and Turkey tend to present low grades in all six areas.

Since all indicators included in each dimension seem indeed to express the same underlying variable and little else, as indicated by the results presented in Table 2, we can confidently proceed to the next step of our analysis. This repeats the exercise whose results were presented in that table, now using the F1 and PC1 values obtained for each dimension and country as indicators for the corresponding prospective dimensions of the political capital of the corresponding electorates. The object of such an exercise is to check to what extent all dimensions may express the same underlying phenomenon. If this were the case, this would mean that our concept of political capital makes sense, in spite of its seemingly multi-dimensional nature. In this case, we could move forward to the estimation of a general index for that concept.

Table 3. Country scores in different dimensions of Political Capital, 2005-2008. (Compromise values resulting from averaging all versions of the corresponding indices).

| Country | <i>Respect for others</i> | <i>Democratic convictions</i> | <i>Political agreement</i> | <i>No free riding</i> | <i>Participation in politics</i> | <i>Information about politics</i> |
|--------------------|---------------------------|-------------------------------|----------------------------|-----------------------|----------------------------------|-----------------------------------|
| Sweden | 53.514 | 30.662 | 28.038 | 27.821 | 15.997 | 36.184 |
| Norway | 50.447 | 31.654 | 28.248 | 28.214 | 14.276 | 35.960 |
| Switzerland | 47.479 | 28.776 | 26.955 | 27.959 | 13.455 | 34.810 |
| New Zealand | 48.302 | 27.955 | 27.950 | 25.535 | 14.003 | 30.743 |
| Canada | 45.990 | 27.987 | 28.797 | 26.449 | 13.864 | 31.253 |
| Finland | 47.430 | 25.793 | 30.816 | 26.912 | 10.287 | 31.195 |
| Australia | 46.291 | 26.552 | 26.064 | 26.552 | 12.805 | 33.009 |
| Andorra | 51.310 | 29.600 | 25.532 | 19.834 | 11.378 | 31.070 |
| Great Britain | 47.802 | 27.471 | 25.795 | 26.141 | 11.860 | 28.549 |
| Germany | 45.305 | 27.246 | 27.570 | 24.125 | 10.348 | 32.306 |
| Netherlands | 46.978 | 25.856 | 27.696 | 23.484 | 10.183 | 31.436 |
| United States | 41.921 | 22.713 | 27.566 | 24.809 | 13.007 | 30.137 |
| France | 46.345 | 25.160 | 24.157 | 23.469 | 12.711 | 27.196 |
| Japan | 38.318 | 24.552 | 29.494 | 26.725 | 9.218 | 30.186 |
| Italy | 42.801 | 26.174 | 24.025 | 22.174 | 13.160 | 28.834 |
| Spain | 44.852 | 25.617 | 23.970 | 23.275 | 8.605 | 23.253 |
| Hong Kong | 33.213 | 21.954 | 34.308 | 23.836 | 8.233 | 25.350 |
| South Korea | 32.734 | 19.312 | 26.715 | 22.117 | 7.836 | 29.525 |
| Poland | 39.673 | 23.413 | 22.187 | 20.071 | 5.327 | 26.802 |
| Uruguay | 43.791 | 24.319 | 21.320 | 21.009 | 5.301 | 21.846 |
| Slovenia | 38.974 | 25.370 | 21.647 | 16.590 | 7.453 | 26.519 |
| Cyprus | 39.728 | 22.980 | 19.014 | 16.755 | 8.252 | 28.208 |
| Taiwan | 36.862 | 21.225 | 27.163 | 21.222 | 3.159 | 23.296 |
| Argentina | 42.519 | 23.154 | 15.051 | 20.494 | 6.029 | 21.944 |
| Bulgaria | 38.888 | 19.607 | 21.844 | 19.689 | 4.221 | 24.865 |
| Trinidad & Tobago | 37.903 | 20.865 | 15.822 | 18.388 | 8.120 | 26.288 |
| Serbia | 38.835 | 17.440 | 21.825 | 14.339 | 9.559 | 24.372 |
| Viet Nam | 30.551 | 23.130 | 24.613 | 21.801 | 2.002 | 23.852 |
| Brazil | 38.262 | 18.343 | 16.692 | 17.043 | 9.052 | 25.267 |
| Ukraine | 33.203 | 18.055 | 25.318 | 18.553 | 4.383 | 25.010 |
| Chile | 36.421 | 21.702 | 21.021 | 17.915 | 4.377 | 22.897 |
| Georgia | 30.393 | 17.760 | 21.479 | 21.621 | 4.649 | 26.717 |
| China | 32.749 | 20.102 | 21.930 | 21.073 | 4.870 | 21.537 |
| South Africa | 33.535 | 19.482 | 20.544 | 19.391 | 5.963 | 21.007 |
| Peru | 34.481 | 21.257 | 18.256 | 16.267 | 6.956 | 22.676 |
| Moldova | 34.929 | 17.304 | 21.536 | 16.811 | 5.172 | 24.013 |
| Thailand | 30.334 | 16.418 | 26.641 | 19.182 | 2.205 | 24.569 |
| Romania | 35.070 | 17.668 | 19.460 | 19.834 | 2.878 | 23.944 |
| Malaysia | 29.408 | 15.288 | 25.938 | 15.955 | 2.992 | 25.919 |
| Colombia | 35.415 | 22.136 | 9.606 | 21.158 | 5.082 | 20.511 |
| Mexico | 34.573 | 20.635 | 11.081 | 18.244 | 5.517 | 23.404 |
| Russian Federation | 31.764 | 18.265 | 17.173 | 15.364 | 4.077 | 26.610 |
| Indonesia | 28.051 | 16.554 | 17.835 | 21.236 | 4.150 | 24.253 |
| India | 28.925 | 16.505 | 8.958 | 17.439 | 8.462 | 19.155 |
| Morocco | 29.155 | 16.575 | 21.143 | 17.449 | 6.029 | 19.813 |
| Turkey | 28.145 | 19.493 | 18.566 | 18.632 | 4.714 | 21.132 |
| Iran | 25.140 | 15.856 | 17.294 | 19.113 | 6.192 | 23.069 |
| Egypt | 25.285 | 18.220 | 21.196 | 18.827 | 1.829 | 18.572 |
| Guatemala | 35.450 | 17.641 | 15.404 | 14.301 | 2.817 | 16.419 |
| Jordan | 25.431 | 18.176 | 10.437 | 20.847 | 1.887 | 20.128 |

In Table 4, which adjusts to the same pattern of Table 2, we present the results obtained when using the PC1s and F1s obtained in the previous step as indicators for the corresponding dimensions. We have performed this new exercise for each of the versions of the re-scaled data. However, in order not to embarrass the reader, In Table 4 we present only the results obtained for one of these versions. Namely: the same one we used for Table 2.

Table 4. Condensed results of PCA and EFA for political capital, 2005-2008. (Data re-scaled through linear transformation, cardinal interpretation. Dimensions' PC1s and F1s used as inputs).

| Range of coefficients in pair-wise correlations among dimensions | Principal Component Analysis | | | Exploratory Factor Analysis | | |
|------------------------------------------------------------------|------------------------------|-----------------------------------------------------|--------------------------------------|-----------------------------------------------|----------------------------------|-------------------------------------|
| | Eigenvalue of PC1 (PC2) | Proportion of total variance explained by PC1 (PC2) | Range of dimensions' loadings on PC1 | Proportion of common variance explained by F1 | Range of dimensions' communality | Range of dimensions' loadings on F1 |
| 0.933 to 0.990 | 5.867 (0.074) | 0.977 (0.012) | 0.400 to 0.411 | 1 | 0.904 to 0.990 | 0.950 to 0.995 |

As in Table 2, columns 2 to 4 of Table 4 present the results of principal component analysis, and columns 5 to 7 do the same with respect to exploratory factor analysis. In column 1, where we are reporting the range of the correlation coefficients between each pair of dimensions, it can be noticed that the coefficients are significantly high, varying between 0.93 and 0.99. Such values suggest the feasibility of grouping all dimensions under a common label. In accordance with this indication is the fact that, when performing principal component analysis, only component one accomplishes with the Kaiser criterion of an eigen-value higher than unity. This component explains almost 98 per cent of the total variance, and, moreover, all dimensions present similar weights in it. The results of exploratory factor analysis largely confirm these results, with each dimension also presenting similar communality and loadings, although their ranges are a bit ampler. In sum, these results indicate that all of our prospective dimensions can be condensed into a meaningful single index.

Another aspect of the table that deserves a comment is that related to the components' [factors'] loadings and to the dimensions' communality. As shown in the corresponding cells, these are always included inside a close range. This is indicative that all dimensions receive similar weights, irrespectively of the method used to construct the index. One may wonder, however, whether this last property is peculiar of the data version to which this table refers. The answer is no. In the following Table 5 we present the components' [factors'] loadings of each particular dimensions stemming from each of the eight versions of our data. The Table makes evident that, in all eight cases, the dimensions' loadings are comprised into a close range. They are neither identical for any given version of the data (with Participation in politics always presenting the lowest loading), nor exactly proportional across versions. Rather, certain slight differences can be detected, but for this one calculator is needed.

Table 5. Loadings used in the Political Capital Index computations.

| <i>Dimension</i> | <i>Data re-scaled through linear transformation, approval criterion</i> | | <i>Data re-scaled through linear transformation, cardinal interpretation</i> | | <i>Data re-scaled by making maximum value equal to ten, approval criterion</i> | | <i>Data re-scaled by making maximum value equal to ten, cardinal interpretation</i> | |
|------------------------------------------|-------------------------------------------------------------------------|------------|------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|------------|
| | PCA | EFA | PCA | EFA | PCA | EFA | PCA | EFA |
| <i>Respect for others</i> | 0.4119 | 0.99415 | 0.41097 | 0.99367 | 0.41373 | 0.99668 | 0.41125 | 0.99671 |
| <i>Democratic convictions</i> | 0.4115 | 0.99526 | 0.41060 | 0.99599 | 0.41354 | 0.99633 | 0.41124 | 0.99779 |
| <i>Political agreement</i> | 0.4073 | 0.97902 | 0.40678 | 0.98083 | 0.40955 | 0.97603 | 0.40732 | 0.97699 |
| <i>No free riding</i> | 0.4101 | 0.99049 | 0.40910 | 0.98944 | 0.41259 | 0.99291 | 0.41041 | 0.99354 |
| <i>Participation in politics</i> | 0.3967 | 0.93061 | 0.40091 | 0.95085 | 0.38579 | 0.88198 | 0.39765 | 0.94323 |
| <i>Information about politics</i> | 0.4118 | 0.99498 | 0.41104 | 0.99518 | 0.41355 | 0.99677 | 0.41145 | 0.99758 |

The preceding results indicate, in sum, that all of our prospective dimensions have indeed much in common. Therefore, they can be grouped into a single index, whose values are given by the PC1s and F1s yield by the corresponding formulae, out of each version of our data. Of course, each version and multivariate method gives rise to a (slightly) different version of the index. However, all versions look very much alike when using PCA, and something similar occurs when using EFA, though the differences are somewhat larger here. When using PCA, the correlation coefficients between any pair of indices are always above 0.99, if barely so in the case of the two versions that differ mostly in relation to the methods used in the treatment of the basic data. The rank correlation coefficients are also above 0.98, understandably a bit lower. With regard to the EFA results, when taken by pairs the four resulting indices are a bit more divergent. The matrix of correlations also contains two coefficients above 0.99, though other three situate between 0.96 and 0.97, and a sixth is only above 0.95. The rank correlation coefficients are lower, though never below 0.93. In sum, EFA has proven to be more sensitive to the different possible ways of dealing with the basic data. Perhaps too sensitive, we should say.

In order not to create confusion, we present here only two averages of the eight versions obtained for the overall Index. In Table 6, columns 2 and 3, we show the results of averaging the four indices obtained with the formulae indicated by PCA out of each version of the data. Columns 4 and five are reserved for the average of the four indices constructed with the help of the formulae indicated by the corresponding EFAs.

The values and, especially, the orderings aren't exactly the same. The coefficient correlation is 0.976, and the rank correlation coefficient is 0.963. Eight countries (those shaded dark grey) vary by more than five posts from one ranking to another, and eight more do by four or five posts. Of course, these countries are the ones whose grades differ most from one dimension to another. Most countries, however, remain more or less about the same posts in the two rankings. Moreover, when they exchange places they tend to do this *inside* groups of countries that are more or less closed. These groups have been shaded pale grey and white, alternatively, in the table. When looking at the scores instead of the places, it is evident that the differences inside each group are often minimal, so that it makes little sense to make a big case of their internal orderings.

Table 6. Political Capital Index 2005-2008. (Averages of the different versions).

| Country | Principal component analysis (average of four versions) | | Exploratory factor analysis (average of four versions) ¹ | | Compromise | |
|--------------------|---------------------------------------------------------|------|---------------------------------------------------------------------|------|------------|------|
| | Score | Rank | Score | Rank | Score | Rank |
| Sweden | 79.158 | 1 | 78.545 | 2 | 78.852 | 1 |
| Norway | 77.413 | 2 | 79.158 | 1 | 78.286 | 2 |
| Switzerland | 74.296 | 3 | 73.489 | 3 | 73.893 | 3 |
| New Zealand | 72.020 | 4 | 69.119 | 8 | 70.569 | 4 |
| Canada | 71.891 | 5 | 69.208 | 7 | 70.549 | 5 |
| Andorra | 68.704 | 10 | 72.331 | 4 | 70.518 | 6 |
| Australia | 70.202 | 7 | 70.828 | 5 | 70.515 | 7 |
| Finland | 70.451 | 6 | 68.717 | 9 | 69.584 | 8 |
| Germany | 69.236 | 8 | 69.461 | 6 | 69.349 | 9 |
| Great Britain | 68.932 | 9 | 67.604 | 11 | 68.268 | 10 |
| Netherlands | 68.354 | 11 | 67.622 | 10 | 67.988 | 11 |
| France | 64.784 | 13 | 63.990 | 12 | 64.387 | 12 |
| United States | 64.766 | 14 | 63.718 | 13 | 64.242 | 13 |
| Japan | 65.043 | 12 | 63.436 | 15 | 64.239 | 14 |
| Italy | 64.722 | 15 | 63.640 | 14 | 64.181 | 15 |
| Spain | 62.287 | 16 | 59.236 | 18 | 60.761 | 16 |
| Poland | 56.391 | 21 | 59.326 | 17 | 57.868 | 17 |
| Hong Kong | 60.651 | 17 | 54.744 | 24 | 57.697 | 18 |
| Slovenia | 55.671 | 19 | 58.367 | 19 | 57.519 | 19 |
| Cyprus | 54.934 | 22 | 59.798 | 16 | 57.366 | 20 |
| Uruguay | 56.490 | 20 | 57.206 | 20 | 56.848 | 21 |
| South Korea | 56.712 | 18 | 56.663 | 21 | 56.688 | 22 |
| Argentina | 54.227 | 24 | 54.964 | 23 | 54.596 | 23 |
| Bulgaria | 53.556 | 25 | 54.676 | 25 | 54.116 | 24 |
| Taiwan | 54.640 | 23 | 53.202 | 26 | 53.921 | 25 |
| Trinidad & Tobago | 52.505 | 26 | 55.179 | 22 | 53.842 | 26 |
| Viet Nam | 52.310 | 27 | 53.083 | 28 | 52.697 | 27 |
| Chile | 52.059 | 29 | 51.885 | 27 | 51.972 | 28 |
| Brazil | 51.116 | 33 | 52.538 | 29 | 51.827 | 29 |
| Georgia | 51.583 | 30 | 50.975 | 31 | 51.279 | 30 |
| Ukraine | 52.162 | 28 | 49.985 | 36 | 51.074 | 31 |
| Serbia | 51.408 | 31 | 50.499 | 33 | 50.954 | 32 |
| China | 51.189 | 32 | 48.806 | 41 | 49.998 | 33 |
| Peru | 50.233 | 34 | 49.640 | 37 | 49.937 | 34 |
| Romania | 49.461 | 37 | 50.223 | 34 | 49.842 | 35 |
| Moldova | 49.479 | 36 | 49.022 | 38 | 49.250 | 36 |
| Mexico | 47.447 | 40 | 50.765 | 32 | 49.096 | 37 |
| Russian Federation | 45.893 | 44 | 52.297 | 30 | 49.095 | 38 |
| Colombia | 47.897 | 39 | 50.160 | 35 | 49.028 | 39 |
| South Africa | 49.912 | 35 | 47.978 | 39 | 48.945 | 40 |
| Thailand | 49.307 | 38 | 47.971 | 40 | 48.639 | 41 |
| Malaysia | 47.216 | 41 | 47.497 | 42 | 47.357 | 42 |
| Indonesia | 47.033 | 42 | 46.833 | 43 | 46.933 | 43 |
| Turkey | 45.589 | 45 | 46.703 | 44 | 46.146 | 44 |
| Morocco | 46.212 | 43 | 42.416 | 47 | 44.314 | 45 |
| Iran | 44.747 | 46 | 43.748 | 46 | 44.248 | 46 |
| Jordan | 41.130 | 50 | 44.062 | 45 | 42.596 | 47 |
| Egypt | 43.312 | 47 | 41.090 | 50 | 42.201 | 48 |
| Guatemala | 41.950 | 48 | 41.648 | 49 | 41.799 | 49 |
| India | 41.682 | 49 | 41.684 | 48 | 41.683 | 50 |

Note: ¹ The original EFA scores were much lower and have been re-scaled in order to make comparison and aggregation easier.

But the fact remains that the two multivariate methods differ in the allocation of a number of countries. Close examination of tables 3 and 5 reveals that PCA puts slightly more emphasis in dimensions “Political agreement” and “No free riding” than does EFA, whereas the latter emphasizes a bit more “Respect for others” and “Democratic convictions”.

Were the differences focused on “Democratic convictions” solely, we could think that the contents of this particular dimension has much of “rhetorical” stuff, and, consequently, we would be inclined to give more credibility to the version of the index that stems from PCA. However, “Respects for others” seems to be an important ingredient of the quality of the electorates, one that may have a noticeable impact on facts. Thus, the two versions of the index seem to present their own merits. The PCA version tend stress national consensus and discipline, and the EFA one highlights the spread of egalitarian feeling and respect for the rules of the democratic game. As none of these alternative interpretations looks clearly superior to the other, we tend to think that the Index that better expresses our concept of Political Capital could be well a compromise between the two. This Compromise Index is presented in column 6 of the table, and its last column shows the resulting ranking. The latter has provided the criterion for the general arrangement of the table.

Generally speaking, the orderings presented in Table 6 show few unexpected results, though some can be commented. It is somewhat surprising to find the Russian Federation and some other ex-communist countries so low in the scale. It is true that the weakness of expressed democratic convictions in these countries pull them towards the bottom of the classification. But it is also true that, often, they also score low due to widespread free riding, lack of national consensus, and all aspects in general. Looking at these results, communism seems to have left behind a terrible the heritage.

This picture contrasts with the high grades that present Vietnam and, to a lesser extent, by China. It looks as if the type of values and beliefs (idiosyncratic of all Eastern Asian countries) that produce national consensus and, less markedly, low levels of free riding, had preserved these countries through their passage through communism.

Apart from these general remarks, one would expect that certain countries, as may be Chile, Romania or perhaps India performed somewhat better. In any case, we cannot have complete guaranty that the national samples interviewed in the World Values survey are equally representatives of the full populations of the corresponding countries.

6. Political capital and political performance: Some descriptive statistics

In the introductory section of this paper we have advanced our suspicion that the apparent effects of formal political institutions, as estimated by scholars, may be more or less biased due to omission of informal institutions in their equations. Moving a step further, we have also advanced the guess that, to some extent, formal political institutions could be a reflection of the informal institutions of the corresponding societies.

Careful checking of these hypotheses will be left for future papers. In any event, however, a necessary condition for the existence of omitted-variable bias in current estimations, as well as for determination of formal institutions by informal ones is the presence of a considerable correlation between the former and the later. Just the same, it

may be interesting to see to what extent our index for informal political institutions correlates with other partial measures of the values and attitudes held by the same populations, as proposed by other authors.

With these aims, we have constructed Table 7, where the correlation coefficients between our Political Capital Index and its different aspects on one hand, and a number of different variables on the other are presented. The highest correlations have been highlighted according to a scale that makes them apparent.

In the first part of the table, we examine the relationship between the (compromise) Index of Political Capital and other indicators of cultural and psychological characteristics of the population of the different countries. These other indicators were commented in section 2, and, although some of these were presumably related to the phenomenon we have tried to measure in this paper, they weren't included in our Index due to inadequate periodicity in the publication of the corresponding data. The present section seems to be the right place for checking these expected relationships.

As expected, Hofstede's cultural dimension "Distance to power" presents high correlation with our general Index, as well as with most of its particular aspects. Less expected was the result that other cultural dimensions (namely: Individualism and Long term orientation) also exhibit high correlation coefficients. Certain factors of "national character" also show noticeable correlation with our Index (for instance, Steel's Lie scale) or with particular components of this (like the NEO-PI-R Extraversion with Respect for others). Also interesting is to observe that the intellectual quotient turns to be a good predictor of the Index and, in particular, of its component "Political agreement".

These relationships raise interesting questions about the direction of causality. However, we cannot speculate much about them, due to the fact that it is unclear to what extent cultural features, traits of national character and intellectual quotients represent fixed parameters, determined by genes or climate, or, rather, "simple" products of national histories. To the point that the first interpretation may be correct, then Political Capital and its components would be determined by those other factors; to the measure that the later interpretation is right, all variables would be codetermined in the course of time.

In the second part of the table, the Index and its different aspects are compared with some widely used indicators of the quality of formal political institutions.

Starting with indicators of democracy, the table includes those developed by the freedom House, Polity IV and The Economist, as well as other partial indicators related to specific aspects of democratic life. With the exceptions of the much elaborated measures of Polity IV, almost all indicators, general or specific, correlate well with our Index. Leaving aside the Polity IV variables, only two out of 20 variables present a correlation coefficient with the general Index below 0.5; even half of the Polity IV variables exceed this threshold.

Apart from the general Index, the components of Political Capital that better correlate with these indicators of formal democratic institutions are Respect for others and Democratic convictions. The lowest coefficients are to be found in the columns corresponding to Political agreement and No free riding. None the less, all components present at least some coefficients above 0.5, and there is only one case where the sign of the correlation coefficient differ from the expected.

Table 7. Correlation coefficients between the Political Capital Index 2005-2008 and other variables

| Type/ Source / Variable | Respect f. others | Democr. convict. | Political agreement | No free riding | Particip. politics | Inform. politics | PC Index | N |
|-----------------------------------------------------|-------------------|------------------|---------------------|----------------|--------------------|------------------|----------|----|
| FEATURES OF NATIONAL CULTURE AND PSYCHOLOGY: | | | | | | | | |
| HOFSTEDE: | | | | | | | | |
| Power distance | -0.709 | -0.786 | -0.504 | -0.710 | -0.737 | -0.687 | -0.802 | 45 |
| Individualism | 0.716 | 0.697 | 0.449 | 0.691 | 0.797 | 0.688 | 0.768 | |
| Uncertainty avoidance | -0.099 | -0.203 | -0.368 | -0.391 | -0.329 | -0.350 | -0.302 | |
| Long term orientation | -0.633 | -0.546 | -0.000 | -0.391 | -0.565 | -0.468 | -0.535 | |
| PIERS STEEL: | | | | | | | | |
| Eysenck's Neuroticism | -0.547 | -0.464 | -0.223 | -0.324 | -0.354 | -0.398 | -0.470 | 24 |
| Lie scale | -0.615 | -0.635 | -0.538 | -0.703 | -0.592 | -0.793 | -0.745 | |
| McCRAE: | | | | | | | | |
| NEO-PI-R Extraversion | 0.721 | 0.575 | 0.031 | 0.249 | 0.560 | 0.480 | 0.570 | 18 |
| NEO- Openness to experience | 0.542 | 0.388 | 0.101 | 0.185 | 0.547 | 0.418 | 0.448 | |
| NEO-PI-R Agreeableness | -0.345 | -0.346 | 0.072 | -0.087 | -0.303 | -0.262 | -0.289 | |
| NEO-PI-R Conscientiousness | -0.481 | -0.630 | -0.464 | -0.582 | -0.213 | -0.507 | -0.601 | |
| LYNN & VANHANEN: | | | | | | | | |
| Mean Intellectual Quotient | 0.562 | 0.621 | 0.748 | 0.682 | 0.477 | 0.682 | 0.713 | 38 |
| INDICATORS OF FORMAL POLITICAL INSTITUTIONS: | | | | | | | | |
| FREEDOM HOUSE: | | | | | | | | |
| Electoral Process | 0.658 | 0.499 | 0.144 | 0.301 | 0.518 | 0.446 | 0.534 | 50 |
| Pluralism & participation | 0.689 | 0.552 | 0.267 | 0.369 | 0.586 | 0.526 | 0.607 | |
| Functioning of Government | 0.801 | 0.708 | 0.414 | 0.508 | 0.698 | 0.634 | 0.751 | |
| Average Political Rights | 0.731 | 0.608 | 0.362 | 0.431 | 0.631 | 0.554 | 0.660 | |
| Freedom of expression | 0.737 | 0.592 | 0.297 | 0.344 | 0.597 | 0.497 | 0.622 | |
| Associational rights | 0.731 | 0.581 | 0.331 | 0.359 | 0.616 | 0.535 | 0.637 | |
| Rule of Law | 0.787 | 0.747 | 0.569 | 0.599 | 0.639 | 0.662 | 0.791 | |
| Individual rights | 0.882 | 0.791 | 0.550 | 0.614 | 0.737 | 0.689 | 0.842 | |
| Average Civil Liberties | 0.817 | 0.711 | 0.463 | 0.507 | 0.673 | 0.624 | 0.757 | |
| POLITY IV: | | | | | | | | |
| Regulat. executive recruitment | 0.477 | 0.355 | -0.015 | 0.232 | 0.421 | 0.213 | 0.343 | 48 |
| Compet. executive recruitment | 0.579 | 0.403 | 0.113 | 0.202 | 0.460 | 0.363 | 0.439 | |
| Openness executive recruitment | 0.299 | 0.219 | 0.236 | 0.096 | 0.185 | 0.265 | 0.263 | |
| Chief executive recruitment | 0.555 | 0.370 | 0.131 | 0.158 | 0.428 | 0.380 | 0.423 | |
| Constraints on executive | 0.656 | 0.511 | 0.206 | 0.257 | 0.519 | 0.412 | 0.523 | |
| Regulation of participation | 0.692 | 0.775 | 0.633 | 0.598 | 0.598 | 0.607 | 0.750 | |
| Competitive. participation | 0.707 | 0.620 | 0.266 | 0.251 | 0.600 | 0.543 | 0.635 | |
| Political Competition | 0.608 | 0.496 | 0.118 | 0.308 | 0.497 | 0.440 | 0.511 | |
| Democracy Index | 0.694 | 0.553 | 0.216 | 0.310 | 0.564 | 0.474 | 0.574 | |
| CHEIBUB ET AL.: | | | | | | | | |
| Age of democracy | 0.368 | 0.447 | 0.339 | 0.636 | 0.599 | 0.444 | 0.500 | 49 |
| Transitions to authoritarian | -0.038 | -0.095 | -0.226 | -0.251 | -0.225 | -0.310 | -0.197 | |
| THE ECONOMIST: | | | | | | | | |
| Elect. process & pluralism | 0.647 | 0.432 | 0.101 | 0.188 | 0.463 | 0.412 | 0.479 | 49 |
| Functioning of Government | 0.729 | 0.665 | 0.450 | 0.570 | 0.654 | 0.588 | 0.711 | |
| Political participation | 0.765 | 0.695 | 0.465 | 0.577 | 0.714 | 0.789 | 0.800 | |
| Political culture | 0.708 | 0.707 | 0.672 | 0.739 | 0.756 | 0.729 | 0.810 | |
| Civil liberties | 0.712 | 0.547 | 0.283 | 0.354 | 0.564 | 0.484 | 0.595 | |
| Democracy Index | 0.830 | 0.693 | 0.421 | 0.528 | 0.717 | 0.675 | 0.769 | |
| STATE FRAGILITY IND.: | | | | | | | | |
| State fragility index | -0.701 | -0.630 | -0.575 | -0.544 | -0.683 | -0.767 | -0.748 | 48 |
| REPORTERS W. BORDERS | | | | | | | | |
| Freedom of the Press (log.) | -0.701 | -0.630 | -0.575 | -0.544 | -0.683 | -0.767 | -0.748 | 49 |

Table 7. (Cont.)

| Source / Variable | Respect | Convict. | Agreem. | No free r. | Particip. | Inform. | PCI | N |
|----------------------------------|---------|----------|---------|------------|-----------|---------|--------|----|
| FREEDOM HOUSE: | | | | | | | | |
| Freedom of the Press | -0.806 | -0.750 | -0.513 | -0.565 | -0.723 | -0.665 | -0.791 | 50 |
| WORLD GOVERNANCE | | | | | | | | |
| Voice & accountability | 0.846 | 0.755 | 0.453 | 0.567 | 0.755 | 0.683 | 0.806 | 50 |
| Stability & no violence | 0.768 | 0.784 | 0.728 | 0.617 | 0.620 | 0.724 | 0.832 | |
| Government effectiveness | 0.726 | 0.776 | 0.692 | 0.743 | 0.719 | 0.767 | 0.847 | |
| Regulatory quality | 0.707 | 0.729 | 0.619 | 0.647 | 0.655 | 0.673 | 0.777 | |
| Rule of Law | 0.707 | 0.773 | 0.687 | 0.760 | 0.716 | 0.739 | 0.834 | |
| Control of corruption | 0.773 | 0.816 | 0.661 | 0.762 | 0.751 | 0.747 | 0.865 | |
| Governance | 0.800 | 0.819 | 0.677 | 0.727 | 0.747 | 0.766 | 0.877 | |
| TRANSPARENCY. ORG: | | | | | | | | |
| Corruption perception index | 0.763 | 0.820 | 0.675 | 0.788 | 0.735 | 0.727 | 0.860 | 49 |
| Bribe payers index | 0.864 | 0.865 | 0.564 | 0.848 | 0.765 | 0.846 | 0.917 | 23 |
| INST. PROFILES DATABASE: | | | | | | | | |
| Political rights & functioning | 0.634 | 0.465 | 0.192 | 0.360 | 0.585 | 0.515 | 0.558 | 38 |
| Public freedoms | 0.760 | 0.600 | 0.374 | 0.509 | 0.676 | 0.520 | 0.672 | |
| Transparency public economy | 0.648 | 0.618 | 0.226 | 0.520 | 0.652 | 0.459 | 0.611 | |
| Transparency economic policy | 0.582 | 0.563 | 0.212 | 0.490 | 0.581 | 0.329 | 0.521 | |
| Corruption | 0.759 | 0.796 | 0.568 | 0.785 | 0.800 | 0.726 | 0.843 | |
| Government/citizen relation | 0.685 | 0.741 | 0.651 | 0.830 | 0.697 | 0.775 | 0.832 | |
| Running of Justice system | 0.787 | 0.762 | 0.603 | 0.783 | 0.755 | 0.708 | 0.838 | |
| Quality publ. educ. & health | 0.399 | 0.456 | 0.571 | 0.580 | 0.428 | 0.618 | 0.578 | |
| Government decision capacity | 0.219 | 0.396 | 0.064 | 0.407 | 0.290 | 0.235 | 0.307 | |
| Coordination public administr. | 0.523 | 0.491 | 0.490 | 0.656 | 0.621 | 0.556 | 0.610 | |
| Capacity political authorities | 0.637 | 0.632 | 0.464 | 0.601 | 0.672 | 0.617 | 0.694 | |
| Strategic vision authorities | 0.083 | 0.216 | 0.252 | 0.425 | 0.296 | 0.377 | 0.291 | |
| Authorities' strategies | 0.601 | 0.603 | 0.422 | 0.662 | 0.648 | 0.604 | 0.673 | |
| Security formal property rights | 0.667 | 0.714 | 0.579 | 0.631 | 0.651 | 0.620 | 0.737 | |
| Government respect contracts | 0.442 | 0.442 | 0.362 | 0.367 | 0.548 | 0.443 | 0.492 | |
| Justice in commercial matters | 0.669 | 0.661 | 0.476 | 0.612 | 0.731 | 0.718 | 0.747 | |
| Free movement persons & info | 0.498 | 0.396 | 0.007 | 0.145 | 0.355 | 0.197 | 0.340 | |
| Equity access to public goods | 0.515 | 0.507 | 0.590 | 0.593 | 0.440 | 0.679 | 0.648 | |
| Administr. business formalities | 0.359 | 0.476 | 0.432 | 0.599 | 0.366 | 0.447 | 0.497 | |
| Freedom business association | 0.699 | 0.557 | 0.244 | 0.497 | 0.674 | 0.492 | 0.620 | |
| FRASER INSTITUTE: | | | | | | | | |
| Size of Government | -0.304 | -0.238 | -0.089 | -0.200 | -0.244 | -0.266 | -0.277 | 49 |
| Legal system & property rights | 0.632 | 0.705 | 0.714 | 0.734 | 0.675 | 0.736 | 0.792 | |
| Access to sound money | 0.550 | 0.596 | 0.403 | 0.540 | 0.523 | 0.492 | 0.596 | |
| Freedom to trade international | 0.196 | 0.227 | 0.415 | 0.276 | 0.120 | 0.199 | 0.262 | |
| Credit market regulation | 0.445 | 0.420 | 0.424 | 0.408 | 0.280 | 0.468 | 0.489 | |
| Labor market regulation | 0.129 | 0.159 | 0.267 | 0.347 | 0.241 | 0.259 | 0.243 | |
| Business regulation | 0.448 | 0.529 | 0.514 | 0.637 | 0.477 | 0.479 | 0.569 | |
| Regulation (all kinds) | 0.378 | 0.414 | 0.470 | 0.551 | 0.394 | 0.469 | 0.498 | |
| EFW Index | 0.490 | 0.572 | 0.607 | 0.623 | 0.506 | 0.548 | 0.624 | |
| HERITAGE FOUNDATION: | | | | | | | | |
| Business freedom | 0.713 | 0.711 | 0.632 | 0.727 | 0.736 | 0.749 | 0.811 | 48 |
| Trade freedom | 0.598 | 0.576 | 0.603 | 0.439 | 0.400 | 0.542 | 0.620 | |
| Fiscal freedom | -0.601 | -0.660 | -0.303 | -0.539 | -0.621 | -0.452 | -0.606 | |
| Government size | -0.729 | -0.718 | -0.359 | -0.518 | -0.643 | -0.612 | -0.715 | |
| Monetary freedom | 0.567 | 0.613 | 0.527 | 0.566 | 0.555 | 0.523 | 0.632 | |
| Investment freedom | 0.618 | 0.611 | 0.414 | 0.475 | 0.540 | 0.440 | 0.599 | |
| Financial freedom | 0.525 | 0.491 | 0.313 | 0.446 | 0.473 | 0.453 | 0.527 | |
| Property rights | 0.704 | 0.696 | 0.581 | 0.631 | 0.705 | 0.674 | 0.761 | |
| Freedom from corruption | 0.784 | 0.820 | 0.651 | 0.772 | 0.765 | 0.730 | 0.861 | |
| Labor freedom | 0.200 | 0.179 | 0.243 | 0.317 | 0.263 | 0.286 | 0.269 | |
| Index of economic freedom | 0.624 | 0.614 | 0.588 | 0.613 | 0.597 | 0.608 | 0.690 | |

Table 7. (Cont.)

| Source / Variable | Respect | Convict. | Radical. | Soc. Cap. | Particip. | Inform. | PCI | N |
|--------------------------------------------------|---------|----------|----------|-----------|-----------|---------|--------|----|
| WORLD BANK: | | | | | | | | |
| Strength of legal rights | -0.312 | -0.362 | -0.278 | -0.459 | -0.327 | -0.252 | -0.361 | 47 |
| Time to build a warehouse | -0.158 | -0.157 | -0.545 | -0.413 | -0.167 | -0.414 | -0.336 | |
| Time to enforce a contract | -0.126 | -0.115 | -0.157 | -0.417 | -0.209 | -0.196 | -0.209 | |
| Time to register property | -0.295 | -0.341 | -0.440 | -0.404 | -0.280 | -0.322 | -0.383 | |
| Time to start a business | -0.616 | -0.646 | -0.494 | -0.571 | -0.608 | -0.546 | -0.660 | |
| Time to export | -0.651 | -0.708 | -0.645 | -0.684 | -0.590 | -0.684 | -0.759 | |
| Time to import | -0.216 | -0.296 | -0.178 | -0.299 | -0.246 | -0.209 | -0.269 | |
| Time to prepare & pay taxes | -0.483 | -0.535 | -0.603 | -0.486 | -0.366 | -0.439 | -0.550 | |
| Time to resolve insolvency | -0.292 | -0.307 | -0.395 | -0.230 | -0.215 | -0.477 | -0.385 | |
| OTHER CHARACTERISTICS OF THE ELECTORATES: | | | | | | | | |
| BJØRNSKOV (2005): | | | | | | | | |
| Ideology, 1975-2000 | -0.253 | -0.221 | -0.285 | 0.046 | -0.257 | -0.529 | -0.221 | 27 |
| WVS/Own elaboration: | | | | | | | | |
| Ideology, 2005-2008 | 0.011 | 0.041 | 0.123 | 0.222 | 0.080 | 0.133 | 0.091 | 50 |
| WVS/Own elaboration: | | | | | | | | |
| Political trust | -0.016 | 0.189 | 0.180 | 0.383 | 0.053 | 0.108 | 0.147 | 50 |
| PERFORMANCE INDICATORS: | | | | | | | | |
| WORLD BANK: | | | | | | | | |
| GDPpc in US\$ (2006) | 0.768 | 0.812 | 0.667 | 0.750 | 0.830 | 0.827 | 0.889 | 48 |
| CPI 2009 (base year 2005) | -0.560 | -0.561 | -0.433 | -0.454 | -0.505 | -0.479 | -0.578 | 47 |
| Unemployment rate 2009 | -0.593 | -0.598 | -0.426 | -0.487 | -0.582 | -0.515 | -0.615 | 46 |
| WORLD VALUES SURVEY | | | | | | | | |
| Life satisfaction | 0.402 | 0.550 | 0.312 | 0.552 | 0.446 | 0.429 | 0.510 | 50 |

Whether these coefficients indicate codetermination of formal and informal political institutions or one way causality, running perhaps from informal institutions to formal ones, it is too soon to speculate. It is not unlikely, however, that they influence each other, with economic development acting as the third vertex of a triangular relationship.

The Kaufmann indices on governance, and the indicators elaborated by Transparency.org present a character slightly different than that of the indicators we have just reviewed. However, they also present correlations with our own indicators of informal political institutions that situate, on average, above 0.8 in the case of the general Index of Political Capital. It is interesting to note that, with only one exception, their correlation with the general Index exceed the ones that they maintain with any of the particular components of Political Capital. As far as good governance is concerned, then, it seems that the whole of Political Capital means more than its individual parts. This notwithstanding, the correlations between the variables constructed by Kaufmann and his associates and by Transparency.org and our partial indices are also high, with only three coefficients below 0.6 out of 63.

The twenty indicators that appear in the table, taken from the Institutional Profiles Database resemble those commented in the precedent paragraph. As these indicators are generally measured on a scale that runs from 1 to 4, there is not much place in them for fine distinctions and, consequently, their correlation with our own measures is lower. Apart from this, much of what we have just said about the governance indicators is also applicable to these new indicators.

When we proceed to examine the relationship between our indicators and the indices of economic freedom, the situation is not very different. Both in the cases of the Index of Economic Freedom elaborated by the Heritage Foundation and the Economic Freedom of the World published by the Fraser Institute, we find two components whose relationship with Political Capital seem to be too complex so as to be expressed by a simple correlation coefficient. We refer to the size of government and tax burden, and to regulation of labor relations. For whatever the reasons, developed countries tend to have big governments that intervene in the labor market, as well as holding democratic values and beliefs, and this implies a negative relationship between Political Capital and the corresponding aspects of economic freedom. This aside, among the 56 remaining correlation coefficients that appear in the part of the table reserved to the Index of Economic Freedom elaborated by the Heritage Foundation, we can find only then that situate below 0.5. Interestingly, correlation is lower in case of the EFW Index of the Fraser Institute. Finally, in the case of the very specific indicators computed by the World Bank about particular aspects of economic freedom, the correlation coefficients are understandably low, although no one among them presents the unexpected sign.

Next, we have examined the relationship between Political Capital and other characteristics of the electorates. To begin with, we have two indicators of the ideology seemingly prevailing in each country. Here, the term ideology is reserved for the mean position of the electorates on the left-right axis. It is interesting to note that the sign of the coefficients that appear in the two corresponding rows of the table differ, although the two indicators of ideology reserve low values for left and high ones for right. However, this contrast is not so striking when one takes into account the differences existing between the two indicators used here for the phenomenon of ideology. Bjørnskov (2005) measure of ideology is the number of years of left-wing [right-wing] rule in each country during the period 1975-2005, whereas our own indicator is based on the 2005-to-2008 responses to the WVS-5 questionnaire, in relation to the 10 questions detailed in Table 1, in the part referred to positioning on the left-right axis. The coefficients that appear in the table are low in any case, and their opposite signs reinforce the conclusion that Political Capital and ideology are orthogonal. Or, rather, ideology is an inferior substitute for Political capital. Thus, our coefficients put into question the adequacy of such names as “progressives” or “liberals” that left-wing activists have given to themselves and have succeeded to introduce in the political parlance.

We also submit to test in the table the proposition, advanced by many renowned political scientists, according to which trust in political institutions is a civic virtue. Coll (2011) holds a rather opposite view. Several questions of WVS-5 refer to trust in government, in parliament, in political parties, in labor unions, in the United Nations, etc. We have taken the responses to these five questions, plus other two (the mean opinion on the democraticness of the country and on respect of human rights in it), and, by averaging their (previously rescaled) means we have constructed an index of political trust (or its obverse: political skepticism or cynicism). According to this index, the electorates of the Scandinavian countries show high trust in their political institutions (and perhaps have good reasons to do so), but so do the electorates of several new (and imperfect) democracies, as well as the subjects of certain autocracies. On the contrary, the electorates of other democracies that score high in our Index of Political Capital tend to political cynicism. Therefore, the correlations that appear in the table are very low, so that our initial reluctance to include political trust among the dimensions of political capital seems to receive ex post confirmation.

In the last rows of Table 7 we show the correlations between our indices and other four variables: three measures of economic success, and life satisfaction. Political Capital and its components correlate well with a contemporaneous measure of GDP per capita, due probably to a long history of interaction between them and with other variables. The relationship between Political Capital and the national averages of satisfaction with life is also non-negligible, probably expressing a similarly long history of interplay among different variables. Perhaps more interesting is, however, to present the correlations between our general and partial indices and the rates of inflation and unemployment. The latter are referred to a year (2009) immediately *after* the period in which Political Capital has been measured. Interestingly, the rates of inflation and unemployment of this year correlate with our indices much better than do the same rates during any year of the 2005-to-2008 period. But this may be informative about the different success of countries with different endowments of Political Capital at facing the World crisis of 2008. All correlation coefficients are negative, and ten out of sixteen are below -0.5 . As it seems, a good endowment in Political Capital is also effective in order to face a situation of economic emergency.

7. Concluding remarks

In the introductory section of the paper we deplored the lack of indicators for informal institutions, mainly values and beliefs, that may have a bearing on the political performance of countries.

Here we have tried to bridge this gap by building an index, to which we have given the name of Index of Political Capital of the Electorates. This tries to measure the ability of the inhabitants of any given polity to make their collective decisions according to democratic rules, and to select thereby the options that are more beneficial to them at every juncture. Another definition of our concept of political capital presents it as as the capacity of the civil society to fulfill its needs and to meet its goals through political action, summarizing the full set of politically relevant beliefs, values and attitudes, that is, the relevant informal rules of that society, plus the political skills, aptitudes and capacities of the citizens.

We have started by distinguishing up to six prospective dimensions of Political Capital, that could serve us as a source of inspiration in our a search for relevant indicators. The indicators encountered have their origins in opinion surveys, in databases that draw on the opinions of area experts and in other statistics.

Using principal component analysis and exploratory factor analysis, we have obtained synthetic indicators for each of our prospective dimensions, or aspects, of the general phenomenon we were trying to measure. Further application of the same types of analysis to these indicators shows that indeed our six prospective dimensions can be reduced to a single factor or component. From this we deduct that our attempt is feasible, in spite of the seemingly complexity of our concept of Political Capital.

The final outcome of the analyses carried on is the general Index of Political Capital, calculated for 50 countries for the years 2005 to 2008. We have estimated several versions of this Index, corresponding to different ways of treating the basic data. Although these versions don't produce identical orderings of our 50 countries, we

believe that a compromise solution may be preferable to any particular version. Moreover, we show that differences are small for most countries, and that countries tend to group in segments whose borders are often clearly delineated. We think that it does not much sense trying to make finer distinctions inside each of these groups, and plainly admit that our Index may be too a rough tool for this end.

In the final section of the paper we show that our Index of Political Capital and the six partial indices calculated for the corresponding dimensions or aspects of political capital correlate well with more than one hundred indicators of cultural peculiarities of each country, of their formal political institutions, and of their economic and general success.

This is indicative that, according to our initial guess, research on the role of institutions in economic growth, or, more generally, on their success in facilitating the satisfaction of human needs, could indeed benefit from inclusion of a quantitative measure for informal political institutions.

This paper constitutes the first outcome of a line of research that looks promising to our opinion. We by no means discard that our current Index can be improved. In the future we plan to calculate it for other periods as well, in order to produce a time series for the political capital of the electorates in different countries. Finally, we have plans for re-estimate the conclusions reached thus far by empirical political economy about the effects of particular political institutions, using an expanded model that explicitly includes Political Capital.

Data Sources:

Barro-Lee: <http://www.barrolee.com/data/dataexp.htm>

Cheibub *et al.*: https://netfiles.uiuc.edu/cheibub/www/DD_page.html

Fraser Institute (Economic Freedom of the World): <http://www.freetheworld.com/>
<http://www.cato.org/pubs/efw/>

Freedom House: <http://www.freedomhouse.org/template.cmf?page=276>

Heritage Foundation (Index of Economic Freedom): <http://www.heritage.org/index/>

Hofstede, G.: <http://geert-hofstede.com/>

Institutional Profiles Database (IPD): <http://www.cepii.fr/anglaisgraph/bdd/institutions.htm>

NSD. European Elections Database (EED): http://www.nsd.uib.no/european_election_database/

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

Reporters without Borders: <http://www.rsf.org/>

State Fragility Index: <http://www.systemicpeace.org/SFI>

Steel, Piers (webpage): <http://webapps2.ucalgary.ca/~steel/Procrastinus/metanalysis.php>

The Economist: http://www.economist.com/media/pdf/DEMOCRACY_INDEX

Transparency International: <http://www.transparency.org/>

World Bank Institute (World Development Indicators): <http://data.worldbank.org/index>

World Bank Institute (Governance): <http://info.worldbank.org/governance/wgi/index.asp>

World Values Survey: <http://www.worldvaluessurvey.org/>

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Footnotes:

¹ The terms pertains to von Wright (1963). His distinction between intrinsic and extrinsic preferences is analogous to that of Caplan (2001) between preferences and beliefs.

² In this dimension, the reader may wonder why to limit the study of voters' distribution to the left-right cleavage only. It is completely true that the experts have identified other cleavages that may be also important, but all of them seem to be more or less idiosyncratic of any given country and time, whereas only the left-right division seems to be ever-present and important. If we were able to take all of these dimensions into account, perhaps we could provide a measure for the distribution of voters on the multidimensional space of politics. Such a target, though, is out of range, and any attempt to include *some* other space-dimension would bias the results against those countries for which the corresponding issues are important: In the rest of countries, something that doesn't constitute a political issue is something in relation to which almost everybody agrees.

³ Aside from differences in constitutional arrangements and in electoral systems that could influence turnout, the ratios that one finds in electoral databases use as denominators the numbers of registered voters. However, in many countries it is the voter who has to register, whereas in others register is automatically done by authorities. In the former countries, no registration constitutes another form of abstention, but the sources that are readily available don't give information on the corresponding numbers of citizens. Thus, international comparisons in turnout are very hard to make.

⁴ One may ask, for instance, why to include indicators of trustworthiness in business in this dimension, instead of restricting it to rent-seeking or cooperation for public goods' production. The inclusion here of the sub-dimension "generalized trust" is also questionable, but we believe that these pieces of information reinforce that provided by our indicators on rent-seeking without biasing the results.

⁵ One may question, for instance, whether judging prostitution as justifiable ads to political capital. Anti-prostitution crusaders tend to see it as a form of gender violence and as an activity incompatible with human dignity. But to this one may answer that the banning of prostitution would leave the prostitutes in the hands of criminal organizations and potentially subject to worst abuses. As for incompatibility with human dignity, the critics may well be right, but there is much danger in banning all actions that some minority considers contemptible.

⁶ Another polemical case is that of the last four variables that we have included in the dimension "democratic convictions". Are indeed non-democratic the ideas that more believers are needed among the politicians or religious leaders have a right to trying to influence voters or rulers? In our opinion, each of these questions admits two different interpretations: strong and weak. Some people may defend the right of religious leaders to trying to influence vote or rulers on the grounds that, in democracy, the principle of free expression of own ideas entails that *everybody* can influence on the actions of others. However, other defendants of the rights of religious leaders may tend to grant these rights to them in an exclusive manner.

In our opinion, and at the worldwide scale, those who favor the second interpretation are more numerous among those who respond with a “yes” to these questions. Although our guess may be wrong with regard to certain countries, the error can be deemed low, as positive responses tend to be scarce precisely in those countries.

⁷ For instance, “misunderstanding of the working of the economy” could perhaps be put apart from the dimension “information about politics” and be taken as an indicator of irrationality, as Caplan does. Or “interest in politics” could perhaps be removed from “information about politics” and put into “political mobilization”. All aspects considered, however, we have preferred to let them where they presently are.

⁸ There is one case where the “approval” criterion has been replaced by that of computing only one particular type of responses. In the questions related to participation in political activities, the possible answers are: “I have done”, “I would do” and “I haven’t done”. Whereas those who choose the second answer show some inclination towards political participation, the fact is that they haven’t done the corresponding action. Since we are trying to compute active participation, we eventually decided to dispense with this type of respondents.

⁹ In the cases of two dimensions, however, the EFA results corresponding to the data rescaled by making the highest values equal to ten correlate rather poorly ($r < 0.96$) with the rest of the versions. These dimensions are Political Radicalism and, especially, No Free Riding. In the dimension Political Participation, the results stemming from versions that make a cardinal interpretation of categorical responses also present modest correlation with the results of those other versions that add all respondents who approve [disapprove] the proposition they are presented with.