Based on the World Values Surveys 2005 data, measures of different aspects of religion are constructed and tested against various measures of democracy on a cross-national level for a set of 41 countries. The analyses reveal that there are some significant inter-linkages between the involved variables; however, the religious variables act in a non-uniform manner on the explanatory ones. We conclude that both conceptual and empirical arguments support the idea of democracy viewed as a religious dependent variable.

Keywords: Cultural paradigm, democracy, human development, religion, WVS

JEL Classification: Z12; A13.
1. Introduction

The choices we made in regard to this paper’s motto are designed to reflect the complexity of religion as societal process. Firstly, the Dominican medieval distich presented above represents a pledge for a polysemic interpretation of the revelation; whereas The Letter to Hebrews views the function of faith as a guarantee for the believer. On the other hand, the I Ching approaches the ethic imperative of the sincerity that it is perfect in itself and of itself. So, we view religion as dealing with a variety of individual and social life related aspects: the position of an individual in the web of social interaction networks, or in relation with the universe and the Divinity; the formal structures and the content of the dominant ethics; the ultimate goals of personal and social evolutions as these could derive from the assessment of a set of existence’ meanings. Thus, religion could influence a wide range of beliefs and social behaviors and outcomes. It could affect the societal architecture, institutions and mechanisms through a multitude of economic, politic and attitudinal variables. In particular, religion could affect the social preference for a democratic societal framework. There can be identified two major channels for such an influence: one based on the impact exercised by religion on economic development and, consequently, on the infrastructure of democratic institutions and mechanisms of human development; the other is via the shape of beliefs, attitudes and behaviors reverberating into the social dynamics. As Eilinghoff (2003:2) notes: “A religious concept in total can lead an individual to infer a certain course of action towards one or several specific goals that are usually regarded as the ‘meaning of life’”.

In regard to the first transmission channel, the research was initiated by Smith ([1776] 1965), Weber ([1905] 1958, 1988, 2002), Azzi and Ehrenberg (1975). Currently, there is an emerging body of literature studying the connections between religion and economy. Iannaccone (1998:1466) identifies three major analytical directions in this body of literature: 1) the interpretation of religion from an economic perspective, seeking to explain patterns of religious behavior among groups and cultures; 2) the study of religion’s economic consequences; 3) the use of the religious doctrinal corpuscle to promote or criticize different economic policies - religious economics. These studies view
religion both as independent and dependent variable and conclude that religious activity could affect economic performance on various levels.

The research field corresponding to the second transmission channel is an interdisciplinary one with various approaches inspired by sociology, psychology, anthropology or institutional economics. This research direction was initiated by de Tocqueville ([1835; 1840] 2001) who suggested that as the American experience shows religion is compatible with democracy (if the public and religious spheres are kept separately). Moreover, Durkheim ([1912] 2001) focuses on religion as a factor able to contribute to social cohesion. Currently, this field is dealing with issues like secularization and post modernization and their impact on social and politic status.

The present paper is an attempt to empirically analyze the direct impact of religion on democracy, by recognizing that religion could shape believes, behaviors, ethic structures and institutional frameworks with consequences on social preference for a democratic status. The first step of our research consists in defining religion and democracy in order to provide an operational framework. A particular emphasis is placed on the view of religion as a cultural artifact and as a generator of meanings, values and purposes of human existence. Democracy is understood as a consequence of the dominant collective position regarding the fundamental social equalities and freedoms and hence as a complex system of entitlements and their borderlines. The second section is searching for the linkages between these variables. Both direct and indirect transmission channels of religion influence on democracy via the social ethics and economic development are briefly discussed.

Furthermore, we test our hypothesis by constructing some measures of different religious variables based on World Values Surveys' data; variables dealing with aspects such as religious concentration, de facto religious behavior, the perception of the social role of religion and of its involvement in political life, the approach toward the “spiritual life” of the society’s members, and the religious denomination, and by taking into account various measures of democracy (and some specific aspects such as electoral processes and political participation, the functioning of the government, political culture and civil liberties) - all these analyzed on cross-national level for a set of 41 countries.

To preview the output of the analysis, it appears that religion matters for democracy, but the impact exercised by the individual religious variables is non-uniform. Empirically, the religious variables are correlated with the dependent measures of democracy, but the robustness of these correlations varies according to the involved methodologies of estimating the democratic status. Still, overall there is a significant predictive power of religion in respect to democratic status.

The remainder of the paper is organized as follows: Section 2 seeks to define the key concepts. Section 3 is searching for possible linkages between the involved variables. Section 4 tests for empirical evidences, while Section 5 comments on results. The findings are summarized and some research limits are revealed in the final section.
2. Religion as a functional generator of meanings, values and purposes

Our starting point in defining religion is the observation that the human spirit needs several filtering mechanisms for the apparent chaos of the existence. More exactly, it needs systematic answers to questions like: Why are we living? What is our main purpose? How can be explained what is happening to us? Why do we suffer? Is there a justice in the world’s mechanisms? Is there a superior sense of life? Is dead the end or there is another level of existence?

In providing answers to such questions, there were generated various consistent and auto-coherent collective mental structures, represented by myths and symbols and by means to communicate, adjust and preserve these in an inter-generational framework. The ensemble of these structures and means constitutes the cultural paradigm as a societal product, a provider of meaning, which guides the collective and individual actions and as a tool used by members of a collectivity to place themselves in a system of relationships among them, with the Others and with the world. In such a perspective, it can be argued that culture is not only an “environment”, but also an active source of social life by determining the societal actions and stimulating / inhibiting their results.

If such approach is seen as viable, then a definition of religion as a cultural artifact could derive.

There is a certain tradition in seeing religion as a social and cultural artifact since Émile Durkheim’s functionalist approach (and going beyond and sometimes divergent from this): “Religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and surrounded by prohibitions - beliefs and practices that unite its adherents in a single moral community called a church” - Durkheim ([1912] 2001:46). Let’s consider for instance the Clifford Geertz’ view of religion as one of the cultural systems of a society. He defined religion as a system of symbols which acts to establish powerful, pervasive and long-lasting moods and motivations by formulating conceptions of a general order of existence. These conceptions are presented as factual ones in such a manner that the explanations appear to be realistic - for a presentation and comments on Geertz arguments and other similar ideas, see Kunin (2003:153).

According to such approaches, it seems that religion is a collective mental structure providing and communicating explanations about the meaning and purpose of life, by referring to an “exogenous” - from the world and mankind referential - cause of existence (the Divinity). And in this process of explaining, religion provides a set of fundamental values which are component of the cultural paradigm. Thus, the role of religion is to explain the universe and the human existence and by doing so to produce a set of meanings and values in accordance with these. Subsequently, it generates an ethics in accordance with these explanations (i.e. a set of prescriptions for human actions perceived as being the “right ones”).
Such a definition of religion is not necessary contradictory to other approaches. As an example, it could be argued that if the output of such a "generator of meanings" is sufficiently consistent and persistent, it could act as a system of "compensators" like in the rational choice theory; compensators which represent languages and practices compensating for a number of physical needs or frustrations, in particular, and for the frustration induced by the apparent lack of existence' purpose in general. Still, our view is that the primary function of religion is not to compensate for frustration on one or another aspect of human life, but for almost all of them. In other words, religion provides a large set of “supernatural credence commodities” (from explanations and meanings for the human condition to afterlife rewards). Moreover, this function is carried out by providing inter-correlated sets of explanations. In other words, we accept that religion is compensating, but we emphasis that this is done by providing explanations and these explanations are acting as an ultimate compensator for the global feeling of life insecurity.

Thus, religion is not primary about our perception of Divinity, good and evil, sins and redemption, rituals or dogmas. It is about the purpose of life, our ultimate objectives, our fear, hopes and expectations, our position in respect to others and to the universe. And mostly, religion is about a meaning greater than ourselves, a justification of our existence; not so much how, but mainly why. Hence, this constitutes the main reason for seeing religion as a cultural element. If culture is the assembly of the collective mythic structures, then there is a special dialectic of πιστις (pi'stis) creation from mythos and logos.

With this framework, our operational definition of religion will be:

**Religion** is a particular system of culture since it has the same function of providing meanings, but differs from other cultural systems by that it relates its explanations to Divinity. Its institutions (communities of believers, dogmas, ethical structures, norms, behaviors and practices) are functioning as compensatory structures for the uncertainty in individual and social life and are offering a set of rewards and penalties which shape the religious ethics. In the mean time, these support specific individuals' relationships according to the structure of a particular ethics and, by doing so, are acting as social integration structures.

This definition incorporates the grassroots definition of Stark and Bainbridge (1985:5):” Religion is any shared set of beliefs, activities and institutions premised upon a faith in supernatural forces” but adds the role of religious institutions as compensator and societal integrator structures.

Being a culture’ component, religion is an organized effort to fill the emptiness of a universe which otherwise appears to be stripped by signification.
3. Searching for the inter-linkages between religion and democracy

Currently, there is a growing literature analyzing the connections between religion and democracy. For instance, Bruce (2006) argues that Protestantism has been implicated in the development of democratic politics and civil liberties. Patterson (2005) provides detailed evidence on religion influencing politics in Latin America. Driessen (2010:56) notes that: „once the core autonomy prerequisites [of democracy] have been fulfilled, there is a wide range of Church-state arrangements which allow for religion to have a public role in political life and simultaneously maintain a high quality of democratic rights and freedoms”. Smith (2009) documents for European countries a link between religion and trust in democratic institutions. Bader (2003) argues that there are mutual relationships between society, culture, politics and state and (organized) religions and that a role of organized religion in political processes can be legitimate.

This section discusses some arguments from this literature and to grasp from these arguments the basis of our main research hypothesis. A central concept for our analysis is the salific merit. As Mc Cleary and Barro (2006:51) are pointing out: “Otherworldly compensators like salvation, damnation and nirvana are great motivators of behavior in this world”.

If the universe is guided by a conscious force (or forces) and if such directing conscience(s) has/have an intrinsic objective, than it could be reasoned that any “correct” decision is in accordance with God’s plan” (which is revealed or unknown in a direct manner but suggested in an indirect one). Correlatively, any “wrong” decision is a “deviationist” one, opposing a transcendent objective more important than the individual goals. So that, there could be identified three sets of rewards / costs associated with each individual decision. The first set is intrinsic deriving from the satisfaction / discomfort in respect to the own decisions who could or not be sanctioned by a “higher instance”. The second set is related to the judgments of other members of the social referential group in regard to the correctitude of an individual action, being partially extrinsic. The last one is fully extrinsic and may well be granted / imposed by the conscience which is governing the universe. From this perspective, any religious action will seek to fulfill two inter-correlated objectives: 1) to complete the prescript acts in order to achieve all the types of rewards; 2) to correct the incomplete, imperfect or “wrong” past actions in order to minimize the subsequent costs of these. Even in the cases when religion does not provide an absolute certainty (”it could be if God decides” but “is not sure”) about the fully extrinsic rewards or costs (life after dead, salvation of soul or physical resurrection, heaven / damnation, hell, the complete destruction of the inner), a believer will attempt to maximize the intrinsic or partially extrinsic rewards, to reinsure her / him that will not support the costs of past or current “mistakes” and to improve others’ perception over her / him.
Thus, several of the differences between religions emerge from the characteristics of the nature, level and channels of rewarding / applying of the rewards / costs and from the mechanisms of their confirmation as well. In order to be efficient, these systems of rewards and costs which form the structure of the religious ethics should be: a) consistent; b) self-explanatory; c) appropriate for the socio-economic current environment; d) able to provide answers and action guidelines for larger set of problems and actions.

The religious acts influence the social and economic conditions through the associated ethics. If such acts are fostering traits - like a pronounced work ethics, social and economic performances (as a sign of being a “community of chosen ones” or part of such community), trust, thrift and decisional prudence, charity, tolerance, openness and acceptance of the specific cultural, sexual or racial differences and so on -, these could contribute to an increase in the degree of societal openness and also could spur economic development in support in the adoption and evolution of the democratic institutions.

In other words, religion can influence, via its specific ethics, the social framework by stimulating / inhibiting different types of social behavior, in order to promote the corresponding values of religiosity. It must be noticed that this line of argumentation does not mainly emphasize the impact of religion on formation of networks, of social clubs, with their capacity to congregate and mobilize a large number of citizens, but more on the influence on social beliefs and, hence, behaviors. As McCleary and Barro (2006:51) explain: “A key concept is ‘salvific merit’ which connects the perceived probability of salvation to a person’s lifetime activities. In some religions, salvific merit can be earned in this life to enhance the chances for a better outcome in the next life”.

For religion to boost up the democratic evolution of a society, it ought to have the capacity to influence both the positive and negative conditions of democracy. Minimally, it should: 1) agree that there is a reason for taking individual and collective actions (to view this world as more than transitory to a better condition which can not be achieved here by its believers) or, at least, not to discourage such actions (by insisting that these are futile); 2) encourage the “right” actions through a well articulated description of rewards and costs; 3) not promote the “negative actions” against the “non-chosen” or “non-believers” - actions translated in anti-social acts, such as violence - in addition recommending the avoidance of such actions; 4) stimulate the social mobility by not sustaining any type of caste system on the argument that each individual social status is predetermined (this request can be controversial in the initial stages of democracy emergence, when religious institutions take position in favor of more rigid social structures; however, this could change in time due to the emergence of more solid and fully functional democratic structures and social faith doctrine may be lost in the process); 5) perceive some actions (charity, self-sacrifices for the good of others and so on) as active instruments of salvation (assuming, of course, that, in a way or another, such salvation is possible) and, correlative, to not promote the idea that extremely spiritual of physical pain is a correct instrument of salvation; 6) promote a doctrine from
which it could be concluded that neither autocracy nor anarchy are social systems in accordance with the Divine will; 7) perceive the democratic social order as a “natural” one (given by God) and so any attempt to change such order is not according to the Divine objectives.

Summarizing, the transmission channels are more complex than the issue of religion’s position in respect to the secular authority. Different religions are giving different answers to the issue of the “correct” political ideas and consequently are placing their believers in a wide range of political opinions.

Generally, the main idea is that: “By spiritually rewarding networks of mutual aid and charitable acts, religion lowers the uncertainties of daily life. That is, charity is a form of communal insurance, which can be efficient if the society has a lot of uncertainty...” - Barro and Cleary (2007:193).

Summarizing: In caeteris paribus conditions, religion could influence both the positive and negative conditions of the democratic status of a society. Such influence may vary according to the particular conditions of religious and democratic evolutions, the nature of religious institutions, the contents of its fundamental dogma, the religious behavior of individuals as well as to the stance of the relationships between political structures and mechanisms and civil society. Briefly, at a certain point in time, the relative democratic performances of a country can be explained among a variety of factors by the nature and relevance of its religious institutions.

4. Empirical evidences

The purpose of this section is to provide some empirical evidences about the interlinkages between the religious behavior characteristics in modern societies and their degree of democracy acceptance.

In order to provide such evidences, there is necessary to involve some operational measures of the religion and democracy variables. For instance, it could be noticed that various aspects of religion such as religion concentration, the religious practices and behaviors (including religious devotion), the degree of acceptance of a certain social role of religion and of its involvement in political life, the approach toward the “spiritual life” of the society’ members, and the predominant religious denomination (and implicitly the predominant dogmatic structures), all these and others are susceptible to induce different effects on societal status and on level of human development. So that a first task of such a study should be the advance of some quantifiable measures of such variables. Also for characterizing empirically the democratic status is necessary to decompose the democratic architecture in some of its constituents (e.g. the nature and mechanisms of electoral processes and political participation, the efficiency of government functioning, the global levels of political culture and civil liberties) and to provide a synthetic measure.
4.1. International Data

Our starting point is the measurement of cross-country differences in religious practices, based on the last wave of World Values Surveys (WVS) - carried out from 2005 to 2008. Since we are interested in obtaining current comparative results for the assessment of religion’s impact on democracy, in accordance with our research hypothesis, the dataset allows us to examine the present outcome of historical religious and societal evolutions; however, it does not allow a dynamic view of these evolutions’ mechanisms. Thus, this type of data fits the narrow purposes of our study. We selected from the entire data base a set of 41 countries with complete religion-related information. Since different questions are covering a wide range of religious behavior patterns we built a set of 4 synthetic indexes in order to capture the common areas of religious practices focusing especially on the aspects connected to the religion’s social role. We use individual data which typically contain 1000 to 2000 participants in each national survey - and aggregate them according to the next topics: 1) the religion concentration - the differences between the share of society’s members with formal religious beliefs which belong to the largest denomination and, respectively, the shares for the second and third denomination; 2) the religious behavior - the degree of involvement in religious practices; 3) religion’s social role - opinions on church’s capacity to answer to social problems and on the interference of religion in public governance; 4) the spirituality - the frequency of the reflections on the meaning and purpose of life.

These indexes are constructed according to our working definition of religion. They are designed to reflect the societal behavior as is this influenced by the structure of religious dogmas and practices in accordance with the position to the salvific merit and the possibility of redemption by a pro-active social attitude. Thus, these indexes are not referring to the content itself of the religious beliefs, but rather to the implications of such beliefs on the perceptions over the potential role of religious institutions. While the religious concentration is not necessarily connected to the views about salvific merit, the religious behavior and the positions about the social role of religious institutions are directed derived from such views. If the believer has at her / his disposal, according to the core dogmas, a set of redemption’ instruments - which consists both in following the structured religious prescriptions and in positive social actions -, she / he will tend to increase, in certain specific conditions, her / his participation to religious practices and rituals and to adopt a pro-active social role. In other words, if the proposed indexes are adequately constructed, there should be observed a greater emphasis on the religious institutions’ involvement in social and political life as their members seek to maximize the perceived compensatory benefits from positive social actions.

The purpose of the first index is to capture the heterogeneity of the religious beliefs by comparing the relative importance of the first three denominations. The index does not account for the existence of an official state religion or for the state regulation of the religious sector. It simply considers the religious choices of the respondents which are identifying themselves as belonging to a religious denomination. These choices can be
influenced by the existence of legal provisions, including statements about religion in fundamental laws or by the de jure or de facto religious persecutions, but these aspects are not directly addressed.

The construction of the index is based on an explicit question from the WVS questionnaire and the index is computed based on the differences between the shares of the largest religious denominations as:

$$\text{Religion Concentration Index}_j = \sqrt{\sum_{i=1}^{2} (s_{ij} - s_{i-1j})^2}$$

Here $s$ is the share of the denomination $i$ for each individual country $j$.

It should be noticed that the index does not account for the intra-religion concentration, but only for the absolute inter-religions one; so that if there are two or more denominations in a country for a certain religion the shares are summed up. Of course, this is not a perfectly accurate measure of concentration since it is not based on census data but it could provide a global picture of denominations’ shares among the members of a society.

The second index reflects the de facto religious behavior, going further then the formal adherence to a certain denomination. It is based on the idea that the self-perception as a “religious person” is not necessarily associated with the frequency of one’s involvement in religious practices but a certain consistency of beliefs and actions should be observed.

So, the index is the equally-weighted aggregation of the frequencies of “regular” religious services’ attendance and the self identification as a religious person:

$$\text{Index of Religious Behavior}_j = \frac{f_{m1j} + f_{1j}}{2} + rp_j$$

Hence $f_{m1}$, $f_1$, $rp$ stands for the shares of respondents attending religious services more than once a week, once a week and, respectively, describing themselves as “religious people” - with equal weights of these variables. Since the shares $f_{m1}$, $f_1$ are equally weighted, it is supposed that there is no de facto difference between a regular daily and, respectively, a weekly attendance. However, the weekly frequency could be seen as an arbitrary one, since, for instance, the religious rituals are different for each individual denomination; so that these may require the believers’ presence to religious practices with different timetables. Still, this time span is short enough to reflect a higher intensity of participation to religious services. Also, the participation at religious practices and the self-identification as a “religious person” are considered equally important in describing the religious behavior. It should be noticed that this index only describes the formal institutional religious practices and not the individual and informal actions of praying / meditation; so that it does not capture all the aspects of religious behavior.

The third index addresses the issue of the perception of churches’ capacity to provide adequate answers to the social problems and the level until where the involvement of the religious institutions in the political life is perceived as acceptable (and necessary).
The index is defined as the average of five variables from WVS reflecting the dominant views in a society in relation to the role that can be attributed to religion in political life:

$$\text{Index of Religion Social Role}_j = \frac{1}{5} \sum_{i=1}^{5} sr_{ij} \quad (3)$$

The shares $sr$ denote the proportion of the respondents which a) are believing that the religious institutions are able to provide adequate answer to the social problems and b) which agree to the involvement of these institutions in political life by c) rejecting the politicians “who don’t believe in God”, d) accepting the influence of the religious leaders on vote and public governance processes and e) requiring more people with strong religious beliefs in public offices. These variables are chosen in order to focus as much as possible on the construction of the index toward the space that religious institutions can have in public life. There is no specific question concerning the implication of the respondent themselves in active politics and, thus, these variables are reflecting the overall attitude of society in respect to the political activism of believers.

The index places an equal weight to each component so that the views about religion’s capacity to provide answers to the social issues are considered equally important as the involvement of religious institutions in the public decisions processes. This implies that the index should reflect both the legitimacy of the religiously motivated social actions as well as connections between religious and political spheres.

In order to complete the picture, a fourth index is computed to describe the “spiritual life”. This index reflects the shares of the respondents frequently meditating at the “meaning and purpose of life”:

$$\text{Index of Spirituality}_j = \beta_1 m_{o,j} + \beta_2 m_{s,j}$$

$$\beta_1 = 0.7, \beta_2 = 0.3 \quad (4)$$

The $m_o, m_s$ variables denote the shares of respondents thinking “often” and, respectively, “sometimes”, to the sense of life. The weights $\beta_1, \beta_2$ are arbitrarily chosen to discriminate between different levels of intensity for such meditations.

In order to reflect more synthetically the religious state, an aggregate index could be constructed based on the four indexes:

$$\text{Global Religion Index}_j = \sum_{i=1}^{4} \omega_{ij} \text{Index}_{ij} \quad (5)$$

Since we are not ex-ante imposing any condition about the relative importance of individual indexes, the $\omega_{ij}$ weights are not predetermined. Several solutions are possible in order to set the values of the weights. We are considering two of them. The first is to simply compute an equiponderate version of the global index ($\omega_{ij} = 0.25$). The second consists in a factor analysis and in the use of score coefficients as weights.

Furthermore, we grouped adherence in seven categories: Protestant (including Lutheran, Anglican, Methodist, Presbyterian, Pentecostal, Evangelical, and others); Catholic; Orthodox; Muslim (this could be roughly breakdown into Sunni, Shiite, and other types but such delimitation is not taken into account); Buddhist (including Shinto and Taoist); Hindu (including Jains and Sikhs) and other religions (including Jew, Jehovah witnesses, Native, as well as other denominations). From the total sample
representative for the countries selected in the analysis data set, 17.33% of the respondents had identified themselves as Protestant, 23.59% as Catholic, 14.30% as Orthodox, 17.20% as Muslim, 4.44% as Buddhist, 3.26% as Hindu and 4.85% as other religions. The sample represents 69.23% of the total 2005-2008 World Values Survey sample.

For assessing the direct impact of religion on democracy we are using as dependent variable the Democracy Index compiled by The Economist which captures various formal aspects of the democratic status. This index includes several elements relevant to the adopted definition of democracy, since it seeks to reflect not only the stance of formal architecture of democratic mechanisms, but also the effectiveness of political arrangements susceptible to ensure the autonomy of civil society from political inference and the equality of participation to political processes.

4.2. The Impact of Religion on Democracy

We are testing our hypothesis on a set of 41 developed and developing countries with a large variety of political institutions and mechanisms. Our dependent variables are the country’s ranks in our dataset for the Democracy Index as well as for its components. As explanatory variables, we are considering our four descriptors of the relevant aspects of religion and two versions of the Global Religion Index. We use as control variable the per capita real GDP based on prior evidences in the literature for its association with democracy (Acemoglu et al., 2005, Barro, 1996, Shen, 2002).

The regressions involve instrumental variables in order to allow for a potential endogeneity of per capital GDP with respect to democracy. The set of the instrumental variables is composed by (shares in GDP formation): the general government final consumption expenditure as a proxy for the public sector importance in the economic system; gross capital formation which is designed to capture the technological base of the economic system and the internal propensity to invest; total value added by services sector as a proxy for the structure of economy; and the Index of Economic Freedom scores for 2007 to describe the legal and institutional economic environment. We argue that differences in these variables can explain the differences in economic performances, but they are unlikely to directly be relevant for cross-section non-uniformity of democracy levels.

The estimations replace the log of per capita GDP (average values for a 1990-2007 time span) ranks with the fitted values from a first-stage regression. This first-stage equation has the log of per capita GDP as the dependent variable and has as independent variables the four instruments. The idea of this instrumental-variable procedure is to isolate the effects of economic development on democracy, rather than the reverse. The estimations give equal weight to each country. The results are reported in Table 1.
The most relevant result consists in that religion has a negative impact on democracy. Both global indexes of religion are negatively and significantly correlated with democracy indexes, but positively with all the other variables. This finding supports approaches as the life-cycle religious participation profile in a rational-choice perspective based on Azzi and Ehrenberg (1975). Since we do not use time-varying data we cannot conclude directly that this is an effect of a secularization process. However, we tend in a certain extend to agree with McCleary and Barro (2006: 62) that “secularization can be seen as a gradual tendency”. Particularly, it could be noticed that the religion concentration affects statistically significant all the dependent variables with the exception of the political participation and civil liberties. One possible explanation is that the absence of religious pluralism does affect the religious beliefs and behaviors and their translations in political

### Table 1: Religious determinants of democracy and human development (ranks regressions)

Cells show estimated coefficients with standard errors in ()

<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Democracy Index</th>
<th>Electoral Process</th>
<th>Functioning of Government</th>
<th>Political Participation</th>
<th>Political Culture</th>
<th>Civil Liberties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of per capita GDP</td>
<td>1.099 (0.017)*</td>
<td>0.894 (0.020)*</td>
<td>0.952 (0.086)*</td>
<td>0.622 (0.064)*</td>
<td>1.140 (0.043)*</td>
<td>0.904 (0.044)*</td>
</tr>
<tr>
<td>Index of Religious Concentration</td>
<td>-0.063 (0.022)***</td>
<td>0.069 (0.021)***</td>
<td>-0.085 (0.056)</td>
<td>0.052 (0.056)</td>
<td>-0.112 (0.037)*</td>
<td>0.001 (0.029)</td>
</tr>
<tr>
<td>Index of Religious Behavior</td>
<td>0.213 (0.044)*</td>
<td>0.224 (0.020)***</td>
<td>-0.034 (0.116)</td>
<td>0.265 (0.174)</td>
<td>0.171 (0.093)***</td>
<td>0.211 (0.054)</td>
</tr>
<tr>
<td>Index of Religion Social Role</td>
<td>-0.105 (0.024)</td>
<td>-0.207 (0.032)***</td>
<td>0.169 (0.035)***</td>
<td>0.149 (0.107)</td>
<td>-0.006 (0.071)</td>
<td>-0.153 (0.032)**</td>
</tr>
<tr>
<td>Index of Spirituality Dominant religious denomination</td>
<td>-0.061 (0.028)***</td>
<td>-0.030 (0.023)***</td>
<td>0.007 (0.043)</td>
<td>0.187 (0.066)**</td>
<td>-0.073 (0.0836)</td>
<td>-0.035 (0.020)**</td>
</tr>
<tr>
<td>Global Religion Index I</td>
<td>-0.719 (0.193)***</td>
<td>0.286 (0.230)***</td>
<td>-0.046 (0.756)</td>
<td>-1.676 (0.690)**</td>
<td>-0.783 (0.609)</td>
<td>0.609 (0.422)</td>
</tr>
<tr>
<td>Global Religion Index II</td>
<td>-0.044 (0.015)</td>
<td>0.058 (0.003)***</td>
<td>0.073 (0.010)</td>
<td>0.409 (0.001)***</td>
<td>0.013 (0.005)***</td>
<td>0.007 (0.005)***</td>
</tr>
</tbody>
</table>

**Notes:**

- The Democracy, Electoral Process, Functioning of Government, Political Participation, Political Culture and Civil Liberties indexes as dependent variables in Columns 1 through 6 figures are the ones reported by the Economist Intelligence Unit in 2008 Report. b. The religious indexes are computed according to the methodology described by the relations (1) to (5). For all the variables, the figures represent the corresponding ranks (“1” for the highest value and “41” for the lowest). Each system treats the log of per capita GDP ranks as endogenous and uses as instruments: the general government final consumption expenditure; gross capital formation; total value added by services sector; the Index of Economic Freedom scores for 2007 and the other explanatory variables.
- The economic variables are from UNCTAD Handbook of Statistics 2008.
- The Index of Economic Freedom is provided by Heritage Foundation - http://www.heritage.org/index/.

*Source: See text*
practices. However, religion concentration is negatively correlated with the global democratic status, the functioning of government and the political culture. In other words, a monopolistic supply of religious products contributes to a decrease in the relative social preference for politic pluralism and politic competition: the rejection of religious / cultural heterogeneity is associated with a rejection of political diversity. Not surprisingly, a greater level of the Index of Religious Behavior is positively and significant associated with a higher level of democracy rank in the sample. Assimilation of religious ethics in the framework of social behaviors could support a democratic culture and enhance the pluralist functioning of the political mechanisms.

The interference between religion and democracy could harm the democratic mechanisms and limit the electoral processes and civil liberties. In the mean time, a religious motivated bureaucracy could be relatively more efficient since its members will take into account not only a politically motivated system of rewards and costs for their actions, but also a religious one. There does not emerge a significant connection between Index of Religion Social Role and the political participation or political culture. One possible explanation for these findings is that the religious institutions are frequently developing parallel non-political networks for their social actions through them mobilizing the believers and substituting the political involvement. Such argument could partially be connected to Verba et al. (1995) who posit that variation in political participation could be explained by the differences in the acquisition of civic skills through different civil society institutions and, in particular, the religious ones. But this process varies according with the internal functional and dogmatic structure of religious institutions and does not imply a uniform impact of religion on the involvement in political life. Hence, our dataset includes several countries with high levels of political participation (Germany, Australia, Canada, Finland or Bulgaria) and lower social role of religious institutions as well as countries with low level of participation and religion’s social importance (Spain, Sweden, Norway or Ukraine and Vietnam). The Index of Spirituality is negatively correlated with the global level of democracy and civil liberties and positively correlated with political participation. For the other dependent variables, there is no statistically significant association with this index. Such a result could be linked to the impact of a greater focus on meanings and values search on social relationship, the development of the communities and hierarchy of human needs.

The shift from Protestantism to other religious denominations is correlated to a decrease in the global level of democracy and political participation; the others dependent variables are not significantly influenced by the denomination. Overall, it appears that religion matters for democracy, but various aspects of religion exercise a non-uniform impact on the dependent variables. There can be formulated a concern about the robustness of this result in respect to the manner in which the degree of democracy is estimated. In other words, a more “narrow” or “broader” institutional or functional emphasis in democratic measures could be sensitive to the stability of the evaluated association between religion and societal status.
4.3. An Indirect Robustness Check with Other Measures of Democracy

In order to provide at least an indirect robustness check of our results, we evaluate the effects of choosing other measures of democratic status. Table 2 reports estimations of the connections between the religion indexes and various measures of the global democratic stance for the countries included in the dataset.

Table 2: Religious determinants of democracy – miscellaneous measures of the democracy status (ranks regressions)

<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Polity IV Institutionalized Democracy</th>
<th>Polity IV Revised Combined Polity Score</th>
<th>Vanhanen’s Index of Democracy</th>
<th>Political Rights (Freedom House)</th>
<th>Civil Liberties (Freedom House)</th>
<th>Direct Democracy (IDEA)</th>
<th>Turnout (IDEA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of per capita GDP</td>
<td>0.121 (0.004)*</td>
<td>0.133 (0.000)*</td>
<td>0.748 (0.103)*</td>
<td>0.111 (0.012)*</td>
<td>0.110 (0.004)**</td>
<td>-0.077 (0.018)*</td>
<td>0.44</td>
</tr>
<tr>
<td>Index of Religious Concentration</td>
<td>-0.003 (0.002)</td>
<td>-0.009 (0.001)*</td>
<td>0.248 (0.075)*</td>
<td>-0.011 (0.004)*</td>
<td>0.0001 (0.001)</td>
<td>0.283 (0.028)**</td>
<td>-0.047 (0.031)</td>
</tr>
<tr>
<td>Index of Religious Behaviour</td>
<td>0.062 (0.005)*</td>
<td>0.078 (0.004)*</td>
<td>0.006 (0.125)</td>
<td>0.065 (0.007)*</td>
<td>0.041 (0.003)**</td>
<td>-0.044 (0.016)*</td>
<td>0.177 (0.070)**</td>
</tr>
<tr>
<td>Index of Religion Social Role</td>
<td>-0.018 (0.002)*</td>
<td>-0.024 (0.006)*</td>
<td>-0.399 (0.050)*</td>
<td>-0.006 (0.003)*</td>
<td>-0.006 (0.003)**</td>
<td>-0.164 (0.049)*</td>
<td>-0.233 (0.082)**</td>
</tr>
<tr>
<td>Index of Spirituality</td>
<td>-0.060 (0.002)*</td>
<td>-0.072 (0.007)*</td>
<td>0.189 (0.045)*</td>
<td>-0.052 (0.006)*</td>
<td>-0.034 (0.003)**</td>
<td>0.126 (0.032)*</td>
<td>0.400 (0.072)**</td>
</tr>
<tr>
<td>Dominant religious denomination</td>
<td>0.240 (0.015)*</td>
<td>0.280 (0.014)*</td>
<td>1.443 (0.879)**</td>
<td>0.046 (0.094)</td>
<td>0.014 (0.028)</td>
<td>2.682 (0.271)*</td>
<td>1.878 (0.413)**</td>
</tr>
<tr>
<td>Global Religion Index I</td>
<td>-0.003 (0.000)**</td>
<td>-0.006 (0.000)**</td>
<td>0.024 (0.002)**</td>
<td>0.004 (0.001)**</td>
<td>0.007 (0.003)**</td>
<td>0.227 (0.018)*</td>
<td>0.341 (0.004)*</td>
</tr>
<tr>
<td>Global Religion Index II</td>
<td>-0.004 (0.000)**</td>
<td>-0.002 (0.001)**</td>
<td>0.003 (0.000)**</td>
<td>0.007 (0.000)**</td>
<td>0.010 (0.005)**</td>
<td>0.206 (0.003)*</td>
<td>0.350 (0.011)*</td>
</tr>
</tbody>
</table>

*p<0.01, **p<0.05, ***p<0.1 (two-tailed tests).

Notes:

a. Polity IV Institutionalized Democracy is an index provided by the Center for Systemic Peace-Polity IV Project. For both indexes the figures used in the ranks’ computation are the ones corresponding to year 2006.

b. The Vanhanen’s Index of Democracy represents the data constructed by T. Vanhanen [http://www.prio.no/CSCW/Datasets/Governance/Vanhanens-index-of-democracy/Polyarchy-Dataset-Manuscript/] in his study of polyarchy. The data used here are the ones for the last electoral cycle in each country (generally from the 2000 electoral processes).

c. The Political Rights and the Civil Liberties indexes are reported by Freedom House. The figures are corresponding to the 2007 values.
All the regression have been carried out by adding to the instrumental variable already used a dummy for the ex-communist countries in order to control for the heterogeneity of the methodologies involved in the estimation of democracy. While the communist period had affected all the components of the religious life, this effect appears to be only a temporary one, since there could be found a considerable rebound in religion in the ex-communist countries. However, from the institutional point of view, the impact of the communist regime could be more persistent due to the necessity of institutional reconstruction of religion as well as of democratic infrastructure. It could be argued that for the ex-communist countries the framework of the interrelations between religion and democracy was substantially modified and so the consistency of the use of different democracy measurement methodologies could be altered.

The results are quite puzzling. For instance, there could be find a negative and statistical significant association between the religious global indexes and Polity IV project measures but a positive and yet significant one between these indexes and Vanhanen’s Index of Democracy and respectively Political Rights and Civil Liberties indexes provided by Freedom House. Several explanations could be advanced for such output. A short list of them could include:

- The Vanhanen’s Index of Democracy is focused on political participation and electoral processes so that it appears that country with medium to high level of religiosity such as Italy or Turkey but also others like the ex-communist Bulgaria, Poland, Romania or Moldova displays more or almost the same degree of “democracy” that United States, Canada or Japan;

- Despite their more complex methodology, with an important emphasis on institutional elements of democracy, the Political Rights and Civil Liberties displays more or less similar features with almost the same outliers for countries like Italy, Bulgaria, Poland, Slovenia, Ukraine or Ghana and Trinidad and Tobago which are reported to have close values of democratic characteristics close to the mature Western democracies;

- From such observations, it could be argued that the mentioned measures of democracy are able to capture the institutional aspects of political architecture and the electoral processes but is still an open question about how much these measure are reflecting the de facto functional infrastructure of a democratic society.

Secondly, it appears that there is a strong and stable negative correlation between the Index of Religion Social Role and the various measures of democracy: the more able is religion considered to supply answers to the social problems in a country, the less this country democratic appears to be regardless the methodology used to estimate the level of democracy. Through, it could be presumed that the religion monopole on societal life...
acts like an inhibitor for the development of the democratic institutions and mechanisms. Of course, this result could not be used for answering the question if such loss in representative democracy quality is not counterbalanced in religious countries by the adoption of some alternative forms of civil society participation to social and political issues.

Thirdly, a correlative positive and robust relationship is the one manifested between the Index of Religious Behavior and the involvement measurements for the level of democracy: the more the citizens of a country are involving themselves in organized religious practices, the more are they willing to accept the specific institutional arrangements of a representative democracy. Such an output should be correlated with the less clear finding that the extent of religious concentration is negative correlated with the democracy indexes (except for the Vanhanen’s Index of Democracy and Freedom House Civil Liberties ones). Thus, is there is achieved a certain degree of religious competition in the conditions of a “sufficient” demand for religious products it is less possible that a single denomination with possible non-democratic doctrines to influence a large number of civic behaviors. Of course, one crucial aspect concerns the nature of the doctrinal corpuscle and practices of a significant or dominant religious denomination. For instance, a country like Norway with a 62.6% share of Protestant denomination subsequently displays a high level of democratic status regardless the methodology used to describe this status. The religious concentration as a single variable has only a limited capacity to explain the relative preference for democratic systems without a more detailed description of the religious demand and supply.

Fourthly, there is a certain negative interrelationship between the Index of Spirituality and democracy indexes (again with the exception of Vanhanen’s Index of Democracy): the more spiritual issues are included in the cultural paradigm, the less a society prefers the representative democracy. This statement does not imply that democracy is only a pragmatic social arrangement rejected by more “spiritual” societies. There could not be a democracy without a social acceptance of its fundamental values directly incorporated in paradigm up to a certain threshold and as a consequence without a conscientious effort to provide senses for personal and social existence. Such result could be more related to a shift toward individualistic points of view and more fragmentation of the societal coagulation processes with the increase in the focus in “here and now” approaches of life. Again, such a thesis should not be considered in an absolute sense. On one hand, peoples could be stimulated to reflect more on the meaning of life in conditions of a short life expectation, a low level of “rational” education and in situations when they feel that there are few opportunities for personal fulfillment. On the other hand, is religion itself which could provide answers on this topic so that if there is a high level of religiosity it compensates for the personal efforts in attributing sense to our lives. However, this last argument is less supported by data since almost all countries with high level of religiosity have also at least medium to high levels for Index of Spirituality (maybe with the exception of Mali).
Fifthly, one of the most striking results insensitive to the changes in the methodology of measuring the democracy is that Protestantism is a clear ground for both representative and direct types of democratic regimes and that the relative preference for democracy diminish in non-Christian denominations countries. Of course, such outcome should be corrected with the unequal weight of different religions in the data sample but still there seems to be a certain evidence for the Weberian argument.

In the context of these results, there appears that there are two other particular issues. The first issue is related to the fact that all mentioned indexes are measuring, in a way or other, the representative type of democracy. Or it is interesting to see if the direct democratic forms are also interrelated with religion. Column 6 of Table 4 reports the linkages between the religion indexes and a direct democracy index build on data concerning the legal provisions about referendums, citizen initiatives and recalls at different levels, the topics which could be subject of such referendums and the usage of referendum mechanisms since 1980 provided by Institute for Democracy and Electoral Assistance. By direct democracy we understood a system in which the social decisional sovereignty is lodged to the civil societies in all the relevant matters for the social processes. The associated mechanisms are: (a) referendums, which are votes on a specific single issue or piece of legislation (; (b) citizen initiatives, whereby citizens can propose new legislation or constitutional amendments; and (c) recall, under which citizens can force a vote on whether to oust an incumbent elected official. The common characteristic of these mechanisms is that they all place more power directly in the hands of voters, as opposed to elected representatives. But it should be noticed that in practices this pure type of democracy is in the best case intent but not realized as a fully operational societal framework. Rather the societies which emphasis such democratic design are deliberative democracy which incorporates elements of both direct democracy and representative democracy. So that, the Direct Democracy Index should be seen as a measure of the degree in which a society accepts to incorporate direct democracy elements into its political mechanisms.

The output of the system suggests that there could be found a negative interaction between economic development and the relative preference for direct democracy and, correlative, a positive one with the religiosity. The first finding could be partially explained by some historical factors specific for mature economies and societies. More exactly, it could be argued that the “traditional democracies” has been evolving like representative democracy' projects and the outcome was stable enough over time in order to be preserved (with various adjustments). In the mean time, we could presume that the emergent societies and / or the not fully consolidate democracies could find in the direct democracy mechanisms a way to compensate and / or to reduce the costs of the institutional construction for the infrastructure of a representative democracy but we do not have data to support this idea.

The second finding could be enlighten by the observation that, since that Switzerland is not included in the dataset, countries with high Direct Democracy Index are represented by Orthodox and Catholic dominant denomination ones (like Peru, Serbia, Guatemala,
Italy or Poland and Slovenia). A possible explanation could subsist in the emphasis that both Orthodoxy and Catholicism are placing on *communion* – a an especially close relationship of Christians, as individuals or as a Church, with God and with other Christians, relationship which could be translated into a strong communitarian sense which serve as ground to the preference for direct form of the community consultation in a larger spectrum of social and political issues. Of course, this argument is not complete since a medium to high level of index could be found for non-Christian Buddhist dominant countries like Thailand or Korea. However, such line of argumentation could be supported by the observation that according to our results a higher level of religious concentration stimulates the adoption of direct democracy elements. Thus is could be argue that this concentration is a stimulus for the communitarian spirit and for a larger autonomy of local structures. Supplementary, the Index of Religious Behavior and the Index of Religion Social Role appear to be negative correlated with the Direct Democracy Index which could be explained by the importance of individual actions in more “social secularized” societies. In other words, there is a certain consistency in assuming that factors as “destiny” or “predetermination” are less important in explaining the output of personal acts and also that religion could not provide answers to the social problems and simultaneous to give up only with limitations the control over the social decisions to representatives eventually perceived to form a “political aristocracy” (or a “benevolent technocracy” or a “omniscient bureaucracy” or a similar term designed to refer to an “exogenous” specialized structure).

Overall, it seems that a religious ethic which emphasis systematic “correct” interactions between individuals and thus shorter societal interspaces is a strong support for the emergence of direct democracy mechanisms. But the analysis is only partial since it not includes a balanced comparative approach of the relative efficiency of religious and non-religious networks through which the citizens gain and exchange information and engage themselves in social actions.

A second particular issue is one about the effectiveness of the democratic mechanisms, effectiveness which in a narrow sense could be synthesized by the degree of participation to the political processes. Column 7 of Table 4 shows the correlations between the religious indexes and the average political participation rate based on the data provided by the Institute for Democracy and Electoral Assistance. It results that an increase in the religiosity is associated with a higher participation to the electoral processes. Of course, this outcome should be more clearly explained. For instance, Djupe and Grant (2001: 311) are arguing that to the extent that religion is positively associated with political participation is much more related to the role of churches in “recruit[ing] parishioners to participate in politics” and in creating the perception among members of a common set of political norms and expectations that would encourage participation. Indeed, churches are “civil” (i.e. non-political) structures and there could be through their specific channels a mobilization for the political life together with other non-religious organizations of the civil society. And some churches have significant potential...
for social mobilization. Supplementary, it could be argued that if there are some monopolistic characteristic of the religious supply (i.e. a high denominational concentration) it is much easier for a particular denomination to mobilize a large share of the citizens and to support their involvement in politic life (of course, if the utility of such denomination is increased by the maximization of the degree of participation for its believers). Our data does not support such an argumentation since there appears to be a negative (and not yet consistent) relationship between the Index of Religious Concentration and the participation. But there is only a point. Another one is the extent to which a certain set of religious beliefs and practices are encouraging the individuals for self-engagement in the political processes. As Patterson (2005:149) finds in the examination of political life in Latin America: “the primary cleavage in political participation was not between Catholics and Protestants but between the devout and the not devout.” Still, in our data appears a manifestation of both type of cleavages since the denomination variable is positively and statistical significant correlated with the political participation. In highly developed countries which largely are Protestants or Catholics (or a combination between these two denominations), the electoral apathy is (up to a certain level) a wide phenomena. Au contraire, in the new emergent democracies (which have a lower share of Christian denominations) the electoral processes are still attracting the citizens. Since in our opinion the electoral absenteeism is the output of a multi-periodic process, a cross-section analysis of religion and democracy could not explain why the attractiveness of democracy fades out in the mature societies. We could only status that: 1) there is such a process and 2) this affects especially the historical democracies (based in Protestants or Catholics countries).

It is interesting to note that there was found a positive and relevant connection between the religious behavior and the tendency to vote: the more somebody acts in a religious formal way the more is likely to participate in electoral processes. This result is somehow different from other findings in literature. For instance, Thornton and Kent (2009:9) conclude for a set of Latin America countries that:” Church attendance was not a predictor of the other forms of participation (voting, contacting, or campaigning)”. Such a difference could be explained by both the facts that our dataset incorporate also non-Christian countries with a different pattern of religious behavior (more exactly, with a different content of what it means a “religious life”) and also that there are significant differences among the countries in the content of political participation beyond the existence of eventually formal similar electoral mechanisms.

Relatively surprising, the participation decrease with the increase of Index of Religion Social Role: despite the fact that citizens believe that religion could provide answers to social problems and that they are requiring more members of public authorities with religious beliefs, they are involving themselves less in politic occasions. But such a paradox could be only a partial one since it could be recalls that a higher level of the belief in the social role of religion could have an adverse effect on democracy and thus could reduce the opportunities to exercise the right to vote.
The Index of Spirituality seems to act on the same way on political participation as on direct democracy: an increase in the concerns about the meaning of life stimulates a higher involvement in the political life as a result of a proactive attitude toward the social problems.

5. Concluding Observations, Limits and Further Research

We have focused in this analysis on the impact exercised by different aspects of institutional religious life on democracy. The empirical research relied on surveys data, and on four analytical indexes based on this data, indexes describing the processes of religion concentration, religious behaviors, and perception about the social role of religion, the importance of spiritual issues in the society, together with the dominant religious denomination, as well on two global indexes of religious status. The dependent variables are designed to reflect various aspects of democracy such as electoral process, functioning of government, political participation and culture or civil liberties.

The main findings could be resumed as follows:

- The level of economic development is positively connected with higher levels of all the representative democracy measures but negatively with the relative societal preference for the adoption of some direct democracy mechanisms;
- There is a significant impact of religion on the global democratic status for all the measures of democracy involved in analysis, but this impact appears to be more ambiguous that it could be deduced from the theoretical framework. It could be found that for both overall religion indexes a higher level is associated with lower levels of The Economist' Democracy Index and Polity IV project measures but also there is a positive and yet significant relationship between these indexes and Vanhanen's Index of Democracy and respectively Political Rights and Civil Liberties indexes provided by Freedom House. Such differences could be attributed to the non-uniform aspects reflected by each measure of democracy but also to the existence of some outliers in the dataset.

The religious variables constructed based on the World Values Surveys questions exercise a non-uniform influence on democracy dependent measures:

- First, the religious concentration tends to limit the various components of democracy: a monopolistic supply of the religious products is translated into a decrease of the relative social preference for politic pluralism and politic competition;
- Second, the Index of Religious Behavior is positively associated with a higher level of democracy: the religious ethic could support a democratic culture but does not appears correlated with efficiency of the public authorities nor with political participation as it is this measured by The Economist. However, a more consistent religious behavior seems to increase the Turnout variable from the IDEA data so that there is some room for the idea that a higher religion concentration could in certain conditions support the political mobilization;
Third, there is a certain negative relationship between our Index of Spirituality and democracy but this is less clear and stable among the various measures of the democratic aspects;

Fourth, there is a certain cleavage between the societies with a dominant Protestant (and for certain aspects Catholic) denomination and the others in respect of democratic achievements.

These findings require a deeper analysis for a better understand of the involved mechanisms. However, these suggest that there is a case for substantial inter-linkages between religion and democracy.

References


