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Towards new maps of global human values, based on *World Values Survey (6)* data

By

Arno Tausch

Abstract:

This article provides a new approach to the study of global values, based on a statistical analysis of the freely available data from the *World Values Survey,* 6th wave of global opinion surveys, which has now been made public. In accordance with economic approaches, we contradict the mainstream of the hitherto published global value analyses in sociology (Ronald F. Inglehart) and we think that family values (Schumpeter) and religious values (Barro) can be an important positive asset for society. Too many negative phenomena, which cannot be overlooked anymore by contemporary social science are clearly to be associated with the loss of religion (irrespective of the predominant denomination in a country): the distrust in the state of law; the shadow economy; the distance from altruistic values; a growing fatigue of democracy; the lack of entrepreneurial spirit; *et cetera.*

We provide global maps for the new 22 value factors which result from the promax factor analysis of 78 variables from 45 countries with complete data, and we also calculate performance indices for the countries and the nine main global religious denominations, answering an old query raised by Huntington, 1996. On this account, the 5775 year old religion of Judaism and also Christian Protestantism emerge as the role models for other religions how to combine religion and the traditions of the Enlightenment. Interestingly enough, also Hinduism, Buddhism, Taoism and Roman Catholicism are assigned a positive value on our combined twelve factor indicator. Religiously committed Protestants and Roman Catholics who assign a greater importance to G'd in their life rank better on our scale than do the overall global Protestant and Roman Catholic populations.

Keywords: Index Numbers and Aggregation; Economic Integration; International Relations and International Political Economy; Religion

JEL Classification: C43, F15, F5, Z12

Social science studied cross-national survey data with statistical methods to gain insights about global value patterns for a number of years. Our survey of the theories and hitherto carried out empirical studies will be rather brief and because of sparse available journal printing space, we would rather like to concentrate here on the new results which we will present. For this reason, our article departs substantially from the usual presentation style in the social science journals and rather adheres to the style in the medical profession as a model to follow.

1. Background

The discipline of global value research made enormous methodological developments over the last decades and is now an integral part of global sociology (Davidov, Schmidt and Billiet, 2011; Davidov, Schmidt and Schwarz, 2008). Inglehart initiated repeated and constant standard surveys over time in the *Eurobarometer* [1] project and the *World Values Survey*. [2] Regional coverage of the *World Values Survey* project quickly transcended developed Western democracies to include in wave 1, 1981-84 South Korea and Mexico; and in wave 2, 1990-1994 a number of former communist and also developing countries. *World Values Survey* data are now available from 100 countries which contain some 90 percent of the world's population, still using a largely common and stable questionnaire with almost 400,000 representative respondents. [3] There was also a growing inclusion of representative Muslim publics in these surveys (Tausch and Moaddel, 2009; Tausch, Heshmati and Karoui, 2014; Yesilada and Noordijk, 2010). Never before in human history have we known as much about the values and cultures across the globe, and never before have we known as much about the changes of values and cultures over time.

In the West, three social scientific traditions gained an overwhelming prominence in the interpretation of global values: G. Hofstede, S. Schwartz, and R. Inglehart. Hofstede, who pioneered value research in international business studies (Hofstede, 2001; Hofstede and Minkov, 2010; Hofstede, Hofstede and Minkov, 2010; Minkov and Hofstede, 2011, 2013) underlines the fundamental insight that transferring global production and doing international business needs a thorough study of the differences in international values of employees and customers alike. According to **Hofstede** there are four to six basic clusters of international value systems, and they are all defined along the scales of how different national societies handle ways of coping with inequality, ways of

[1] http://ec.europa.eu/public_opinion/index_en.htm
[2] http://lcsr.hse.ru/en/inglehart
[3] http://www.worldvaluessurvey.org/WVSContents.jsp?CMSID=WhatWeDo

coping with uncertainty, the relationship of the individual with her or his primary group, and the emotional implications of having been born as a girl or as a boy. Among Hofstede's factors, power distance (lowest in Scandinavian and in the Anglo-Saxon democracies), uncertainty avoidance (generally highest in Roman Catholic and Orthodox cultures), and long-term orientation (LTO) (highest in South Korea, Japan, and China) are especially often mentioned in the literature.

Schwartz, 2006 highlights a famous map of global values. Schwartz identifies seven basic cultural orientations and the structure of interrelations among them: West European, English-speaking, Latin American, East European, and South Asian, Confucian influenced, and African and Middle Eastern.

His seven country-level cultural dimensions are

1. Embeddedness
2. Hierarchy
3. Mastery
4. Affective Autonomy
5. Intellectual Autonomy
6. Egalitarianism
7. Harmony

Muslim societies rank very high on values of embeddedness. Embeddedness combines such values as social order, respect tradition, forgiving, moderateness, obedience, politeness, cleanness, national security, devoutness, wisdom, self-discipline, family security, honoring elders, reciprocation of favors, protecting the public image.

Inglehart predicted a more or less generalized global increase in human security in parallel with the gradual waning of the religious phenomenon in the majority of countries across the globe. Inglehart spells out what tendencies are brought about by the waning of the religious element in advanced western democracies: higher levels of tolerance for abortion, divorce, homosexuality; the erosion of parental authority, the decrease of the importance of family life *et cetera* (Inglehart and Baker, 2000; Inglehart and Norris, 2003).

Inglehart and Baker, 2000, which has become a true classic of the social sciences today, quoted none the less than 3256 times in the literature, [4] developed an interpretation of global value change which rests – like our present

[4] http://scholar.google.at/citations?view_op=view_citation&hl=de&user=r3vC6IAAAAAJ&citation_for_view=r3vC6IAAAAAJ:9yKSN-GCB0IC

article - on the statistical technique of factor analysis. Inglehart used up to some twenty key *World Values Survey* variables, mostly from the waves (1) to (4) of the project. As it is all too well-known, the two Inglehart dimensions are: (1) the Traditional/ Secular-Rational dimension and (2) the Survival/Self-expression dimension. These two dimensions also explain more than 70 percent of the cross-national variance in another Inglehart factor analysis of ten indicators, and each of these dimensions is strongly correlated with scores of other important variables. For Inglehart and Baker, 2000 all of the preindustrial societies show relatively low levels of tolerance for abortion, divorce, and homosexuality; tend to emphasize male dominance in economic and political life, deference to parental authority, and the importance of family life, and are relatively authoritarian; most of them place strong emphasis on religion. Advanced industrial societies tend to have the opposite characteristics.

When survival is uncertain, cultural diversity seems threatening. When there isn't *"enough to go around,"* foreigners are seen as dangerous outsiders who may take away one's sustenance. People cling to traditional gender roles and sexual norms, and emphasize absolute rules and familiar norms in an attempt to maximize predictability in an uncertain world. Conversely, when survival begins to be taken for granted, ethnic and cultural diversity become increasingly acceptable - indeed, beyond a certain point, diversity is not only tolerated, it may be even positively valued because it is seen as interesting and stimulating. In advanced industrial societies, people seek out foreign restaurants to taste new cuisine; they pay large sums of money and travel long distances to experience exotic cultures. Changing gender roles and sexual norms no longer seem threatening.

In this article we will analyse the weight of such factors as the loss of religion and the rise of the shadow economy, including in leading Western countries, and we start out from a frame of reference which was provided by the American economist **Robert Barro**, who thinks that religion does affect economic outcomes mainly by fostering religious beliefs that influence individual traits such as thrift, work ethic, honesty, and openness to strangers. For Barro, beliefs in heaven and hell might affect these traits by creating perceived rewards and punishments that relate to *"good"* and *"bad"* lifetime behavior. The networks and interactions fostered by churches and religious denominations are important elements of social capital.

For Inglehart, such phenomena as bribery, corruption, tax evasion, cheating the state to get government benefits for which one wouldn't be entitled, but also the healthy activism of citizens in volunteer organizations, already described by Amitai Etzioni, hardly exist, while the rich data base of the *World Values Survey* provides ample evidence about these phenomena and their occurrence in world society. Our statistics and choropleth maps of global value adherence underline

a preoccupation about the loss of spiritual values, which also unites leaders of the major world religious denominations. [5] As **Rabbi Lord Jonathan Sacks** in his address at the Pontifical Gregorian University on December 12, 2012 in Rome correctly highlighted, the religious roots of the market economy and of democratic capitalism can never be forgotten:

"They were produced by a culture saturated in the values of the Judaeo-Christian heritage, and market economics was originally intended to advance those values." [6]

And Rabbi Lord Sacks went on to underline the following aspect, which achieves highest significance in our own empirical results:

"But trust is not a dispensable luxury. It is the very basis of our social life. Many scholars believe that capitalism had religious roots because people could trust other people who, feeling that they were answerable to God, could be relied on to be honest in business. A world without trust is a lonely and dangerous place. […] In the end we do not put our faith in systems but in the people responsible for those systems, and without morality, responsibility, transparency, accountability, honesty and integrity, the system will fail." [7]

Lord Sacks argues also that affluence makes you complacent. You no longer have the moral and mental energy to make the sacrifices necessary for the defense of freedom. Inequalities grow. The rich become self-indulgent. The poor feel excluded. There are social divisions, resentments, injustices. Society no longer coheres. People do not feel bound to one another by a bond of collective responsibility. Individualism prevails. Trust declines. Social capital wanes.

"Those who believe that liberal democracy and the free market can be defended by the force of law and regulation alone, without an internalised sense of duty and morality, are tragically mistaken." [8]

Secularization is part and parcel of the decay of family values and economic values, which threaten to affect negatively the very existence of the capitalist market economy. This simple and compelling message from one of the greatest

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[5] http://www.peace.ca/concludingstatement.htm and http://www.catholiceducation.org/en/religion-and-philosophy/social-justice/has-europe-lost-its-soul.html

[6] http://www.catholiceducation.org/en/religion-and-philosophy/social-justice/has-europe-lost-its-soul.html

[7] http://www.catholiceducation.org/en/religion-and-philosophy/social-justice/has-europe-lost-its-soul.html

[8] http://www.catholiceducation.org/en/religion-and-philosophy/social-justice/has-europe-lost-its-soul.html

economists of all times, **Joseph Alois Schumpeter** was already published in 1950. For Schumpeter, the loss of family values destroys the fabric of capitalist family owned businesses. Today we can add: if overall values decline, then, also tax morale and the human work ethic, considered to be so vital for economic progress since the days of the German sociologist **Max Weber**, will decline as well.

The economics profession, that is, mathematical, quantitative economics, already began to make large-scale use of the *World Values Survey* data, integrating the *World Values Survey* country level results into international economic growth accounting.

Following **Hayek** and Barley, 1988 and Hayek, 1960, we think that values like hard work which brings success, competition, and private ownership of business play an overwhelming role in 21st Century Capitalism, and simply cannot be overlooked in empirical global value research.

Starting with the usual World Bank economic growth data (as of March 2015), we immediately see that the centers of economic growth since the crisis of 2008 shift inexorably towards the countries of the Pacific and the Indian Ocean arena, and away from the secularized West. Even in their wildest anti-Western dreams, the opponents of the West would not have been able to imagine what has come true today – the tremendous reduction of Western economic power. What radical Islamist movements could hitherto not achieve – the undermining of Western military power – the economic crisis and the rise of new economic global players accomplished within the timespan of a few years. Not the bombs of Mr. Osama Ben Laden, but the relentless economic crisis starting in 2007 achieved this decline.

Barro speaks decidedly in favor of the importance of religion for sound economic growth and long-run economic well-being. Barro and McCleary, 2003, instead of viewing 'religious beliefs' as an 'impediment' of economic growth, tend to see them as requirements of a resilient society today:

'Our central perspective is that religion affects economic outcomes mainly by fostering religious beliefs that influence individual traits such as thrift, work ethic, honesty, and openness to strangers. For example, beliefs in heaven and hell might affect these traits by creating perceived rewards and punishments that relate to "good" and "bad" lifetime behavior.'

Religious beliefs stimulate growth because they help to sustain aspects of individual behavior that enhance productivity. Respect of parents is related in a clear-cut positive manner to economic growth, as well as the belief in hell. Our Appendix Map 1 projects the World Bank average economic growth rates since

the world economic crisis began in 2008. Poor countries grow faster than richer countries, but we also show how even under consideration of prior economic development levels, economic growth inexorably shifts towards the Pacific and Indian Ocean region.

The decline of "economic morality" has many visible results – the shadow economy, bribery, corruption *et cetera.* The economic profession already invested lots of energy over recent years to investigate these phenomena (Tanzi and Schunecht, 1997; Tanzi, 1999; Schneider, 2005). Hofstede, Schwartz/Davidov and Inglehart, the three major existing sociological and psychological theories about global values do not talk about the shadow economy at all.

The present author is of course well aware of the vast debate on religion and globalization in the context of the theories, debated above (Beyer and Beaman, 2007; Sen 2006). **Eisenstadt** (1968) already underlined the pivotal role of Protestantism in the rise of the Enlightenment traditions in the West. In accordance with Guiso *et al*., 2003, we think that Eisenstadt's theory deserves a more than passing mentioning here, because Eisenstadt (1968) moved away from an analysis of a direct causal link between Protestantism and capitalism to focus on the ''transformative potential'' of religions.

The transformative potential is defined by Eisenstadt as the ''capacity to legitimize, in religious or ideological terms, the development of new motivations, activities, and institutions which were not encompassed by their original impulses and views" (Eisenstadt, 1968). As Guiso *et al*. correctly emphasized, Eisenstadt's main contribution in the context of the debate was to show that Protestantism redefined political and social institutions, and impacted on the reformulation of roles within the economic sphere.

In view of the global quest for an ethics of tolerance and understanding (Küng, 1997), one might also argue that starting from Montesquieu (Montesquieu, 1989) in the Western Christian tradition, **Enlightenment** would be indeed inseparable from the development of a culture of tolerance and the market economy (Allen, 2008; Holmes, 2006; just to mention a few). Important traditions of Enlightenment in other world religions – to name here only Judaism and Islam, without neglecting the other global religions – must also be named in this context (Feiner and Naor, 2011; Lawson, 2005; Morgan, 2007; Sacks, 1998, 2003, 2005, 2014). Europe's dominant denomination, Roman Catholicism, only joined the traditions of Enlightenment in the Second Vatican Council (Lehner and O'Neill Printy, 2010). And while the Roman Catholic Church now forcefully condemns Anti-Semitism, it is still ambivalent at best on the "second

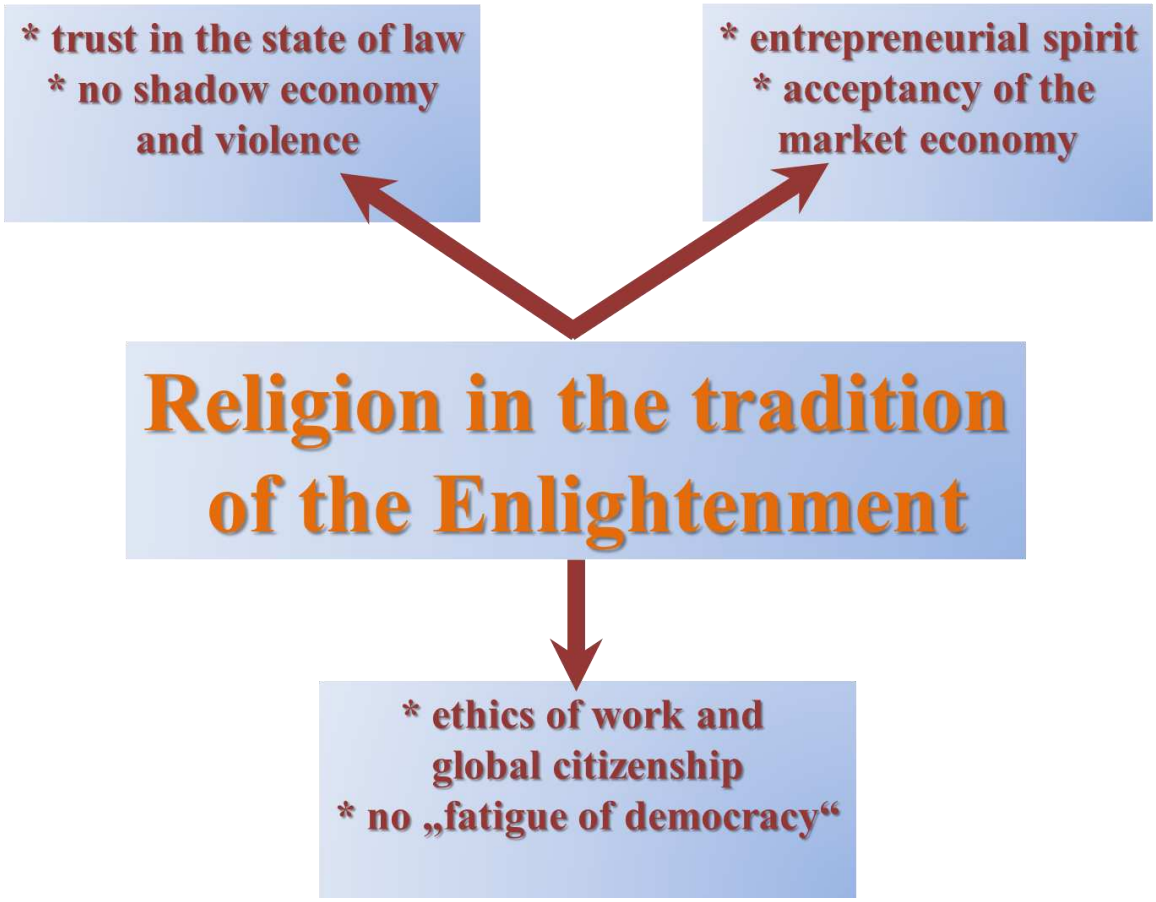
pillar" of its Anti-Enlightenment prejudice, [9] which targeted Free Masonry (Lenoir and Etchegoin, 2009).

But for empirical economists, who are not primarily in sacred scriptures but in economic behavior of human beings, the evidence published on the relationship between religion, denominations, societal ethics and economic growth is far from clear and conclusive. There are, if one wishes to say so, different shades of very contradicting evidence, and among the dozens and dozens of articles and books published on the subject, we should just mention the influential articles Berggren and Bjørnskov, 2011, who found a negative relationship between religiosity and trust; Porta *et al*., 1996, who distinguished between the effects of what they term hierarchical religions (a debate started by Putnam, 1993 and Fukuyama, 1995; defined in the article by Porta *et al*. as Catholicism, Eastern Orthodox Christianity, and Islam) and **Guiso *et al*., 2003;** Knack and Keefer, 1997; Sapienza *et al*., 2006; and Zak and Knack, 2001; who all arrived at a more complex picture of realities. Guiso *et al*., 2003 is an especially noteworthy source in this context, because the article is based on a very comprehensive analysis of the *World Values Survey* data, which were available to the authors at the time of the writing of their article. Only a very limited number of conclusions of that article can be debated here: Guiso *et al*., 2003 found that on average religion is good for the development of stronger institutions. **Religious people trust others more, trust the government more, are less willing to break the law, and believe more in the fairness of the market. Active churchgoers are not more intolerant toward immigrants than the rest of the population.** Finally, both a religious upbringing and active religious participation increase trust toward government institutions. Religious upbringing and affiliation are associated with a reduced willingness to break any sort of legal rule. People attending religious services on a more regular basis are more willing to trade off equality for incentives and in particular, they favor more private ownership. **Catholicism breeds trust more than any other non-Christian religion.**

The main theoretical connections of the present new approach to global value studies could then be summarized as follows:

[9] http://www.jewishvirtuallibrary.org/jsource/judaica/ejud_0002_0007_0_06772.html

Graph 1: Religions in the tradition of the Enlightenment and global values – the causal connections



2. Data and Methodology

Human value data collections now include data from much of the Americas, Europe and the former USSR, East and South-East Asia and several countries in Sub-Saharan Africa, and also from twenty majority Muslim countries of our globe, now participating in the last wave of the *World Values Survey* project.

Our present attempt to map anew the structure of global values is based on an extensive and ehaustive approach of the 78 best documented variables in the *World Values Survey (6),* based on 41178 global representative citizens with complete data who reside in none the less than 45 countries. Our multivariate analysis thus covers roughly some 47% of the total global population of 7.303 currently billion people and it also comprises some 580 Muslim inhabitants of our globe, i.e. around 36% of the global Muslim population of more than 1.6

billion people. [10] The fifteen member countries of the Organization of Islamic Cooperation, [11] covered by our final multivariate analysis are: Algeria, Azerbaijan, Iraq, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Libya, Malaysia, Nigeria, Pakistan, Tunisia, Turkey, Uzbekistan, and Yemen. The full list of countries, entered into the final analysis emerges from Table 3.

Our variables include a wider array of values than in any previous encompassing analysis on the subject. We also include necessary background data such as age, education, gender, and income of the respondents. The fifteen categories of values and activities measured now include

- Active/Inactive membership in seven types of **voluntary organizations**
- Attitudes on **gender issues**
- Basic attitudes on the **market economy**, on **inequality** and on **wealth**
- **Confidence** in key national and international institutions (nine indicators)
- Eleven indicators of the **values** which are **important in** the **education** of a child
- Feeling of **happiness**
- **Indentification with democracy** (several indicators)
- Indicators of positions on **environmental protection**
- Indicators of **trust**
- Indicators of **work ethics**
- Nine **indicators of what is justifiable** and what is not in a society, including the shadow economy
- Seven indicators measuring the **scales** proposed by **Shalom Schwartz**
- Several indicators of **religiosity**
- Three indicators of **xenophobia and racism**
- **What democracy should be all about** (seven indicators)

The IBM-SPSS version of the *World Values Survey* data were downloaded from the official website of the research project: http://www.worldvaluessurvey.org/WVSOnline.jsp. The countries and territories originally entered into the final analysis were: Algeria, Argentina, Armenia, Australia, Azerbaijan, Bahrain, Belarus, Brazil, Chile, China, Colombia, Cyprus, Ecuador, Egypt, Estonia, Germany, Ghana, Hong Kong (China), India, Iraq, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Pakistan, Palestine (Occupied Territories), [12] Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Singapore, Slovenia, South Africa, South Korea, Spain, Sweden, Taiwan (China), Thailand, Trinidad and Tobago, Tunisia, Turkey, Ukraine,

[10] http://www.worldometers.info/world-population/
[11] http://www.oic-oci.org/oicv2/home/?lan=en
[12] The *World Values Survey* data list the Occupied Palestinian territories (Gaza and the Westbank) as "Palestine".

United States, Uruguay, Uzbekistan, Yemen, and Zimbabwe. **We worked with listwise deletion of missing values.**

Our used statistical program was the IBM-SPSS XXII. All our used algorithms are fully available to the international public (IBM, 2011). As to the analysis of principal components and factor analysis, we generally refer our readers to Blalock, 1972; Dziuban and Shirkey, 1974; Harman, 1976, and Rummel, 1970. The choice of the factor analytical method used to reduce the number of variables of the *World Values Survey* to its underlying dimensions is not just a matter for the specialist but it also has many different practical consequences. Inglehart relied on standard principal components, which is basically a statistical methodology already developed before the Second World War. We think that the time has come to use more modern techniques which properly allow for stronger relations between the "factors" which are underlying the correlations between the variables. We think that **promax factor analysis** is the ideal analytical technique, and we use it throughout this article. [13]

Factor analysis also allows the researcher to construct combined indices, in our case a combined global value development index (trust in the state of law; no shadow economy and violence; post material activism; support for democracy; non-violent society; no xenophobia and racism; trust in transnational capital and Universities; support for the market economy, described in the works of Hayek and Weber; supporting gender justice; not staying away from environmental activism; caring for democracy; supporting the army and sports (weighted by the *Eigenvalues* of the Promax factor analytical model)).

3. Results

In all brevity, we would like to present now the results of our research endeavor. Interested readers are being referred to our website at https://uibk.academia.edu/ArnoTausch/Documentation-for-books-and-articles where they will find not only the factor loadings of the promax factors, but also the full correlation matrix between the factors and also a second order factor analysis, based on the factor scores between the 22 oblique factors, which again corresponds the main findings of this analysis. The presentation of all these new

[13] The author is indebted on this point to his colleague Prof. Almas Heshmati; see also Tausch, Heshmati and Karoui, 2014. Principal Component analysis was originally developed by Pearson (1901) and further improved by Hotelling (1933). As to the literature on factor analysis, see, among others Agénor, 2003; Andersen and Herbertsson, 2003; DeVellis, 2003; Dien *et al*., 2005; Finch, 2006; Hambleton *et al*., 1991; Heshmati and Oh, 2007; Heshmati *et al*., 2008; Heshmati, 2006a; Kang, 2002; Kieffer, 1998; McDonald, 1997; McLeod *et al*., 2001. Promax factor analysis emerges as the most suitable method.

materials in this article, all substantially qualifying hitherto established *World Values Survey* research, would by far beyond any word limit for scientific journals nowadays, including the present one.

In our re-analysis of the latest *World Values Survey* data, we show that the contemporary landscape of global values is indeed very different from the logic, described by Inglehart and his so-called self-expression values, associated by Inglehart with high levels of subjective well-being, good health, and high interpersonal trust, as well as tolerance of outgroups, support for gender equality, postmaterialist values, and environmental activism.

We show by contrast that a very large array of negative phenomena, which cannot be overlooked anymore by contemporary social science, are clearly associated with the loss of religion. This holds for the majority of nations around the world, irrespective of the predominant religious denominations. **Negative phenomena are on the rise especially in Western countries and in the former communist countries of Eastern Europe, where they spread most rapidly, and where they endanger, in the end, the very existence of the Open Society, such as the growth of distrust in the state of law; the shadow economy and violence; the distance to altruistic values; the growing fatigue of democracy, the lack of entrepreneurial spirit, the careless rejecting of work and global citizenship, and the dislike of sports and also the armed forces** which are there to protect our societies against external threats. Our empirical analysis shows that while contemporary parents in the early 21st Century hold dear such educational values as independence and imagination, **ecological responsibility and acceptancy of societal rules are on the retreat as the loss of religion progresses.**

In the tradition of Hayek and Barley, 1988 and Hayek, 1960, one finds evidence in our results that the values of **hard work** which brings success, **competition**, and **private ownership of business** (Appendix Map 15) today are most present in the following ten nations: Yemen, Uzbekistan, Libya, Tunisia, Trinidad and Tobago, Iraq, United States, Romania, Mexico, and Rwanda. The most anti-market attitudes can be found today not only in some former communist nations, but also in core countries of the European Union, like the Netherlands. The ten nations, whose populations most profoundly reject the market as understood by Hayek, nowadays are: Azerbaijan, Poland, Kazakhstan, Ukraine, Uruguay, Russia, Netherlands, Estonia, Singapore, and Chile.

We should emphasize at this point that there is nothing arbitrary in our results based on the investigation of the relationships between the 78 variables. **Factor analysis does nothing but to bring the structure, which is underlying the correlation matrix between the variables, to the surface.** There were twenty-

two promax factors, whose statistical benchmark, the so-called *Eigenvalue,* was above 1, as required by the statistical analysis textbooks.

Table 1: The factors of the model

	Eigenvalue	**% of total variance explained**	**Cumulated percentage of total variance explained**
no trust in the state of law	4,729	6,063	6,063
shadow economy and violence	4,652	5,964	12,026
post material activism	3,761	4,822	16,849
secularism	3,289	4,217	21,065
distance to altruistic values & G'd	2,656	3,405	24,470
social democratic orientation	2,147	2,753	27,222
support for democracy	2,034	2,607	29,830
the violent society	1,898	2,433	32,263
xenophobia and racism	1,612	2,067	34,329
happiness and economic well-being	1,573	2,016	36,345
lack of entrepreneurial spirit	1,444	1,851	38,197
older generation with low education and high fertility	1,316	1,687	39,884
distrust in transnational capital and Universities	1,227	1,573	41,456
anti-Hayek/anti-Max Weber	1,219	1,563	43,020
rejecting work, global citizenship; but social trust	1,193	1,530	44,550
supporting gender justice	1,163	1,491	46,041
educational value: independence not obedience	1,113	1,427	47,468
staying away from environmental activism	1,096	1,406	48,873
„fatigue of democracy“	1,086	1,392	50,266
egoism of the rich	1,054	1,351	51,617
imagination versus ecological responsibility	1,035	1,327	52,944
Hating the Army and sports	1,013	1,299	54,242

Following the conventions of factor analysis, we performed the so-called scree-test in Graph 2. That is to say, the factors mentioned by the size of their *Eigenvalues* are on the x-axis, while the *Eigenvalues* are on the y-axis. Popularly formulated, the scree test looks at the shape of the line of the *Eigenvalues.* There should be a discernable upward bounce in the *Eigenvalues* to make those on the left hand of the Graph relevant beyond doubt. While the *Eigenvalues* for factors 12 – 22 correspond to a rather unspectacular straight line starting from factor 22

on the right to factor 12 on the left, whose *Eigenvalue* is just above 1.0, the *Eigenvalues* for factors 1-5 are really way above all trends, and the *Eigenvalues* for factors 6-8 are still relatively markedly above the linear trend from factor 12 to factor 22. Factors 9 to 11 are still above the trend line, although the visual diagnosis leaves other interpretations open as well.

Thus the factors

- no trust in the state of law
- shadow economy and violence
- post material activism
- secularism
- distance to altruistic values & G'd

must be considered under any circumstances as the main factors of our model. Together, they already explain 24.47% of the total variance of the model, based on the 41178 global representative citizens and 78 variables from 45 countries. The following factors still achieved some salience

- social democratic orientation
- support for democracy
- the violent society

while

- xenophobia and racism
- happiness and economic well-being
- lack of entrepreneurial spirit

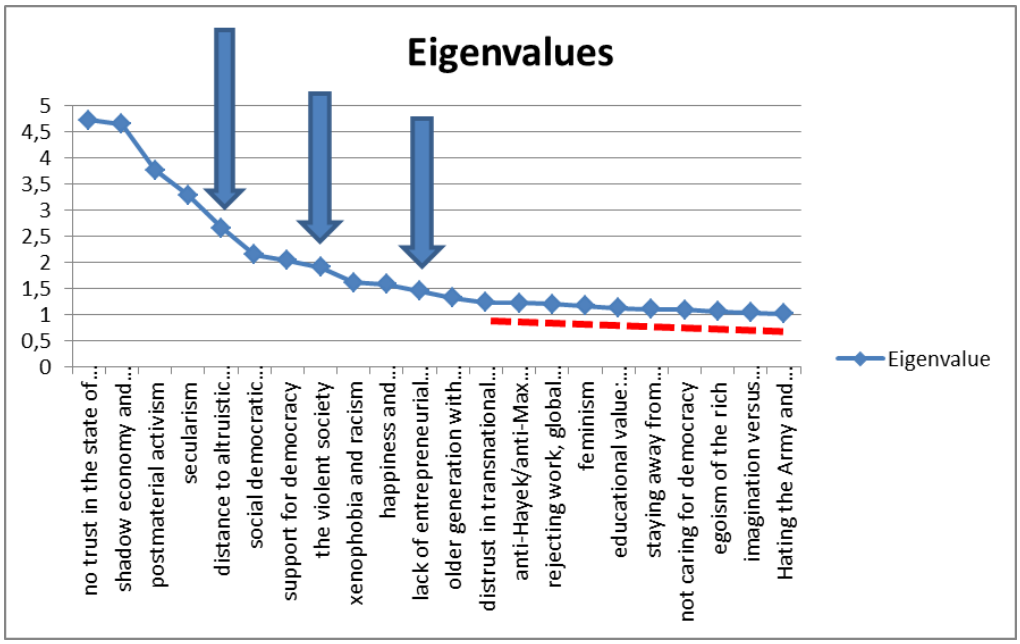
must be considered as “borderline cases” of the scree test.

The other factors, that is to say:

- older generation with low education and high fertility
- distrust in transnational capital and Universities
- anti-Hayek/anti-Max Weber
- rejecting work, global citizenship; but social trust
- supporting gender justice
- educational value: independence not obedience
- staying away from environmental activism
- „fatigue of democracy“
- egoism of the rich
- imagination versus ecological responsibility
- Hating the Army and sports

should be interpreted with caution: while their *Eigenvalue* is still above 1.0, their *Eigenvalues* correspond rather to a straight line starting from factor 22.

Graph 2: The scree-test for the factor analytical model



In the following, we will make some comments on the promax rotated factors, and refer our readers also to the following choropleth maps (Appendix Map 2 to Appendix Map 23), which contain a detailed description of the most important factor loadings as well as the countries corresponding most and corresponding least to these factors:

no trust in the state of law: combines low trust in the state apparatus, especially the organs of state security with distrust in the press, the universities, the banks and transnational corporations. Worst performers are located in Eastern Europe and Latin America; while some Muslim societies and China are outstanding performers on this scale.

shadow economy and violence: acceptancy of cheating on taxes, stealing property, taking bribes, avoiding fares on public transport, cheating on government social benefits, combined with acceptancy of violence against other people and violence against women. Worst performers: Philippines, Algeria, Lebanon, Mexico, Russia, best performers: Azerbaijan, Trinidad and Tobago, Ghana, Japan and Turkey. These two factors combined already explain 12,026% of total variance, and the scree-plot suggests that in statistical terms, they are the most reliable measurement scales in our present work. Both factors are at the center of economic theory formation and were hitherto

neglected by empirical sociological value research.

post material activism: volunteer activities for humanitarian and ecological organizations, labor unions, Church organizations and other volunteer activities. Worst performers: Tunisia, Azerbaijan, Armenia, Turkey; best performers: Taiwan (China), Sweden, Rwanda, Australia, Nigeria and the Philippines. This "Etzioni" factor of an active society also could present many perspectives in the context of future democratic stability.

secularism: no importance assigned to G'd in one's life and to religious education; no attendance of religious services, no activity in Church organizations, rejection of tradition, acceptancy of divorce, rejection of the interpretation of laws by religious authorities. Lowest values in Sub-Saharan African developing countries, highest occurrence in Sweden, China, the Netherlands, Estonia, Slovenia, Japan and Australia.

distance to altruistic values & G'd: combines the Shalom Schwartz scale about not looking after the environment with the Schwartz scale of not accepting tradition, proper behavior, and altruism. The factor is combined with a low importance assigned to God in one's life. Least occurring in some Eastern European and former Soviet countries, Columbia and some Arab countries, highest occurrence in Japan, the Netherlands, Rwanda and South Korea

social democratic orientation: This orientation combines demands for redistribution by the state in favor of the poor and unemployed with a strong belief in civil rights, in free elections, and – surprisingly enough – with the interpretation of laws by the religious authorities. This "socialism" of the 21st Century, which in several countries also has a religious aspect, is weakest in the United States, Trinidad and Tobago, Japan, and Sweden, and is strongest in Pakistan, Turkey, Uzbekistan, the Ukraine and China.

support for democracy: this factor combines support for democracy on various scales with a rejection of the interpretation of laws by the religious authorities and support for gender justice (University equally important for a boy or for a girl). Support for secular democracy and supporting gender justice is weakest in Kyrgyzstan, Pakistan, the Philippines, and Azerbaijan, and is strongest in Sweden, the Netherlands, Australia, Cyprus, Japan and the United States.

the violent society: This factor combines the acceptancy of domestic violence against women and children with the acceptancy of violence against other people, acceptancy of taking bribes, stealing property and cheating on taxes. The worst performers on this scale are Rwanda, the Philippines, Zimbabwe, Nigeria, and Singapore, while Chile, Romania, Japan, South Korea and Poland are the best performers.

In the following, we can only present – where necessary – some general further comments on the remaining factor of lesser statistical importance:

- xenophobia and racism
- happiness and economic well-being
- lack of entrepreneurial spirit
- older generation with low education and high fertility
- distrust in transnational capital and Universities

- anti-Hayek/anti-Max Weber
- rejecting work, global citizenship; but social trust
- supporting gender justice
- educational value independence not obedience
- staying away from environmental activism
- „fatigue of democracy“
- egoism of the rich
- imagination versus ecological responsibility
- hating the Army and sports

From the viewpoint of previous research on the subject, the following factors deserve some further verbal comments, while all the necessary basic information about our research results is presented in Appendix Maps 2-23 and in the Appendix, which we made electronically freely available at https://uibk.academia.edu/ArnoTausch/Documentation-for-books-and-articles

The rejection of the Schwartz scales “get rich”, “adventure and risk”, and “new ideas” combines with a very negative attitude towards elderly people, which are seen as a burden on society, and with a rejection of global citizenship. This attitude, which we call **“lack of entrepreneurial spirit”** is especially to be found in former communist countries – especially in the former USSR – and in Japan and Taiwan, while this attitude is least to be found in four countries in Sub-Saharan Africa.

Contemporary strong anti-globalization attitudes, directed against major companies and banks, combine with a negative attitude against (global) Universities, the national civil service and the national press. This factor of **distrust in transnational capital and the Universities** is strongest in the five majority Muslim countries Jordan, Tunisia, Yemen, the Occupied Palestinian Territories and Iraq, while three Sub-Saharan African developing countries, Taiwan and Estonia are the least anti-globalization countries in the WVS sample.

Appendix Map 14 shows the factor **“anti-Hayek/anti-Max Weber”,** combining the attitude that hard work does NOT bring success, with the rejection of competition and the longing for state ownership of enterprises. This factor is especially present in some former communist countries, while some majority Muslim countries (Yemen, Uzbekistan, Libya, and Tunisia) and the Caribbean nation of Trinidad and Tobago best correspond to the lessons of Hayek and Weber.

Rejecting work, global citizenship; but a higher social trust is a factor least frequently to be encountered in several poor countries, among them Latin America, while it is especially prominent in the post-industrial societies of the Netherlands, the United States, Sweden, Australia, Japan and interestingly also in Belarus. It combines the rejection of work, global citizenship, and the importance of G’d for one’s life with a higher degree of social trust and an acceptancy of divorce. It is a factor typical for the secular milieu in highly developed countries.

There is a certain polarization in the global educational values between a dimension, emphasizing independence and

responsibility, and a dimension emphasizing obedience and unselfishness. **The independence, not obedience syndrome** is strongest in highly industrialized capitalist and former communist countries, and weakest in African and Latin American developing countries.

Staying away from environmental activism is weakest in Sweden, the Netherlands and Australia, and strongest in Muslim and non-Muslim developing countries.

Our analysis also clearly shows the existence of the phenomenon of the **"fatigue of democracy"** in several advanced western nations and also in developing countries in Latin America with a long tradition of democracy. In the countries of the former USSR, this phenomenon is still least present. It combines a rejection of the importance of democracy with the absence of activities in sports organizations, a low attendance of religious services or no attendance at all, and also these strata refrain from donating money to ecological organizations.

The **"egoism of the rich"** combines material satisfaction with a low trust of other people and a positive attitude towards divorce. While it is least present in some developed old and new democracies, it is very common especially in five majority Muslim countries – Yemen, Pakistan, Libya, Jordan, and Malaysia. The relationship of this variable with indicators of societal inequality would have to be investigated in further research.

Above, we have stated that there is a certain polarization in the global educational values between a dimension, emphasizing independence and responsibility, and a dimension emphasizing obedience and unselfishness. The second global "clash" between competing syndromes of education concerns the **dimension of imagination versus ecological responsibility**. It is very typical for the secular milieus in several majority Muslim developing countries like Pakistan, Turkey, Algeria, Lebanon, and also Nigeria and Rwanda, while it is least present in the Netherlands, in Yemen, in Poland and in Chile. Why there are such large differences between the majority Muslim countries Pakistan, Turkey, Algeria *et cetera* on the one hand and Yemen on the other hand would have to be investigated in further research.

Finally, the last factor to be presented is **"hating the Army and sports",** which is very typical for some non-Russian former parts of the USSR and also Zimbabwe, while it is least present in Sweden, Poland, and China, all countries, where sports and the armed forces of the country both are very popular.

Table 2 shows the main contradictions between secularism, the distance to altruistic values and to G'd and values necessary for an Open Society in the 21st Century. Table 2 also supports the argument, forwarded in Graph 1. Enlightened religion positively contributes to the six factors as described by our Graph. The empirical evidence on the ''transformative potential'' of religions shows that religions have the *''capacity to legitimize, in religious or ideological terms, the development of new motivations, activities, and institutions which were not encompassed by their original impulses and views"*, as was predicted by Eisenstadt, 1968.

Table 2: the main correlations between the promax factors, contradicting the hitherto existing secularist consensus in sociology

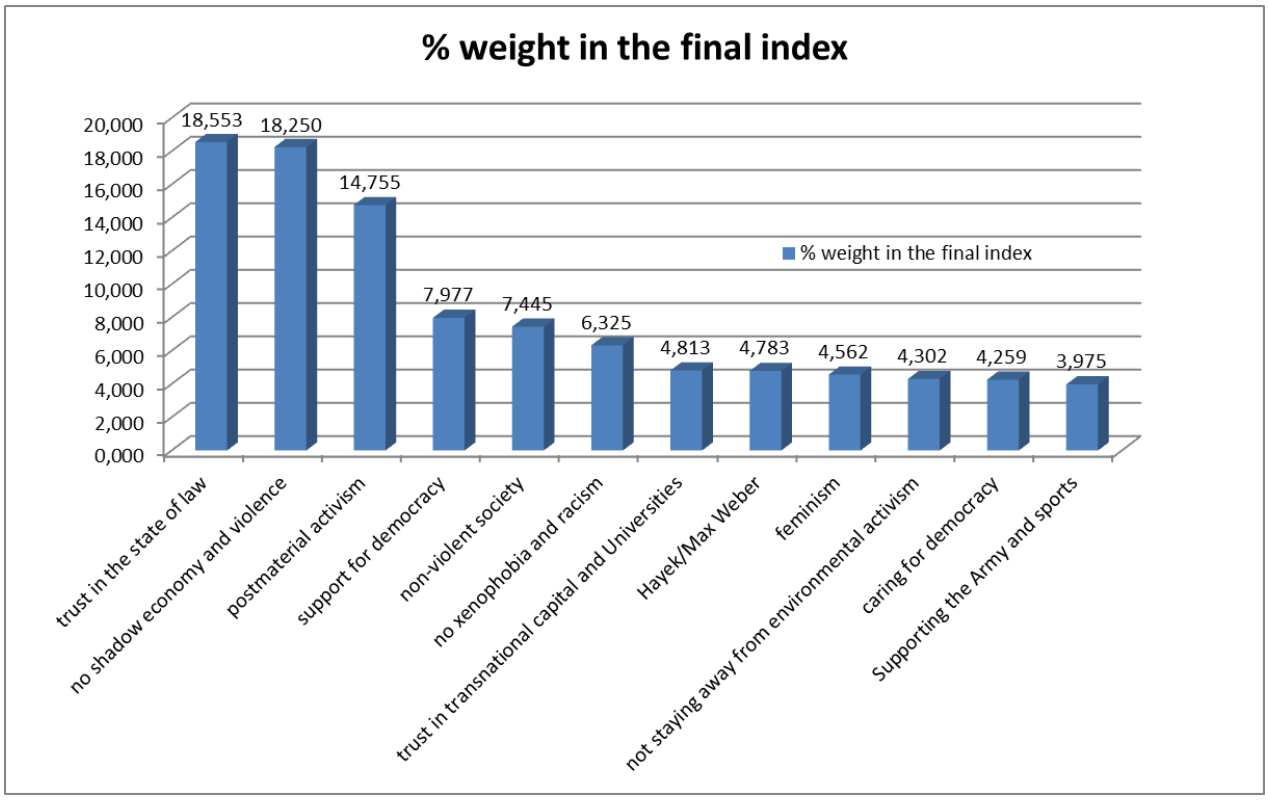
	secularism	**distance to altruistic values & G'd**
no trust in the state of law	0,105	0,120
shadow economy and violence	0,038	0,151
lack of entrepreneurial spirit	0,212	-0,077
anti-Hayek/anti-Max Weber	0,096	0,149
rejecting work, global citizenship; but social trust	0,312	0,218
„fatigue of democracy“	0,105	-0,018

We also present a Global Value Development Index. According to the standard statistical analysis textbook recommendations, we multiplied the original factor scores by the *Eigenvalues*. For factors, which originally present a socially negative phenomenon, like “no trust in the state of law”, we also multiplied the factor scores by the number -1. So the final weights applied to our original factors scores to arrive at the results in Table 3 were:

no trust in the state of law	-4,729
shadow economy and violence	-4,652
postmaterial activism	+3,761
support for democracy	+2,034
the violent society	-1,898
xenophobia and racism	-1,612
distrust in transnational capital and Universities	-1,227
anti-Hayek/anti-Max Weber	-1,219
supporting gender justice	+1,163
staying away from environmental activism	-1,096
„fatigue of democracy“	-1,086
Hating the Army and sports	-1,013

Graph 3 shows the percentages which each factor contributes to the final Global Value Development Index.

Graph 3: The weights of the different components in the Global Value Development Index



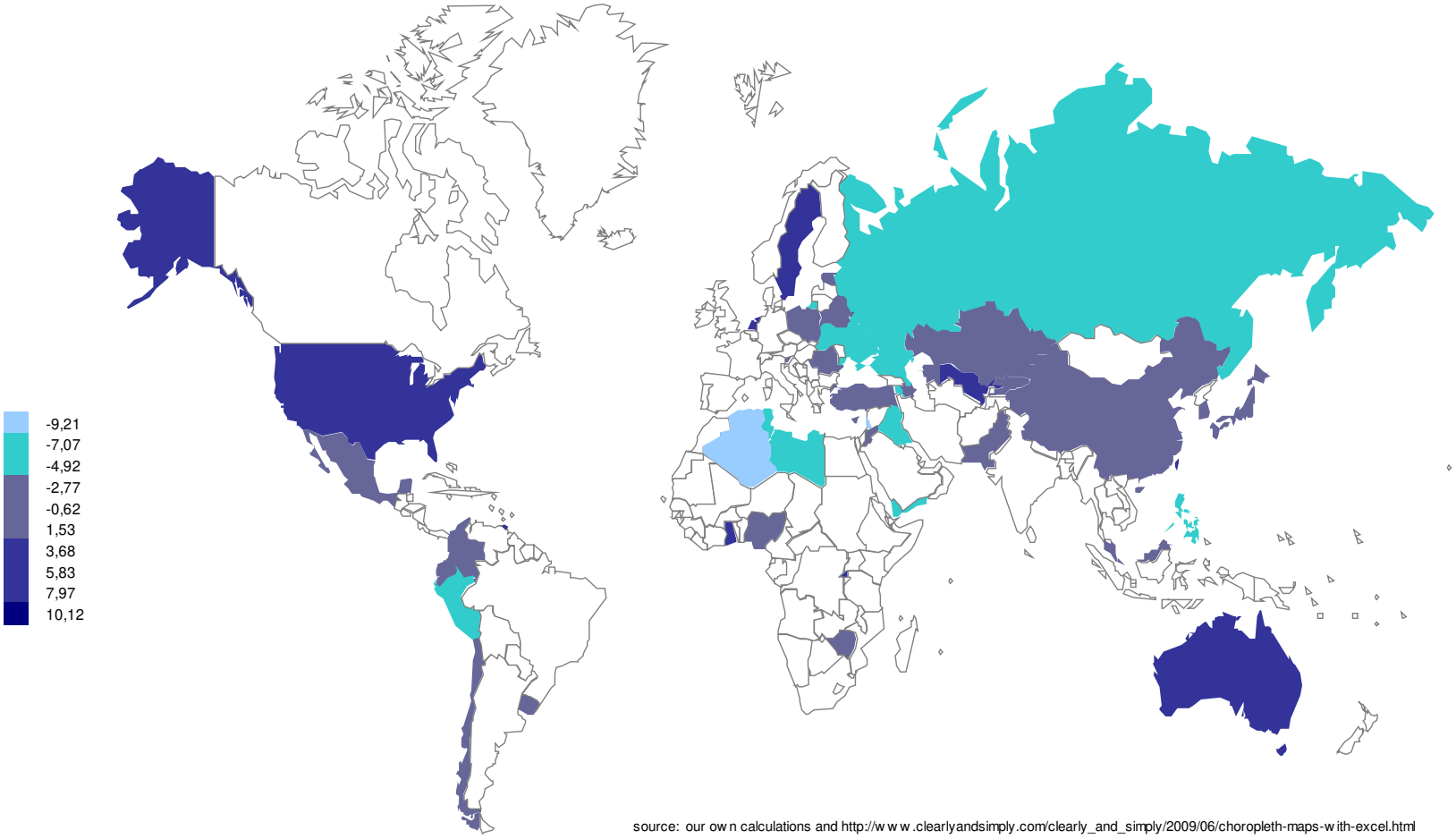
If we assume that the *World Values Survey* data are correct and that trust in the state of law; no shadow economy and violence; post material activism; support for democracy; non-violent society; no xenophobia and racism; trust in transnational capital and Universities; Hayek/Max Weber; supporting gender justice; not staying away from environmental activism; no democracy fatigue; and supporting the Army and sports are the twelve factors best representing the social values necessary for an Open Society then we must recognize that today Sweden; Uzbekistan; Australia; Netherlands; Ghana; Taiwan; Trinidad and Tobago; Rwanda; United States; and China are the societies, whose populations most support these social values. On the other hand, it also emerges from the *World Values Survey* data that the populations in Lebanon; Algeria; Russia; Yemen; Ukraine; Iraq; Peru; Libya; Tunisia; and the Philippines least support these twelve core social values, deemed necessary for the good functioning of an Open Society in the long run.

Table 3: Global Value Development Index

Country	trust in the state of law	no shadow economy and violence	post material activism	support for democracy	non-violent society	no xenophobia and racism	trust in transnational capital and Universities	Hayek/ Max Weber	supporting gender justice	not staying away from environmental activism	caring for democracy	Supporting the Army and sports	Overall Value Development Index
Sweden	-0,078	-0,048	2,760	2,941	0,538	0,927	0,400	-0,160	0,729	0,809	-1,363	0,517	7,972
Uzbekistan	**7,932**	**0,242**	**-1,339**	**-0,354**	**-0,059**	**0,358**	**0,250**	**0,651**	**-0,336**	**0,021**	**0,957**	**-0,783**	**7,540**
Australia	-0,437	0,734	2,528	1,995	0,627	0,805	0,003	0,198	0,712	0,569	-0,876	-0,078	6,780
Netherlands	-1,556	1,824	1,358	2,024	0,543	0,590	0,035	-0,434	0,602	0,610	-0,688	0,398	5,306
Ghana	1,309	2,266	0,601	0,188	-0,616	0,132	1,024	0,298	0,041	-0,419	0,393	-0,128	5,089
Taiwan	-1,559	0,516	3,672	0,936	-0,337	0,574	0,732	0,216	0,071	0,005	-0,429	0,310	4,707
Trinidad and Tobago	-2,434	2,467	1,031	0,764	-0,124	0,989	0,284	0,574	0,554	0,164	-0,042	0,300	4,527
Rwanda	1,542	1,758	2,558	-0,920	-2,303	0,916	-0,104	0,300	0,029	-0,017	0,413	0,155	4,327
United States	-0,775	0,308	1,366	1,144	0,450	0,705	-0,189	0,349	0,573	0,312	-0,165	-0,028	4,050
China	3,743	-0,050	-1,211	-0,262	-0,502	0,627	0,273	0,201	-0,025	-0,221	0,432	0,422	3,427
Japan	0,100	2,046	-0,425	1,196	0,878	-0,341	0,109	-0,045	0,088	0,233	-0,641	-0,266	2,932
Cyprus	-0,116	1,224	-0,180	1,265	0,746	-0,369	-0,134	-0,184	0,364	0,279	-0,432	-0,218	2,245
Estonia	-0,109	-0,128	-0,684	0,925	0,733	-0,454	0,680	-0,342	0,540	-0,104	0,010	0,053	1,120
Zimbabwe	-0,051	0,094	0,588	0,558	-1,246	0,666	0,695	0,189	0,110	-0,427	0,242	-0,341	1,077
Turkey	**2,059**	**2,017**	**-2,014**	**-0,242**	**0,814**	**-0,666**	**-0,544**	**-0,192**	**-0,294**	**-0,195**	**0,055**	**0,023**	**0,821**
Nigeria	**-0,570**	**0,541**	**2,170**	**-0,616**	**-1,039**	**-0,022**	**0,644**	**-0,220**	**-0,340**	**0,052**	**0,221**	**-0,134**	**0,687**
Chile	-1,514	-0,036	0,050	0,698	1,039	0,737	-0,320	-0,310	0,514	0,484	-0,641	-0,099	0,602
Colombia	-1,800	0,019	0,877	-0,329	0,496	0,943	0,189	-0,106	0,435	0,494	-0,947	0,234	0,505
Uruguay	-1,433	1,179	-0,743	0,803	0,489	0,966	0,071	-0,545	0,431	0,159	-1,205	0,020	0,192

Malaysia	**3,176**	**-1,027**	**-0,705**	**-0,578**	**-0,169**	**-1,061**	**0,131**	**0,150**	**-0,254**	**0,004**	**-0,004**	**0,297**	**-0,040**
Romania	-2,423	1,516	-1,298	0,805	0,915	-0,136	-0,199	0,310	0,022	0,161	0,260	0,015	-0,052
Singapore	2,378	-1,152	-0,205	-0,640	-1,037	0,013	0,428	-0,313	0,173	0,097	0,109	0,097	-0,052
Korea, South	-1,199	0,419	-0,096	-0,061	0,849	-0,945	0,533	-0,306	0,156	0,085	0,277	-0,121	-0,409
Poland	-2,431	0,087	-0,558	0,657	0,847	0,667	0,161	-0,675	0,105	-0,104	-0,620	0,505	-1,359
Kyrgyzstan	**0,834**	**-1,033**	**0,419**	**-1,378**	**0,336**	**-0,488**	**-0,253**	**0,001**	**-0,222**	**0,036**	**0,745**	**-0,361**	**-1,364**
Slovenia	-4,346	0,392	0,673	0,672	0,468	0,489	0,078	-0,147	0,707	0,246	-0,668	0,046	-1,390
Jordan	**3,224**	**1,769**	**-1,744**	**-0,882**	**0,321**	**-0,728**	**-1,242**	**0,060**	**-1,043**	**-0,595**	**-0,565**	**-0,079**	**-1,504**
Kazakhstan	**0,667**	**-1,010**	**-1,264**	**0,005**	**-0,002**	**0,133**	**-0,136**	**-0,604**	**-0,002**	**-0,293**	**0,750**	**-0,120**	**-1,876**
Mexico	-2,475	-2,598	1,196	-0,370	0,638	0,534	0,004	0,304	0,488	0,512	-0,497	0,232	-2,032
Belarus	-0,458	-1,315	-0,890	-0,076	0,477	-0,330	0,163	-0,208	0,002	-0,331	0,843	0,082	-2,041
Pakistan	**-0,010**	**1,494**	**-1,988**	**-1,318**	**0,598**	**0,062**	**-0,360**	**0,273**	**-1,041**	**0,036**	**0,059**	**-0,062**	**-2,257**
Azerbaijan	**1,931**	**2,533**	**-2,175**	**-1,023**	**0,373**	**-1,314**	**-0,397**	**-0,749**	**-0,929**	**-0,659**	**0,563**	**-0,442**	**-2,288**
Ecuador	-0,759	-0,311	-1,289	-0,500	0,711	-0,607	-0,378	0,201	0,377	0,083	-0,238	0,380	-2,330
Armenia	-1,124	1,167	-2,136	0,125	0,628	-0,704	-0,625	0,146	-0,491	-0,213	0,550	-0,441	-3,118
Philippines	2,131	-5,169	2,016	-1,229	-1,363	0,293	0,109	0,024	-0,322	0,196	0,187	-0,015	-3,142
Tunisia	**-0,581**	**1,348**	**-2,255**	**0,006**	**0,020**	**-0,048**	**-1,050**	**0,592**	**-0,823**	**-0,676**	**0,004**	**-0,156**	**-3,619**
Libya	**0,049**	**0,720**	**-0,217**	**-0,590**	**-0,292**	**-1,933**	**-0,427**	**0,609**	**-0,806**	**-0,294**	**-0,487**	**0,000**	**-3,668**
Peru	-3,908	-0,826	-0,587	0,016	0,509	0,573	-0,220	0,172	0,315	0,516	-0,630	0,069	-4,001
Iraq	**0,875**	**-0,199**	**-1,964**	**-0,777**	**-0,683**	**-0,487**	**-0,732**	**0,532**	**-0,821**	**-0,486**	**-0,104**	**0,031**	**-4,815**
Ukraine	-2,915	-0,872	-1,546	0,051	0,426	0,089	-0,244	-0,567	0,122	-0,229	0,697	-0,036	-5,024
Yemen	**-2,379**	**1,428**	**-1,587**	**-0,215**	**-0,675**	**-0,450**	**-1,014**	**1,213**	**-0,900**	**-0,413**	**-0,313**	**0,112**	**-5,193**
Russia	-1,830	-2,266	-1,451	-0,293	0,244	-0,228	-0,342	-0,545	0,129	-0,175	0,616	-0,132	-6,273
Algeria	**0,487**	**-3,385**	**-1,903**	**-0,224**	**-0,688**	**-0,585**	**-0,461**	**-0,040**	**-0,635**	**-0,396**	**-0,089**	**-0,011**	**-7,930**
Lebanon	**-2,377**	**-2,635**	**-0,300**	**-0,882**	**-0,479**	**-1,148**	**-0,560**	**-0,272**	**-0,288**	**0,081**	**-0,152**	**-0,201**	**-9,213**

Map 1: Overall Value Development Index



source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

For many decades, comparing religions for their doctrinal aspects has been the domain of the comparative study of religions, and several outstanding works were published in the literature which investigated the *"who"* said *"what" "to whom"* and *"when"* (Lasswell, 1948) in these major denominations along their historical trajectory (Bowker, 2000; Küng, 1997, 2002; Lenoir and Tardan-Masquelier, 1997). Social scientists however are primarily interested in the *"what effects"* and *"why"* of these religious activities ever since the beginnings of the sociology of religion (Durkheim, 1965/1915; Morel, 1972, 1977, 1986, 1997, 1998, 2003).

Valuable, as interfaith research and dialogue, comparisons and a mutual better understanding between the different global denominations may be, such activities as yet do not tell us which values, say, guide inhabitants in the rural regions of the Philippines in comparison to the people in Bihar, India, or in the Punjab in Pakistan just across the Indian border, or for that matter in the Nigerian city of Lagos or in Brooklyn, New York or in Amsterdam in the Netherlands. For that reason, it's a welcome development that nowadays empirically oriented political scientists and sociologists have begun to publish comparative studies on their own on comparing religions (Juergensmeyer *et al.,* 2013; Röhrich, 2004, 2010). This research effort, just to mention a few, produced already important comparative studies on the relationship of the globalized denominations to the state apparatus in 175 countries (Fox, 2000), or on the relationship of religions to violence and terrorism (Juergensmeyer, 2000, 2011). Even more, the use of massive comparative evidence based on global opinion surveys to compare the actual different cultural systems of the world *"on the ground",* is relatively new, and outstanding attempts to arrive at such empirically well-founded comparisons already include Barro, 2004; Guio *et al.,* 2003; and Inglehart and Norris, 2003.

In the following, we apply the logic of our new *"Overall Value Development Index"* to the data contained in the *World Values Survey* about the major global religious denominations. Such an attempt is but a continuation of the path-breaking analysis by Guio *et al*. Our comparisons show again the importance of the factor of the Enlightenment for the different denominations to come to terms with the realities of the 21st Century (starting with Montesquieu, 1989, we refer here to Eisenstadt, 1968; Feiner and Naor, 2011; Lawson, 2005; Lehner and O'Neill Printy, 2010; Sacks, 1998, 2005). For reasons of space we can only mention some preliminary results and must leave other aspects for further research. In that context, we could also mention the hypothesis by Lenoir, who maintained that inequality, individual freedom, emancipation of women, social justice, the separation of powers, non-violence and pardoning of sins, and love of your neighbor as the seven major points of the message of Jesus of Nazareth only came to blossom in the movement of the Enlightenment (Lenoir, 2008).

For each denomination (and for the people without any denomination), we empirically distinguish between those individuals who say that G'd has a great importance in their lives [14] and the respective entire population. Our results by and large confirm the findings, reported by Porta *et al.,* 1996 about the **poor performance of what he terms to be hierarchical global religions in contrast to the other denominations** (Fukuyama, 1995 and Putnam, 1993). Table 4 also confirms the pessimism regarding Confucianism, which already features prominently in Huntington, 1996, and which on all accounts has the poorest performance of all the major denominations on our combined indicator. This performance, we have to add, does not necessarily reflect a doctrinal or sociological weakness of the community of Confucian believers *per se,* but does reflect the realities of contemporary China which still is a one-party communist state (McGregor, 2010).

Table 4: The paths of Enlightenment: Global Value Development Index for the different global denominations (religiously active population and total population)

	Overall Value Development Index
Jewish global total population in the WVS sample	4,085
Jewish global population in the WVS sample saying G'd important/very important	3,620
Protestant global population in the WVS sample saying G'd important/very important	3,375
Protestant global total population in the WVS sample	3,193
Hindu global population in the WVS sample saying G'd important/very important	3,159
Hindu global total population in the WVS sample	2,793
Buddhist global population in the WVS sample saying G'd important/very important	1,566
Taoist global population in the WVS sample saying G'd important/very important	1,525
Buddhist global total population in the WVS sample	1,233
Taoist global total population in the WVS sample	0,601
No religious denomination global total population in the WVS sample	0,336
Roman Catholic global population in the WVS sample saying G'd important/very important	0,295

[14] The WVS item about the importance of G'd is a 10-point scale. People choosing a value of 7 or more on the scale were classified as the population with stronger religious feelings. We are aware of the fact that such a distinction might be arbitrary. It should be emphasized however that also people NOT belonging formally to any religious denomination may be religious persons, and indeed they often are!

Roman Catholic global total population in the WVS sample	0,036
Muslim global population in the WVS sample saying G'd important/very important	-0,974
Muslim global total population in the WVS sample	-1,125
No religious denomination global population in the WVS sample saying G'd important/very important	-1,140
Orthodox global population in the WVS sample saying G'd important/very important	-1,192
Orthodox global total population in the WVS sample	-1,729
Confucian global total population in the WVS sample	-6,555
Confucian global population in the WVS sample saying G'd important/very important	-7,413

On this account, the 5775 year old religion of Judaism (Sacks, 1998, 2003, 2005, 2014) emerges as the role model for other religions how to combine religion and the traditions of the Enlightenment (Feiner and Naor, 2011; see also Cardinal A. Bea, 1966). It also should be noted that Eisenstadt's hypothesis about the transformative potential defined as the capacity to legitimize, in religious or ideological terms, the development of new motivations, activities, and institutions which were not encompassed by their original impulses and views is fully vindicated for the case of global Judaism and global Protestantism. Interestingly enough, also Hinduism, Buddhism, Taoism and Roman Catholicism are assigned a positive value on the indicator. It has to be noted as well that religiously committed Protestants and Roman Catholics rank better on our scale than does the overall global Protestant and Roman Catholic population, indicating how much already traditions of the Enlightenment took hold of the two major Western Christian denominations.

4. Conclusions and prospects

In our essay, we evaluated the latest wave of *World Values Survey* data. Our article is based on a standard IBM-SPSS XXII analysis of the data. Very large arrays of negative phenomena, which cannot be overlooked anymore by contemporary social science, are clearly associated with the loss of religion. This holds for the majority of nations around the world, irrespective of the predominant religious denominations. Negative phenomena are on the rise especially in Western countries and in the former communist countries of Eastern Europe, where they spread most rapidly, and where they endanger, in the end, the very existence of the Open Society. Our results, based on the factor analysis of the opinions of 41178 global representative citizens from 45 countries, for whom data for all our 78 variables were available, also show the following to hold:

Inglehart's optimism completely vindicated

- -

Inglehart's optimism mostly vindicated (minor development crises only at very early stages of secularization)

- Support for democracy

Inglehart's optimism vindicated, but reversals at highest stages of secularization:

- Violent society

Severe development crises at middle stages of secularization

- No trust in the state of law
- Shadow economy and violence
- Post-material activism
- Xenophobia and racism
- Distrust in transnational capital and Universities
- Fatigue of democracy

Outright secularization pessimism vindicated for most stages of the secularization process and positive turns only at very high stages of secularization

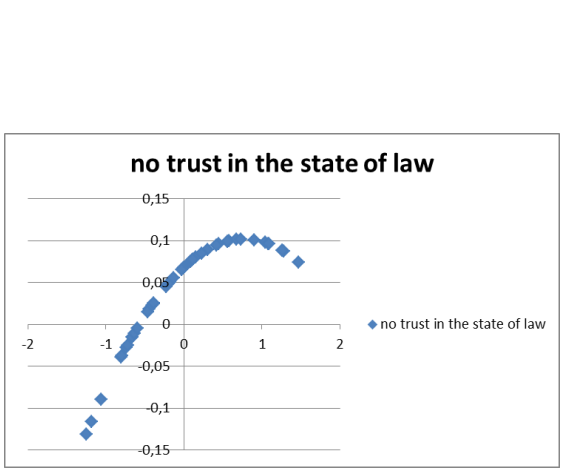
- Lack of entrepreneurial spirit

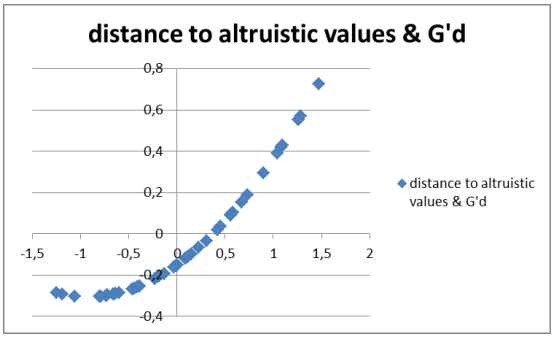
Outright secularization pessimism vindicated

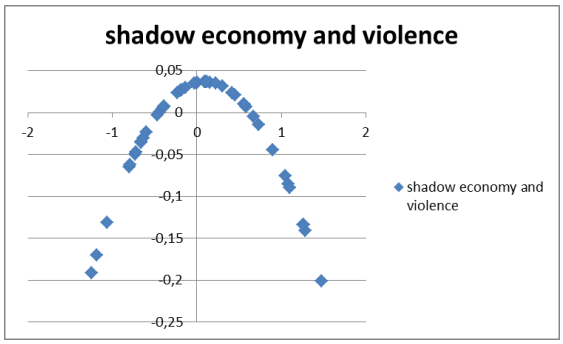
- Distance to altruistic values
- Anti-Hayek/anti-Max Weber

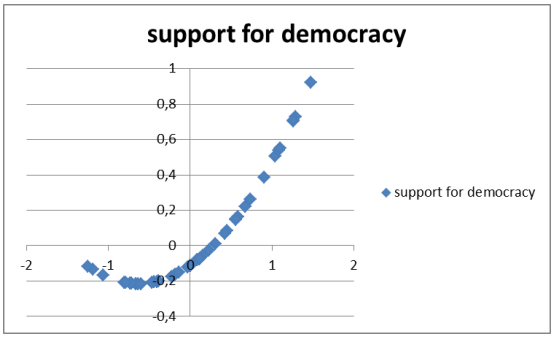
Graph 4 now shows the diagrams of the mean country factor scores (y-axis) as predicted by secularism and secularism squared (secularism: x- axis). Graph 3, so to speak, presents the new laws of global values and development, as they emerge from this article.

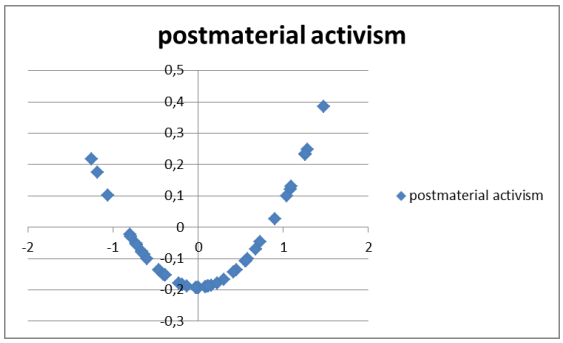
Graph 4: The thorny paths of secularization. Mean country factor scores (y-axis) as predicted by secularism and secularism squared (secularism: x-axis)

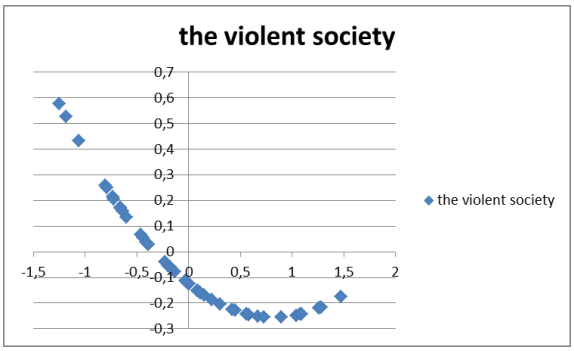


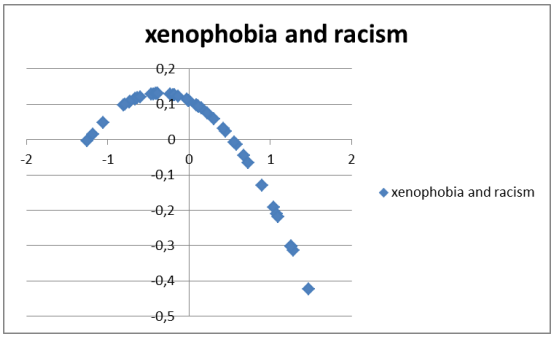


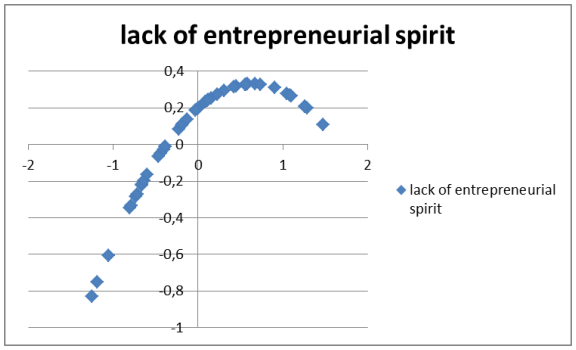


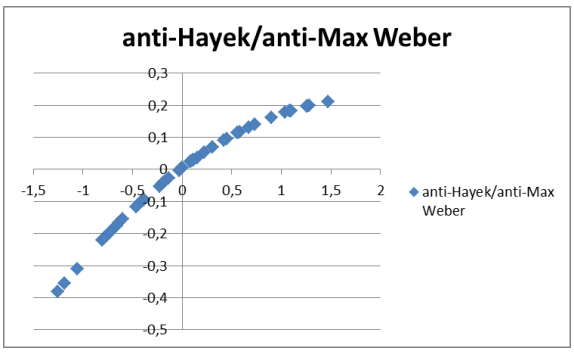


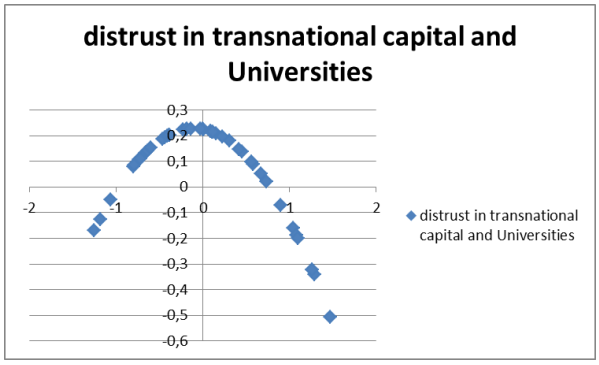


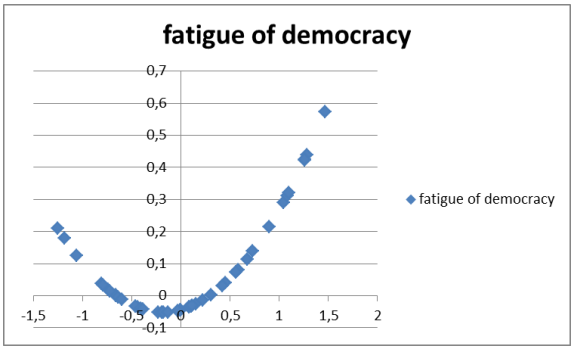












An analysis of the emerging trends regarding the relationship of value structures to economic convergence also seems to suggest that in contrast to Inglehart's secularist interpretation, value change is becoming destructive indeed and undermines the very basis of economic growth in the West. [15] Trust and work ethics all have an influence on the economic growth rate of today: no trust in the state of law, distrust in transnational capital and Universities, and lack of entrepreneurial spirit are among the major growth bottlenecks, while our Value Development Index is positively related to the economic convergence process between the nations since the global economic crisis of 2007/2008. International economic data (see: https://uibk.academia.edu/ArnoTausch/Documentation-for-books-and-articles) also suggest that the shifting of global economic weights away from Europe and benefitting the world of Islam and the world of immigration is absolutely correct (see Table 4 and Table 5).

[15] Poorer nations grow faster than richer countries. The well-known facts of economic convergence, analyzed by Barro, suggest to test the effects of social values on economic growth by correlating social values with economic convergence, measured here by the residuals from the non-linear function of average economic growth rates, predicted by the natural logarithm of GDP per capita and GDP per capita square in the initial phase of the growth process. Other procedures would bias the results in favor of poorer nations, whose economic growth "automatically" tends to be higher; see also Barro, 1991, 1998, 2012; Barro and Sala-i-Martin, 1991.

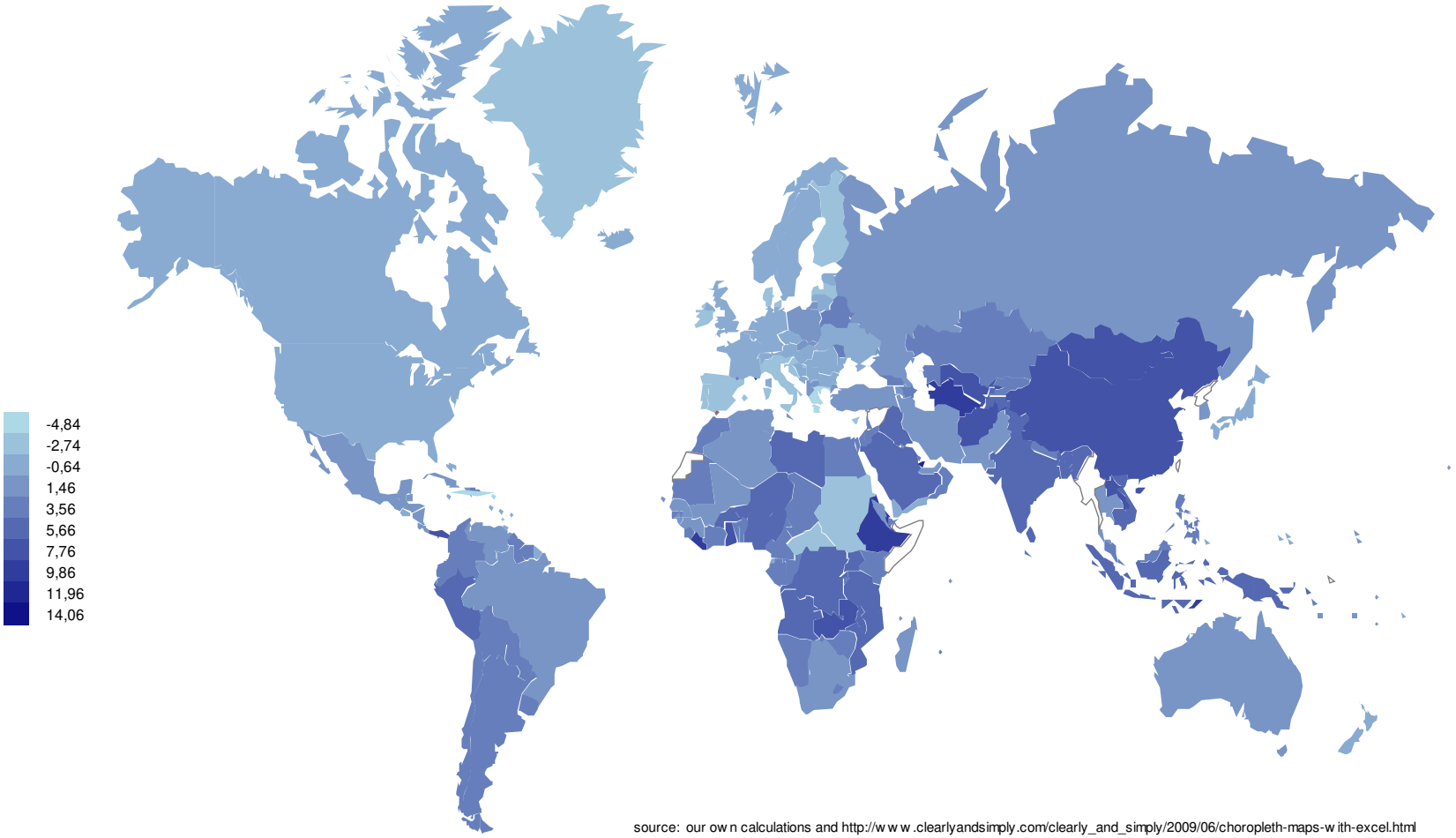
Table 4: the bi-variate correlations of economic convergence, 2008-2013 with value patterns

	Pearson correlation with convergence	R^2
no trust in the state of law	-0,511	26,156
distrust in transnational capital and Universities	-0,299	8,923
lack of entrepreneurial spirit	-0,256	6,539
social democratic orientation	-0,141	1,976
careless rejecting of work, global citizenship, but trusting people	-0,138	1,911
post material activism	0,163	2,669
happiness and economic well-being	0,224	5,019
Value Development Index	0,251	6,321

Table 5: the bi-variate correlations of economic convergence with global structure data

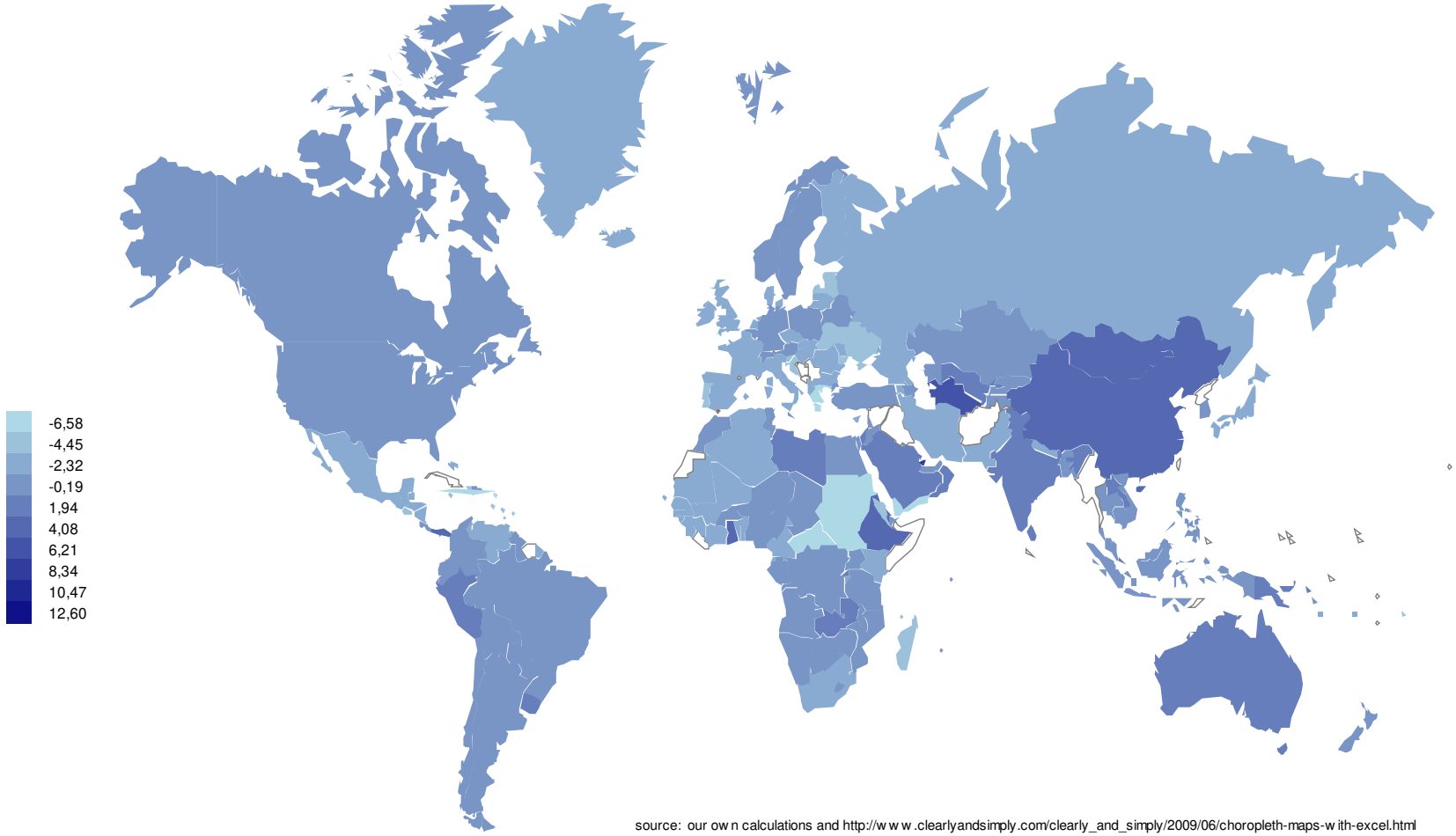
	Pearson correlation with convergence	R^2
years of membership in EMU, 2010	-0,157	2,477
social security expenditure per GDP average 1990s (ILO)	-0,139	1,944
Years of membership in the EU, 2010	-0,132	1,738
Muslim population share per total population	0,146	2,143
Membership in the Islamic Conference	0,157	2,461
MNC outward investments (stock) per GDP	0,183	3,349
% world population	0,198	3,932
Immigration - Share of population 2005 (%)	0,253	6,392
Annual population growth rate, 1975-2005 (%)	0,310	9,620
net international migration rate, 2005-2010	0,376	14,143

Appendix Map 1a: average economic growth rates 2008-2013



source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

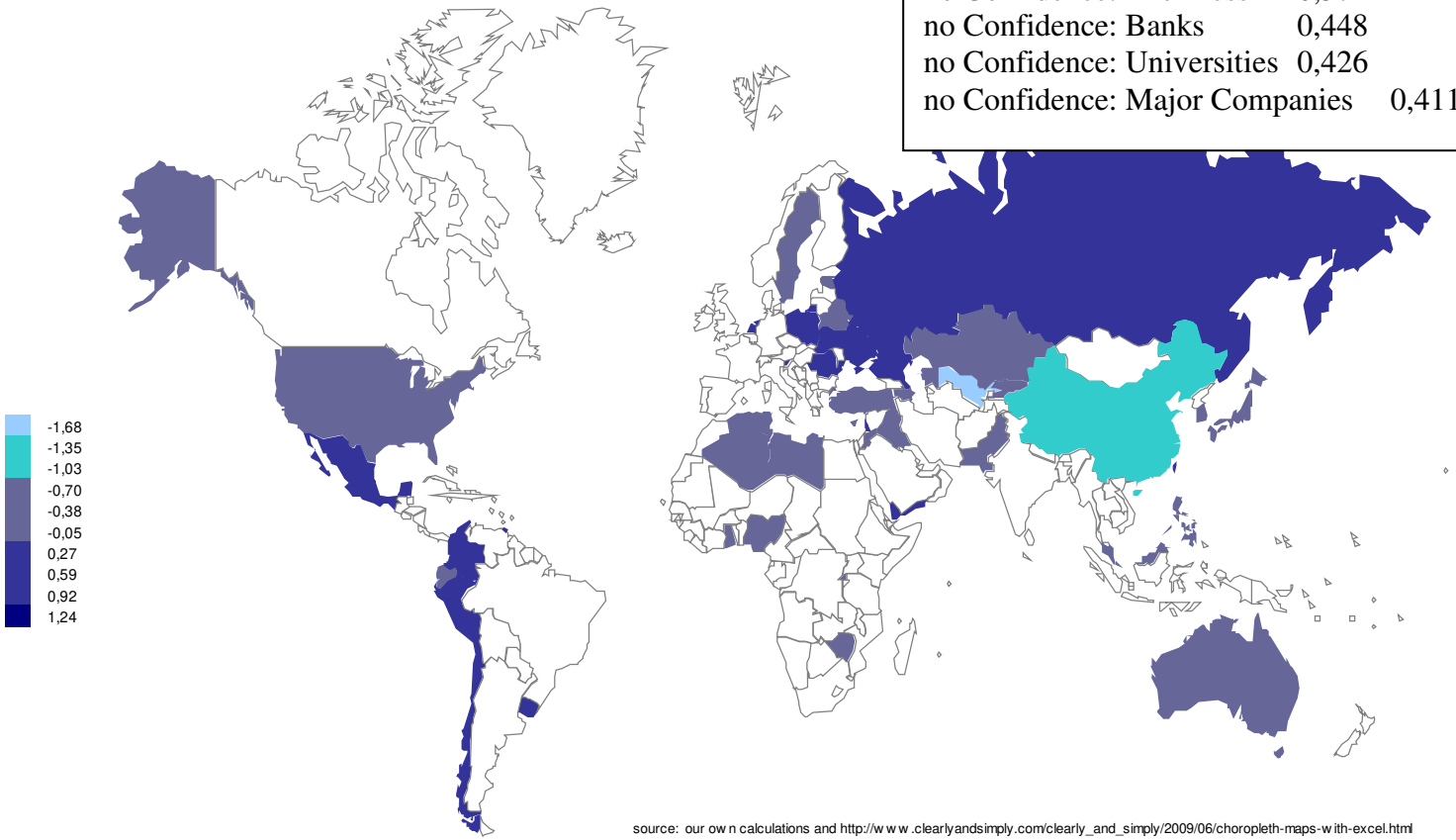
Appendix Map 1b: economic convergence, 2008-2013 (residuals from the regression natural log GDP per capita and natural log GDP per capita^2 by around 2005 on average economic growth (GDP per capita) 2008-2013)



source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 2: no trust in the state of law

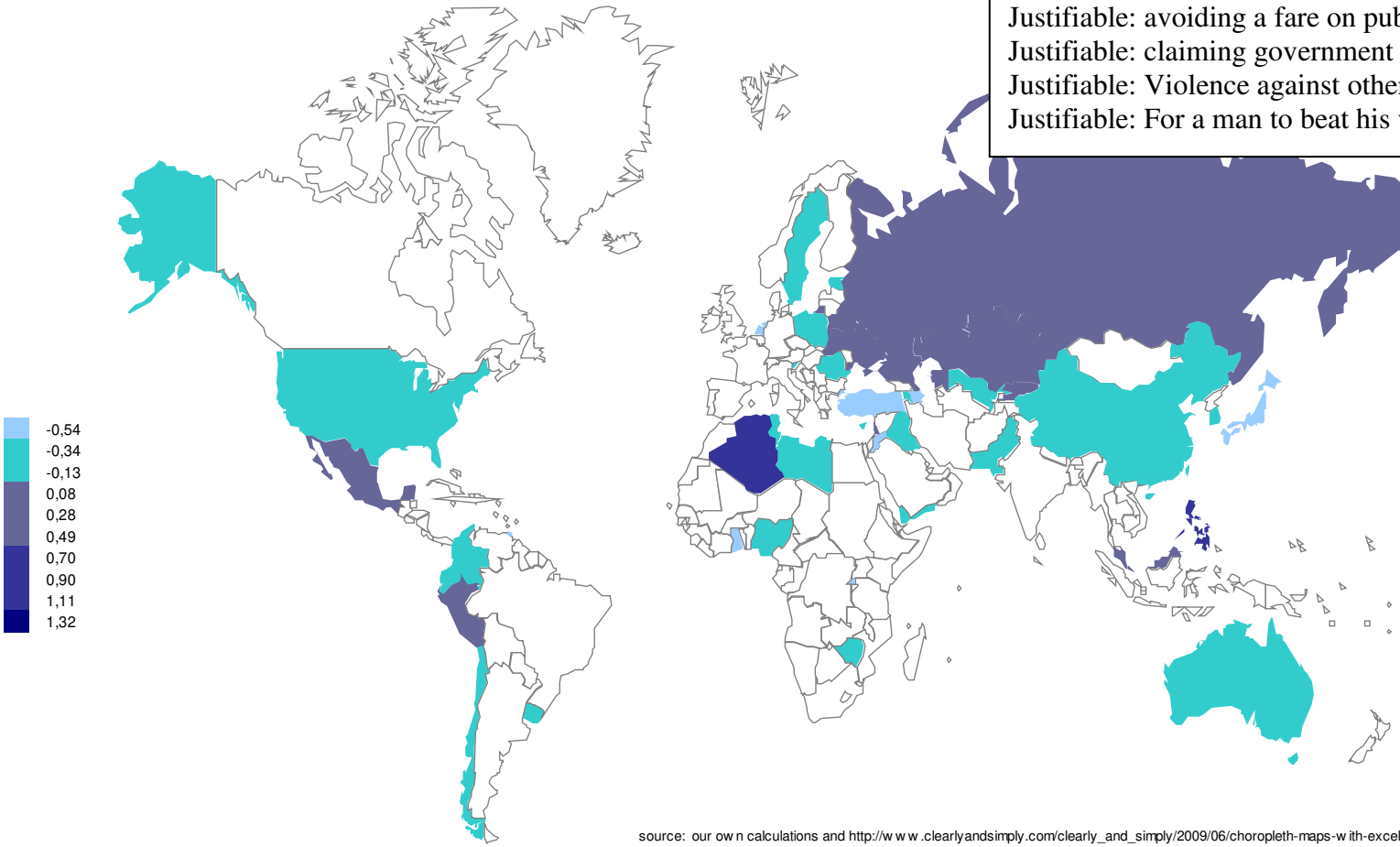
no Confidence: Justice System/Courts	0,783
no Confidence: The Police	0,762
no Confidence: The Government	0,738
no Confidence: The Civil Services	0,652
no Confidence: Armed Forces	0,640
no Confidence: The Press	0,574
no Confidence: Banks	0,448
no Confidence: Universities	0,426
no Confidence: Major Companies	0,411



source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Slovenia (2011)	0,919
Peru (2012)	0,826
Ukraine (2011)	0,616
Mexico (2012)	0,523
Trinidad and Tobago (2011)	0,515
Poland (2012)	0,514
Malaysia (2012)	-0,672
Jordan (2014)	-0,682
China (2012)	-0,792
Uzbekistan (2011)	-1,677

Appendix Map 3: shadow economy and violence



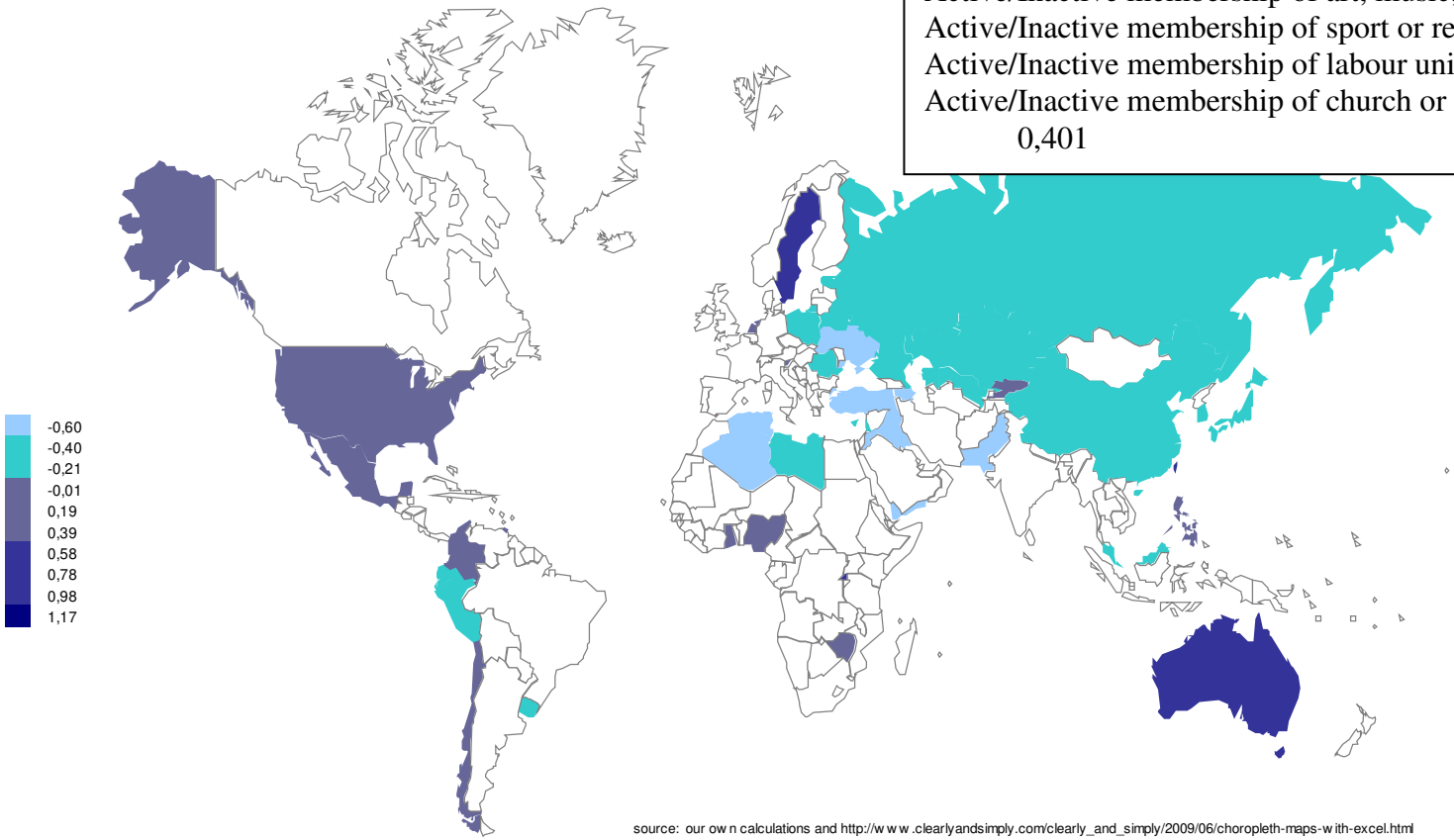
Justifiable: cheating on taxes 0,777
Justifiable: Stealing property 0,775
Justifiable: someone accepting a bribe 0,760
Justifiable: avoiding a fare on public transport 0,755
Justifiable: claiming government benefits 0,711
Justifiable: Violence against other people 0,539
Justifiable: For a man to beat his wife 0,448

Philippines (2012) 1,111
Algeria (2013) 0,728
Lebanon (2013) 0,566
Mexico (2012) 0,558
Russian Federaton (2011) 0,487
Turkey (2011) -0,434
Japan (2010) -0,440
Ghana (2012) -0,487
Trinidad and Tobago (2011) -0,530
Azerbaijan (2011) -0,545

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 4: post material activism

Active/Inactive membership of environmental organization 0,710
Active/Inactive membership of charitable/humanitarian organization 0,707
Active/Inactive membership: Consumer organization 0,686
Active/Inactive membership of art, music, educational 0,668
Active/Inactive membership of sport or recreation 0,606
Active/Inactive membership of labour unions 0,580
Active/Inactive membership of church or religious organization 0,401

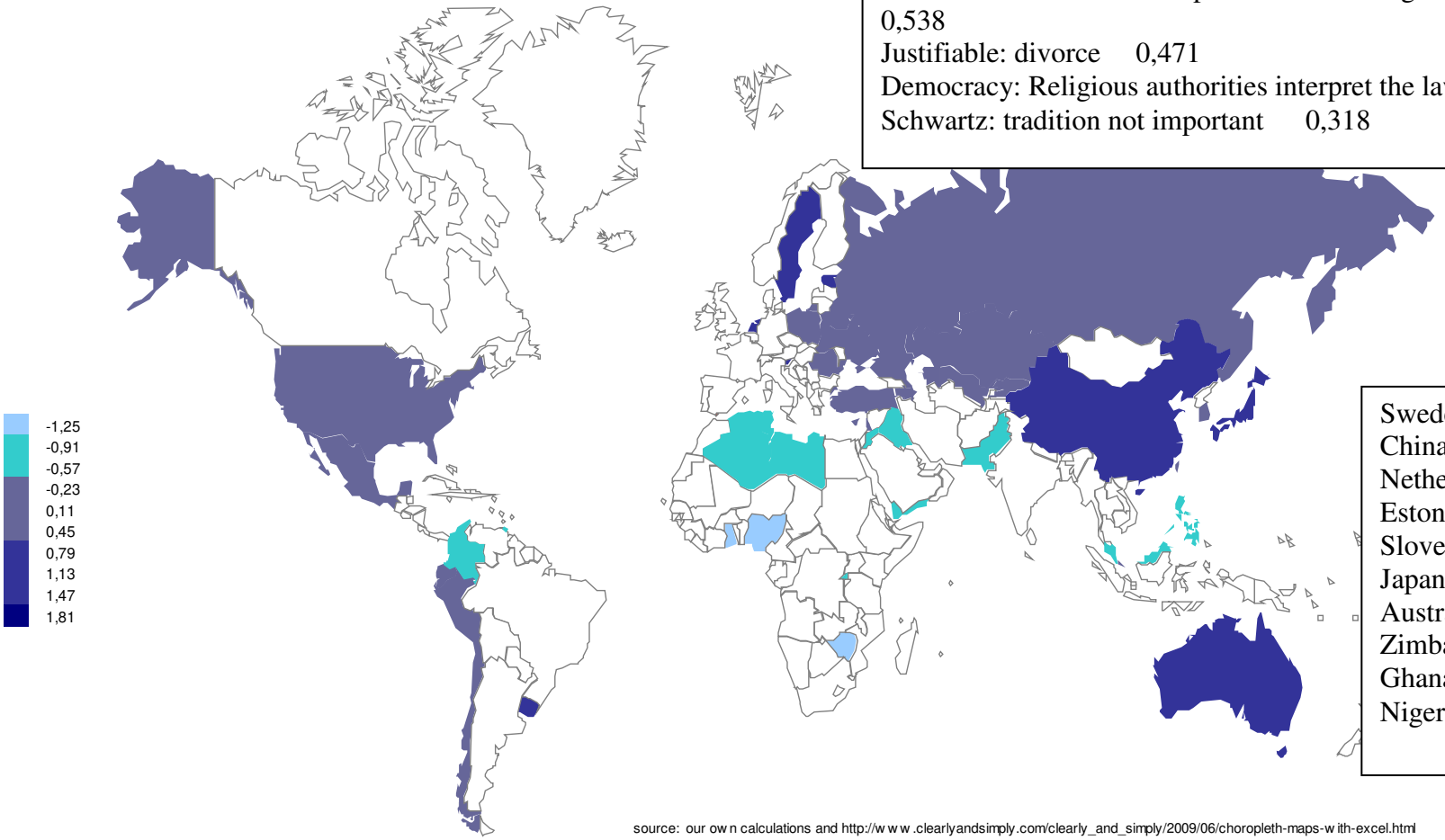


source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Taiwan (2012)	0,976
Sweden (2011)	0,734
Rwanda (2012)	0,680
Australia (2012)	0,672
Nigeria (2011)	0,577
Philippines (2012)	0,536
Turkey (2011)	-0,536
Armenia (2011)	-0,568
Azerbaijan (2011)	-0,578
Tunisia (2013)	-0,600

Appendix Map 5: secularism

never attend religious services 0,728
How important is God in your life -0,699
Important child qualities: religious faith -0,672
Active/Inactive membership of church or religious organization -0,538
Justifiable: divorce 0,471
Democracy: Religious authorities interpret the laws. -0,407
Schwartz: tradition not important 0,318

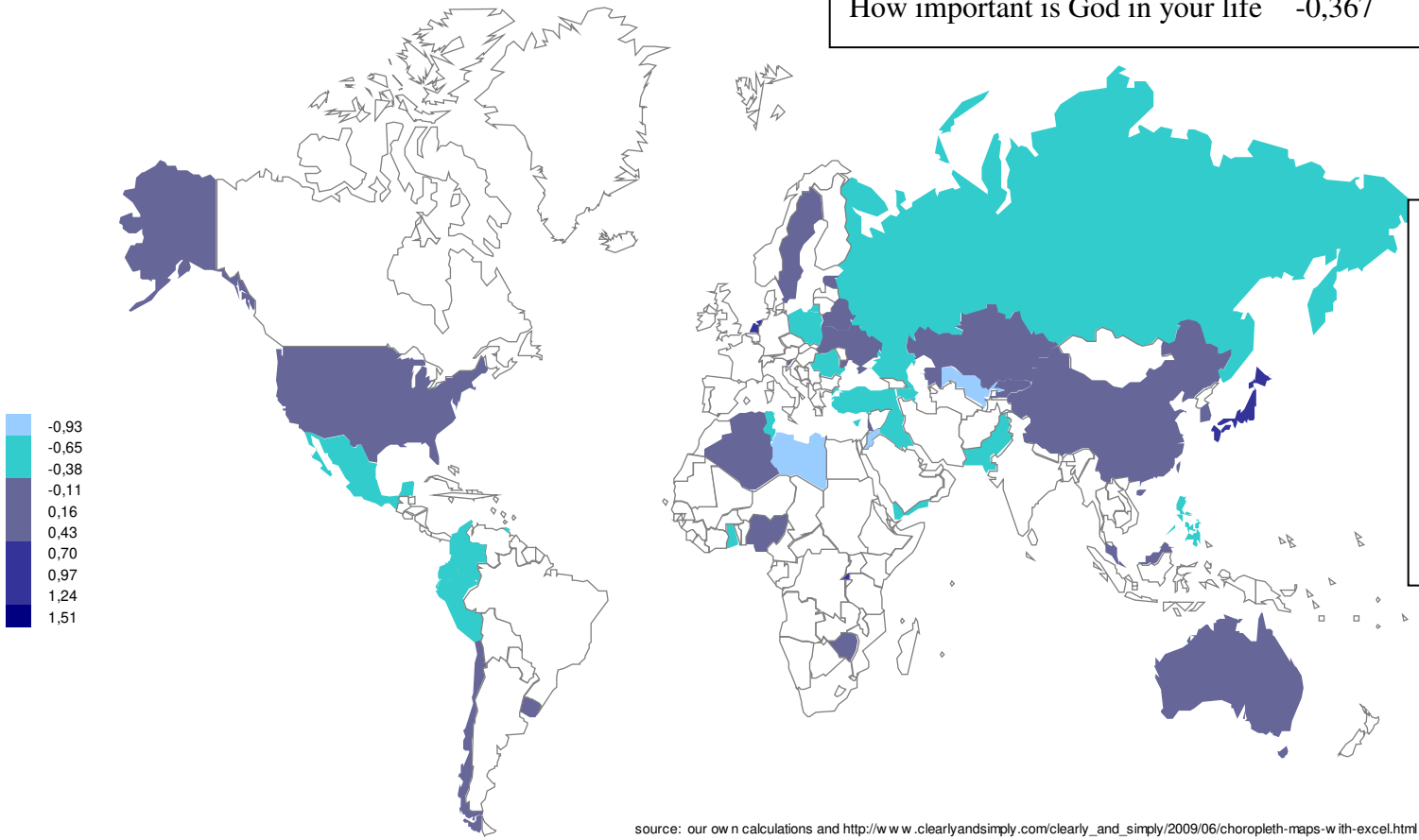


Sweden (2011) 1,472
China (2012) 1,284
Netherlands (2012) 1,262
Estonia (2011) 1,260
Slovenia (2011) 1,097
Japan (2010) 1,081
Australia (2012) 1,042
Zimbabwe (2012) -1,059
Ghana (2012) -1,185
Nigeria (2011) -1,251

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 6: distance to altruistic values & G'd

Schwartz: not important looking after the environment 0,731
Schwartz: tradition not important 0,687
Schwartz: not important always behave properly 0,676
Schwartz: not important to do something for the good of society 0,670
How important is God in your life -0,367

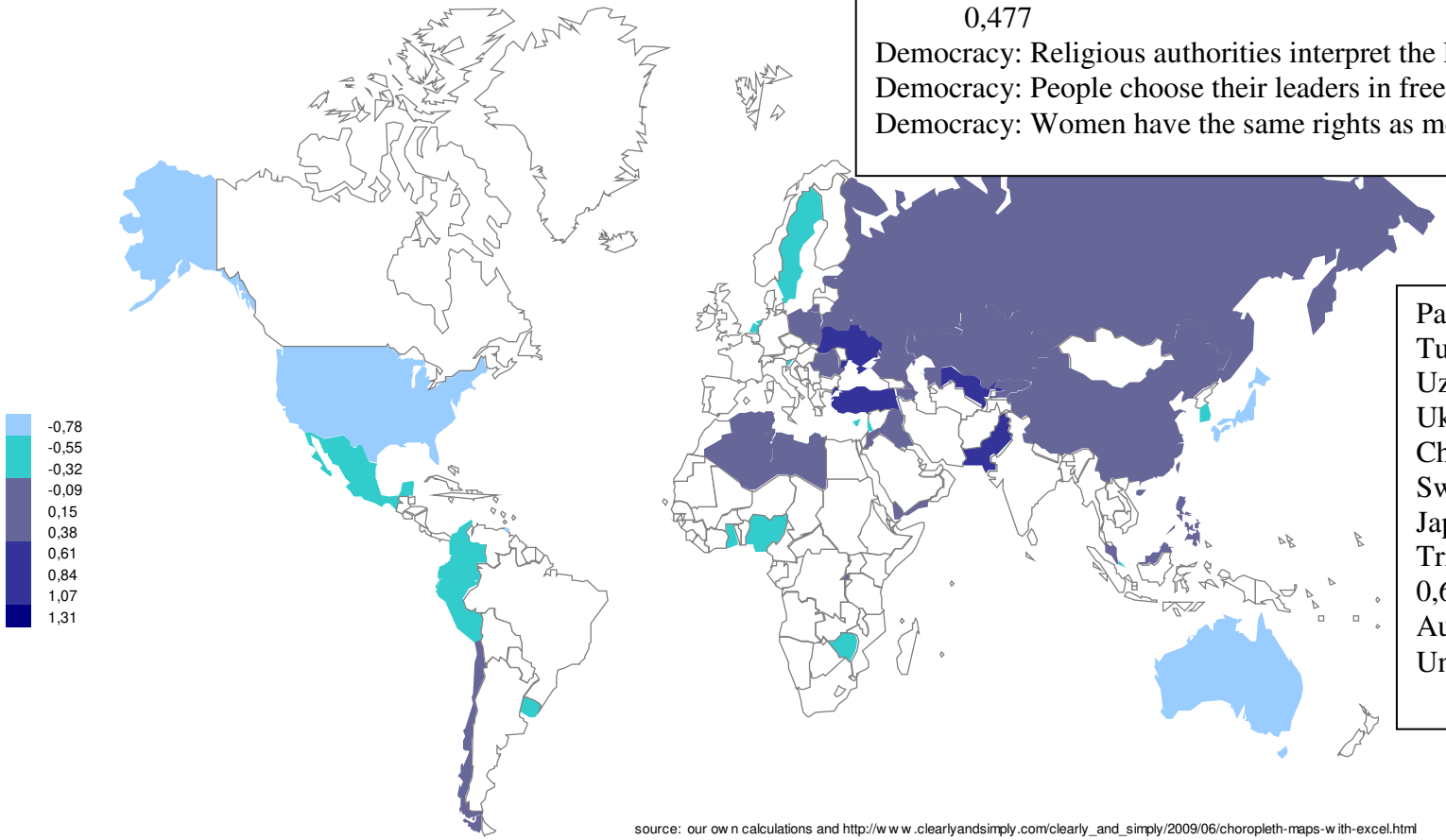


Japan (2010) 1,241
Netherlands (2012) 0,938
Rwanda (2012) 0,777
South Korea (2010) 0,687
Yemen (2014) -0,551
Colombia (2012) -0,552
Cyprus (2011) -0,576
Jordan (2014) -0,810
Libya (2014) -0,867
Uzbekistan (2011) -0,925

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 7: social democratic orientation

Democracy: The state makes people's incomes equal 0,715
Democracy: People receive state aid for unemployment. 0,674
Democracy: Governments tax the rich and subsidize the poor. 0,644
Democracy: Civil rights protect people's liberty against oppression. 0,477
Democracy: Religious authorities interpret the laws. 0,444
Democracy: People choose their leaders in free elections. 0,372
Democracy: Women have the same rights as men. 0,365

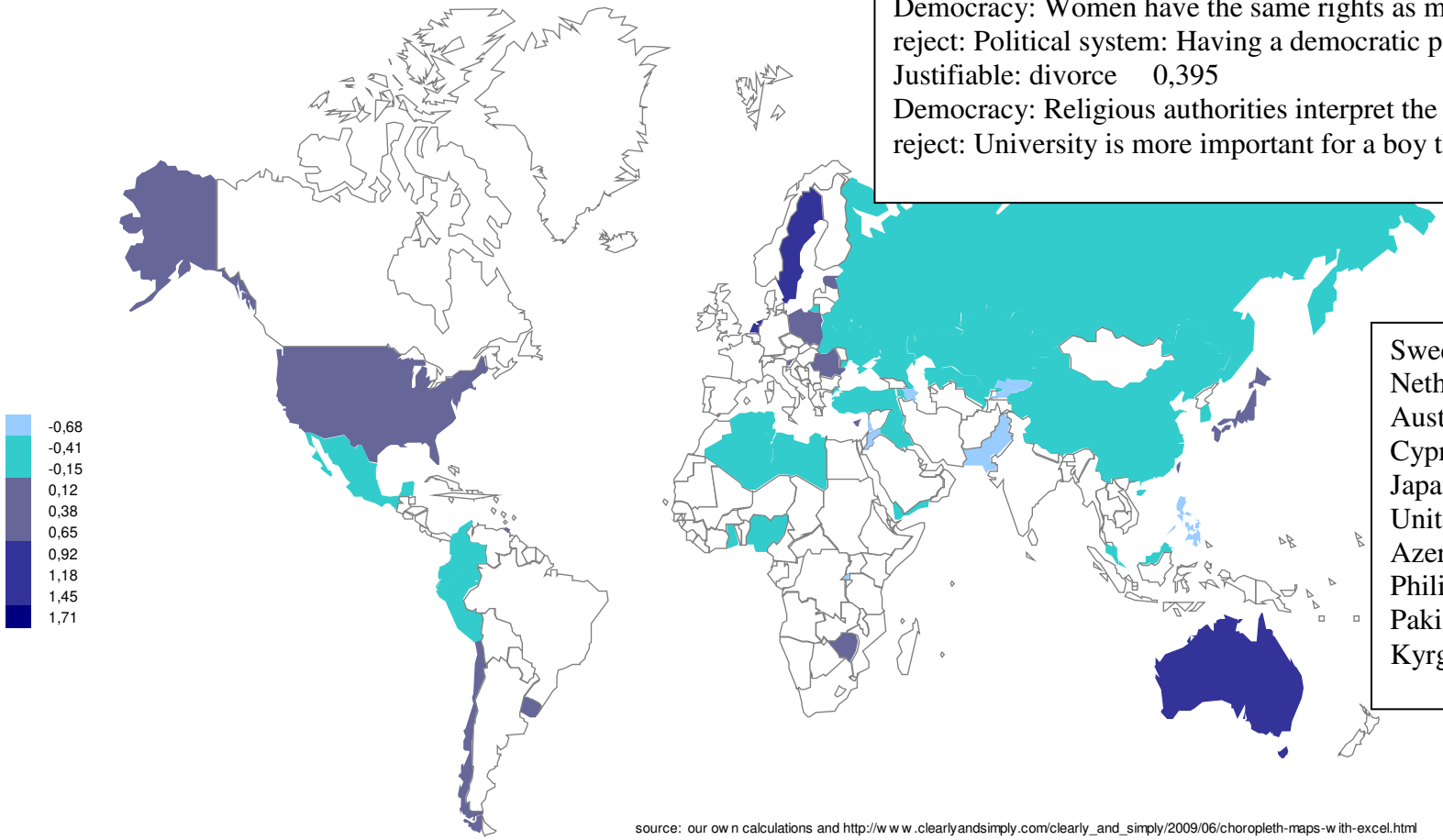


Pakistan (2012) 1,075
Turkey (2011) 0,725
Uzbekistan (2011) 0,719
Ukraine (2011) 0,670
China (2012) 0,545
Sweden (2011) -0,521
Japan (2010) -0,557
Trinidad and Tobago (2011) -0,617
Australia (2012) -0,701
United States (2011) -0,784

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 8: support for democracy

Democracy: People choose their leaders in free elections. 0,628
Importance of democracy 0,601
Democracy: Civil rights protect people's liberty against oppression. 0,537
Democracy: Women have the same rights as men. 0,531
reject: Political system: Having a democratic political system -0,517
Justifiable: divorce 0,395
Democracy: Religious authorities interpret the laws. -0,363
reject: University is more important for a boy than for a girl 0,338

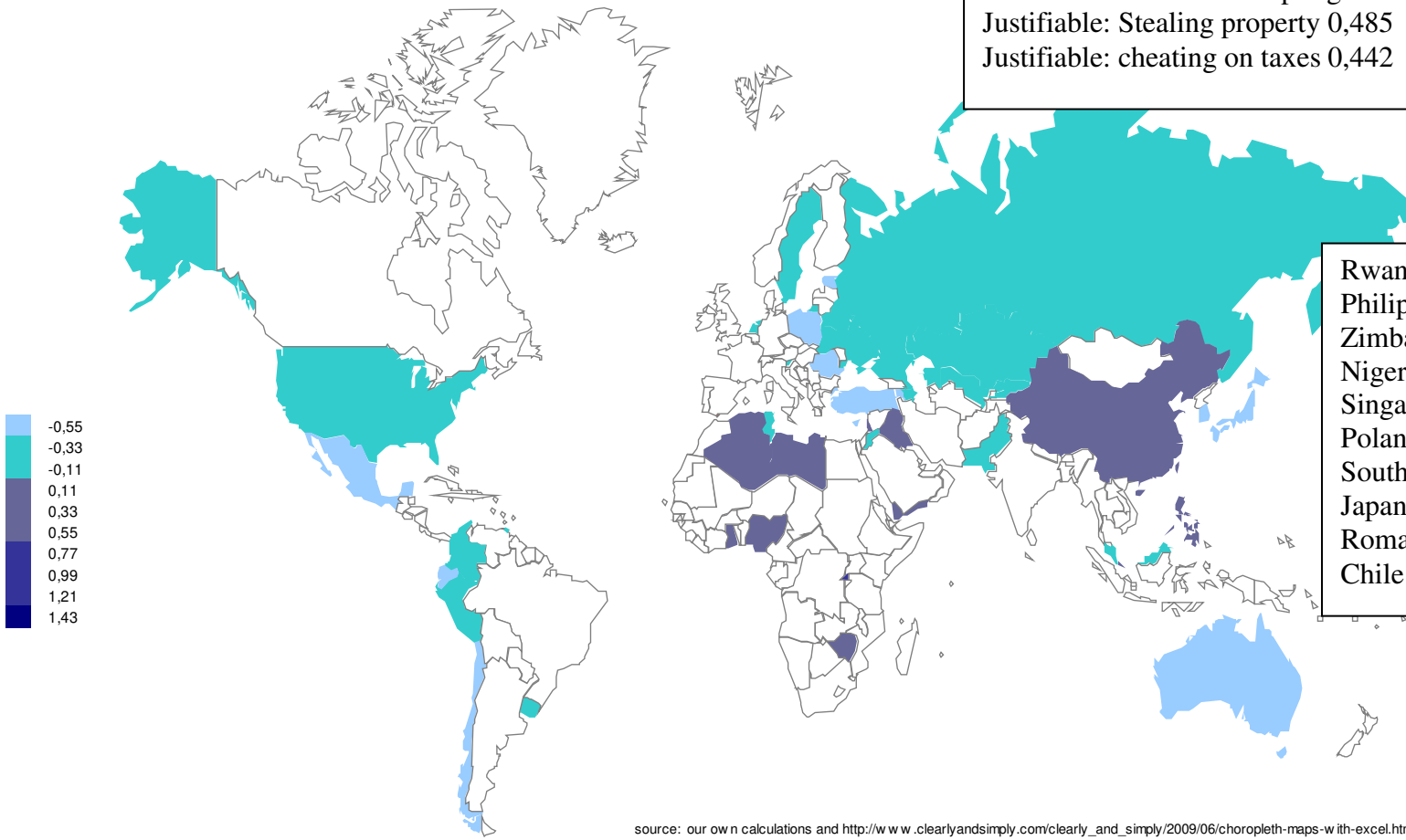


Sweden (2011)	1,446
Netherlands (2012)	0,995
Australia (2012)	0,981
Cyprus (2011)	0,622
Japan (2010)	0,588
United States (2011)	0,562
Azerbaijan (2011)	-0,503
Philippines (2012)	-0,604
Pakistan (2012)	-0,648
Kyrgyzstan (2011)	-0,678

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 9: the violent society

Justifiable: For a man to beat his wife	0,844
Justifiable: Parents beating children	0,802
Justifiable: Violence against other people	0,771
Justifiable: someone accepting a bribe	0,526
Justifiable: Stealing property	0,485
Justifiable: cheating on taxes	0,442

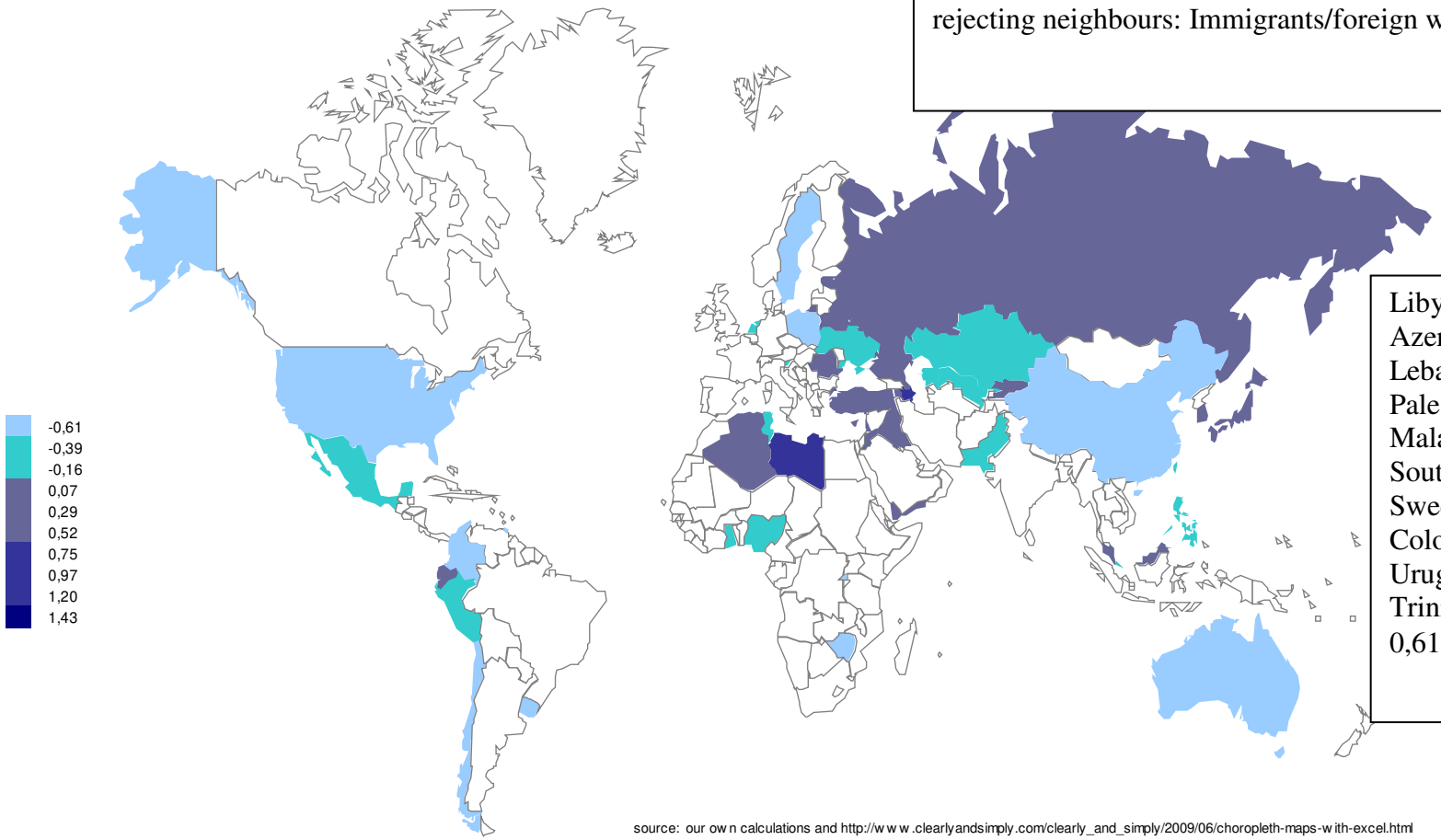


Rwanda (2012)	1,213
Philippines (2012)	0,718
Zimbabwe (2012)	0,656
Nigeria (2011)	0,547
Singapore (2012)	0,546
Poland (2012)	-0,446
South Korea (2010)	-0,447
Japan (2010)	-0,462
Romania (2012)	-0,482
Chile (2011)	-0,548

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 10: xenophobia and racism

rejecting neighbours: People of a different race 0,810
rejecting neighbours: People of a different religion 0,769
rejecting neighbours: Immigrants/foreign workers 0,759

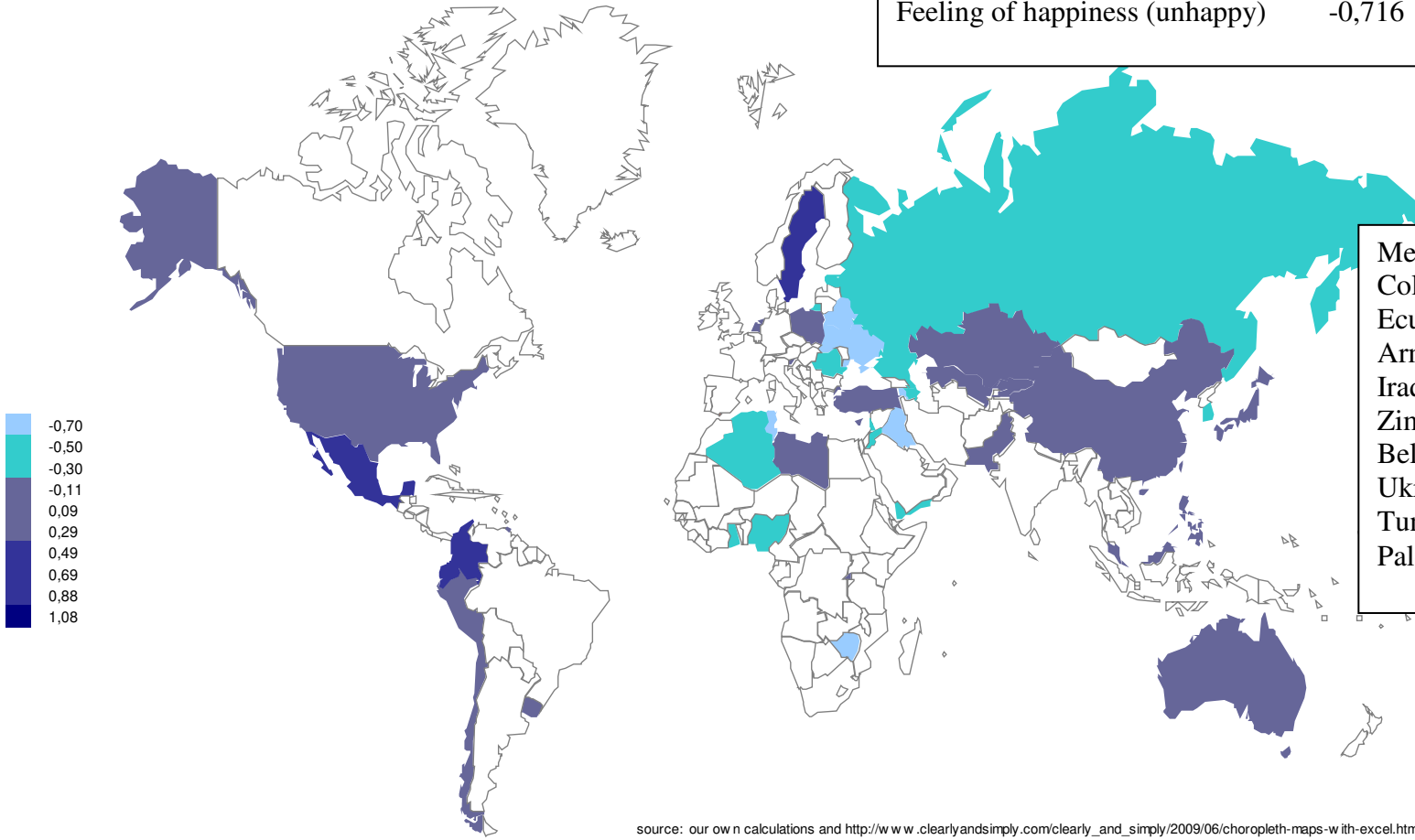


Libya (2014) 1,199
Azerbaijan (2011) 0,815
Lebanon (2013) 0,712
Palestine (2013) 0,681
Malaysia (2012) 0,658
South Korea (2010) 0,586
Sweden (2011) -0,575
Colombia (2012) -0,585
Uruguay (2011) -0,599
Trinidad and Tobago (2011) -0,614

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 11: happiness and economic well-being

Satisfaction with your life	0,810
Satisfaction with financial situation of household	0,717
Feeling of happiness (unhappy)	-0,716

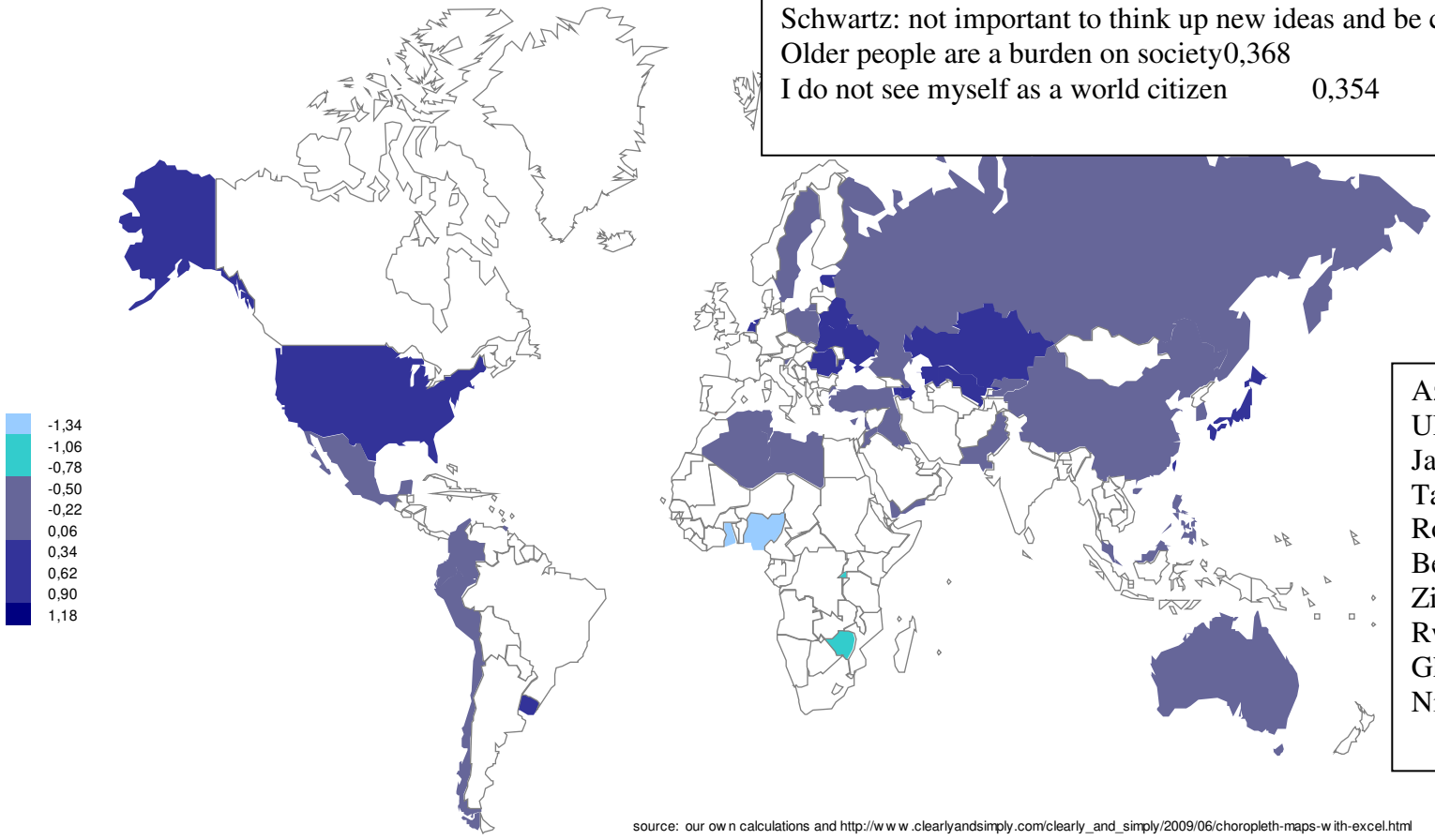


Mexico (2012)	0,883
Colombia (2012)	0,658
Ecuador (2013)	0,620
Armenia (2011)	-0,530
Iraq (2012)	-0,548
Zimbabwe (2012)	-0,626
Belarus (2011)	-0,635
Ukraine (2011)	-0,685
Tunisia (2013)	-0,698
Palestine (2013)	-0,792

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 12: lack of entrepreneurial spirit

Schwartz: not important to be rich 0,626
Schwartz: not important adventure and taking risks 0,616
Schwartz: not important to think up new ideas and be creative 0,575
Older people are a burden on society0,368
I do not see myself as a world citizen 0,354

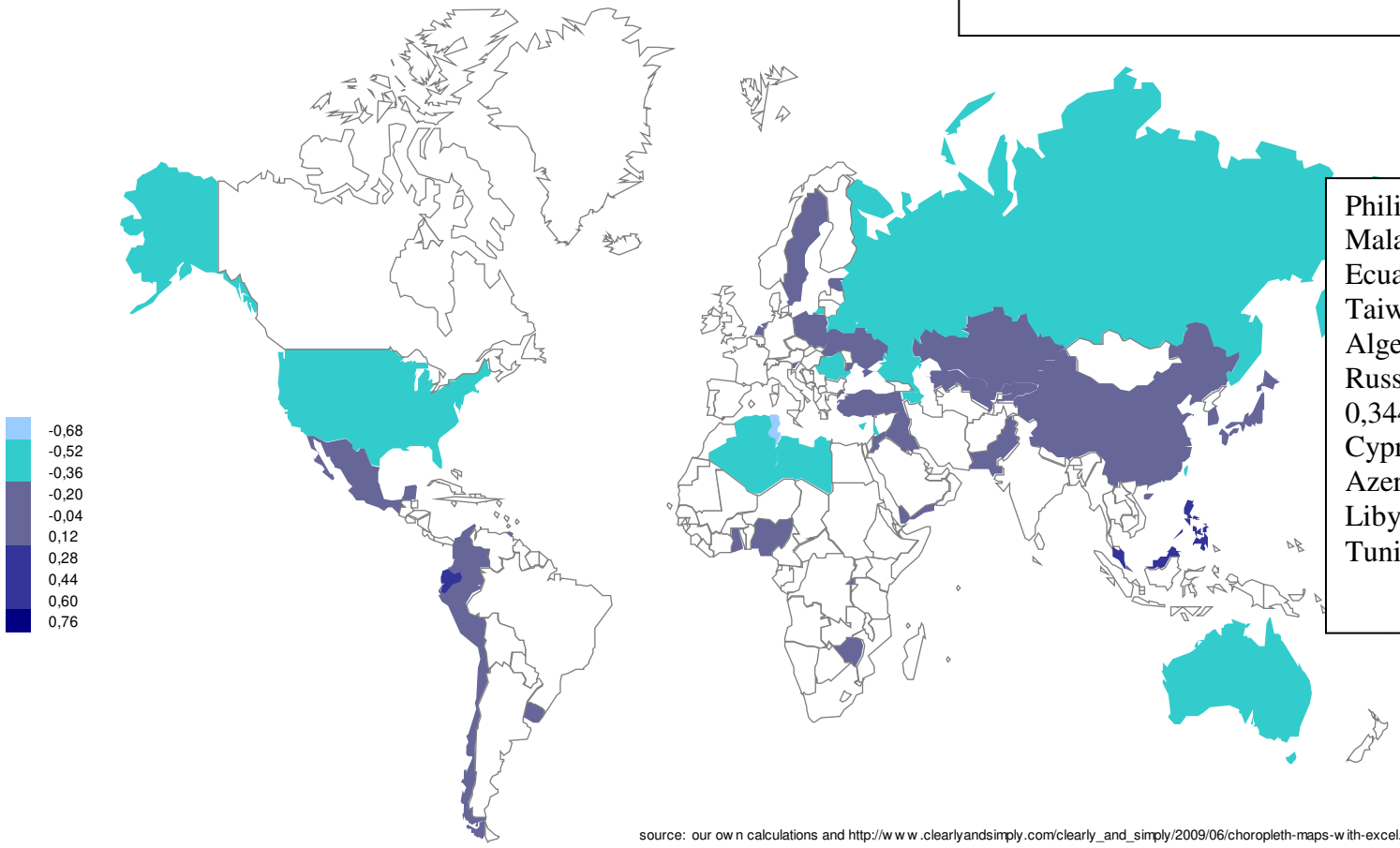


Azerbaijan (2011)	0,898
Ukraine (2011)	0,556
Japan (2010)	0,551
Taiwan (2012)	0,497
Romania (2012)	0,494
Belarus (2011)	0,476
Zimbabwe (2012)	-0,511
Rwanda (2012)	-0,693
Ghana (2012)	-1,125
Nigeria (2011)	-1,340

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 13: older generation with low education and high

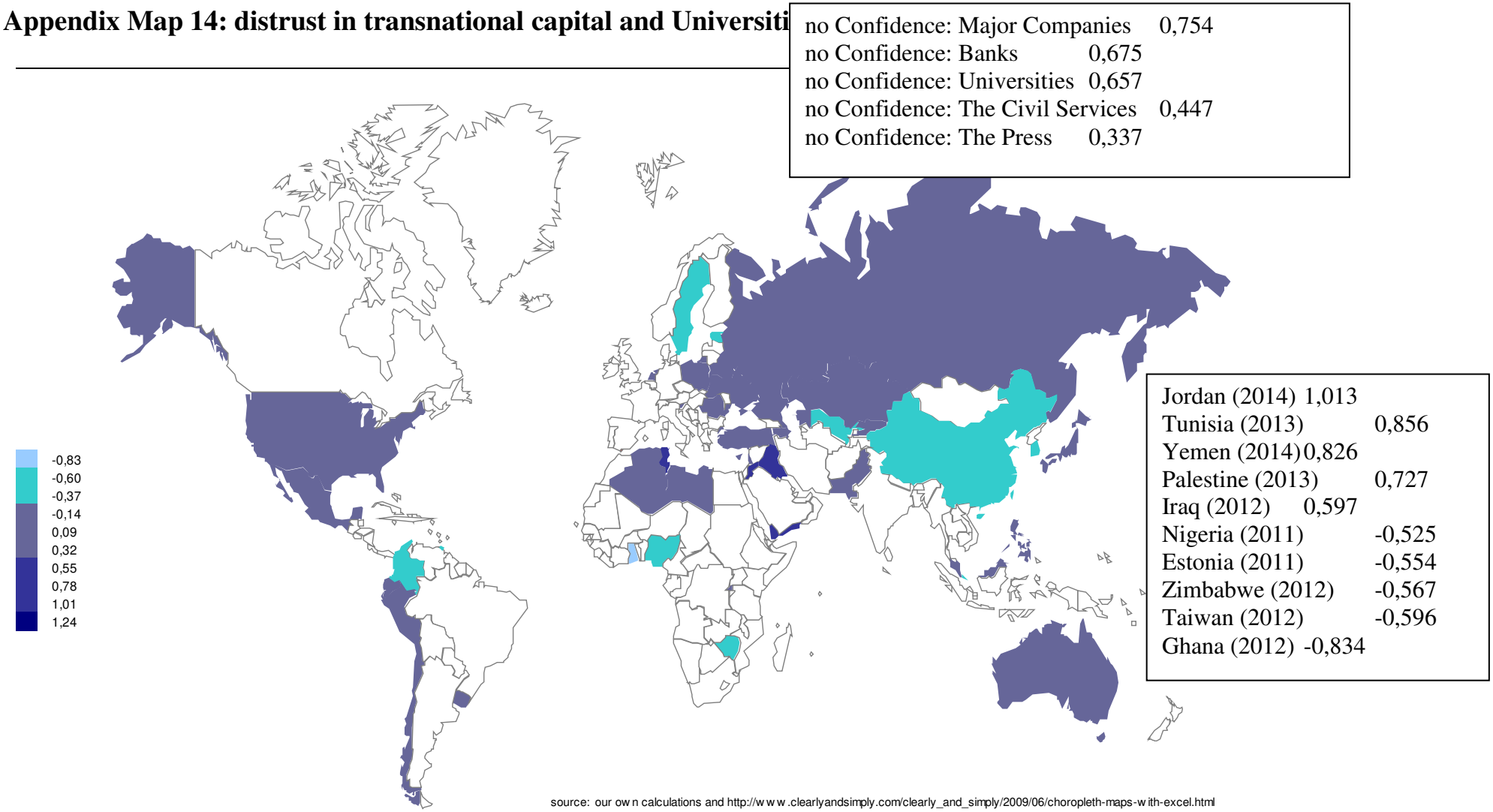
How many children do you have 0,738
Age 0,692
Highest educational level attained -0,554



Philippines (2012) 0,597
Malaysia (2012) 0,458
Ecuador (2013) 0,356
Taiwan (2012) -0,302
Algeria (2013) -0,315
Russian Federaton (2011) -0,344
Cyprus (2011) -0,371
Azerbaijan (2011) -0,476
Libya (2014) -0,501
Tunisia (2013) -0,679

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

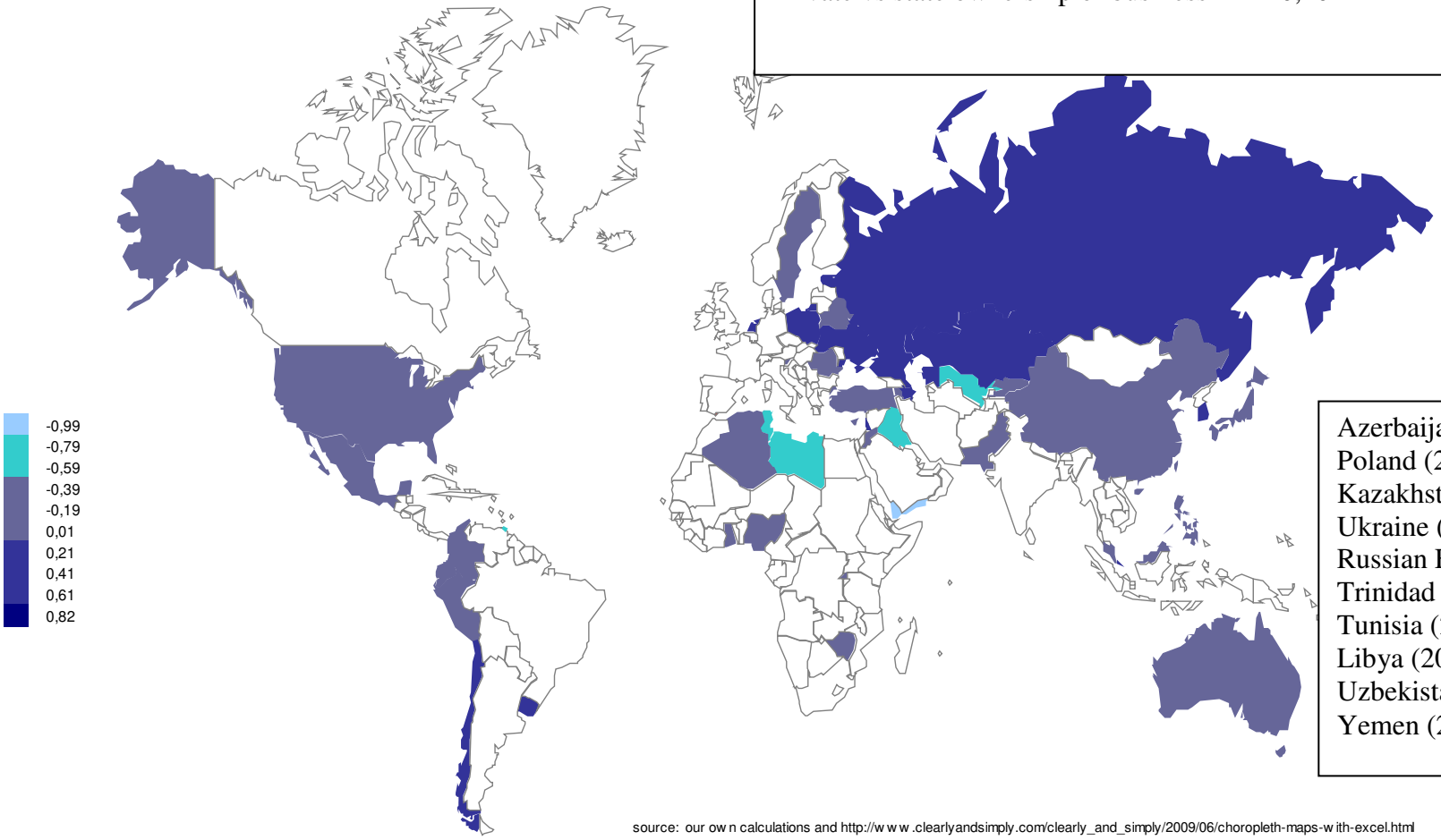
Appendix Map 14: distrust in transnational capital and Universiti



source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 15: anti-Hayek/anti-Max Weber

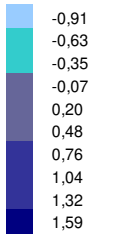
Hard work does not bring success	0,780
Competition good or harmful	0,748
Private vs state ownership of business	0,402



Azerbaijan (2011)	0,615
Poland (2012)	0,553
Kazakhstan (2011)	0,496
Ukraine (2011)	0,465
Russian Federaton (2011)	0,447
Trinidad and Tobago (2011)	-0,471
Tunisia (2013)	-0,486
Libya (2014)	-0,499
Uzbekistan (2011)	-0,534
Yemen (2014)	-0,995

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 16: rejecting work, global citizenship; but social trust



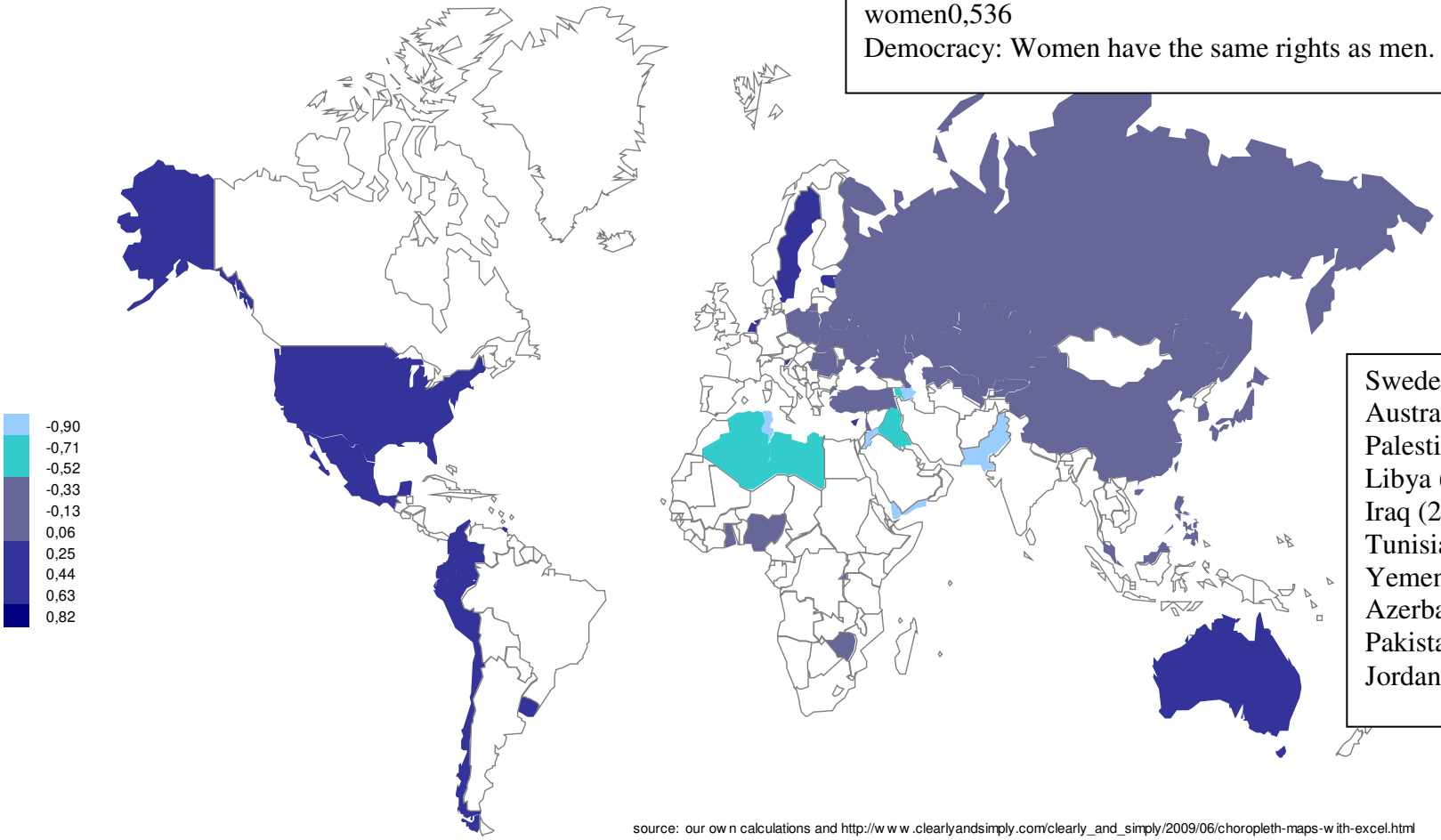
not important in life: Work 0,627
Most people can be trusted/you just can't be too careful -0,482
I do not see myself as a world citizen 0,419
How important is God in your life -0,377
Justifiable: divorce 0,345
Highest educational level attained 0,328

Netherlands (2012)	1,315
United States (2011)	1,000
Sweden (2011)	0,986
Australia (2012)	0,969
Japan (2010)	0,726
Belarus (2011)	0,703
Uzbekistan (2011)	-0,727
Mexico (2012)	-0,763
Ghana (2012)	-0,889
Ecuador (2013)	-0,909

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 17: supporting gender justice

Gender (female) 0,652
reject: University is more important for a boy than for a girl 0,545
reject: Jobs scarce: Men should have more right to a job than women0,536
Democracy: Women have the same rights as men. 0,330

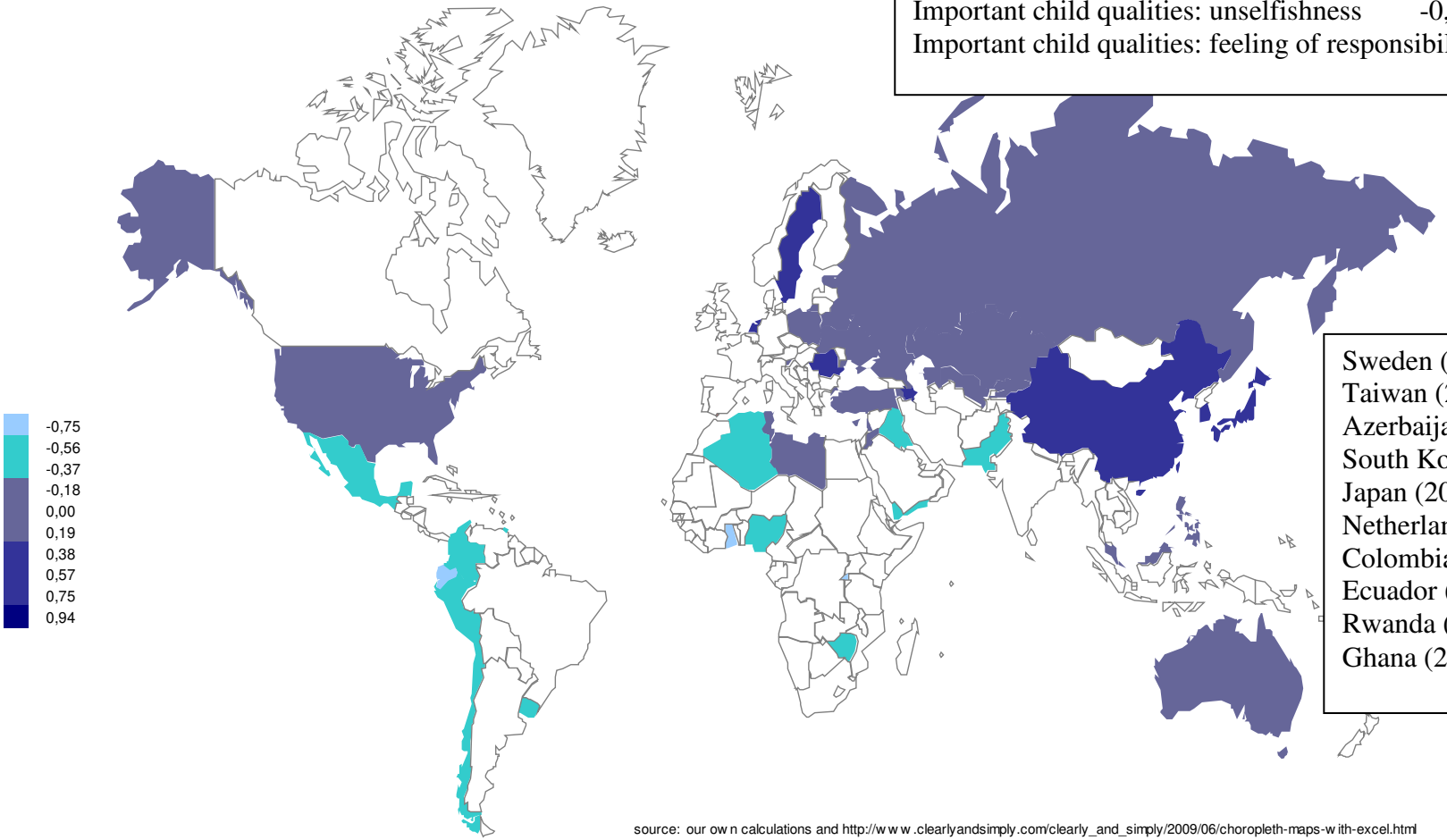


Sweden (2011)	0,627
Australia (2012)	0,612
Palestine (2013)	-0,636
Libya (2014)	-0,693
Iraq (2012)	-0,706
Tunisia (2013)	-0,707
Yemen (2014)	-0,774
Azerbaijan (2011)	-0,799
Pakistan (2012)	-0,895
Jordan (2014)	-0,897

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 18: educational value: independence not obedience

Important child qualities: independence 0,666
Important child qualities: obedience -0,591
Important child qualities: unselfishness -0,528
Important child qualities: feeling of responsibility 0,342

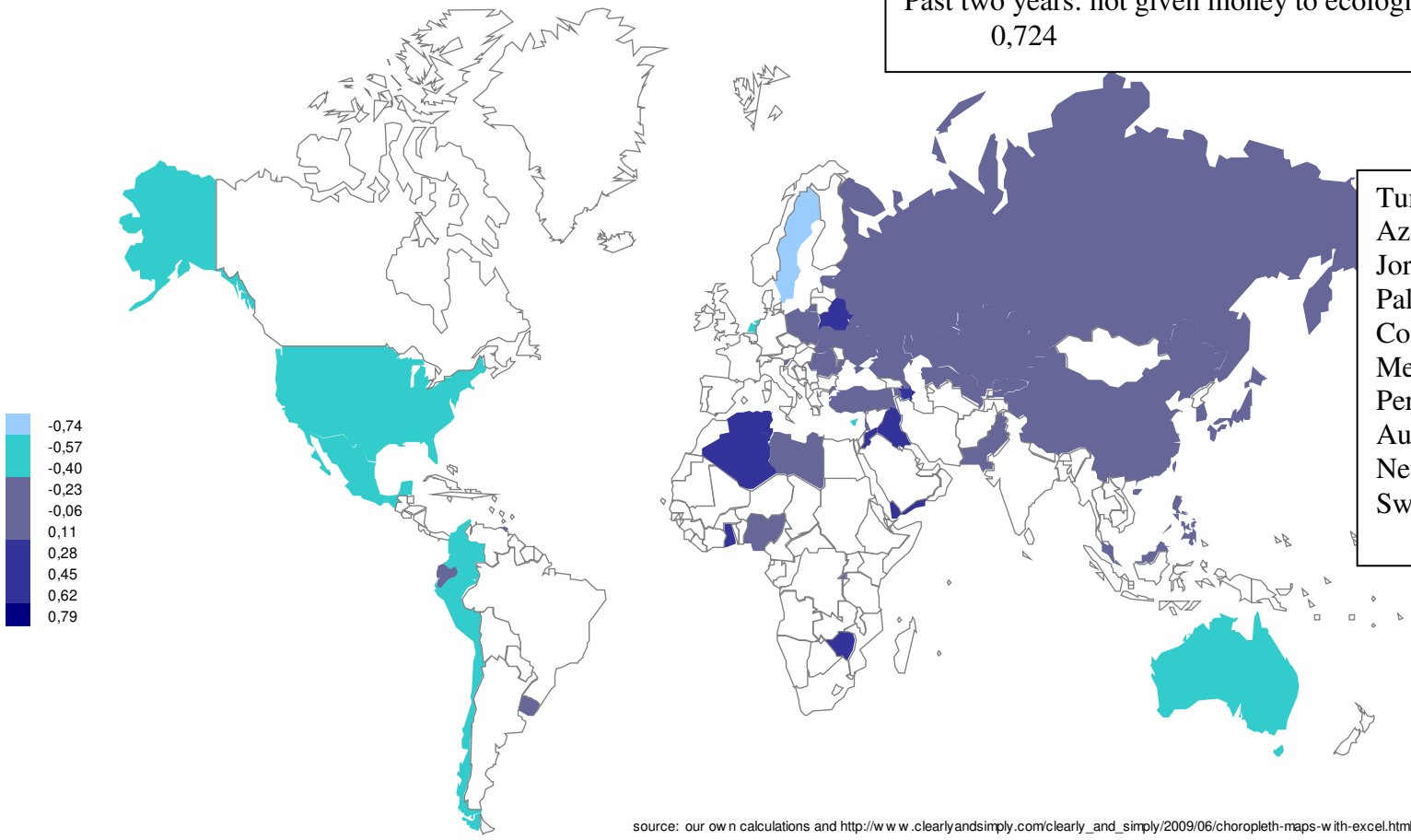


Sweden (2011)	0,754
Taiwan (2012)	0,727
Azerbaijan (2011)	0,702
South Korea (2010)	0,701
Japan (2010)	0,598
Netherlands (2012)	0,516
Colombia (2012)	-0,543
Ecuador (2013)	-0,615
Rwanda (2012)	-0,678
Ghana (2012)	-0,746

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 19: staying away from environmental activism

Past two years: not participated in demonstration for environment
0,726
Past two years: not given money to ecological organization
0,724

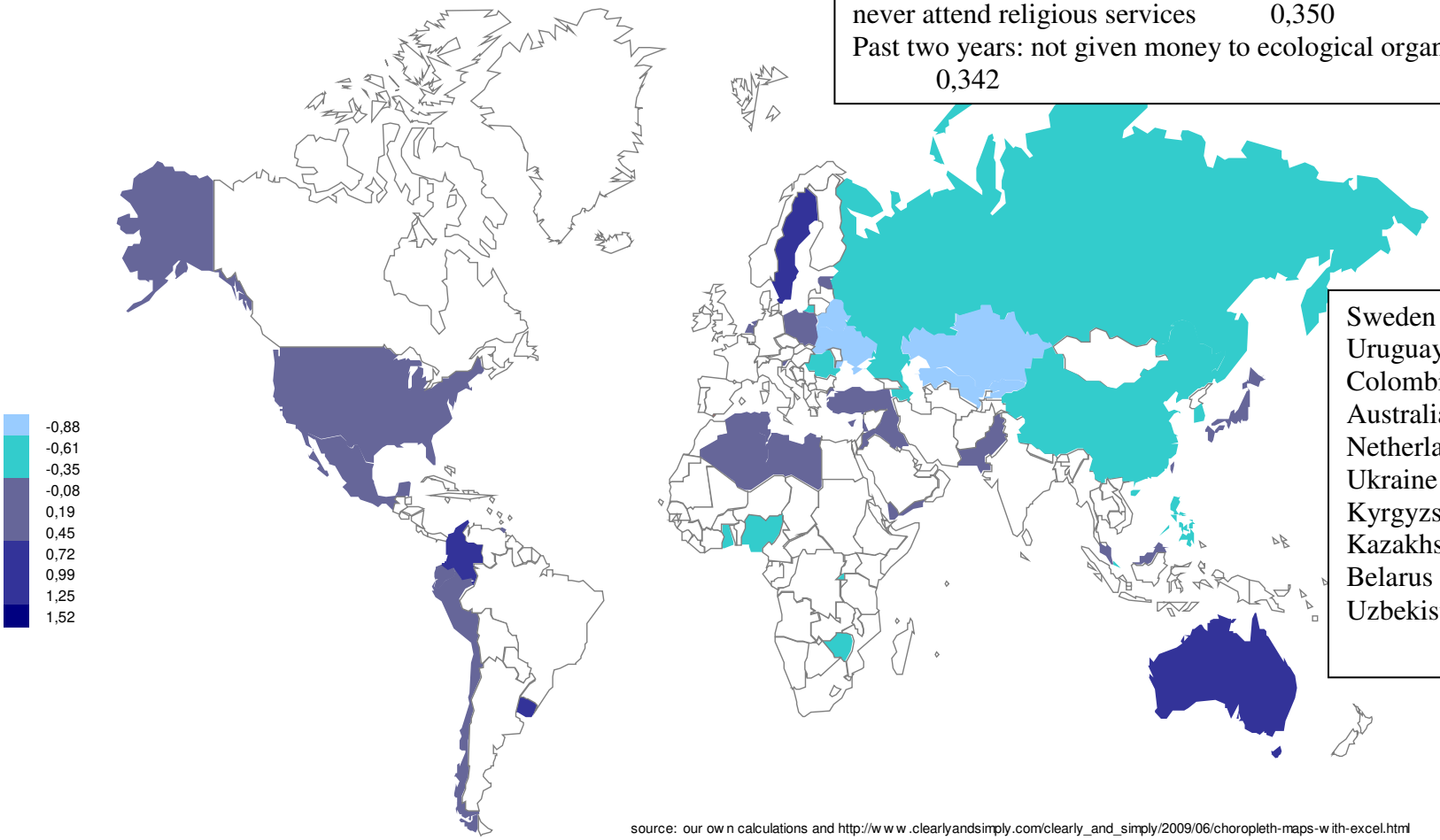


Tunisia (2013)	0,616
Azerbaijan (2011)	0,601
Jordan (2014)	0,543
Palestine (2013)	0,458
Colombia (2012)	-0,451
Mexico (2012)	-0,467
Peru (2012)	-0,471
Australia (2012)	-0,519
Netherlands (2012)	-0,556
Sweden (2011)	-0,738

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 20: „fatigue of democracy“

Importance of democracy -0,702
Active/Inactive membership of sport or recreation -0,392
never attend religious services 0,350
Past two years: not given money to ecological organization 0,342

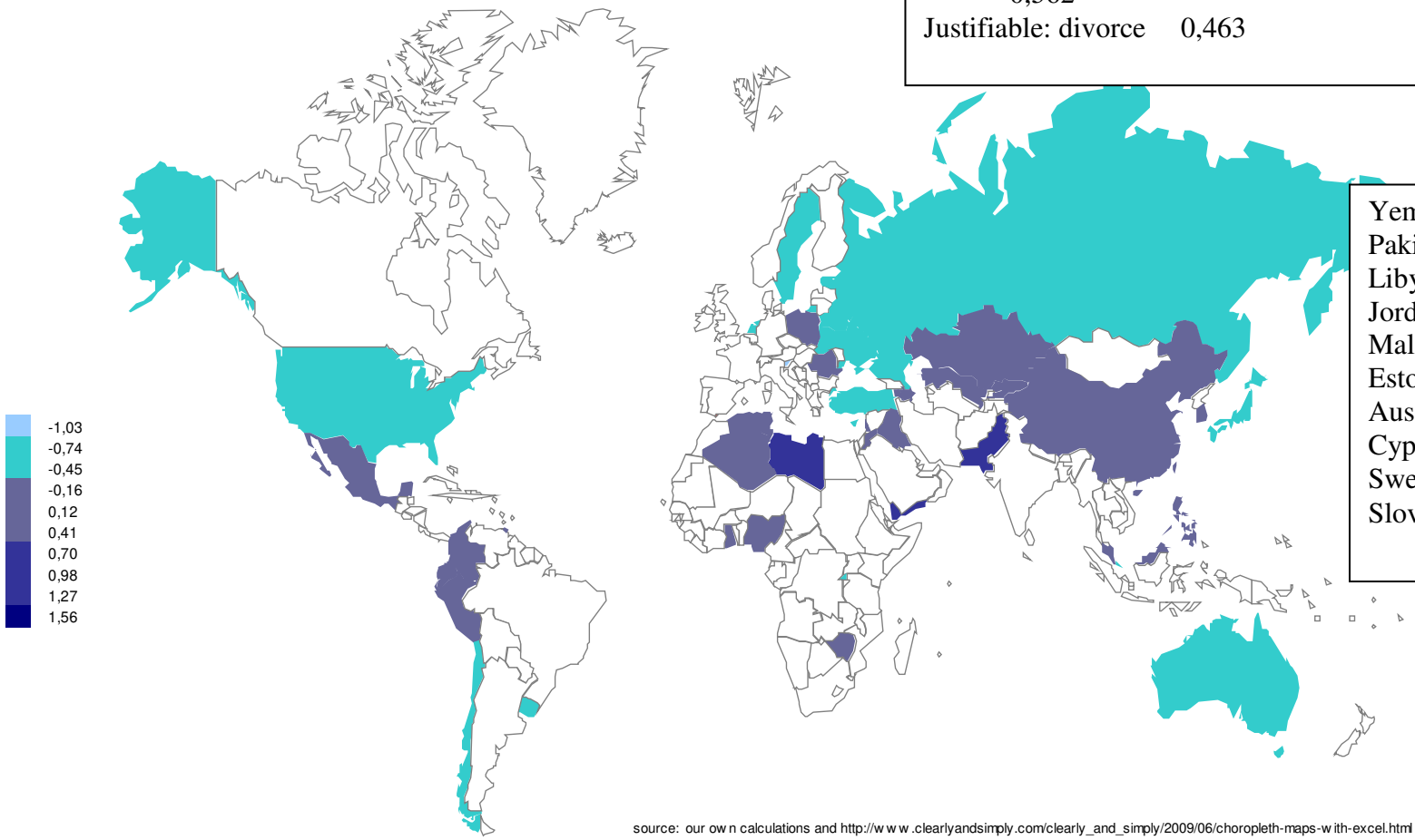


Sweden (2011)	1,255
Uruguay (2011)	1,110
Colombia (2012)	0,872
Australia (2012)	0,806
Netherlands (2012)	0,633
Ukraine (2011)	-0,642
Kyrgyzstan (2011)	-0,686
Kazakhstan (2011)	-0,691
Belarus (2011)	-0,776
Uzbekistan (2011)	-0,881

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 21: egoism of the rich

Satisfaction with financial situation of household 0,620
Most people can be trusted/you just can't be too careful 0,562
Justifiable: divorce 0,463

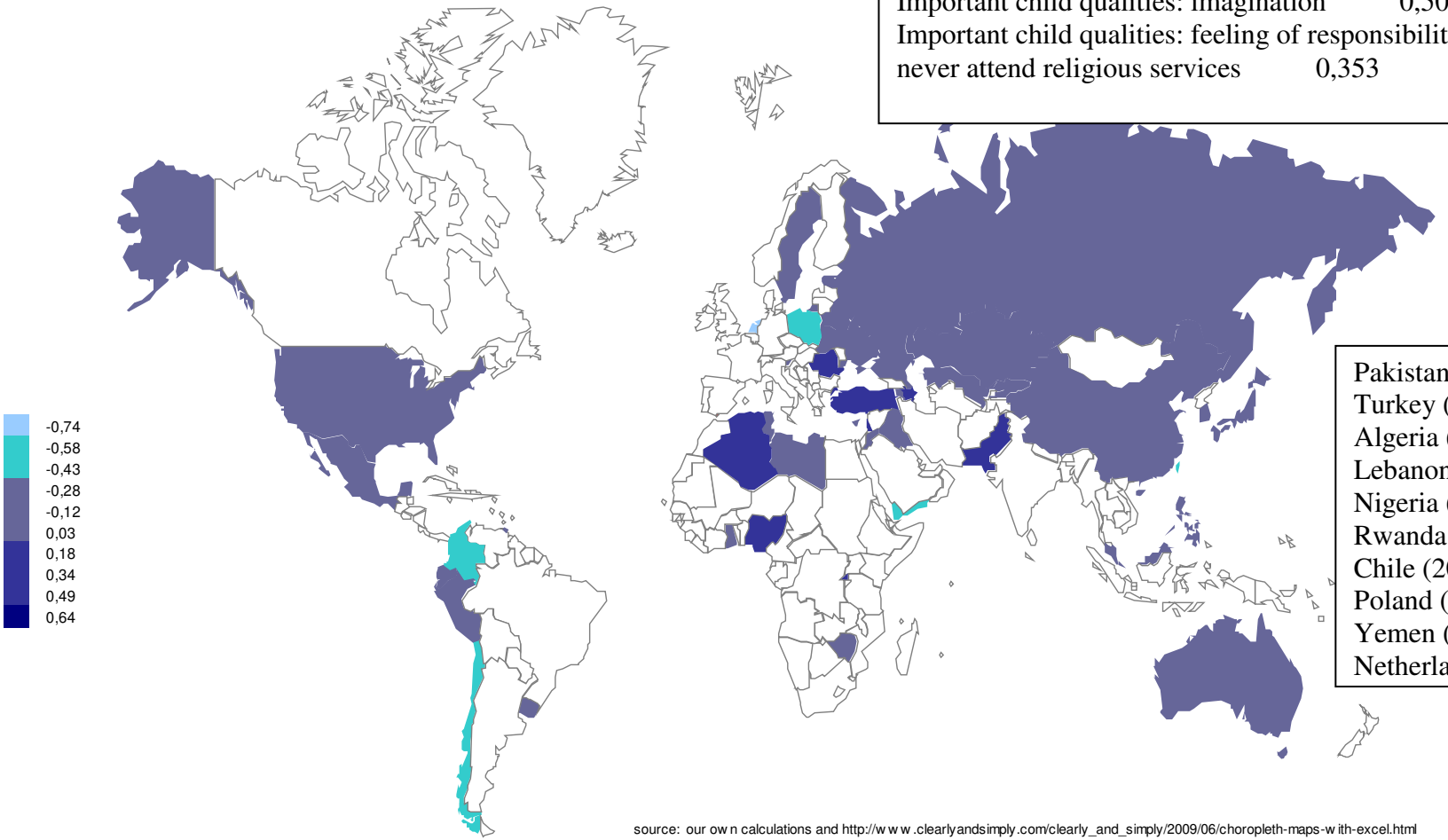


Yemen (2014)	1,271
Pakistan (2012)	0,947
Libya (2014)	0,763
Jordan (2014)	0,627
Malaysia (2012)	0,576
Estonia (2011)	-0,658
Australia (2012)	-0,712
Cyprus (2011)	-0,726
Sweden (2011)	-0,733
Slovenia (2011)	-1,025

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 22: imagination versus ecological responsibility

Active/Inactive membership of environmental organization -0,680
Important child qualities: imagination 0,506
Important child qualities: feeling of responsibility -0,460
never attend religious services 0,353

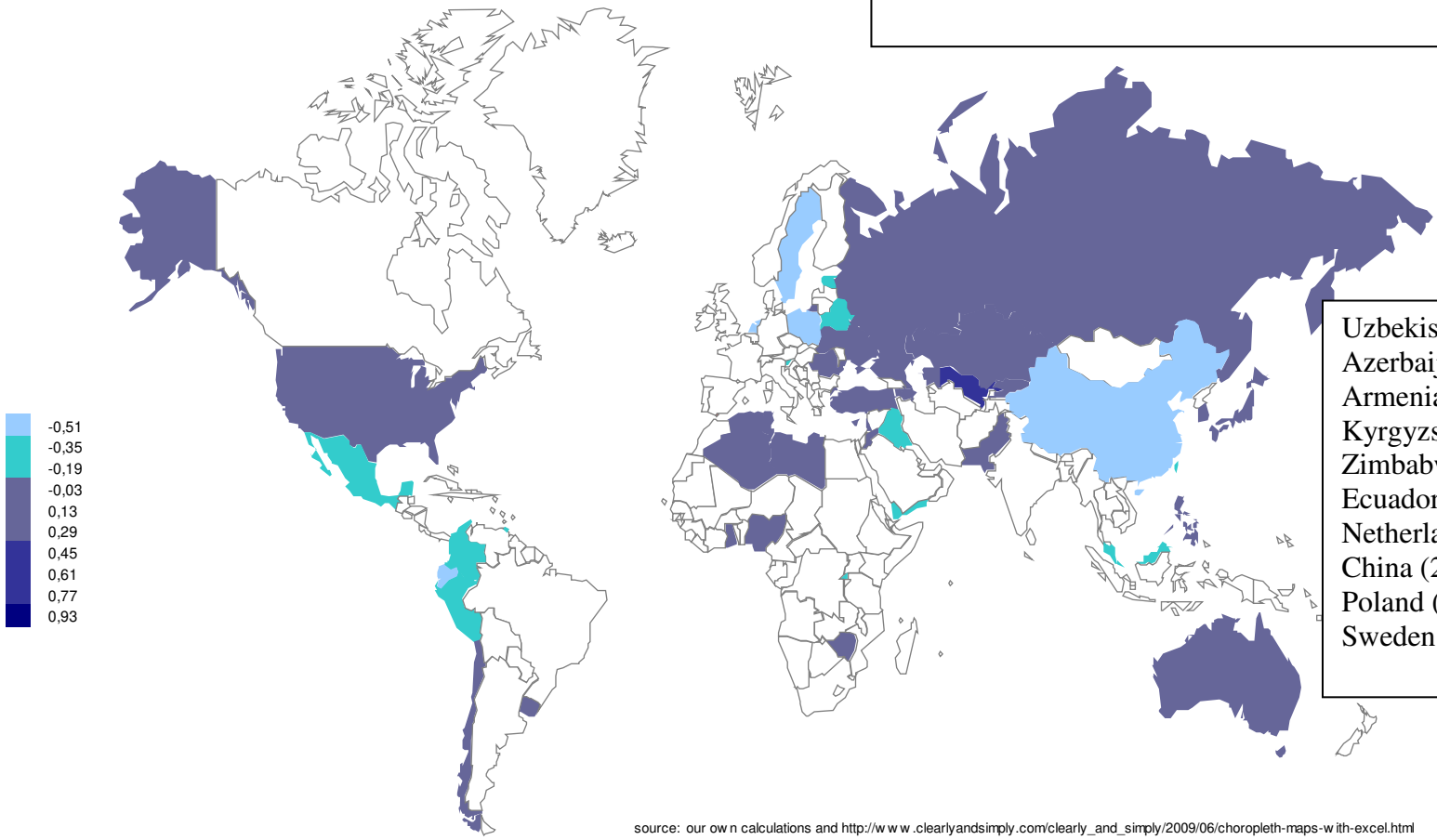


Pakistan (2012)	0,490
Turkey (2011)	0,395
Algeria (2013)	0,362
Lebanon (2013)	0,319
Nigeria (2011)	0,306
Rwanda (2012)	0,284
Chile (2011)	-0,289
Poland (2012)	-0,339
Yemen (2014)	-0,413
Netherlands (2012)	-0,737

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

Appendix Map 23: hating the Army and sports

no Confidence: Armed Forces 0,775
Active/Inactive membership of sport or recreation -0,518



Uzbekistan (2011)	0,773
Azerbaijan (2011)	0,437
Armenia (2011)	0,435
Kyrgyzstan (2011)	0,356
Zimbabwe (2012)	0,336
Ecuador (2013)	-0,375
Netherlands (2012)	-0,393
China (2012)	-0,416
Poland (2012)	-0,498
Sweden (2011)	-0,510

source: our own calculations and http://www.clearlyandsimply.com/clearly_and_simply/2009/06/choropleth-maps-with-excel.html

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