

# **Informal institutions and demand for income redistribution**

**Diploma thesis**

**Thesis Supervisor:**

**Ing. Luděk Kouba, Ph.D.**

**Bc. Katarína Vigodová**

**Brno 2017**

## **Acknowledgement**

I would like to thank to the supervisor of the thesis, Ing. Luděk Kouba, Ph.D. for his recommendations and advice. I would like to also thank to the doc. Mgr. David Hampel, Ph.D. for his great support, helpful recommendations and advice during the whole studies. The paper is a result of the research project MENDELU IGA No. PEF\_TP\_2016014. The research leading to these results received funding from the European Commission's Seventh Framework Programme FP7/2007-2013 under grant agreement No. 290647. Individual chapters from this thesis were presented at 20th European Scientific Conference of Doctoral Students PEFNET 2017, and also at 20th anniversary of the conference Enterprise and Competitive Environment 2017. Working paper based on chapter from this thesis received the Dean's award as a best working paper in section Quantitative Methods on PEFNET 2017 conference.

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## **Abstract**

This thesis studies the relationship between the informal institutions represented by religiousness, the way of understanding religion, the control over life and the preferences for income redistribution by state. Influence of informal institutions on preferences for income redistribution was confirmed by using multinomial logistic regression, contingency table, as well as cluster analysis. Results from empirical analysis suggest a polarization of religious people into those with positive preferences and those with negative preferences towards income redistribution. Most of the recent studies that were geographically defined claimed a rather negative preferences of religious people towards income redistribution by the state. Understanding religion as following norms and ceremonies, as well as high perception of life control lead to rather negative preferences towards income redistribution. Understanding religion as doing good to other people as well as low perception of life control lead to rather positive preferences towards income redistribution by the state.

## **Keywords**

Informal institutions, Income redistribution, Religion, Life control, Preferences

## **Abstrakt**

Diplomová práca sa zaoberá vzťahom medzi neformálnymi inštitúciami, ktoré sú reprezentované náboženstvom, odlišným chápaním náboženstva, subjektívnym názorom na kontrolu nad vlastným životom a preferenciami k redistribúcií príjmu štátom. Vplyv neformálnych inštitúcií na preferencie ohľadne redistribúcie príjmu bol potvrdený použitím multinomiálneho logitového modelu, kontingenčných tabuliek a zhlukovej analýzy. Výsledky empirickej analýzy poukazujú na polarizáciu veriacich ľudí do dvoch skupín. Veriaci, ktorí podporujú redistribúciu príjmu a veriaci, ktorí oponujú redistribúcií príjmu štátom. Väčšina aktuálnych štúdií poukazuje na prevažne negatívne preferencie veriacich voči redistribúcií príjmu štátom. Chápanie náboženstva ako nasledovanie noriem a ceremónií, tak ako vysoké vnímanie kontroly nad vlastným životom vedie k prevažne negatívnym preferenciám k redistribúcií príjmu štátom. Chápanie náboženstva ako robenia dobra v spoločnosti, tak ako nízke vnímanie kontroly nad vlastným životom vedie prevažne k pozitívnym preferenciám k redistribúcií príjmu štátom.

## **Kľúčové slová**

Neformálne inštitúcie, Redistribúcia príjmu, Náboženstvo, Kontrola nad životom, Preferencie

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# 1 Introduction

Emergence, expansion and maturation of welfare state, it can be said of the twentieth century as the century of a welfare state (Morel, 2012). Despite the emergence, expansion and maturation of welfare state in the twentieth century, it can't be assessed as a thriving system everywhere. Why is it so? Reasons for that may differ. They may not only come from different macroeconomic background of a country, statistically depicted with tools such as GDP, employment rate or policy implementation effectiveness, but can also be understood by looking into the behavioural part of their economy. This diploma thesis studies the relationship between informal institutions represented by religiousness, the way of understanding religion, life control and preferences for income redistribution by state in order to identify the main determinants of individual's attitude leading to the formation of political preferences.

Author's motivation comes from long-lasting interest in behavioural economy through the whole studies combined with interest in statistics. Informal institutions have been recently in the centre of attention of many studies. Most of the up to date studies in the area of formal and informal institutions with connection to welfare state were geographically or demographically focused and limited, author's interest is to research this causal relationship on a world-wide level. World Values Survey organization collects answers to many questions as part of a very vast questionnaire covering wide range of opinions, values and demographics. Therefore, World Values Survey organization is providing us with large dataset for many different possibilities and directions in research.

To identify and quantify a relationship between informal institutions and preferences for income redistribution as a characteristic of a welfare state, empirical analysis, using advanced statistical methods on collected data from the sixth wave of survey provided by the World Value Survey will be conducted. Results of this research may benefit and provide bases for assessing social policy effectiveness, public finance and spending as a part of an economic policy.

The research leading to these results received funding from the European Commission's Seventh Framework Programme FP7/2007-2013 under grant agreement No. 290647. Individual chapters from this thesis were presented at 20th European Scientific Conference of Doctoral Students PEFNET 2017, and also at 20th anniversary of the conference Enterprise and Competitive Environment 2017. Working paper based on chapter from this thesis received the Dean's award as a best working paper in section Quantitative Methods on PEFNET 2017 conference.

## **2 Objective and Hypothesis**

### **2.1 Objective**

The main objective of this paper is to identify the influence of individualistic attitudes, represented by religiousness, way of understanding religion and life control variable, towards demand for income redistribution in society as one of the components of a welfare state through empirical analysis on data from the sixth wave of the World Value Survey.

### **2.2 Hypothesis**

The main assumption of this paper is to support that informal institutions, as determinants of individual's attitude, play an important role in forming individual political preferences. Based on previous studies and findings in the area of informal institutions and their influence on demand for welfare state, the main assumption is that religious people will have negative preferences towards income redistribution. On a more debatable aspect, the partial assumption is to include the idea that people perceive religion in different ways, which would bring different results.

Another assumption to make is that individuals, having stated that they have a great deal of choice and control over their lives, will have negative preferences towards income redistribution by the state. On the other hand, those who stated having no choice at all and no control over their lives, will show very positive preferences towards income redistribution by the state.

## 3 Literature Review

In order to fully understand the topic, a literature review is conducted to explain and acquaint reader with fundamental expressions, their origin, development and current situation at first. Overview of up to date studies in area of informal institutions and demand for income redistribution is also conducted in order to establish assumptions on its basis.

### 3.1 Institutions

Institution: *“An organization founded for a religious, educational, professional, or social purpose.”* Oxford dictionary (2017) defines the term institution in such way. Informal institutions have been around since the mankind itself, taking the form of group habits, traditions, spread of beliefs or occurrence of rituals. Another definition of an institution could be given as the following: *“Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that shape human interaction”* (North, 1990, page 3).

We can classify institutions in several ways there are formal and informal institutions, created or those which evolve over time. Formal or informal, created or evolving institution may have different forms. Some of them prohibit society directly from some actions while others on the other hand may define suitable behaviour or actions to undertake in different situations. It can therefore be said that they create guidelines for society. Institutions exist so people know or can learn how to behave, how to do things from the simple tasks to the most complicated ones.

Institutions vary among the world, some form of behaviour or action that is absolutely unacceptable or even forbidden in one state, country, culture, may be happening somewhere else without the slightest form of disgrace. Institutions may differ among cultures, nevertheless their purpose remains still the same. *“In the jargon of the economist, institutions define and limit the set of choices of individuals”* (North, 1990, page 4).

From (Giddens, 1984), (Leftwich & Sen, 2010) and (North, 1990) we can learn some basic characteristics of institutions. Institutions are set of rules, guidelines, which put order into social, economic or political life. Sets of rules are brought to life by collective behaviour of individuals and organisations. On one hand, they lead to firm patterns of actions or behaviour on the other hand they may also change overtime. Outcome of following institutions may be positive as well as negative. This depends on which kinds of behaviour or actions institutions enable, as well as different allocation of resources over the society.

One of the differences between formal and informal institutions is that following of them may be enforced or punished when not followed by law in case of formal institutions. Enforcement or punishment may as well occur in conflicts with informal institutions, but in a different form. Separation from social groups and facing disapproval from community are just some of the examples. For a better understanding of differences between formal and informal institutions let me list some examples, which we can find in work of Douglas C. North from 1991. Informal constraints represented by sanctions, taboos, customs, traditions, and codes of conduct, and formal rules in forms of constitutions, laws, property rights.

Formal and informal institutions among society should exist on principle of symbiosis. However, different kinds of changes in society can deflect the symbiotic relationship off the equilibrium. In such situations, institutions must undergo a change. As Joseph E. Stiglitz would say: *“Typically, institutions (organizations) develop an internal coherency that is not too dissonant with the external environment they must face. When it becomes too dissonant then institutions change”* (Stiglitz, 1999, page 63).

## 3.2 Religion

Christianity, Buddhism, Islam, Hinduism, Judaism, Mormonism, Rastafari, Jehovah’s Witnesses, Amish, Greek Mythology are just few examples of many different kinds of religion. Each of them varies, but they all have one thing in common. All of them connect people, create groups of people with same beliefs, opinions and values. In words of historian of religion, Charles H. Long definition of religions is as follows: *“religion will mean orientation – orientation in the ultimate sense, that is, how one comes to terms with the ultimate significance of one’s place in the world”* (Long, 1986). Thesaurus dictionary provides us with such definition of religion: *“a specific fundamental set of beliefs and practices generally agreed upon by a number of persons or sects”* (Thesaurus, 2017).

More prolegomenous definition of religion by Clifford Geertz would be as follows: *“(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic”* (Geertz, 1993).

Last mentioned and indeed exhaustive and vast definition of religion would be as follows: *“Religions are shared collections of transcendental beliefs that have been passed on from believers to converts, that are held by adherents to be actively meaningful and serious and either based on (1) formally documented doctrine (organized religion) or (2) established cultural practices (folk religion). In both forms, there are religious professionals who embody formal aspects of the religion and who*

*act in positions of leadership and governance, and there are certain rituals reserved for them to carry out.*

*Religions often include: spiritual explanations of our place in the world in an attempt to answer questions about "why we are here"; worship of deities and/or supernatural entities (including ancestors); conceptions of "holy" and "sacred" activities ideas and objects; set rituals, calendar events based on the changing seasons, distinctive dress codes (especially for religious professionals), codes of morality and action that are given a mandate from a supernaturally great being, from a supernatural force or from the will of the Universe itself; and, a caste of privileged and exalted professionals who have particular claims to be in touch with transcendental forces" (Human Religions, 2017).*

Based on this definition we could consider religion as a formal institution, however it is not. Even if it is based on formally documented doctrine it is in fact an informal institution. Nothing could force you to be part of a religion or follow religious norms and ceremonies. The decision to be part of some religious group no matter which one, is solely up to an individual's choice.

### 3.2.1 General demographic statistics on religion

As mentioned before people all around the world identify themselves with different kinds of religious groups. General statistical tools can hence be used to depict the situation, such as geographical distribution and age distribution, from the demographic research conducted by Pew Research Center in 2012.

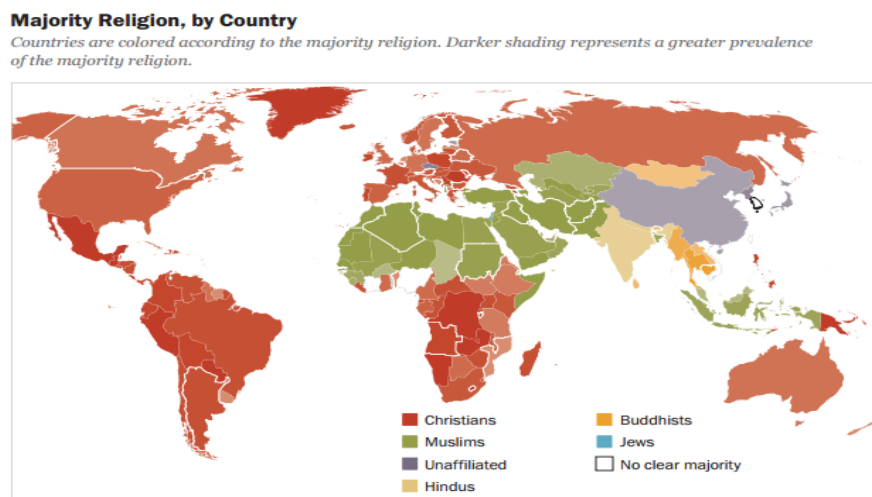


Figure. 1 Majority Religion by Country  
Source: Hackett & Grim, 2012

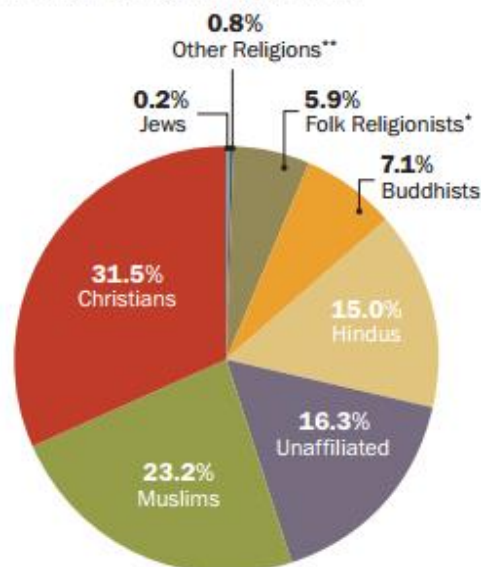
## Major Religious Groups

*“Based on analysis of more than 2,500 censuses, surveys and population registers – finds 2.2 billion Christians (32% of the world’s population), 1.6 billion Muslims (23%), 1 billion Hindus (15%), nearly 500 million Buddhists (7%) and 14 million Jews (0.2%) around the world as of 2010. In addition, more than 400 million people (6%) practice various folk or traditional religions, including African traditional religions, Chinese folk religions, Native American religions and Australian aboriginal religions. An estimated 58 million people – slightly less than 1% of the global population – belong to other religions, including the Baha’i faith, Jainism, Sikhism, Shintoism, Taoism, Tenrikyo, Wicca and Zoroastrianism, to mention just a few.*

*At the same time, the new study by the Pew Forum also finds that roughly one-in-six people around the globe (1.1 billion, or 16%) have no religious affiliation” (Hackett & Grim, 2012, page 9).*

### Size of Major Religious Groups, 2010

Percentage of the global population



\*Includes followers of African traditional religions, Chinese folk religions, Native American religions and Australian aboriginal religions.

\*\*Includes Baha’i’s, Jains, Sikhs, Shintoists, Taoists, followers of Tenrikyo, Wiccans, Zoroastrians and many other faiths.

Percentages may not add to 100 due to rounding.

Figure. 2 Size of Major Religious Groups, 2010

Source: Hackett & Grim, 2012

## Geographic distribution of Religious Groups

Geographic distribution is another important and interesting aspect. Individuals who identify themselves as Christians are the most evenly distributed around the globe among all the religious groups.

People affiliated with Islam can be mostly found in Asia-Pacific region, Middle East, North America and in sub-Saharan Africa. Among them in North America and Middle East majority of Jewish community can be found.

*“Three-quarters of the religiously unaffiliated (76%) also live in the massive and populous Asia-Pacific region. Indeed, the number of religiously unaffiliated people in China alone (about 700 million) is more than twice the total population of the United States” (Hackett & Grim, 2012).*

### Geographic Distribution of Religious Groups

Percentage of each group's total population that lives in particular regions

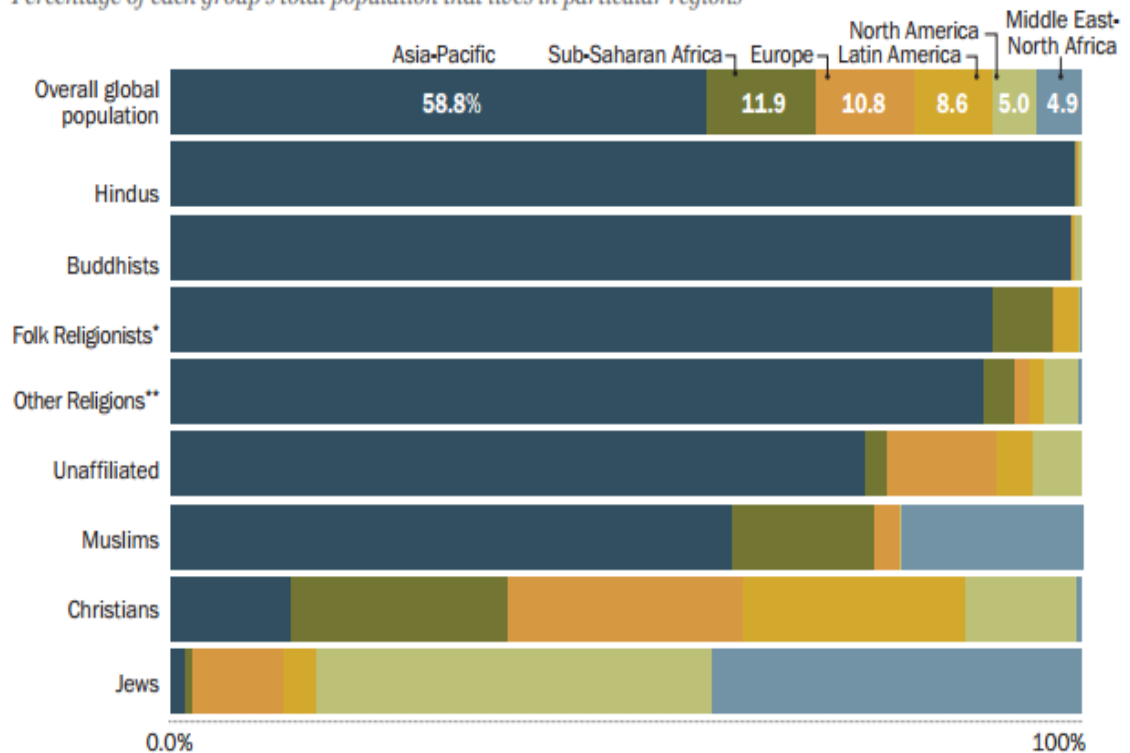


Figure. 3 Geographic Distribution of Religious Groups

Source: Hackett & Grim, 2012

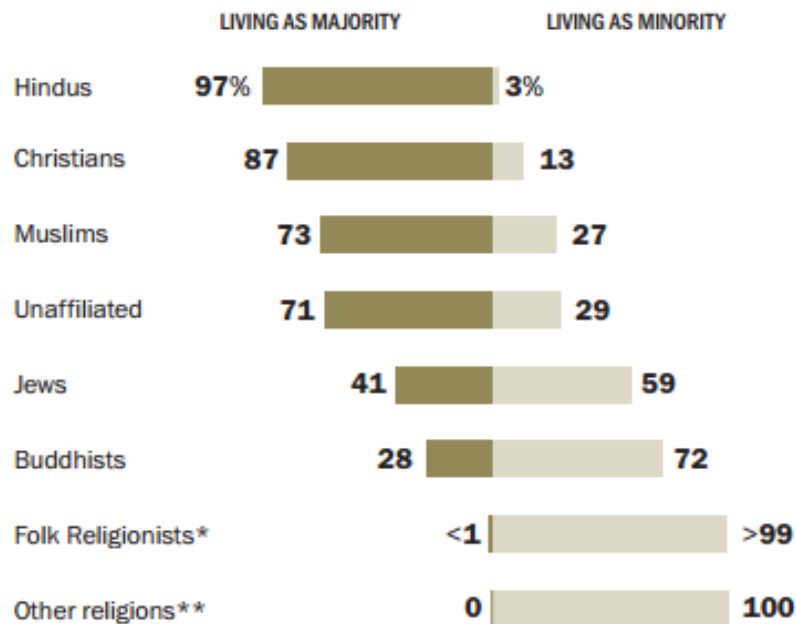
## Living in Majority or Minority

Individuals all around the world affiliating with different kinds of religion in different parts of the world may find themselves living and belonging to a majority or a minority, based on their religious group and specific geographic region.

*“Nearly three-quarters (73%) of the world’s people live in countries in which their religious group makes up a majority of the population. Only about a quarter (27%) of all people live as religious minorities” (Hackett & Grim, 2012)*

### Majority or Minority

*Percentage of each religious group that lives in countries where its adherents are a majority or a minority*



\*Includes followers of African traditional religions, Chinese folk religions, Native American religions and Australian aboriginal religions.

\*\*Includes Bahai's, Jains, Sikhs, Shintoists, Taoists, followers of Tenrikyo, Wiccans, Zoroastrians and many other faiths.

Percentages may not add to 100 due to rounding.

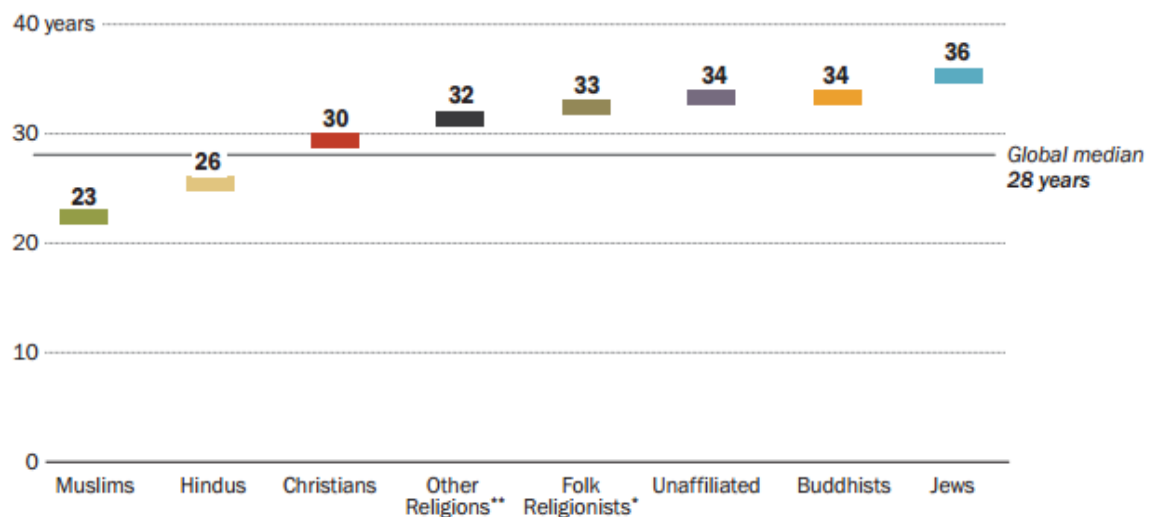
Figure. 4 Living in Majority or Minority  
Source: Hackett & Grim, 2012



## Age of Religious Groups

There are also age differences among different kinds of religious groups among the world and there is also an explanation such differences. Age differences are connected to geographical distribution of religious groups. Average age of religion group seems to be connected also to the economic activity of the country. Fast developing, growing countries tend to have younger religious populations. On the other hand concentrated and advanced industrial countries like China tend to have their religious population of a higher average age (Hackett & Grim, 2012).

### Median Age of Religious Groups, 2010



Religious groups are ordered by median age from youngest to oldest.

\*Includes followers of African traditional religions, Chinese folk religions, Native American religions and Australian aboriginal religions.

\*\*Includes Bahai's, Jains, Sikhs, Shintoists, Taoists, followers of Tenrikyo, Wiccans, Zoroastrians and many other faiths.

Figure. 5 Median Age of Religious Groups, 2010

Source: Hackett & Grim, 2012

### 3.3 Life control

We can find different opinions of individuals on what may be the main determinant of an individual's success and their attitude to life based on that, in work of Julian B. Rotter, Generalized expectancies for internal versus internal control of reinforcement from 1966.

In his work he differentiates between internal and external control, he also pointed out that these are not the only two options. People can find themselves in between, closer to internal or external control, but not strictly belonging to one or another belief. Julian B. Rotter (1966) defines belief in external control as follows: *"When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labelled this a belief in external control."*

Internal control defined by Rotter is as follows: *"If the person perceives that the event is contingent upon his own behaviour or his own relatively permanent characteristics, we have termed this a belief in internal control."*

Whether the person believes in internal or external control, it affects his or her behaviour in a certain way. *"A series of studies provides strong support for the hypotheses that the individual who has a strong belief that he can control his own destiny is likely to (a) be more alert to those aspects of the environment which provide useful information for his future behaviour; (b) take steps to improve his environmental condition; (c) place greater value on skill or achievement reinforcements and be generally more concerned with his ability, particularly his failures; and (d) be resistive to subtle attempts to influence him"* (Rotter,1966).

We can learn about different visions of self and the effect of those different visions, from work of Gorodnichenko and Roland from 2011. According to them, the different visions of self, among other causes, have an impact on whether a society is collectivistic or individualistic. Many things are affected and determined by the cultural dimension. Gorodnichenko and Roland (2012) found out that: *"the individualism collectivism cultural dimension has an important and robust causal effect on innovation and long run growth"*.

The vision of self is fundamental to human behaviour. We can identify two different perceptions of self, the independent self and the interdependent self. The independent self is defined as follows: *"The independent self derives its identity only from the inner attributes of the individual. These attributes are considered to reflect*

*the essence of the individual, to be stable across time and context and the combination of these attributes is seen as unique to the individual. These individual inner attributes are significant for defining, regulating and thus predicting the behaviour of an individual” (Gorodnichenko & Roland, 2012).*

The interdependent self is defined as follows: *“The interdependent self, in contrast derives its identity essentially from relations with others. The Self is not a separate identity but is embedded in a larger social group and can be understood only in relation to that larger group. From the point of view of the interdependent self, individual behaviour is derived from one’s role in different social contexts and from the perception of others’ reaction to one’s behaviour as well as from the perceived effect of one’s own actions on others” (Gorodnichenko & Roland, 2012).*

These different visions of self-affect a lot of things, for example self-knowledge, self-consistency, self-enhancement. Moreover they affect something called primary and secondary control. Primary control is defined as actions with intentions of changing the world, whereas the secondary control is defined as actions to adjust oneself to the surrounding world.

Different visions of oneself affect one’s behaviour in society. In the individualist culture, the independent self is stable and the world is malleable. Individuals will thus engage in primary control strategies to achieve their goals and wishes. In contrast, in the collectivist culture, the interdependent self is malleable whereas the world is stable. Individuals will thus tend to engage in secondary control strategies by controlling the psychological impact of reality on them instead of attempting to change reality (Gorodnichenko, Roland, 2012).

### **3.4 Welfare state**

Every state, country, district are governed in a unique way. These days we can say that most of the states have democratic regimes, but there are so much more criteria according to which we can describe any given example of a regime. Political parties among the world are promoting different political programs. Promotion of social policies has its peak always in pre-election periods.

Defining welfare state as an expression covering many different kinds of social policies according to dictionary: *“a social system in which a government is responsible for the economic and social welfare of its citizens and has policies to provide free health care, money for people without jobs” (Webster, 2017).*

Social policies may vary, but any kind of social policy should fit this definition: *“First, they aim to be beneficent - policy is directed to provide welfare for citizens. Second, they include economic as well as non-economic objectives; for example, minimum wages, minimum standards of income maintenance and so on. Thirdly, they*

involve some measure of progressive redistribution in command-over-resources from rich to poor“ (Titmuss, 1974, page 29).

Public administration, social security insurances, income redistribution, labour market rules and minimal requirements and many more aspects of welfare state can be absent or present in different levels and therefore creating many different kinds of welfare state. In following tables we can see description and typology of different kinds of welfare state.

Tab. 1 An overview of typologies of welfare states  
Source: Arts, Gelissen, 2002

<b>Liberal Regimes (USA)</b>	<b>Corporatist regimes (Germany)</b>	<b>Social-democratic (Sweden, Norway)</b>	<b>Mediterranean regimes (Spain, Portugal, Greece, Italy)</b>	<b>Radical regimes (Australia)</b>
<b>Esping Andersen (1990)</b>				
<i>Liberal</i> low level of decommodification; market differentiation of welfare	<i>Corporatist</i> moderate levels of decommodification; social benefits mainly depend on former contributions and status	<i>Social democratic</i> high level of decommodification; Universal benefits and high degree of benefit equality		
<b>Leibfried (1992)</b>				
<i>Anglo-Saxon</i> right to income transfers; welfare state as compensator of last resort and tight enforcer to work in the marketplace	<i>Bismarck</i> right to social security; welfare state as compensator of first resort and employer of last resort	<i>Scandinavian</i> right to work for everyone; universalism; welfare state as employer of first resort and compensator of last resort	<i>Latin-Rim</i> Right to work and welfare proclaimed; welfare state as a semi-institutionalised promise	

Tab. 2 An overview of typologies of welfare states – continued  
 Source: Arts, Gelissen, 2002

<i>Castles and Mitchell (1993)</i>				
<i>Liberal</i> low on social spending and no adoption of equalising instruments in social policy	<i>Conservative</i> high social expenditures, but little adoption of equalising instruments in social policy	<i>Non-right</i> hegemony high social expenditure and use of highly equalising instruments in social policy		<i>Radical</i> achievement of equality in pre-tax, pre-transfer income, but little social spending
<i>Siaroff (1994)</i>				
<i>Protestant Liberal</i> minimal family welfare, yet relatively egalitarian gender situation in labour market; family benefits are paid to the mother but are rather inadequate	<i>Advanced Christian democratic</i> no strong incentives for women to work, but strong incentives to stay at home	<i>Protestant social-democratic</i> true work-welfare choice for women; family benefits are high, paid to the mother; importance of Protestantism	<i>Late female mobilisation</i> absence of Protestantism. Family benefits are usually paid to the father; universal female suffrage is relatively new	
<i>Ferrera (1996)</i>				
<i>Anglo-Saxon</i> fairly high welfare state coverage; social assistance with a means test; mixed system of financing; highly integrated organisational framework entirely	<i>Bismarck</i> strong link between work position and social entitlements; benefits proportional to income; financing through contributions; reasonably substantial social	<i>Scandinavian</i> social protection as a civil right; universal coverage; relatively generous fixed benefits for various risks; financing mainly through tax revenues; strong	<i>Mediterranean</i> fragmented system of income guarantees linked to work position; generous benefits without articulated net of minimum social protection; health care as	

managed by a public administration	assistance benefits; insurance schemes mainly governed by unions and employers organisations	organisational integration	a right of citizenship; particularism in payments of cash benefits and financing	
<i>Bonoli (1997)</i>				
British low percentage of social expenditure financed through contributions (Beveridge); low expenditure as percentage of GDP	Continental high percentage of social expenditure financed through contributions (Bismarck); high social expenditure as percentage of GDP	Nordic low percentage of social expenditure financed through contributions (Beveridge); high social expenditure as percentage of GDP	Southern high percentage of social expenditure financed through contributions (Bismarck); low social expenditure as percentage of GDP	
<i>Korpi and Palme (1998)</i>				
<i>Basic security</i> entitlements based on citizenship; application of flat-rate benefits principle	<i>Corporatist</i> entitlements based on occupational category and labour force participation; use of the earnings-related benefit principle	<i>Encompassing</i> entitlement based on citizenship and contributions; use of flat-rate and earnings-related benefit principle		<i>Targeted</i> eligibility based on proven need; use of the minimum benefit principle

### 3.4.1 Income Redistribution

Emergence, expansion and maturation of welfare state, we may call the twentieth century as a century of a welfare state (Morel, 2012). Not only there are different types of welfare states, there are also different levels of welfare state. Some countries spend bigger portions of their budgets for social policies than others in order to benefit from it in a form of an overall growth. However some may argue that the amount of money spent for social policies is not the only and main determinant of its effectiveness. By the amount of money spent on social policies we can approximately measure a level of a certain welfare state. In following graph we can see an average percentage of GDP spend on social policies by OECD countries through the period from 2010 to 2014.

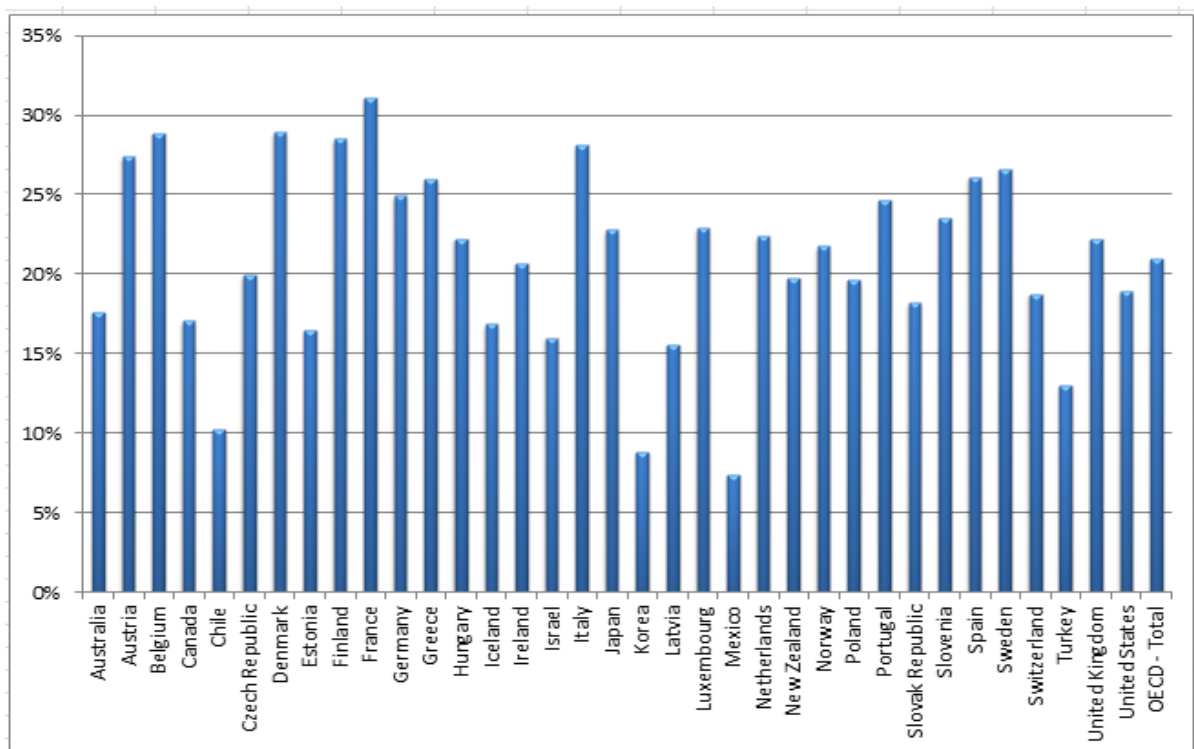


Figure. 6 Social expenditure in average percentage of gross domestic product in OECD countries in 2010-2014

Source: OECD, 2017

According to the OECD statistics we can divide states in three groups based on their generosity represented by social expenditure expressed as a percentage of gross domestic product. States with the lowest percentage of GDP on social spending are for example: Chile, Korea and Mexico. More than 15 % of GDP spend on social expenditures countries like Australia, Canada, Czech Republic, Estonia, Iceland, Israel, Latvia and Switzerland. The most generous group of countries according to the percentage of GDP spent on social expenditures consist of states like Austria,

Belgium, Italy, Portugal, Spain and Sweden. France spent more than 30% of GDP on social expenditures through the period from 2010 to 2014.

Income redistribution in welfare states may occur in various forms, for example:

- Progressive income tax
- Negative income tax
- Transfer payment in form of food stamps, vouchers, subsidies
- Social security
  - Health care insurance
  - Unemployment insurance
- Land reform, inheritance taxes, direct wealth taxes

### **3.5 Informal institutions and demand for Income redistribution**

In order to be able to set reasonable bases for hypothesis about informal institutions forming individual's opinion about income redistribution as a component of welfare state a review on researches and up to date working papers in the area of informal institutions and welfare state preferences is conducted in following chapter.

Stegmueller et al. (2012) studied influence of religion on support of income redistribution in sixteen states of Western Europe. He assumed that religious citizens living in a society with higher number of non-religious citizens, will differ in their political preferences. He also assumed that religious citizens will oppose income redistribution by state. Moreover, he assumed that in society where are bigger differences between religious and non-religious citizens, will be very low preferences for income redistribution.

Stegmueller tested his assumptions by empirical analysis on data from European Social Survey 2002-2006 for sixteen states of Western Europe. Empirical analysis on those data confirmed his assumptions, and that religion plays an important role in forming political preferences. One of the findings was that Catholics and Protestants in sixteen states of Western Europe significantly oppose income redistribution. Important finding is also that there is much more significant difference in forming political preferences between religious and non-religious people than the difference between denominations. Existence of bigger differences in society between religious and non-religious people is causing lower support of income redistribution in general.

Due to the mixed empirical evidence regarding the economic determinants, beliefs have been at the centre of attention of research into preferences for income redistribution. Neustadt (2011) studied political preferences about income redistribution by experiment in Switzerland and their relationship towards behavioural



determinants, mainly the religious beliefs. He found out that estimated marginal willingness to pay (WTP), which represents preferences about income redistribution, is positive among those who do not belong to a religious denomination, and negative otherwise. Interesting contrast is that the higher the percentage of religious population, the higher WTP.

Another behavioural factor that Ilja Neustadt studied was opinion of individuals on what affects an economic success of a person. Those who claimed one's good luck as the main determinant of an economic success exhibit significantly higher WTP values. On the other hand those who stated effort as a main determinant of their economic success, exhibit lower WTP values.

Tabellini in his work, *Institutions and Culture* from 2008 used indicators of individual values and beliefs, such as trust and respect for others, and confidence in individual self-determination, to describe and measure culture. Using data from the World Value Survey he pointed out that culture, described by named indicators of individual values and beliefs, has a causal effect on economic development.

Regarding religion as a significant behavioural determinant, we can find another supportive proof of its causal relationship towards political preferences in work of Scheve and Stasavage from 2008. Their main argument is that religion and welfare state spending are substitute mechanisms that insure individuals against adverse life events. There are few assumptions why it is so.

The first is that adverse life events, brings not only monetary costs but also a psychological costs. Secondly, they assumed that that religiosity provides some of the same psychic benefits as does being in good health, having a job, or a sufficient retirement income. Their final assumption was that person is not very well capable of processing those costs separately. *"As a result, individuals who are religious are predicted to prefer lower levels of social insurance than will individuals who are secular"* (Scheve, Stasavage 2008).

They empirically tested their predictions using individual-level data on religiosity, individual-level data on social insurance preferences, and cross-country data on social spending outcomes. Findings from empirical analysis were very supportive of their assumptions. As a result we can say that those individuals that refer to themselves as religious prefer lower levels of social insurance. On the other hand, secular individuals prefer higher levels of social insurance.

Kouba and Pitlik (2014) studied an influence of locus of control on support for the welfare state. They conducted an empirical analysis on the data from the World Values Survey and European Values Survey on restricted sample consisting of 37 developed OECD and EU member states. To measure welfare state attitudes they used following survey questions: income equalization, state vs. private business

ownership, government vs. private responsibility to ensure that everyone is provided for and attitudes towards competition. To measure informal institutions and perceived quality of formal institutions following survey questions were used: perception of life control, confidence in administration, confidence in major companies and in addition legal quality.

Result of the empirical analysis suggests that internal locus of control seems to be an influential determinant. *“Life control is strongly negatively related to the attitudes for income equalization at high levels of statistical significance across all model specifications. Similarly, it shows a strongly negative relationship to the government intervention attitudes, where significance never drops below a 5%-level. Analysing conditional effects among people that do not believe in their ability to control their own lives, both as a highly perceived quality of public administration and a low confidence in major companies, enhance the preferences for redistribution and interventions (Kouba, Pitlik, 2014).*

Regarding preferences for government intervention as one of the characteristics of welfare state based on social trust and trust in state actors, as representatives for informal institutions we can learn from the work of Pitlik and Kouba (2015). Conducting an empirical analysis on 37 OECD and EU member states covering more than 100 000 respondents over a time period of 1990-2009 brought interesting results regarding social trust, trust in state actors and trust in private companies and their mutual relations.

As it may be anticipated by many the social trust as a representative of an informal institution is not crucial in attitude forming process. Key and crucial role in forming attitudes plays trust in companies. *“The effect of a lack of confidence in companies appears to be substantially more important for attitude formation. People who report a high level of generalized trust (to unknown other people) have stronger interventionist preferences when their confidence in state actors is high and confidence in companies is comparably low. On the other hand, general distrust is supportive of government intervention preferences only if distrusting people have a smaller confidence in private than in state actors (Pitlik, Kouba, 2015).* General social trust seems to be conditional to the general trust in companies.

Neustadt (2011), Rotter (1966), Tabellini (2008) and Gorodnichenko, Roland (2011) shows us that different visions and understandings of self are fundamental to individual's behaviour and its effect on society. Stegmüller et al. (2012), Neustadt (2011) and Scheve, Stasavage (2008) provides proof for a causal relationship of religion and political preferences.

Overall from Kouba and Pitlik (2014) and Pitlik and Kouba (2015) we can learn about causal effects of different representatives of informal institutions on attitude forming about different components of welfare state.

## 4 Material and Methods

### 4.1 Material

This paper analyses data from the last sixth wave of survey done by World Value Survey organization. The sixth wave of survey took place between 2010 until 2014 in 57 countries around the world, covering more than 80 000 respondents. Respondents come from countries all around the world, men and women in age from 16 to 98 years old, from different social groups, different education level and with different believes and opinions. In following graphs we can see basic division and statistics about respondents and their answers to questions.

Gender distribution in the dataset is almost equal, 52% of all respondents are women and 48% are men.

Respondents not only come from different states and parts of the world they also come from different social backgrounds, from the lower to the upper class.

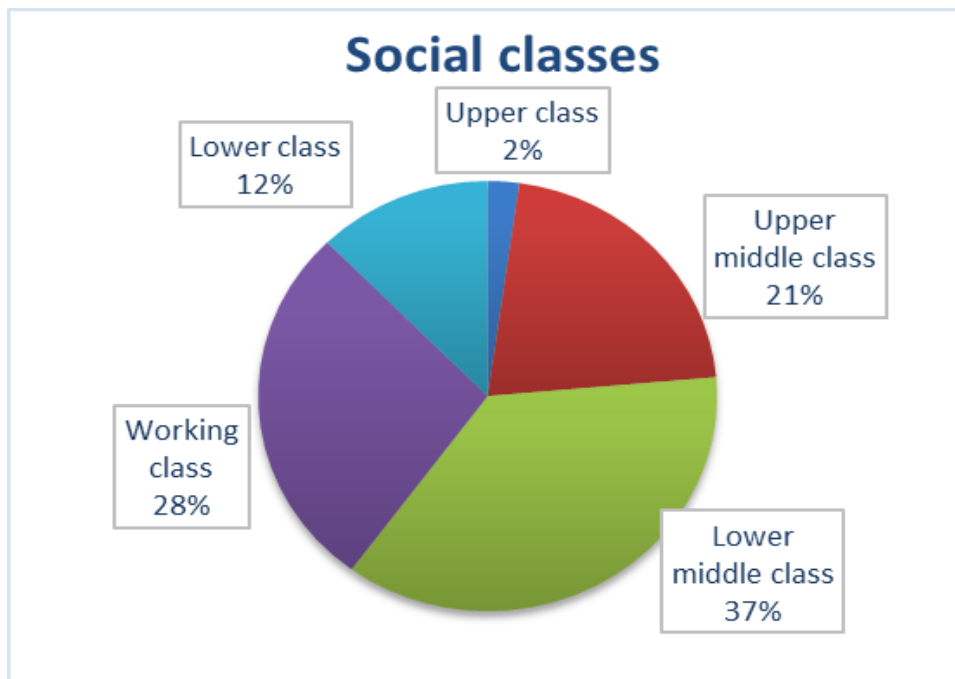


Figure. 7 Social classes distribution

Regardless of gender or age different levels of education can be found among respondents. Education levels are divided into 9 groups, starting with no formal education, continuing through incomplete or complete primary and secondary education to university education without or with a degree.

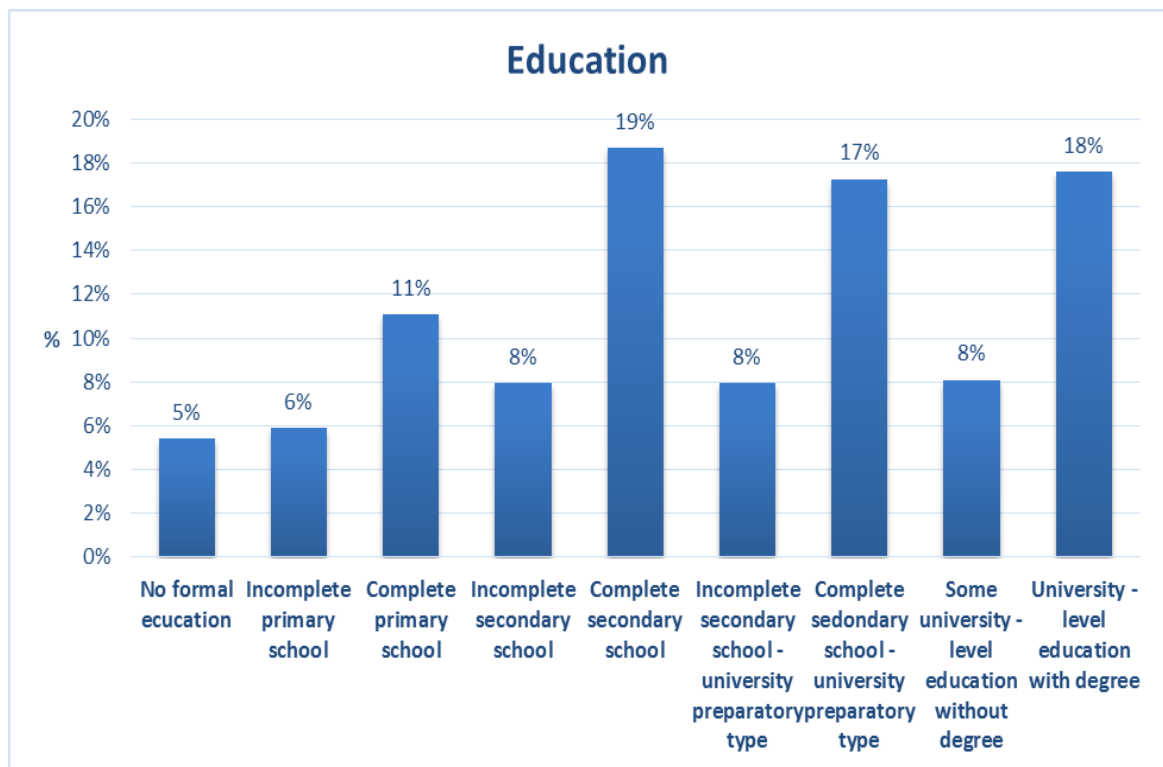


Figure. 8 Different levels of education among respondents

We can observe that only 26% of the respondents attended university, while 36% of respondents completed whether a preparatory type of secondary school or any different kind of secondary school. No formal education or incomplete primary school defines about 11% of respondents. Different level of education may and usually does relate to social background, development stage of a country and many other characteristics mostly related to the economic situation of a given respondent or a given country. About 70% of all respondents have finished or have a higher education than a secondary school.

Employment and unemployment rates relate also to the economic situation or development stage of a given country. In a given dataset we have countries like Rwanda, Botswana, Ghana compared to countries like Finland, Germany and Canada. In the given dataset of about 80 000 respondents, 54% of those respondents are employed in some kind of paid employment. The rest of 46% of respondents are unemployed. Employment is then divided into three groups, part time employment, full time employment and self-employment. Unemployment also comes in a various forms, structural, frictional, cyclical. We also have groups of people who don't work for a specific reason, they are students, retired people or mothers on maternity leave. Then there is a group of unemployed people who are searching for jobs but can't find one for different reasons.

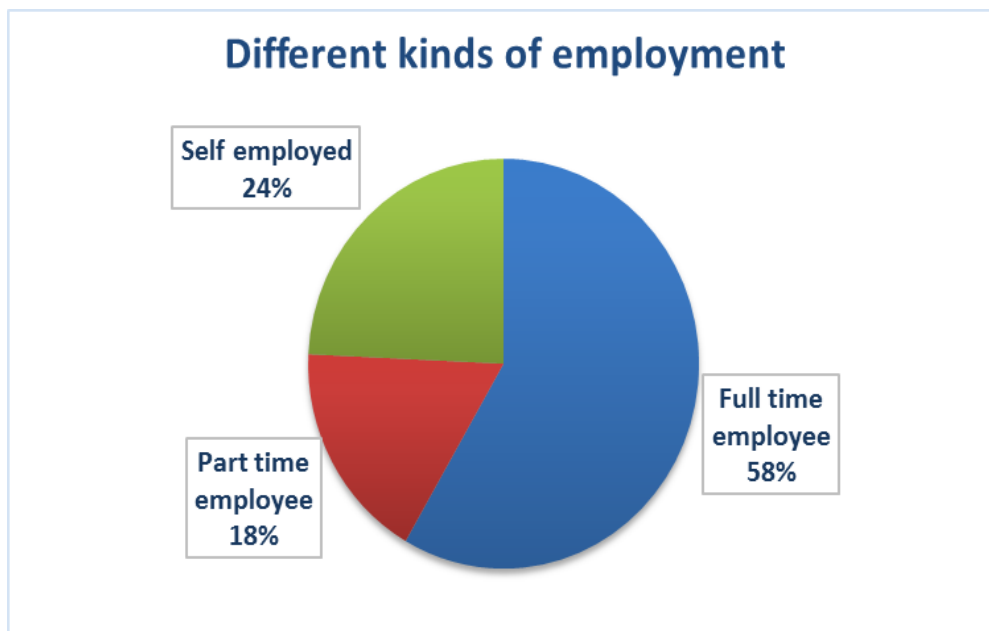


Figure. 9 Different kinds of employment among employed respondents

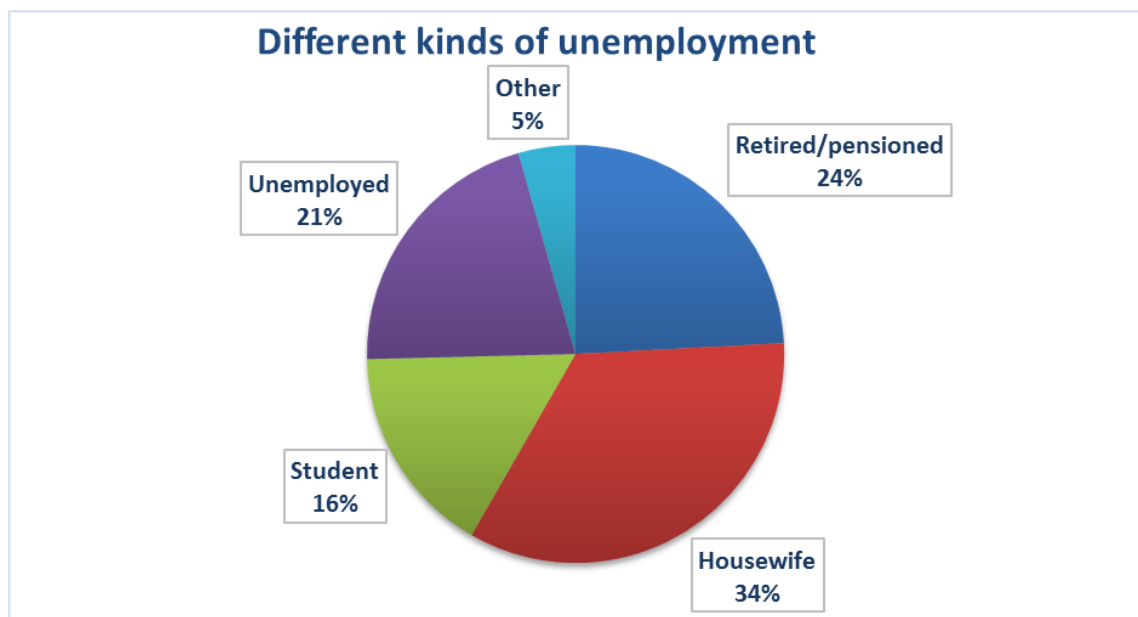


Figure. 10 Different kinds of unemployment among respondents

Out of all respondents, religious people make up almost 70 %, remaining 30 % are people who stated themselves as not a religious or atheist. More than two thirds, 67 %, out of all respondents consider religion as doing good to other people while 33 % of respondents consider religion as following religious norms and ceremonies.

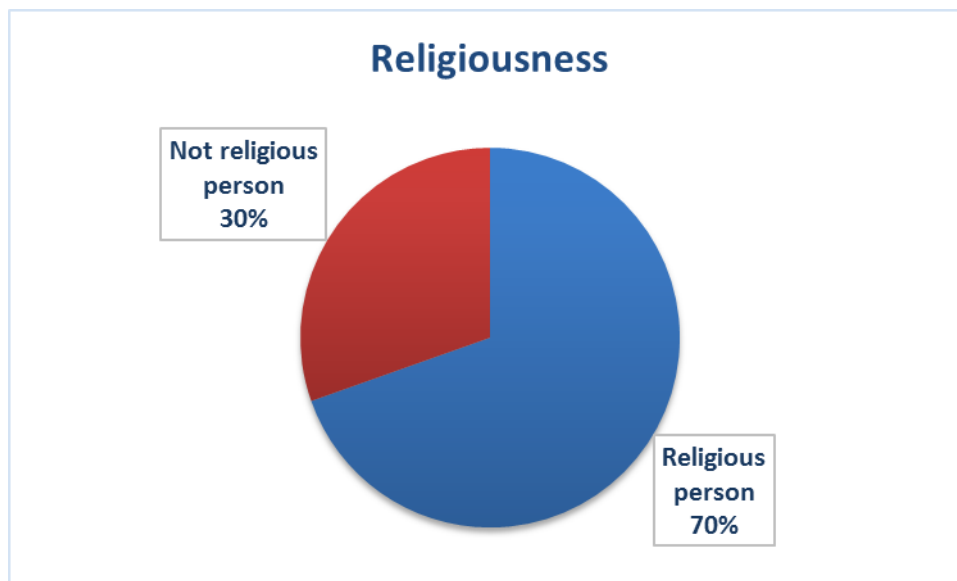


Figure. 11 Religiousness among respondents

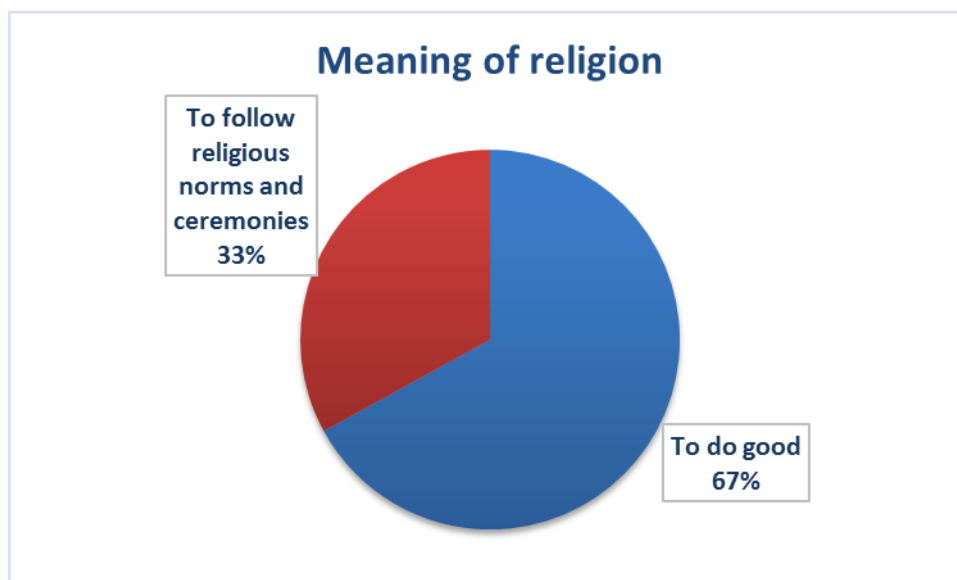


Figure. 12 Different opinions on meaning of religion among respondents

Regarding the characteristic life control, much more people stated that they have rather bigger deal of choice and control over their lives. Only 22,75 % of respondents inclined more to the opinion, that they have rather not at all or very small choice and control over their lives at all. About 77,25 % of all respondents incline to the opinion that they have choice and control over the outcome of their lives, specifically 18,21 % off all respondents claim that they have an absolute choice and control over the outcome of their lives according to their opinion.

Tab. 3 Life Control Distribution among respondents

Life Control Distribution										
1	2	3	4	5	6	7	8	9	10	total
1750	1119	2131	3218	9311	9272	12990	14881	8108	13957	76647
2,28	1,46	2,78	4,08	12,15	12,10	16,95	19,41	10,58	18,21	100%
22,75%					77,25%					100%

Preferences towards a demand for income redistribution were collected on a Likert scale with 10 levels. In order to prepare the data for future processing by multinomial logistic regression, Likert scale of 10 levels was adjusted to a Likert scale of 5 levels in following way. Aggregating preferences on level 1 and level 2 into level 1 preferences. Aggregating preferences on level 3 and 4 into level 2 preferences and so on. Preferences on level 1 are representing positive preferences towards income redistribution. As stated in the questionnaire, opinion that incomes should be made more equal. Preferences on level 5 represent rather negative preferences towards and income redistribution. As stated in the questionnaire, opinion that we need larger income differences as incentives for individual effort. About 60% of all respondents are inclining to rather negative preferences towards income redistribution. Rest of the respondents makes up two groups, 20% of all respondents have neutral preferences and the last 20% of respondents have rather positive preferences.

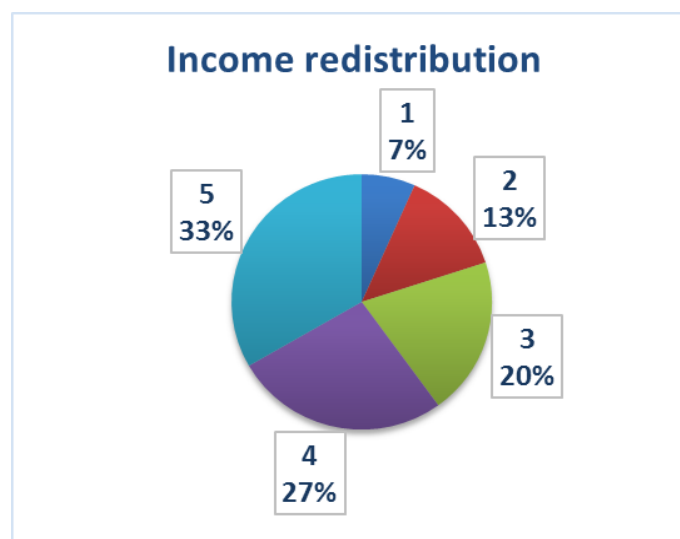


Figure. 13 Income redistribution preferences among respondents

## 4.2 Methods

In order to fully understand the topic, a literature review is conducted to explain and acquaint reader with fundamental expressions, their origin, development and current situation at first. Overview of up to date studies in area of informal institutions and demand for income redistribution is also conducted in order to establish assumptions on its basis. Continuing with description of statistical methods and listing their assumptions and assessing their applicability to the given dataset.

### 4.2.1 Multinomial logistic regression

Multinomial logistic regression is an extension of binomial logistic regression, to allow us to work with dependant variable, which has more than two categories. *“Like all linear regressions, the multinomial regression is a predictive analysis. Multinomial regression is used to describe data and to explain the relationship between one dependent nominal variable and one or more continuous-level (interval or ratio scale) independent variables”* (Statistics Solutions, 2017).

Multinomial logit regression is used to analyse the data, while as well as the dependant variable all the independent variables in the model are categorically distributed. The basic assumption in the multinomial logit model is that the log-odds of each response follow a linear model. *“The  $J-1$  multinomial logit equations contrast each of categories  $1, 2, \dots, J-1$  with category  $J$ ”*(Germán, 2016).

There are six assumptions of dataset that need to be fulfilled in order to use multinomial logistic regression in an appropriate way and get valid results.

- Assumption #1
    - Dependant variable is measured at nominal level
  - Assumption #2
    - One or more independent variables that are continuous, ordinal (Likert scales) or nominal (including dichotomous variables)
  - Assumption #3
    - Observations should be independent
    - dependent variable should have mutually exclusive and exhaustive categories
  - Assumption #4
    - No multicollinearity
  - Assumption #5
    - linear relationship between any continuous independent variables and the logit transformation of the dependent variable
  - Assumption #6
    - no outliers, high leverage values or highly influential points
- (Laerd Statistics, 2017).



*“Like binary logistic regression, multinomial logistic regression uses maximum likelihood estimation to evaluate the probability of categorical membership”*(Starkweather, 2011).

The first explanatory variable represents role of religion, whether the person is religious or not. This variable is a dummy variable with value 1, if the person is religious and value 0, when the person is atheist or not religious. The second explanatory variable represents the way people understand religion. One form of understanding religion is to follow religious norms and ceremonies. This form of understanding is represented by artificial variable with value 1. On the other side there is understanding in which religion means to do good to other people. This form of understanding is represented by artificial variable with value of 0. The third explanatory variable represents subjective opinion on “Life Control”. Some people feel they have completely free choice over their lives, while other people feel that what they do has no real effect on what happens to them. Respondents answer this question on a scale from 1 to 10, when 1 means “no choice at all” and 10 stands for “a great deal of choice”.

The dependant variable represents opinion of individuals towards income redistribution by state. Respondents were given two statements and a scale from 1 to 10. Value 1 represents an opinion that “incomes should be more equal”, while on the opposite value 10 represents an opinion that “we need larger income differences as incentives for individual effort”. Because of using multinomial logit model this variable was adjusted to a scale from 1 to 5.

When we focus our attention on coefficients, they are multinomial logit estimates for a given variable. *“Since the parameter estimates are relative to the referent group, the standard interpretation of the multinomial logit is that for a unit change in the predictor variable, the logit of outcome  $m$  relative to the referent group is expected to change by its respective parameter estimate given the variables in the model are held constant* (UCLA, 2016).

#### **4.2.2 Contingency table**

Contingency table is used as well to examine the relationship between given variables. Contingency tables are used in statistics to identify and analyse the relationship between two or more categorical variables. Contingency table is type of frequency distribution table, where two variables are shown simultaneously (Bishop et al., 1975). The question that contingency table provides answer to is whether there is a significant relationship between given variables. In order to find out following steps need to be done:

- Construct a table of observed frequencies from dataset
- Compute and construct a table of expected frequencies
  - $E_{i,j} = \frac{T_i * T_j}{T}$
  - $E_{i,j}$  – expected frequency for cell i, j
  - $T_i$  – total for the i-th row
  - $T_j$  – total for the j-th column
  - $T$  – total number of observations
  - Important assumption which has to be fulfilled, regarding expected frequencies is that at least 80% of all the computed expected frequencies have to be higher than value 5, and the 20% of all the computed expected frequencies have to be higher than value 2.
- Conduct Chi Square significance test
  - $\chi^2 = \sum \frac{(E - O)^2}{E}$
  - E – expected frequencies
  - O – observed frequencies
  - Degrees of freedom are equal to  $(r-1)(c-1)$ 
    - r – number of rows
    - c – number of columns
  - If calculated probability value of Chi Square with  $(r-1)(c-1)$  degrees of freedom is smaller than 0,05 (significance level) we can reject null hypothesis of no relationship between given variables (Gokhale et al., 1978).

#### 4.2.3 Cluster analysis

Aim of the cluster analysis is to analyse and create a group of similar objects, or objects with similar qualities based on given characteristics in a form of variables. “*The Cluster Analysis is an explorative analysis that tries to identify structures within the data. Cluster analysis is also called segmentation analysis or taxonomy analysis. More specifically, it tries to identify homogenous groups of cases, i.e., observations, participants, respondents. Cluster analysis is used to identify groups of cases if the grouping is not previously known*” (Statistics Solutions, 2017).

Important fact about cluster analysis that needs to be taken into consideration while conducting this analysis and choosing variables is the fact that: “*Cluster analysis has no mechanism for differentiating between relevant and irrelevant variables. Therefore the choice of variables included in a cluster analysis must be underpinned by conceptual considerations*” (Cornish, 2007).

Cluster analysis can be conducted in numerous ways, the basic division for those methods is to:

- Hierarchical methods
  - Agglomerative methods
    - Two most similar subjects are combined to a cluster, then two most similar clusters are combined, this is repeated until there is one cluster
      - Nearest neighbour method
        - Distance defined by the distance of the two closest neighbours
      - Average linkage method
        - Distance defined by the average distance between all pairs
      - Centroid method
        - Centroid, the mean value for each variable is calculated and the distance between centroids is used
      - Ward's method
        - Sum of squared distances within every possible cluster is calculated, combination that gives the lowest sum is chosen
  - Divisive methods
    - All subjects are part of one cluster at the beginning, the strategy reversed to that one above is applied until all the subjects are separate
- Non-hierarchical methods (Cornish, 2007).

## 5 Empirical analysis

### 5.1 Multinomial logistic regression

Multinomial logit model is used to analyse the data from almost 80 000 respondents from the last sixth World Value Survey wave. Gretl software was used to process the model. In the table below we can see an overview of assumptions which need to be fulfilled in order to receive meaningful results from multinomial logistic regression.

Tab. 4 Overview of assumptions of a multinomial logistic regression

<b>Assumptions of a multinomial logistic regression</b>		
Assumption #1	Dependant variable is measured at nominal level	fulfilled
Assumption #2	One or more independent variables that are continuous, ordinal (Likert scales) or nominal (including dichotomous variables)	fulfilled
Assumption #3	Observations should be independent, dependent variable should have mutually exclusive and exhaustive categories	fulfilled
Assumption #4	No multicollinearity	fulfilled
Assumption #5	linear relationship between any continuous independent variables and the logit transformation of the dependent variable	fulfilled
Assumption #6	no outliers, high leverage values or highly influential points	fulfilled

In the data output below we can observe multinomial logit equations contrasting each category of preferences 2, 3, 4, 5 to the base category, J=1, which stands for positive preference towards an income redistribution. Because of using multinomial logit model this variable was adjusted to a scale from 1 to 5. In the data output we can see that each of the parameters is statistically significant, that proves a causal relationship between explanatory variables and dependant variable. Based on that we can say that, individual's preferences are influenced by whether a person is religious or not, by the way person understands a religion and by subjective opinion about own life control.

Tab. 5 Multinomial Logistic regression , using observations 1-76647

<b>Multinomial Logistic regression</b>				
	<b>Coefficient</b>	<b>Std. Error</b>	<b>z</b>	<b>p-value</b>
const	0.104114	0.042948	2.4242	0.0153 **
Religiousness	-0.272203	0.025404	-10.7151	<0.0001 ***
MofReligion	0.121817	0.025667	4.7460	<0.0001 ***
LifeControl	-0.035614	0.005313	-6.7029	<0.0001 ***
const	0.186278	0.039828	4.6770	<0.0001 ***
Religiousness	-0.065111	0.023530	-2.7671	0.0057 ***
MofReligion	0.068395	0.023426	2.9197	0.0035 ***
LifeControl	-0.012016	0.004861	-2.4720	0.0134 **
const	-0.306038	0.041886	-7.3064	<0.0001 ***
Religiousness	-0.064883	0.024127	-2.6892	0.0072 ***
MofReligion	0.198736	0.023747	8.3688	<0.0001 ***
LifeControl	0.037745	0.005067	7.4486	<0.0001 ***
const	-1.454450	0.047191	-30.8206	<0.0001 ***
Religiousness	0.257571	0.026183	9.8375	<0.0001 ***
MofReligion	0.246600	0.024643	10.0069	<0.0001 ***
LifeControl	0.139255	0.005528	25.1910	<0.0001 ***
Mean dependent var	2.986301	S.D. dependent var		1.399550
Log-likelihood	-121879.5	Akaike criterion		243791.0
Schwarz criterion	243938.9	Hannan-Quinn		243836.4

**Number of cases 'correctly predicted' = 19719 (25.7%)**  
**Likelihood ratio test: Chi-square(12) = 1719.32 [0.0000]**

First equation is contrasting the second category of preferences to the first, base category of preferences which is positive preferences towards income redistribution. The coefficient for religiousness in first equation  $-0.272203$  means that, if a person is religious, value of variable religiousness is 1, the chances that his preferences will be in second category rather than in the first lowers by 27,2203 %, while holding all other variables in the model constant. In different words, the chance that individual's preferences will be in category 1, not in category 2 increases by 27,2203 % if the person is religious and other variables stay unchanged.

On the other side if we look at the equation 5, which stands for negative preferences for income redistribution, the value of coefficient for variable religiousness is 0,257571. Meaning that if a person is religious, value of the variable religiousness is 1, the chance that his preferences will be in category 5 rather than in category 1 is higher by 25,7571 % while holding all other variables in the model constant. This suggests that there is polarization of religious people into two groups, those with positive preferences and those with negative preferences towards income redistribution.

Coefficient for the way people understand religion, says that if a person considers religion as following religious norms and ceremonies, value of this variable is 1, the chance that his preferences will be in second category rather than in the first category increases by 12,1817 %. When we look at all four equations, we see that when person sees a religion as following norms and ceremonies, so the value of the variable is 1, it's increasing the chance that his preferences will remain in that given category while holding all other variables in the model constant. Considering the value of coefficient for variable meaning of religion, especially in equation 4 and 5, it suggests rather negative preferences for income redistribution when a person understands a religion as following religious norms and ceremonies.

Regarding the variable life control, we can observe a markedly high value of coefficient in the equation 5. Meaning that the higher is stated value of this variable, on scale from 1 to 10, the higher chance for preferences to stay in category 5 rather than in category one. This suggests that individuals who stated that they have a great deal of choice over their lives, have rather negative preferences towards an income redistribution.

There is still more than 74 % of variability of the data unexplained. Considering that the model is using just three characteristics to describe individual's preferences about income redistribution, which in reality is influenced by many more factors, suggests a strong causal relationship between these variables. The number of cases correctly predicted by this model is 25,7%.

Fitness of the model is determined by whether are the assumptions fulfilled or not. Multicollinearity of explanatory variables is tested by variance inflation factors, VIF factors were calculated using Gretl software. Value of VIF factor for explanatory variables above 10 may indicate a problem with multicollinearity in the model. In the table below we can see calculated values of variance inflation factors for religiousness, meaning of religion and life control variables.

Tab. 6 Variance inflation factors for multinomial logistic regression

<b>Variance Inflation Factors</b>	
Religiousness	1.003
Meaning of Religion	1.004
Life Control	1.002

According to the values of variance inflation factors for each explanatory variable we can assume that problem with multicollinearity is not present in this case.

## 5.2 Multinomial logistic regression with control variables

Multinomial logistic regression conducted in a previous chapter, explained 25,7 % of variability and correctly predicted approximately one in four cases, respondents. In order to control and explain as much variability as possible among respondents and their attitude forming process we include control variables in the multinomial logistic regression.

Income redistribution as a dependant variable representing one characteristic of welfare state is being explained in the model by seven explanatory variables. Besides religiousness, different opinion on meaning of religion, life control variable, other four control variables are used. Social class, different levels of education, employment status and balance of savings describing social background of respondents are included in the multinomial logistic regression in order to explain as much variability as possible among respondents.

Before conducting a multinomial logistic regression with control variables, it is needed to check if the assumptions for using this model are fulfilled in order to receive meaningful results. In the table below we can see an overview of all the assumptions that needs to be fulfilled.

Tab. 7 Overview of assumptions of a multinomial logistic regression with control variables

<b>Assumptions of a multinomial logistic regression with control variables</b>		
Assumption #1	Dependant variable is measured at nominal level	fulfilled
Assumption #2	One or more independent variables that are continuous, ordinal (Likert scales) or nominal (including dichotomous variables)	fulfilled
Assumption #3	Observations should be independent , dependent variable should have mutually exclusive and exhaustive categories	fulfilled
Assumption #4	No multicollinearity	fulfilled
Assumption #5	linear relationship between any continuous independent variables and the logit transformation of the dependent variable	fulfilled
Assumption #6	no outliers, high leverage values or highly influential points	fulfilled

In the data output below we can observe multinomial logit equations contrasting each category of preferences 2, 3, 4, 5 to the base category,  $J=1$ , which stands for positive preference towards an income redistribution. Gretl software is used to process the model. Multinomial logistic regression was computed from 70 580 respondents, that is less by 6 067 respondents. Original dataset after broaden by four more variables needed to be cleared from respondents, who did not answer all seven questions used as variables in this model. Variable representing social class has five levels, level one stand for upper class while level five stand for lower class. Variable education has nine levels, level one representing no formal education to level nine representing university-level education with a degree. Employment variable has two values, value 1 representing any kind of paid employment and value 0 representing any kind of unemployment. Last explanatory variable representing the balance of savings for each respondent has four levels, level one representing the state when respondent is able to save money, level two represents the state when respondent "just gets by", level three representing the state when respondent is spending his/hers savings and level four when respondent is in a state that he/she spent savings and needed to borrow money.



Tab. 8 Multinomial logistic regression, using observations 1-70580, with control variables

	<i>Coefficient</i>	<i>Std. Error</i>	<i>z</i>	<i>p-value</i>
const	0.203274	0.0809778	2.5102	0.0121 **
Religiousness	-0.243846	0.0269017	-9.0643	<0.0001 ***
MofReligion	-0.045595	0.0178027	-2.5611	0.0104 **
Life Control	-0.051849	0.0056181	-9.2291	<0.0001 ***
Social Class	-0.039926	0.0133691	-2.9865	0.0028 ***
Education	0.047747	0.0055461	8.6091	<0.0001 ***
Employment	0.115382	0.0254368	4.5360	<0.0001 ***
Savings	-0.070386	0.0136973	-5.1387	<0.0001 ***
const	0.502208	0.0738586	6.7996	<0.0001 ***
Religiousness	-0.014501	0.0249912	-0.5803	0.5617
MofReligion	-0.095034	0.0163960	-5.7962	<0.0001 ***
Life Control	-0.031266	0.0051465	-6.0751	<0.0001 ***
Social Class	-0.082367	0.0121284	-6.7913	<0.0001 ***
Education	0.046959	0.0050275	9.3404	<0.0001 ***
Employment	0.128440	0.0231044	5.5591	<0.0001 ***
Savings	-0.107257	0.0125017	-8.5793	<0.0001 ***
const	0.114031	0.0761993	1.4965	0.1345
Religiousness	-0.012612	0.0255155	-0.4943	0.6211
MofReligion	-0.096729	0.0168774	-5.7313	<0.0001 ***
Life Control	0.010095	0.0053450	1.8886	0.0589 *
Social Class	-0.122877	0.0124312	-9.8846	<0.0001 ***
Education	0.074815	0.0051659	14.4825	<0.0001 ***
Employment	0.050574	0.0236093	2.1421	0.0322 **
Savings	-0.097297	0.0127783	-7.6142	<0.0001 ***
const	-1.022060	0.0812141	-12.5848	<0.0001 ***
Religiousness	0.269976	0.0276158	9.7762	<0.0001 ***
MofReligion	-0.142524	0.0178824	-7.9701	<0.0001 ***
Life Control	0.119180	0.0058000	20.5482	<0.0001 ***
Social Class	-0.115660	0.0129208	-8.9515	<0.0001 ***
Education	0.032995	0.0053495	6.1679	<0.0001 ***
Employment	0.070360	0.0245997	2.8602	0.0042 ***
Savings	-0.003332	0.0131313	-0.2538	0.7997
Mean dependent var	2.981496	S.D. dependent var	1.400572	
Log-likelihood	-111900.8	Akaike criterion	223865.6	
Schwarz criterion	224158.9	Hannan-Quinn	223956.1	

**Number of cases 'correctly predicted' = 18495 (26.2%)**  
**Likelihood ratio test: Chi-square (28) = 2212.81 [0.0000]**

We can observe that almost every coefficient in every equation is statistically significant which indicates a causal relationship between these given explanatory variables and dependant variable.

Coefficients of religiousness in first equation representing second level of preferences and in fourth equation representing fifth level of preferences are again suggesting polarization of religious people into two groups. Coefficient for religiousness in first equation can be interpreted in a following way. If a person is religious, value of variable religiousness is 1, then there is higher probability, specifically by 24,3846 %, that this individual will have rather positive preferences in category one than in category two, while holding all other variables in the model constant. Coefficient for religiousness in fourth equation which represents preferences on level 5 can be interpreted as follows. If an individual is religious, value of variable religiousness is 1, there is higher probability, specifically by 26,9976 % that this individual will remain in preference category 5, which represents rather negative attitude towards income redistribution, while holding all other variables in the model constant. Religious people are polarizing into two groups, those who are supportive of income redistribution, and those religious people who oppose income redistribution by state.

Regarding variable representing different opinions on what is the basic meaning of religion, results have changed compared to those in multinomial logistic regression without control variables and computed from original dataset. Dataset from which this model is computed is smaller by 6 067 respondents compared to the original one. These 6 067 respondents, seems to be crucial for determining the direction of preferences. Coefficients in multinomial logistic regression with control variables suggest that those individuals who understand religion as following religious norms and ceremonies tend to have rather positive preferences towards income redistribution. Coefficients in all four equations are negative, which means that if value of variable is 1, understanding religion as following norms and ceremonies, there is higher probability that individual's preferences will be rather in category one, which stands for positive preferences towards income redistribution, than any other category.

Significantly high value of coefficient of variable life control in fourth equation representing category 5 preferences is suggesting that the higher is the stated value of life control the higher is probability that the preferences of an individual will be rather negative.

Coefficients of variable social class are negative and statistically significant in every equation. It suggests that the higher is the value of the social class variable, meaning the lower is the social class the higher is the probability of individual's preferences to be rather positive.

Regarding the variable education, results are suggesting that the higher is completed education the higher is the probability for individual's preferences to be rather negative. All coefficients in all four equations are positive, which means that the higher is the value of the variable, representing higher level of education, the higher is the chance that individual's preferences will rather remain in that given category than switch to the base category representing positive preferences.

Coefficients of variable employment suggest a logical connection between the state of employment or unemployment and attitude towards income redistribution. All coefficients in each equation are positive, which means that if value of variable is one, means any kind of paid employment, the preferences of an individual are more likely to stay in that given category than switch to category one, representing positive preferences for income redistribution. On the other hand, if the value of variable is zero, means any kind of unemployment, individual's preferences are more likely to be at category one. Coefficients are pointing on a logical connection that people who are unemployed from any reason are more likely to support income redistribution by state.

Savings are important characteristic of a social background of an individual. Savings are affecting attitude towards income redistribution in a very similar way as state of employment does, both can be used to provide for one self. Coefficients in every equation are negative, which means that the higher is the value of variable savings, meaning the worse is the situation with savings of an individual, the higher is the probability that the preferences of an individual will be rather in category one than any other category.

Despite including four more control variables into the multinomial logistic regression, the variability explained by the model raised just by 0,5 % to 26,2 %. However, this result may be looked at as a success when we consider that the model is trying to explain a human decision making process, attitude forming just by seven variables. In reality, forming opinions, attitudes and decision making process are influenced by many more factors that can't be even fully listed yet.

Fitness of the model is determined by whether are the assumptions fulfilled or not. Multicollinearity of explanatory variables is tested by variance inflation factors, VIF factors were calculated using Gretl software. Value of VIF factor for explanatory variables above 10 may indicate a problem with multicollinearity in the model. In the table below we can see calculated values of variance inflation factors for religiousness, meaning of religion, life control, social class, education, employment and savings variables.

Tab. 9 Variance inflation factor for multinomial logistic regression with control variables

<b>Variance inflation factors</b>	
Religiousness	1.025
Meaning of Religion	1.014
Life Control	1.023
Social Class	1.159
Education	1.151
Employment	1.040
Savings	1.067

According to the values of variance inflation factors for each explanatory variable we can assume that problem with multicollinearity is not present in this model.

### 5.3 Contingency table

Model suggests polarization of religious people into two groups, those who support income redistribution and those who oppose it. Contingency table is used to try to identify the source of this polarization. Contingency table below provides a basic picture of the interrelation between the variable religiousness and the variable meaning of religion.

Tab. 10 Observed frequencies for Religiousness and Meaning of religion

<b>Religiousness</b>	<b>Meaning of religion</b>		<b>total</b>
	<b>0</b>	<b>1</b>	
<b>0</b>	21,41 %	9,00 %	30,41 %
<b>1</b>	45,60 %	23,99 %	69,59 %
<b>total</b>	67,01 %	32,99 %	100,00 %

Tab. 11 Expected frequencies for Religiousness and Meaning of religion

<b>Religiousness</b>	<b>Meaning of religion</b>		<b>total</b>
	<b>0</b>	<b>1</b>	
<b>0</b>	20,38 %	10,03 %	30,41 %
<b>1</b>	46,63 %	22,96 %	69,59 %
<b>total</b>	67,01 %	32,99 %	100,00 %

The probability value for a Chi Square of 174,677 with one degree of freedom is equal to  $7,04318e-040$ . Therefore, the null hypothesis of no relationship between religiousness and different meaning of religion can be rejected at a significance level of 0,05.

In table 3 we can see expected frequencies, if the data were divided like this it would mean a state of ideal independence between religion and meaning of religion. However, observed frequencies from the dataset vary from expected frequencies, which confirm a relationship between these two variables. Comparing those two tables, we can observe that in reality there are more people who are not religious and understand religion as doing good to other people than expected. Also, the observed number of religious people who understand religion as following religious norms and ceremonies is higher than expected. Number of people who identify themselves into these two groups is higher at the expense of lower number of people who identify themselves into remaining groups.

This contingency table provides us with an information that the number of religious people who consider the basic meaning of religion to do good to other people is almost two times higher than the number of religious people who consider religion as following religious norms and ceremonies. This division of religious people by different opinions on what is the basic meaning of religion may be the source of the explanation for the polarization.

## 5.4 Cluster analysis

In order to analyse the relationship between income redistribution, religiousness, different understandings of religion and life control variables more thoroughly cluster analysis is conducted on the dataset. The dataset consists from almost 80 000 respondents and four questions for each respondent. Currently available software and computers at disposal were not able to compute and provide results from such vast dataset. Therefore another, smaller dataset was created by random selection. To maintain the world wide diversity of respondents the smaller dataset was created by taking every tenth respondent from the original dataset, where all the respondents were in order by their countries origin. To create another, smaller dataset by random selection and then to process the cluster analysis Matlab software was used.

Cluster analysis connects individual respondents into groups based on their similarities, than continuing to connect those groups based on their similarities until there are few several groups. To analyse the dataset created by random selection, three methods of hierarchical clustering were used. All of used methods, ward's method, centroid method and median method are based on and calculated with Euclidean distance.

In the following three figures we can observe different results of clustering based on the used method. Based on the assessment of following figures the best method is chosen and then the individual clusters, groups are described.

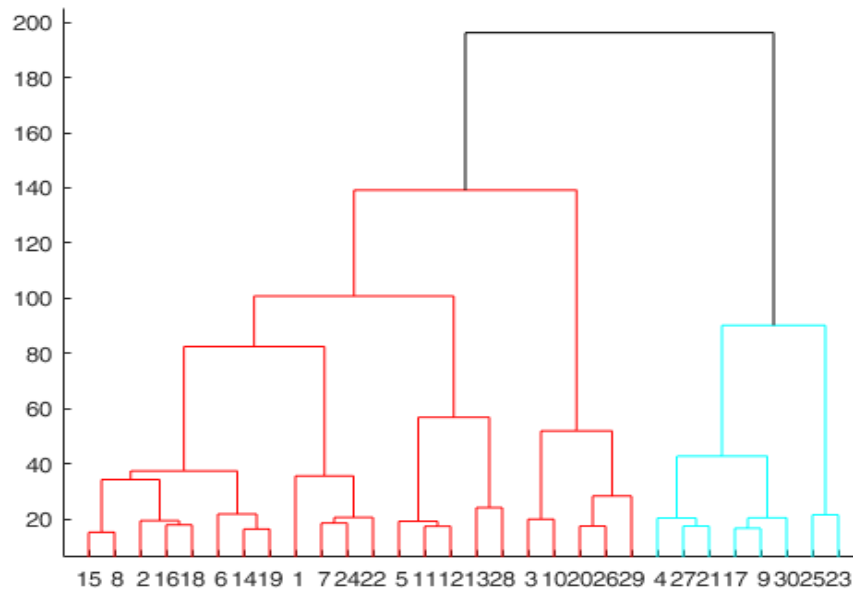


Figure. 14 Clusters calculated by using ward's method based on Euclidean distance

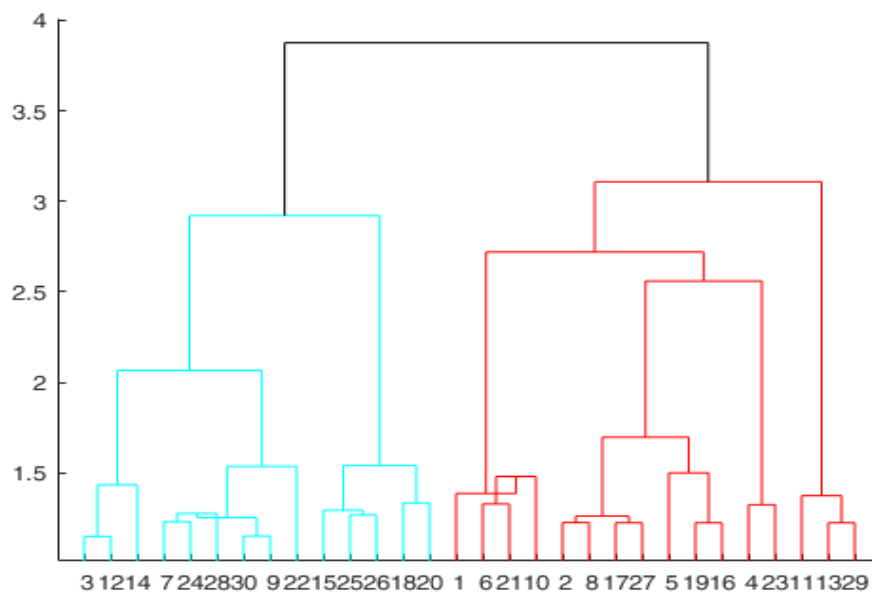


Figure. 15 Clusters calculated by using median method based on Euclidean distance

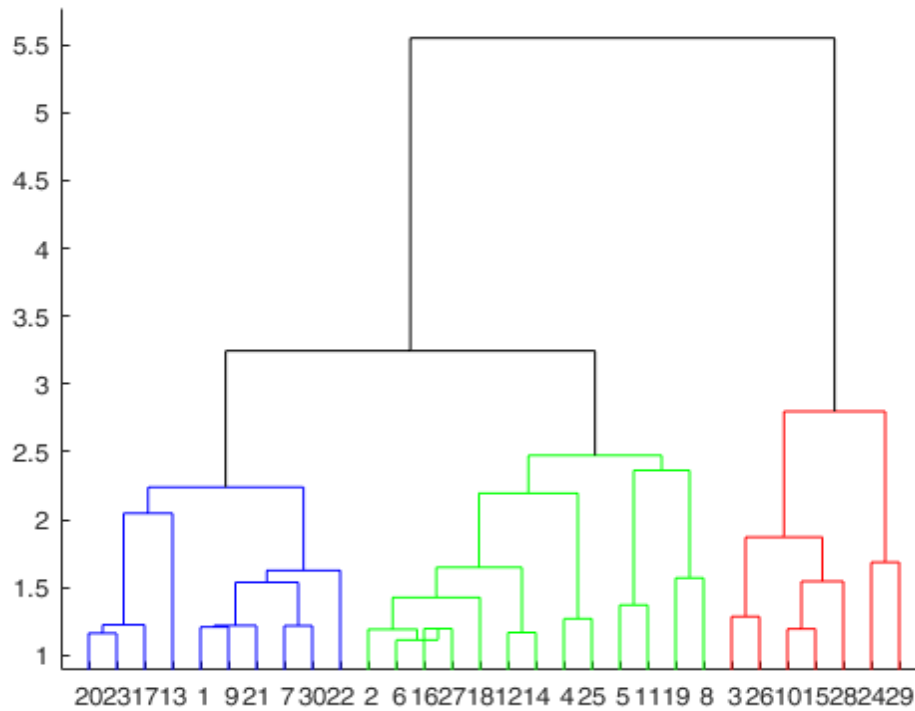


Figure. 16 Clusters calculated by using centroid method based on Euclidean distance

After assessment of these three figures as outcomes of using different methods of clustering, centroid method seems to be the best fit for the given dataset creating three complex clusters. Numbers on the horizontal axis are the numbers of the groups created by clustering, in smaller dataset those numbers would directly stand for respondents, but in the given vast dataset they are numbers for the groups created based on similarities between respondents. Numbers on the vertical axis are describing the centroid distance between the clusters.

In order to analyse and interpret the results of cluster analysis, ten respondents are randomly chosen from each dataset, creating a table with their answers to assess and compare similarities in their answers. In the table below we can see randomly chosen 10 respondents as representatives of a first cluster. We can observe that respondents from this random selection have rather negative preferences towards income redistribution. They are mostly religious respondents with different opinions on what is the basic meaning of religion and their subjective opinion about their own control over their lives is in the middle of the Likert scale between no control and absolute control. Negative preferences towards income redistribution characterize this group of respondents.

Tab. 12 Random sample of respondents from first cluster

<b>Income Redistribution preferences</b>	<b>Religiousness</b>	<b>Meaning of religion</b>	<b>Life Control</b>
4	1	0	6
4	1	1	4
4	1	1	4
5	1	1	4
5	1	0	5
4	1	0	4
4	1	0	5
4	1	0	5
4	1	0	4
4	1	0	6

In the table below we can see randomly chosen 10 respondents as representatives of a second cluster. We can observe that respondents from this random selection have rather negative preferences towards income redistribution. They are not religious and not. Religious or not, all of them from random sample think that basic meaning of religion is to do good to other people. High perception of life control is what differentiates the respondents from second cluster from respondents from the first cluster. Mostly negative preferences and majority of religious people is what is similar for respondents from the first and the second cluster. Markedly high perception of life control in this random sample may be the explanation for the negative preferences towards income redistribution.

Tab. 13 Random sample of respondents from second cluster

<b>Income Redistribution preferences</b>	<b>Religiousness</b>	<b>Meaning of religion</b>	<b>Life Control</b>
4	1	0	9
5	1	0	6
4	1	0	8
5	1	0	10
4	1	0	9
4	1	0	9
4	1	0	9
4	0	0	9
5	0	0	8
4	0	0	7



In the table below, we can observe randomly chosen 10 respondents as representatives of a third cluster. Unlike the previous two clusters we can observe positive preferences towards income redistribution by those randomly chosen respondents. All of the randomly chosen respondents are religious and their opinion about the basic meaning of religion is that religion means to do good to other people. Those respondents show also a very low perception of life control. Understanding a religion as doing good to other people in combination with significantly low perception of life control may be factors determining the positive direction of preferences towards income redistribution by state.

Tab. 14 Random sample of respondents from third cluster

<b>Income Redistribution preferences</b>	<b>Religiousness</b>	<b>Meaning of religion</b>	<b>Life Control</b>
2	1	0	1
3	1	0	2
2	1	0	1
3	1	0	1
3	1	0	2
2	1	0	2
2	1	0	2
2	1	0	1
1	1	0	1
2	1	0	2

Result of the cluster analysis are suggesting a polarization of religious people into those with positive preferences and those with negative preferences as well as the results from multinomial logistic regression.

Respondents from the first and second cluster have in common negative preferences. They differ slightly in opinions about the basic meaning of religion. Respondents from the first cluster have rather intermediate perception of life control, whereas the respondents from the second cluster can be described by significantly high value of perception of life control. Understanding a religion as doing good to other people with combination of markedly low perception of life control seem to be causing respondents to have a positive preferences towards income redistribution by state. Respondents from the second and third cluster are mostly religious individuals who understand a religion as doing good to other people. Respondents from second cluster have rather negative preferences and respondents from third cluster have rather positive preferences towards income redistribution. The difference between these two groups is significant spread of perception of life control. Respondents from second cluster claim markedly high perception of life

control and tend to have rather negative preferences. Respondents from the third cluster stated very low perception of life control and they tend to have rather positive preferences.

Based on assessment of similarities and differences of respondents in each cluster variable life control seems to be the most important determinant with biggest influence on preferences towards income redistribution. The subjective opinion of an individual on what is the main determinant of his or hers economic success, whether it is individual effort or some higher force or luck seems to be a crucial point in attitude forming process.

## 6 Discussion

Main assumption of this paper was that informal institutions as determinants of individual's attitude play an important role in process of forming political preferences of an individual. Empirical analysis on the data from the sixth wave of World Value Survey confirms that assumption. Significance of the multinomial logit model, the contingency table as well as cluster analysis confirm a relationship between religiousness, different understandings of religion, life control and income redistribution.

Partial assumption, based on previous studies and researches was that religious people have negative preferences towards income redistribution. Results from multinomial logit model as well as results from cluster analysis suggests, not only that religious people tend to have negative preferences but also that religious people have also positive preferences towards an income redistribution. Previous studies claim rather negative preferences of religious people towards income redistribution by state, even though these studies were conducted for a specific geographic region and for this empirical analysis collected data from countries all over the world were used.

Another partial assumption was that including a way people understand a religion may bring different results. Findings and results from multinomial logit regression suggest that understanding religion as following religious norms and ceremonies leads to rather negative preferences for income redistribution. This characteristic, which consists from two different opinions on basic meaning of religion may be the source of explanation for the polarization of religious people.

Theory behind this is based on confirmed arguments presented in work of Scheve and Stasavage from 2008. They argued that adverse life events, brings not only monetary costs but also a psychological costs, that religiosity provides some of the same psychic benefits as does being in good health, having a job, or a sufficient retirement income and finally that person is not very well capable of processing those costs separately (Scheve, Stasavage, 2008). Based on these arguments it means that religion and income redistribution are substitute mechanisms that insure individuals against adverse life events. Individuals who consider religion as following religious norms and ceremonies, may find certainty and feeling of stability in history of religion and existence of religious norms and ceremonies. For that reason they may have higher psychological benefits from religion as a substitute insurance mechanism than those who think of religion as doing good to other people, therefore they have negative preferences towards income redistribution. On the other hand, religious people who understand religion as doing good to other people, and they behave according to it, but have no certainty if they can expect such behaviour from others, may have lower psychological benefits from religion

as a substitute insurance mechanism and therefore they have positive preferences towards income redistribution.

The last assumption was that individuals, who stated that they have a great deal of choice and control over their lives, will have negative preferences towards income redistribution by state. On the other hand those, who stated that they have no choice at all and no control over their lives, will show positive preferences towards income redistribution by state. Results provided by multinomial logit model confirm this assumption. The higher is the perception of life control stated by individual the higher is the chance that the preferences will be negative. Results from cluster analysis also confirmed mentioned relationship and direction of preferences in consideration with different levels of perception of life control. Moreover, the results from the cluster analysis may provide us with another explanation for the polarization of religious individuals into those with positive and those with negative preferences. Based on the findings from the cluster analysis conducted on a dataset it seems that the level of perception of life control is the most influential and key determinant for attitude forming process. Different levels of perception of life control may be the cause for polarization of religious individuals. Therefore suggesting that perception of life control is not determined by religiousness or influenced by different denominations of religion.

The inspiration for another possible explanation for the polarization comes from a work of Gorodnichenko and Roland (2010) where they researched the causal relationship between culture and institutions. By conducting an empirical analysis they came to the conclusion that: "*culture appears to have a causal effect on institutions and is itself influenced by institutions, although the latter direction of causation is less clear cut than the former*" (Gorodnichenko, Roland, 2010). Based on that finding, culture, whether it is individualistic or collectivistic is forming institutions, institutions such as religion. Finding the explanation to such polarization may require looking in a broader range than just religions itself, seeking understanding from the roots of its creation. The explanation for the polarization may come from looking and further investigating what culture, individualistic or collectivistic was forming and is influencing given religion. However, to research this topic such deeply is not an objective of this diploma thesis and is therefore left for future research, just providing the possible basis for explanation of polarization of religious individuals.

Empirical analysis was made on data from respondents all over the world, this may have weakened the relationship between given variables, as these interrelations depend on people, their behaviour, opinions and culture and these can be very regionally specific. Collecting the data may have caused loss of some informative value, which could be significant in the specific geographic region.

Findings of the empirical analysis conducted on a worldwide values survey data could serve as an explanation or basis for assessing policy effectiveness. Based on the findings we may be able to assess or reveal why political programs supporting social policies would not ever be effective in some geographical regions, countries, states with some specifications like high percentage of religious population with high perception of life control. By using the findings of this diploma thesis in connection with findings of other studies conducted in the same area we could assess the fitness of political programs and see whether it is proper to assert social types of policies. By categorizing a country through religiousness, as well as the way people understand a religion, perceive life control in combined with other factors describing state macroeconomic situation, we could explain why introducing and trying to maintain welfare state policy is pointless and ineffective.

## 7 Conclusion

This diploma thesis studied data collected from World Value Survey with an intention of proving a relationship between informal institutions and individual's preferences for income redistribution. Influence of informal institutions represented by, religiousness, way of understanding a religion and life control on preferences towards income redistribution was confirmed by using multinomial logistic regression, contingency table and cluster analysis providing following results.

Most of the recent studies that were geographically defined claimed rather negative preferences of religious people towards income redistribution by the state. Results from multinomial logistic regression as well as results from cluster analysis suggest a polarization of religious people into those with positive preferences and those with negative preferences towards income redistribution. Possible explanations for this polarization may be the different understanding of religion. When individuals understand religion as following religious norms and ceremonies they tend to have rather negative preferences for income redistribution. When individuals understand religion as doing good to other people they tend to have rather positive preferences towards income redistribution. Other possible explanations for the polarization of religious people may have roots in different levels of perception of life control as well as the nature of culture in which an individual lives. Individualistic or collectivistic cultures influence and form institutions, institutions such as religion. Therefore the nature and cultural background of the specific denomination may be the answer for the polarization. Results provided by multinomial logit model confirmed the assumption regarding life control. The higher is the perception of life control stated by individual the higher is the chance that the preferences will be negative. Results from cluster analysis also confirmed mentioned relationship and direction of preferences in consideration with different levels of perception of life control.

Results from the cluster analysis suggest also a polarization of religious individuals into those with positive preferences and those with negative preferences. Not only they suggest polarization, based on those results we can name the variable life control representing individualism as the main and key determinant in decision making process and attitude forming.

Findings of this thesis provide us with a possible basis for assessing effectiveness of social policy and public spending as part of economic policy. Results provided by empirical analysis opened up and pointed a direction for future research possibilities regarding informal institutions and welfare state, to examine more deeply the reasons for the polarization of religious people.

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# **Annexes**

## **A World Values Survey Official Questionnaire**

## 2010 -2012 WORLD VALUES SURVEY

V1. Survey  
wave number:  
*the constant,*  
6 (for Wave  
six).

V2. Country  
code (*write in 3-*  
*digit code from*  
*list below*):

8	Albania	108	Burundi	348	Hungary	508	Mozambique	760	Syria
12	Algeria	112	Belarus	352	Iceland	512	Oman	762	Tajikistan
16	American Samoa	116	Cambodia	356	India	516	Namibia	764	Thailand
20	Andorra	120	Cameroon	360	Indonesia	524	Nepal	768	Togo
24	Angola	124	Canada	364	Iran	528	Netherlands	780	Trinidad
28	Antigua and Barbuda	144	Sri Lanka	368	Iraq	554	New Zealand	784	United Arab Emirates
31	Azerbaijan	148	Chad	372	Ireland	558	Nicaragua	788	Tunisia
32	Argentina	152	Chile	376	Israel	562	Niger	792	Turkey
36	Australia	156	China	380	Italy	566	Nigeria	795	Turkmenistan
40	Austria	158	Taiwan	384	Côte d'Ivoire	578	Norway	800	Uganda
50	Bangladesh	170	Colombia	388	Jamaica	586	Pakistan	804	Ukraine
51	Armenia	180	Dem. Rep. of Congo	392	Japan	591	Panama	807	Macedonia
52	Barbados	184	Cook Islands	398	Kazakhstan	598	Papua New Guinea	818	Egypt
56	Belgium	188	Costa Rica	400	Jordan	600	Paraguay	826	Great Britain
60	Bermuda	191	Croatia	404	Kenya	604	Peru	834	Tanzania
64	Bhutan	192	Cuba	408	North Korea	608	Philippines	840	United States
68	Bolivia	196	Cyprus	410	South Korea	616	Poland	850	U.S. Virgin Islands
70	Bosnia	203	Czech Republic	414	Kuwait	620	Portugal	854	Burkina Faso
72	Botswana	208	Denmark	417	Kyrgyzstan	624	Guinea-Bissau	858	Uruguay
76	Brazil	214	Dominican Republic	418	Laos	626	Timor-Leste	860	Uzbekistan
84	Belize	218	Ecuador	422	Lebanon	630	Puerto Rico	862	Venezuela
100	Bulgaria	222	El Salvador	426	Lesotho	634	Qatar	887	Yemen
854	Burkina Faso	226	Equatorial Guinea	428	Latvia	642	Romania	891	Serbia and Montenegro
104	Myanmar	231	Ethiopia	430	Liberia	643	Russia	894	Zambia
		232	Eritrea	434	Libya	646	Rwanda	900	West Germany
		233	Estonia	438	Liechtenstein	682	Saudi Arabia	901	East Germany
		246	Finland	440	Lithuania	686	Senegal	902	Tambov
		250	France	442	Luxembourg	690	Seychelles	903	Moscow
		268	Georgia	450	Madagascar	694	Sierra Leone	904	Basque Country
		270	Gambia	454	Malawi	702	Singapore	906	Andalusia
		275	Palestine	458	Malaysia	703	Slovakia	907	Galicia
		276	Germany	466	Mali	704	Viet Nam	909	North Ireland
		288	Ghana	470	Malta	705	Slovenia	910	Valencia
		292	Gibraltar	474	Martinique	706	Somalia	911	Serbia
		300	Greece	478	Mauritania	710	South Africa	912	Montenegro
		320	Guatemala	480	Mauritius	716	Zimbabwe	913	SrpSka Republic
		324	Guinea	484	Mexico	724	Spain		
		328	Guyana	492	Monaco	736	Sudan		
		332	Haiti	496	Mongolia	740	Suriname		
		340	Honduras	498	Moldova	752	Sweden		
		344	Hong Kong	504	Morocco	756	Switzerland		

V3. Interview number (*write in 4-digit number identifying each respondent*): \_\_\_\_\_



(Show Card C)

V23. All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are “completely dissatisfied” and 10 means you are “completely satisfied” where would you put your satisfaction with your life as a whole? (Code one number):

Completely dissatisfied	Completely satisfied
1    2    3    4    5    6    7    8    9    10	

V24. Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (Code one answer):

- 1 Most people can be trusted.
- 2 Need to be very careful.

Now I am going to read off a list of voluntary organizations. For each organization, could you tell me whether you are an active member, an inactive member or not a member of that type of organization? (Read out and code one answer for each organization):

	Active member	Inactive member	Don't belong
V25. Church or religious organization	2	1	0
V26. Sport or recreational organization	2	1	0
V27. Art, music or educational organization	2	1	0
V28. Labor Union	2	1	0
V29. Political party	2	1	0
V30. Environmental organization	2	1	0
V31. Professional association	2	1	0
V32. Humanitarian or charitable organization	2	1	0
V33. Consumer organization	2	1	0
V34. Self-help group, mutual aid group	2	1	0
V35. Other organization	2	1	0

V35a. Approximately how many total hours a month were you active in voluntary organizations?

- 0 None
- 1 1-2 hours
- 2 3-5 hours
- 3 5-10 hours
- 4 More than 10 hours a month

(Show Card E)

On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Code an answer for each group):

	Mentioned	Not mentioned
V36. Drug addicts	1	2
V37. People of a different race	1	2
V38. People who have AIDS	1	2
V39. Immigrants/foreign workers	1	2
V40. Homosexuals	1	2
V41. People of a different religion	1	2
V42. Heavy drinkers	1	2
V43. Unmarried couples living together	1	2
V44. People who speak a different language	1	2

Do you agree, disagree or neither agree nor disagree with the following statements? (Read out and code one answer for each statement):

	Agree	Neither	Disagree
V45. When jobs are scarce, men should have more right to a job than women.	1	2	3



V46.	When jobs are scarce, employers should give priority to people of this country over immigrants.	1	2	3
V47.	If a woman earns more money than her husband, it's almost certain to cause problems	1	2	3
V48	Having a job is the best way for a woman to be an independent person.	1	2	3

For each of the following statements I read out, can you tell me how strongly you agree or disagree with each. Do you strongly agree, agree, disagree, or strongly disagree? (*Read out and code one answer for each statement*):

	Strongly agree	Agree	Disagree	Strongly disagree	
V49.	One of my main goals in life has been to make my parents proud	1	2	3	4
V50.	When a mother works for pay, the children suffer.	1	2	3	4
V51.	On the whole, men make better political leaders than women do.	1	2	3	4
V52.	A university education is more important for a boy than for a girl.	1	2	3	4
V53.	On the whole, men make better business executives than women do.	1	2	3	4
V54	Being a housewife is just as fulfilling as working for pay	1	2	3	4

V55. Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means "no choice at all" and 10 means "a great deal of choice" to indicate how much freedom of choice and control you feel you have over the way your life turns out (*code one number*):

No choice at all										A great deal of choice
1	2	3	4	5	6	7	8	9	10	

(*Show Card F*)

V56. Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair? Please show your response on this card, where 1 means that "people would try to take advantage of you," and 10 means that "people would try to be fair" (*code one number*):

People would try to take advantage of you										People would try to be fair
1	2	3	4	5	6	7	8	9	10	

(*Show Card G*)

V57. Are you currently (*read out and code one answer only*):

- 1 Married
- 2 Living together as married
- 3 Divorced
- 4 Separated
- 5 Widowed
- 6 Single

V58. Have you had any children? (*Code 0 if no, and respective number if yes*):

- 0 No children
- 1 One child
- 2 Two children
- 3 Three children
- 4 Four children
- 5 Five children

- 6 Six children
- 7 Seven children
- 8 Eight or more children

(Show Card H)

V59. How satisfied are you with the financial situation of your household? Please use this card again to help with your answer (*code one number*):

Completely dissatisfied	Completely satisfied
1    2    3    4    5    6    7    8    9    10	

(Show Card I)

V60. People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important? (*Code one answer only under "first choice"*):

V61. And which would be the next most important? (*Code one answer only under "second choice"*)

	V60	V61
	First choice	Second choice
A high level of economic growth	1	1
Making sure this country has strong defense forces	2	2
Seeing that people have more say about how things are done at their jobs and in their communities	3	3
Trying to make our cities and countryside more beautiful	4	4

(Show Card J)

V62. If you had to choose, which one of the things on this card would you say is most important? (*Code one answer only under "first choice"*):

V63. And which would be the next most important? (*Code one answer only under "second choice"*):

	V62	V63
	First choice	Second choice
Maintaining order in the nation	1	1
Giving people more say in important government decisions	2	2
Fighting rising prices	3	3
Protecting freedom of speech	4	4

(Show Card K)

V64. Here is another list. In your opinion, which one of these is most important? (*Code one answer only under "first choice"*):

V65. And what would be the next most important? (*Code one answer only under "second choice"*):

	V64	V65
	First choice	Second choice
A stable economy	1	1
Progress toward a less impersonal and more humane society	2	2
Progress toward a society in which Ideas count more than money	3	3
The fight against crime	4	4

V66. Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country? (*Code one answer*):

- 1 Yes
- 2 No

I'm going to read out a list of various changes in our way of life that might take place in the near future. Please tell me for each one, if it were to happen, whether you think it would be a good thing, a bad thing, or don't you mind? (*Code one answer for each*):

	Good	Don't mind	Bad
V67. Less importance placed on work in our lives	1	2	3
V68. More emphasis on the development of technology	1	2	3
V69. Greater respect for authority	1	2	3

(Show Card L)

Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you? (Code one answer for each description):

	Very much like me	Like me	Some- what like me	A little like me	Not like me	Not at all like me
V70. It is important to this person to think up new ideas and be creative; to do things one's own way.	1	2	3	4	5	6
V71. It is important to this person to be rich; to have a lot of money and expensive things.	1	2	3	4	5	6
V72. Living in secure surroundings is important to this person; to avoid anything that might be dangerous.	1	2	3	4	5	6
V73. It is important to this person to have a good time; to "spoil" oneself.	1	2	3	4	5	6
V74. It is important to this person to do something for the good of society.	1	2	3	4	5	6
V74B. It is important for this person to help the people nearby; to care for their well-being	1	2	3	4	5	6
V75. Being very successful is important to this person; to have people recognize one's achievements.	1	2	3	4	5	6
V76. Adventure and taking risks are important to this person; to have an exciting life.	1	2	3	4	5	6
V77. It is important to this person to always behave properly; to avoid doing anything people would say is wrong.	1	2	3	4	5	6
V78. Looking after the environment is important to this person; to care for nature and save life resources.	1	2	3	4	5	6
V79. Tradition is important to this person; to follow the customs handed down by one's religion or family.	1	2	3	4	5	6

V80. I'm going to read out some problems. Please indicate which of the following problems you consider the most serious one for the world as a whole?

(Interviewer: read out alternatives and mark only ONE)

People living in poverty and need	1
Discrimination against girls and women	2
Poor sanitation and infectious diseases	3
Inadequate education	4
Environmental pollution	5

V81. Here are two statements people sometimes make when discussing the environment and economic growth. Which of them comes closer to your own point of view? (Read out and code one answer):

- 1 Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs.
- 2 Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent.
- 3 Other answer (code if volunteered only!).

During the past two years have you...

V82. Given money to an ecological organization?

- 1. Yes
- 2. No

V83. Participated in a demonstration for some environmental cause?

- 1. Yes
- 2. No

V84. How interested would you say you are in politics? Are you (*read out and code one answer*):

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not at all interested

(*Show Card M*)

Now I'd like you to look at this card. I'm going to read out some forms of political action that people can take, and I'd like you to tell me, for each one, whether you have done any of these things, whether you might do it or would never under any circumstances do it (*read out and code one answer for each action*):

	Have done	Might do	Would never do
V85. Signing a petition	1	2	3
V86. Joining in boycotts	1	2	3
V87. Attending peaceful demonstrations	1	2	3
V88. Joining strikes	1	2	3
V89. Any other act of protest?	1	2	3

**INTERVIEWER: ASK V90 – V94 ONLY TO THOSE WHO SAID THEY “HAVE DONE” THE GIVEN ACTIVITY**

Tell me for each of these activities how often you have done it in the last year! (*Read out and code one answer for each action*):

	Not at all	Once	Twice	Three times	More than three times
V90. Signing a petition	1	2	3	4	5
V91. Joining in boycotts	1	2	3	4	5
V92. Attending peaceful demonstrations	1	2	3	4	5
V93. Joining strikes	1	2	3	4	5
V94. Any other act of protest?	1	2	3	4	5

(*Show Card P*)

V95. In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking? (*Code one number*):

- Left Right
- 1    2    3    4    5    6    7    8    9    10

(*Show Card Q*)

Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the

statement on the right; and if your views fall somewhere in between, you can choose any number in between. (*Code one number for each issue*):

V96. Incomes should be made more equal	1	2	3	4	5	6	7	8	9	10	We need larger income differences as incentives for individual effort
V97. Private ownership of business and industry should be increased	1	2	3	4	5	6	7	8	9	10	Government ownership of business and industry should be increased
V98. Government should take more responsibility to ensure that everyone is provided for	1	2	3	4	5	6	7	8	9	10	People should take more responsibility to provide for themselves
V99. Competition is good. It stimulates people to work hard and develop new ideas	1	2	3	4	5	6	7	8	9	10	Competition is harmful. It brings out the worst in people
V100. In the long run, hard work usually brings a better life	1	2	3	4	5	6	7	8	9	10	Hard work doesn't generally bring success—it's more a matter of luck and connections
V101. People can only get rich at the expense of others	1	2	3	4	5	6	7	8	9	10	Wealth can grow so there's enough for everyone

I'd like to ask you how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much or not at all? (*Read out and code one answer for each*):

	Trust completely	Trust somewhat	Do not trust very much	Do not trust at all
V102. Your family	1	2	3	4
V103. Your neighborhood	1	2	3	4
V104. People you know personally	1	2	3	4
V105. People you meet for the first time	1	2	3	4
V106. People of another religion	1	2	3	4
V107. People of another nationality	1	2	3	4

I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (*Read out and code one answer for each*):

	A great deal	Quite a lot	Not very much	None at all
V108. The churches	1	2	3	4
V109. The armed forces	1	2	3	4
V110. The press	1	2	3	4
V111. Television	1	2	3	4
V112. Labor unions	1	2	3	4
V113. The police	1	2	3	4
V114. The courts	1	2	3	4

V115.	The government (in your nation's capital)	1	2	3	4
V116.	Political parties	1	2	3	4
V117.	Parliament	1	2	3	4
V118.	The Civil service	1	2	3	4
V119.	Universities	1	2	3	4
V120.	Major Companies	1	2	3	4
V121.	Banks	1	2	3	4
V122.	Environmental organizations	1	2	3	4
V123.	Women's organizations	1	2	3	4
V124.	Charitable or humanitarian organizations	1	2	3	4
V125.	The [European Union]**	1	2	3	4
V126.	The United Nations	1	2	3	4

\* [Substitute "religious organizations" in non-Christian countries; "the Church" in Catholic countries]

\*\* [Substitute appropriate regional organization outside Europe (e.g., in North America, NAFTA)]

I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country? (Read out and code one answer for each):

	Very good	Fairly good	Fairly bad	Very bad
V127. Having a strong leader who does not have to bother with parliament and elections	1	2	3	4
V128. Having experts, not government, make decisions according to what they think is best for the country	1	2	3	4
V129. Having the army rule	1	2	3	4
V130. Having a democratic political system	1	2	3	4

(Show Card T)

Many things are desirable, but not all of them are essential characteristics of democracy. Please tell me for each of the following things how essential you think it is as a characteristic of democracy. Use this scale where 1 means "not at all an essential characteristic of democracy" and 10 means it definitely is "an essential characteristic of democracy" (read out and code one answer for each):

	Not an essential characteristic of democracy					An essential characteristic of democracy				
V131. Governments tax the rich and subsidize the poor.	1	2	3	4	5	6	7	8	9	10
V132. Religious authorities ultimately interpret the laws.	1	2	3	4	5	6	7	8	9	10
V133. People choose their leaders in free elections.	1	2	3	4	5	6	7	8	9	10
V134. People receive state aid for unemployment.	1	2	3	4	5	6	7	8	9	10
V135. The army takes over when government is incompetent.	1	2	3	4	5	6	7	8	9	10
V136. Civil rights protect people from state oppression.	1	2	3	4	5	6	7	8	9	10
V137. The state makes people's incomes equal.	1	2	3	4	5	6	7	8	9	10
V138. People obey their rulers.	1	2	3	4	5	6	7	8	9	10
V139. Women have the same rights as men.	1	2	3	4	5	6	7	8	9	10

(Show Card U)

V140. How important is it for you to live in a country that is governed democratically? On this scale where 1 means it is "not at all important" and 10 means "absolutely important" what position would you choose? (Code one number):

Not at all important									Absolutely important
1	2	3	4	5	6	7	8	9	10

(Show Card V)

V141. And how democratically is this country being governed today? Again using a scale from 1 to 10, where 1 means that it is “not at all democratic” and 10 means that it is “completely democratic,” what position would you choose? (Code one number):

Not at all democratic								Completely democratic	
1	2	3	4	5	6	7	8	9	10

V142. How much respect is there for individual human rights nowadays in this country? Do you feel there is (read out and code one answer):

- 1 A great deal of respect for individual human rights
- 2 Fairly much respect
- 3 Not much respect
- 4 No respect at all

V143. Now let’s turn to another topic. How often, if at all, do you think about the meaning and purpose of life? (Read out and code one answer!)

- 1 Often
- 2 Sometimes
- 3 Rarely
- 4 Never

V144. Do you belong to a religion or religious denomination? If yes, which one? (Code answer due to list below. Code 0, if respondent answers to have no denomination!)

No: do not belong to a denomination	0
Yes: Roman Catholic	1
Protestant	2
Orthodox (Russian/Greek/etc.)	3
Jew	4
Muslim	5
Hindu	6
Buddhist	7
Other (write in): _____	8

**(NOTE: If your own society does not fit into this coding system, please devise an alternative, following this as closely as possible; for example, in Islamic countries, ask about Sunni, Shia, etc. Send a list of the categories used here along with your data.)**

(Show Card X)

V145. Apart from weddings and funerals, about how often do you attend religious services these days? (Code one answer):

- 1 More than once a week
- 2 Once a week
- 3 Once a month
- 4 Only on special holy days
- 5 Once a year
- 6 Less often
- 7 Never, practically never

(Show Card X2)

V146. Apart from weddings and funerals, about how often do you pray? (Code one answer):

- 1 Several times a day
- 2 Once a day
- 3 Several times each week
- 4 Only when attending religious services





		Extremely <b>low</b> position in society						Extremely <b>high</b> position in society				(Don't know)
V157	...people in their 20's?	1	2	3	4	5	6	7	8	9	10	-1
V158	...people in their 40's?	1	2	3	4	5	6	7	8	9	10	-1
V159	...people over 70?	1	2	3	4	5	6	7	8	9	10	-1

**NOTE : IN COUNTRIES WHERE THERE ARE VERY FEW PEOPLE OVER 70, THIS QUESTION CAN BE CHANGED TO READ « Over 60. » In fieldwork report, specify which form is used.**

*(Show Card AC)*

V160. Please tell me how acceptable or unacceptable you think most people in [country] would find it if a suitably qualified 30 year old was appointed as their boss?

Use this card where 1 means they would find it completely unacceptable and 10 means completely acceptable.

Completely unacceptable					Completely acceptable				
1	2	3	4	5	6	7	8	9	10

*(Show Card AD)*

Now think about those aged over 70\*. Using the same card please tell me how likely it is that most people in [country] view those over 70...**READ OUT...**

		Not at all likely to be viewed that way			Very likely to be viewed that way		(Don't know)
V161	...as friendly?	0	1	2	3	4	-1
V162	...as competent?	0	1	2	3	4	-1
V163	...with respect?	0	1	2	3	4	-1

Now think about those between the ages of 18 to 29. Using the same card please tell me how likely it is that most people in [country] view those between the ages of 18 to 29...**READ OUT...**

		Not at all likely to be viewed that way			Very likely to be viewed that way		(Don't know)
V163a	... as civil?	0	1	2	3	4	-1
V163b	... as competent?	0	1	2	3	4	-1
V163c	... with respect?	0	1	2	3	4	-1

**\* NOTE : IN COUNTRIES WHERE THERE ARE VERY FEW PEOPLE OVER 70, THIS QUESTION CAN BE CHANGED TO READ « Over 60. » In fieldwork report, specify which form is used.**

*(Show Card AE)*

V 164. Please tell me how acceptable or unacceptable you think most people in [country] would find it if a suitably qualified 70\* year old was appointed as their boss?

Use this card where 1 means they would find it completely unacceptable and 10 means completely acceptable.

Completely unacceptable					Completely acceptable					DK = -1
1	2	3	4	5	6	7	8	9	10	

**\* NOTE : IN COUNTRIES WHERE THERE ARE VERY FEW PEOPLE OVER 70, THIS QUESTION CAN BE CHANGED TO READ « Over 60. » In fieldwork report, specify which form is used.**

Now could you tell me whether you agree, agree strongly, disagree or disagree strongly with each of the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree
V165. Older people are not respected much these days	1	2	3	4
V166. Older people get more than their fair share from the government	1	2	3	4
V167. Older people are a burden on society.	1	2	3	4
V168. Companies that employ young people perform better than those that employ people of different ages.	1	2	3	4
V169. Old people have too much political influence.	1	2	3	4

I see myself as someone who...	Disagree strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree Strongly	Don't know
V160A ...is reserved	1	2	3	4	5	9
V160B ...is generally trusting	1	2	3	4	5	9
V160C ...tends to be lazy	1	2	3	4	5	9
V160D ...is relaxed, handles stress well	1	2	3	4	5	9
V160E ...has few artistic interests	1	2	3	4	5	9
V160F ...is outgoing, sociable	1	2	3	4	5	9
V160G ...tends to find fault with others	1	2	3	4	5	9
V160H ...does a thorough job	1	2	3	4	5	9
V160I ...gets nervous easily	1	2	3	4	5	9
V160J ...has an active imagination	1	2	3	4	5	9

V170. Could you tell me how secure do you feel these days in your neighborhood ?

Very secure	1
Quite secure	2
Not very secure	3
Not at all secure	4
DK/NA	-1

How frequently do the following things occur in your neighborhood?

	Very frequently	Quite frequently	Not frequently	Not at all frequently	DK/NA
V171. Robberies	1	2	3	4	-1
V172. Alcohol consumption in the streets	1	2	3	4	-1
V173. Police or military interfere with people's private life	1	2	3	4	-1
V174. Racist behavior	1	2	3	4	-1
V175. Drug sale in streets	1	2	3	4	-1

Which of the following things have you done for reasons of security? (MULTIPLE RESPONSE)

	Yes	No
V176. Didn't carry much money	1	2
V177. Preferred not to go out at night	1	2
V178. Carried a knife, gun or other weapon	1	2

V179. Have you been the victim of a crime during the past year?

V180. And what about your immediate family--has someone in your family been the victim of a crime during the last year ?

	V179. Respondent	V180. Family
Yes	1	1
No	2	2
DK/NA	-1	-1

To what degree are you worried about the following situations?

	Very much	A good deal	Not much	Not at all	DK/NA
V181. Losing my job or not finding a job	1	2	3	4	-1
V182. Not being able to give my children a good education	1	2	3	4	-1
V183. A war involving my country	1	2	3	4	-1
V184. A terrorist attack	1	2	3	4	-1
V185. A civil war	1	2	3	4	-1
V186. Government wire-tapping or reading my mail or email	1	2	3	4	-1

V187. Do you agree or disagree with the following statement:

“Under some conditions, war is necessary to obtain justice.”

1. Agree
2. Disagree

In the last 12 month, how often have you or your family

	Often	Sometimes	Rarely	Never	DK/NA
V188. Gone without enough food to eat	1	2	3	4	-1
V189. Felt unsafe from crime in your home	1	2	3	4	-1
V190. Gone without medicine or medical treatment that you needed	1	2	3	4	-1
V191. Gone without a cash income	1	2	3	4	-1

Now, I would like to read some statements and ask how much you agree or disagree with each of these statements. For these questions, a 1 means that you “completely disagree” and a 10 means that you “completely agree.” (Code one number for each statement):

V192. Science and technology are making our lives healthier, easier, and more comfortable.

Completely disagree Completely agree  
 1 2 3 4 5 6 7 8 9 10

V193. Because of science and technology, there will be more opportunities for the next generation.

Completely disagree Completely agree  
 1 2 3 4 5 6 7 8 9 10

V194. We depend too much on science and not enough on faith.

Completely disagree Completely agree  
 1 2 3 4 5 6 7 8 9 10

V195. One of the bad effects of science is that it breaks down people’s ideas of right and wrong.

Completely disagree Completely agree  
 1 2 3 4 5 6 7 8 9 10

V196. It is not important for me to know about science in my daily life.

Completely disagree Completely agree

1 2 3 4 5 6 7 8 9 10

V 197. All things considered, would you say that the world is better off, or worse off, because of science and technology? Please tell me which comes closest to your view on this scale: 1 means that “the world is a lot worse off,” and 10 means that “the world is a lot better off.” (Code one number):

A lot worse off  
1 2 3 4 5 6 7 8 9 10  
A lot better off

(Show Card AA)

Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. (Read out and code one answer for each statement):

		Never justifiable							Always justifiable		
		1	2	3	4	5	6	7	8	9	10
V198.	Claiming government benefits to which you are not entitled	1	2	3	4	5	6	7	8	9	10
V199.	Avoiding a fare on public transport	1	2	3	4	5	6	7	8	9	10
V200.	Stealing property	1	2	3	4	5	6	7	8	9	10
V201.	Cheating on taxes if you have a chance	1	2	3	4	5	6	7	8	9	10
V202.	Someone accepting a bribe in the course of their duties	1	2	3	4	5	6	7	8	9	10
V203.	Homosexuality	1	2	3	4	5	6	7	8	9	10
V203A	Prostitution	1	2	3	4	5	6	7	8	9	10
V204.	Abortion	1	2	3	4	5	6	7	8	9	10
V205.	Divorce	1	2	3	4	5	6	7	8	9	10
V206.	Sex before marriage	1	2	3	4	5	6	7	8	9	10
V207.	Suicide	1	2	3	4	5	6	7	8	9	10
V207A.	Euthanasia	1	2	3	4	5	6	7	8	9	10
V208	For a man to beat his wife	1	2	3	4	5	6	7	8	9	10
V209	Parents beating children	1	2	3	4	5	6	7	8	9	10
V210	Violence against other people	1	2	3	4	5	6	7	8	9	10

V211. How proud are you to be [French]\*? (Read out and code one answer):

- 1 Very proud
- 2 Quite proud
- 3 Not very proud
- 4 Not at all proud
- 5 I am not [French]\* (do not read out! Code only if volunteered!)

\* [Substitute your own nationality for “French”]

(Show Card AF)

People have different views about themselves and how they relate to the world. Using this card, would you tell me how strongly you agree or disagree with each of the following statements about how you see yourself? (Read out and code one answer for each statement):

	Strongly agree	Agree	Disagree	Strongly disagree
V212. I see myself as a world citizen.	1	2	3	4
V213. I see myself as part of my local community.	1	2	3	4
V214. I see myself as part of the [French]* nation.	1	2	3	4
V215. I see myself as part of the [European Union]**	1	2	3	4
V216. I see myself as an autonomous individual.	1	2	3	4

\* [Substitute your country’s nationality for “French”]

\*\* [Substitute appropriate regional organization for “European Union”]

People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never (*read out and code one answer for each*):

	Daily	Weekly	Monthly	Less than monthly	Never
V217. Daily newspaper	1	2	3	4	5
V218. Printed magazines	1	2	3	4	5
V219. TV news	1	2	3	4	5
V220. Radio news	1	2	3	4	5
V221. Mobile phone	1	2	3	4	5
V222. Email	1	2	3	4	5
V223. Internet	1	2	3	4	5
V224. Talk with friends or colleagues	1	2	3	4	5

V225. How often, if ever, do you use a personal computer? (*Read out and code one answer*):

- 1 Never
- 2 Occasionally
- 3 Frequently
- 4 Don't know what a computer is (*do not read out, code only if volunteered!*)

When elections take place, do you vote always, usually or never? Please tell me separately for each of the following levels (*Read out and code one answer for each item*):

	Always	Usually	Never
V226. Local level	1	2	3
V227. National level	1	2	3

(*SHOW CARD A1*)

V228. If there were a national election tomorrow, for which party on this list would you vote? Just call out the number on this card. If DON'T KNOW: Which party appeals to you most?

1. Party 1
2. Party 2
3. Party 3
4. etc.

[use two-column code to cover all major parties in given society; use "01," "02," for first parties]

***In your view, how often do the following things occur in this country's elections?***

	Very often	Fairly often	Not often	Not at all often	DK/NA
V228A. Votes are counted fairly	1	2	3	4	-1
V228B. Opposition candidates are prevented from running	1	2	3	4	-1
V228C. TV news favors the governing party	1	2	3	4	-1
V228D. Voters are bribed	1	2	3	4	-1
V228E. Journalists provide fair coverage of elections	1	2	3	4	-1
V228F. Election officials are fair	1	2	3	4	-1

V228G. Rich people buy elections	1	2	3	4	-1
V228H. Voters are threatened with violence at the polls	1	2	3	4	-1
V228I. Voters are offered a genuine choice in the elections	1	2	3	4	-1

V228 J Some people think that having honest elections makes a lot of difference in their lives; other people think that it doesn't matter much.

Do you think that honest elections play an important role in deciding whether you and your family are able to make a good living? (IF NO code as 4)

IF YES: How important would you say this is—very important, fairly important, not very important or not at all important?

1. Very important
2. Rather important
3. Not very important
4. Not at all important

V 228 K Do you think that honest elections are an important factor in whether or not this country develops economically? (IF NO code as 4)

IF YES: How important would you say this is—very important, fairly important, not very important or not at all important?

1. Very important
2. Rather important
3. Not very important
4. Not at all important

V228L. If you had your preference, in which of the following would you prefer to work?

1. To work as an employee in the public sector
2. To work as an employee in the private sector
3. To be self-employed

**V228M** Using a scale where 1 means none or low corruption and 10 means high corruption...

How widespread do you think that corruption is within businesses in **your country**?

None/low corruption High corruption

1 2 3 4 5 6 7 8 9 10

**V228N** Using a scale where 1 means none or low corruption and 10 means high corruption...

How widespread do you think that corruption is within the government in **your country**?

None/low corruption High corruption

1 2 3 4 5 6 7 8 9 10

**V228O** Using a scale where 1 means lower and 10 means higher...

Do you think the level of corruption in this country is lower, about the same, or higher than it was five years ago?

Level is lower Level is higher

1 2 3 4 5 6 7 8 9 10

V228P Do you think the government of your country is doing enough to fight corruption, or not?

1. Yes, doing enough
2. Trying, but could do more
3. No, not doing enough

V228Q Sometimes people have to give a bribe or a present in order to solve their problems or receive services which are supposed to be for free. In the last 12 months, how often were you personally faced with this kind of situation?

1. Never/Very rarely
2. Rarely
3. Often
4. Very often

V228R In general, do you have a favorable or an unfavorable opinion of those who start and run their own businesses?

1. Very favorable
2. Fairly favorable
3. Fairly unfavorable
4. Very unfavorable
- 1. (DK)
- 2. (Refused)

V228S In the city or area where you live, are you satisfied or dissatisfied with the quality of the following?

	Very satisfied	Fairly satisfied	Fairly Dissatisfied	Very dissatisfied	DK	Refused
V228s1. The public transportation systems	1	2	3	4	-1	-2
V228s2. The roads and highways	1	2	3	4	-1	-2
V228s3. The schools	1	2	3	4	-1	-2
V228s4. The quality of air	1	2	3	4	-1	-2
V228s5. The quality of water	1	2	3	4	-1	-2
V228s6. The quality of health care	1	2	3	4	-1	-2
V228s7. The quality of housing	1	2	3	4	-1	-2
V228s8. The beauty or physical setting	1	2	3	4	-1	-2

V229. Are you employed now or not? If yes, about how many hours a week? If more than one job: only for the main job (*code one answer*):

Yes, has paid employment:

- Full time employee (30 hours a week or more) 1
- Part time employee (less than 30 hours a week) 2
- Self employed 3

No, no paid employment:

- Retired/pensioned 4
- Housewife not otherwise employed 5
- Student 6
- Unemployed 7
- Other (*write in*): \_\_\_\_\_ 8

V229A Have you actively looked for work in the past four weeks:

1. Yes
2. No

V229B If you received an employment opportunity in the last four weeks or during the next month, would you be interested and able to start working?

1. Yes
2. No

V230. Are you working for the government or public institution, for private business or industry, or for a private non-profit organization? If you do not work currently, characterize your major work in the past! Do you or did you work for (*read out and code one answer*):

- 1 Government or public institution
- 2 Private business or industry
- 3 Private non-profit organization

V230-A. Are you registered through your employer with the [name of the national social security agency of the country] of [your country]?

1. Yes
2. No

V231. Are the tasks you do at work mostly manual or mostly intellectual? If you do not work currently, characterize your major work in the past. Use this scale where 1 means “mostly manual tasks” and 10 means “mostly intellectual tasks” (*code one answer*):

Mostly manual tasks	Mostly intellectual tasks
1    2    3    4    5    6    7    8    9    10	

V232. Are the tasks you perform at work mostly routine tasks or mostly creative tasks? If you do not work currently, characterize your major work in the past. Use this scale where 1 means “mostly routine tasks” and 10 means “mostly creative tasks” (*code one answer*):

Mostly routine tasks	Mostly creative tasks
1    2    3    4    5    6    7    8    9    10	

V233. How much independence do you have in performing your tasks at work? If you do not work currently, characterize your major work in the past. Use this scale to indicate your degree of independence where 1 means “no independence at all” and 10 means “complete independence” (*code one answer*):

No independence at all	Complete independence
1    2    3    4    5    6    7    8    9    10	

V233a. How satisfied are you with the salary and benefits of your current primary job?

- 1 Strongly satisfied
- 2 Fairly satisfied
- 3 Fairly dissatisfied
- 4 Strongly dissatisfied

V233b. How satisfied are you with the opportunities for professional development and promotion in your current primary job?

- 1 Strongly satisfied
- 2 Fairly satisfied
- 3 Fairly dissatisfied
- 4 Strongly dissatisfied

V234. Do you or did you supervise other people at work? (*Code one answer*):

- 1 Yes
- 2 No

V234a. Do you own a business or have taken tangible steps to start a business during the past twelve months (either by yourself or with others)?



- 1 I already have an established business
- 2 I have taken steps to establish a new business
- 3 I have not taken any steps to establish a business

V235. Are you the chief wage earner in your household? (*Code one answer*):

- 1 Yes
- 2 No

V236. Is the chief wage earner of your household employed now or not? (*Code one answer*):

- 1 Yes
- 2 No

V237. During the past year, did your family (*read out and code one answer*):

- 1 Save money
- 2 Just get by
- 3 Spent some savings
- 4 Spent savings and borrowed money

V237a. Over the past year, did you or a member of your family living with you borrow money?

1. Yes
2. No (Go to v238)

V237b If 'yes', did you borrow from any of the following places? *Check all that apply*

1. Microfinance Institution
2. Commercial Bank
3. Public Bank
4. Friends or Family
5. Informal Savings & Lending Association (e.g. Jamiyat)
6. Credit Supplier
7. Other

V237c. If 'yes', was the loan used for

1. Starting or Growing a Business
2. Buying or Improving a Home
3. Getting Married
4. For Household Purchases
5. For emergencies
6. Other \_\_\_\_\_please describe\_\_\_\_\_

V238. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the (*read out and code one answer*):

- 1 Upper class
- 2 Upper middle class
- 3 Lower middle class
- 4 Working class
- 5 Lower class

(*Show Card AE*)

V239. On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please,

specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in. (*Code one number*):

Lowest group											Highest group
1	2	3	4	5	6	7	8	9	10		

## DEMOGRAPHICS

V240. (*Code respondent's sex by observation*):

- 1 Male
- 2 Female

V241. Can you tell me your year of birth, please? 19\_\_\_\_ (*write in last two digits*)

V242. This means you are \_\_\_\_ years old (*write in age in two digits*).

Are your mother and father immigrants to this country or not? Please, indicate separately for each of them (*read out and code one answer for each*):

	Immigrant	Not an immigrant
V243. Mother	1	2
V244. Father	1	2

V245. Were you born in this country or are you an immigrant ?

- 1 I am born in this country.
- 2 I am an immigrant to this country.

V246. Are you a citizen of this country?

- 1 Yes, I am a citizen of this country.
- 2 Not, I am not a citizen of this country.

V247. What language do you normally speak at home? (*Code one answer!*)

- 1 English
- 2 Spanish
- 3 French
- 4 Chinese
- 5 Japanese

[*NOTE: modify the list of languages to fit your own society. Optional if only one language is spoken!*]

V248. What is the highest educational level that you have attained? [*NOTE: if respondent indicates to be a student, code highest level s/he expects to complete*]:

- 1 No formal education
- 2 Incomplete primary school
- 3 Complete primary school
- 4 Incomplete secondary school: technical/vocational type
- 5 Complete secondary school: technical/vocational type
- 6 Incomplete secondary: university-preparatory type
- 7 Complete secondary: university-preparatory type
- 8 Some university-level education, without degree
- 9 University-level education, with degree

V249. At what age did you (or will you) complete your full time education, either at school or at an institution of higher education? Please exclude apprenticeships [NOTE: if respondent indicates to be a student, code highest level s/he expects to complete]:

\_\_\_\_\_ (write in age in two digits)

V249a. Do you think the formal education system in your country provides people with the skills and training they need:

	Yes	No	DK	Refused
V249a1. to find employment	1	2	-1	-2
V249a2. to perform their jobs well	1	2	-1	-2
V249a3. to start a business	1	2	-1	-2

V250. Do you live with your parents? (Code one answer):

- 1 Yes
- 2 No

#### OBSERVATIONS BY THE INTERVIEWER

V251. Respondent's Interest (Code how interested the respondent was during the interview):

- 1 Respondent was very interested.
- 2 Respondent was somewhat interested.
- 3 Respondent was not interested.

V252. Interview Privacy (Code whether the interview took place in privacy or not):

- 1 There were no other people around who could follow the interview.
- 2 There were are other people around who could follow the interview.

V253. (Code size of town):

- 1 Under 2,000
- 2 2,000 - 5,000
- 3 5 - 10,000
- 4 10 - 20,000
- 5 20 - 50,000
- 6 50 - 100,000
- 7 100 - 500,000
- 8 500,000 and more

V254. (Code ethnic group by observation, modify for your own society):

- 1 Caucasian white
- 2 Negro Black
- 3 South Asian Indian, Pakistani, etc.
- 4 East Asian Chinese, Japanese, etc.
- 5 Arabic, Central Asian
- 6 Other (write in): \_\_\_\_\_

V 255. Was the respondent literate or illiterate?

- 1 Literate

2 Illiterate

V256 (*Code region where the interview was conducted*):

- 1 New England
- 2 Middle Atlantic states
- 3 South Atlantic
- 4 East South Central
- 5 West South Central
- 6 East North Central
- 7 West North Central
- 8 Rocky Mountain states
- 9 Northwest
- 10 California

[NOTE: use 2-digit regional code appropriate to your own society]

V257. (*Code language in which interview was conducted*):

- 1 English
- 2 French
- 3 Spanish

[NOTE: if relevant, use codes appropriate to your own society]

V258. Weight variable (*Provide a 4-digit weight variable to correct your sample to reflect national distributions of key variables. If no weighting is necessary, simply code each case as "1." It is especially important to correct for education. For example, if your sample contains 10 percent more university-educated respondents as there are in the adult population, members of this group should be downweighted by 10 percent, giving them a weight of .90*).