UNIVERSIDADE FEDERAL DE MINAS GERAIS

Faculdade de Ciências Econômicas
Centro de Desenvolvimento e Planejamento Regional - CEDEPLAR
Programa de Pós-Graduação em Economia
Mestrado em Economia

Thales Souza Lima

FORMATION OF PREFERENCES FOR INCOME REDISTRIBUTION: A WORLDWIDE STUDY FROM 1989 TO 2020

Belo Horizonte
2023

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Dissertação de mestrado apresentada ao Programa de Pós-Graduação em Economia do Centro de Desenvolvimento e Planejamento Regional da Universidade Federal de Minas Gerais, como requisito parcial à obtenção do título de Mestre em Economia.

Orientador: Igor Viveiros
Co-orientadora: Lízia de Figueiredo
Co-orientadora: Mehtap Hisarciklilar

Belo Horizonte
2022

Ficha catalográfica

L732f
2022

Lima, Thales Souza.
Formation of preferences for income redistribuition [manuscrito] : a worldwide study from 1989 to 2020 / Thales Souza Lima. – 2022.
100 f.: il. e tabs.

Orientador: Igor Viveiros.
Coorientadora: Lízia de Figueiredo
Coorientadora: Mehtap Hisarciklilar
Dissertação (mestrado) – Universidade Federal de Minas Gerais, Centro de Desenvolvimento e Planejamento Regional.
Inclui bibliografia (f. 58-61) e anexos.

1. Renda - Distribuição – Teses. 2. Capital - Economia – Teses. 3. Economia – Teses. I. Viveiros, Igor. II. Figueiredo, Lízia de. III. Hisarciklilar, Mehtap. IV. Universidade Federal de Minas Gerais. Centro de Desenvolvimento e Planejamento Regional. V. Título.

CDD: 339.2

Elaborado por Adriana Kelly Rodrigues CRB-6/2572
Biblioteca da FACE/UFMG. – AKR/007/2023

UNIVERSIDADE FEDERAL DE MINAS GERAIS
FACULDADE DE CIÊNCIAS ECONÔMICAS
CENTRO DE DESENVOLVIMENTO E PLANEJAMENTO REGIONAL
PROGRAMA DE PÓS-GRADUAÇÃO EM ECONOMIA

FOLHA DE APROVAÇÃO

THALES SOUZA LIMA

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Aprovado em Belo Horizonte, 13 de dezembro de 2022.

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Documento assinado eletronicamente por **Ronaldo Nazaré**, **Professor do Magistério Superior**, em 14/12/2022, às 09:53, conforme horário oficial de Brasília, com fundamento no art. 5° do Decreto n° 10.543, de 13 de novembro de 2020.

Documento assinado eletronicamente por **Lizia de Figueiredo**, **Professora do Magistério Superior**, em 14/12/2022, às 10:38, conforme horário oficial de Brasília, com fundamento no art. 5º do Decreto nº 10.543, de 13 de novembro de 2020.

Documento assinado eletronicamente por **Thiago Henrique Carneiro Rios Lopes**, **Usuário Externo**, em 14/12/2022, às 14:14, conforme horário oficial de Brasília, com fundamento no art. 5º do Decreto nº 10.543, de 13 de novembro de 2020.

Documento assinado eletronicamente por **Mehtap Hisarciklilar Riegler**, **Usuário Externo**, em 15/12/2022, às 11:52, conforme horário oficial de Brasília, com fundamento no art. 5º do Decreto nº 10.543, de 13 de novembro de 2020.

Documento assinado eletronicamente por **Igor Viveiros Melo Souza**, **Professor do Magistério Superior**, em 16/12/2022, às 07:32, conforme horário oficial de Brasília, com fundamento no art. 5º do Decreto nº 10.543, de 13 de novembro de 2020.

Documento assinado eletronicamente por **Rafael Saulo Marques Ribeiro**, **Coordenador(a) de curso de pós-graduação**, em 16/12/2022, às 09:02, conforme horário oficial de Brasília, com fundamento no art. 5º do Decreto nº 10.543, de 13 de novembro de 2020.

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Referência: Processo nº 23072.272617/2022-09 SEI nº 1957340

Resumo

Preferência por redistribuição de renda (PR) pode ser afetada por uma série de características individuais como idade, gênero, estado de saúde, renda, classe social, raça e ideologia. Partindo de regressões MQO e tratando variáveis em escala Likert como contínuas, Alesina & Giuliano (2011) demonstram que tais atributos de fato importam para a formação de PR. Primeiro argumentamos que a relação entre essas características e PR devem ser testadas usando as variáveis como categóricas, detalhando melhor a relação entre os diferentes níveis da escala Likert e a preferência por redistribuição em si. Testamos essa hipótese rodando regressões LSDV e comparando nossos resultados com os encontrados em Alesina & Giuliano (2011), além de adicionar as duas últimas ondas da World Value Survey (WVS). Como a maioria dos estudos na área, Alesina & Giuliano (2011) empilham uma série de ondas de várias pesquisas internacionais, como a WVS, e tratam a questão temporal adicionando efeitos fixos de tempo. Acreditamos também que o contexto em que essas pesquisas foram feitas pode afetar a formação de PR. Para entender melhor essa relação de tempo, sugerimos uma proposta alternativa: regredir os modelos em cada onda da WVS e comparar os resultados. Achamos evidências que corroboram com Alesina & Giuliano (2011) acerca dos efeitos renda, ideologia e gênero e mostramos que nossa especificação permite entender como diferentes níveis ideológicos e de renda afetam diferentemente as preferências. Além disso, também achamos evidências que mostram um possível efeito do contexto em que cada onda foi pesquisada na formação de preferências por redistribuição.

Palavras-chave: Preferência por Redistribuição.

Abstract

Preferences for income redistribution (PfR) may be affected by multiple individual characteristics such as age, gender, health, income, social class, ideology, race and beliefs. Using OLS estimations and treating likert-scale variables as continuous, Alesina & Giuliano (2011) showed that these attributes matter to the formation of preferences for redistribution. We first argue that we should test the relation between these characteristics and PfR by treating these variables as categoricals, in order to properly understand the relation between each step and the formation of PfR. We do so by running LSDV models, comparing our results to the ones found in their paper and adding the last two waves of the World Value Survey (WVS). Alongside many studies in the field, Alesina & Giuliano (2011) pool multiple sets of international surveys, such as the WVS, and control for time and country fixed effects. We also argue that the context in which each survey was taken may affect the formation of PfR, so we propose a different approach to the time analysis: to run separate models, one for each point of time and compare the coefficients. We corroborate the findings in Alesina & Giuliano (2011) for income,

ideology and gender and show that our specifications allowed us to see that different income levels and ideological granularities affect PfR differently. We also find that the context seems to matter for the formation of PfR, however individual aspects ate the main driver to the formation of PfR.

Keyword: Preferences for Redistribution

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Sumário

1. Introduction

How much one earns now, how much one expects to earn in the future and how much one earns compared to the rest of the society are questions that permeate many works in the field of Preferences for Income Redistribution (PfR). We may start answering our first question with Meltzer & Richard (1981) that states a negative relation between income and PfR, so the higher you earn now, the less favorable, on average, for redistribution. Ravallion & Lokshin (2000), Benabou & Ok (2001) and Alesina & La Ferrara (2005) focused on the last two relations, showing that people who believe that they would be richer in the future, are, in the present, less prone to redistribute, just as those who believe that they are better-off than their peers.

Solely the pecuniary factor, however, does not seem to englobe all the aspects that shape PfR. Another widely studied aspect is personal beliefs. Regarding Ideology, for example, Alesina & Giuliano (2011) and Armingeon & Weisstanner (2021) showed that left wingers tend to be more supportive of redistribution. The dichotomy between effort and luck, as two opposites of personal drives for success is also very important, as shown in Fong (2001) and Alesina & Giuliano (2011) who argue that believing luck to be the main driver for personal success increases the average support for redistribution. As also expressed in Alesina & Giuliano (2011), not only personal beliefs, but personal characteristics such as age, gender and race are also very important to understand what shape the preferences here studied, showing that, for the United States, woman, African Americans and the youth tend to be, on average, more prone to redistribute. This work (Alesina and Giuliano) inaugurated a broader way to study these individual characterizations, using the five first waves of the World Value Survey, they test their hypothesis using OLS estimations and treating Likert-scale variables as continuous. We argue that, when using this specification, important information from each category of the variable is lost, therefore we need to treat them as categorical.

All these questions regarding income, personal beliefs, ideology, and individual characterization raised so far are only a small glance at the literature of preferences for redistribution, mainly explored and tested using multiple datasets such as the World Value Survey, General Social Survey and the European Social Survey. These surveys are usually taken in waves, sometimes with the same group of countries/states with the same periodicities, sometimes not. The time aspects of such information are usually explored by incorporating time

fixed effects when pooling different waves, however they do not focus on trying to understand the time aspect itself, such as comparing the same model in different years, or waves.

From 1989 to 2020 many changes in the political and economic context were seen in the world. The dot com bubble in 1994 and the 2008 financial crisis are just two examples of major downturns in the world's economic stability. Shifts in political power from the surge of the left in Latin America to the rise of conservatism and nationalism in parts of the occidental world are just few examples of how things changed over 30 years. We believe that these changes may affect individuals' formation of preferences for redistribution.

To test if we can observe a clear distinction through time, we take the last 6 available waves of the World Value Survey (WVS) and run separate Least Square Dummy Variable models, one for each wave. These models cover the main aspects of the formation of PfR: income, social class, ideology, beliefs, gender, age, health, religion, and marital status. We expect to find changes in the coefficient estimates (impacts and sensibilities) in each Wave.

Using a proxy for PfR inspired by Alesina & Giuliano (2011) taken from the World Value Survey, we, prior to running separate estimations for each wave, ran pooled regressions. Our first goal with these pooled estimations is to provide a picture of the world's responses to PfR. Second, we aim to expand the Alesina & Giuliano (2011) model by treating the dependent variables as categorical and using the last two waves of WVS, enriching the analysis. We show that our specifications allow us to interpret important movements within the effects of some variables, especially income, ideology and beliefs.

Our first section is a literature review, followed by a detailed description on our data and models. We finish the study providing the results for the pooled and wave models and a conclusion. We conclude that the inclusion of the variables as categorical significantly adds to the analysis, there are many movements within each variable that cannot be excluded. We find evidence to corroborate with the Meltzer-Richard model, showing a clear inverse relation between income and PfR We also find that woman, left-wingers, and people who value more effort than luck tend to be, on average, more prone to redistribute, in opposition of Right-wingers and people with better health status. We also find that the formation of PfR changes across time, however, they maintain their overall trends.

2. Literature Review

The Preferences for Redistribution (PfR) literature started with the microeconomic model developed by Meltzer & Richard (1981), establishing a negative relation between PfR and income. This model arises directly from Romer (1975) in which the author works with the formalization of individual welfare and majority voting. Following Atkinson (1973) where the role of the median voters is established as the decisive group and Roberts (1977) that states an inverse relation between productivity and the individual decision of the tax rate, the Meltzer-Richard model surges. Ordering the individuals by productivity, the lump-sum type redistributive program would be demanded by the individuals with less productivity, therefore, if the society is in general unproductive, the amount of income redistribution would be high and it would force an increase at the tax rates, increasing the size of the state. That is why their work is entitled "A Rational Theory of the Size of Government". This seminal idea, then, creates the most widespread and tested argument in the literature, the pecuniary one.

In another work from Alesina & Glaeser (2004), the empirical validity of the Meltzer-Richard model is questioned, however it is still the core of most of the work in this field. We will call this argument, the inverse relation between PfR and income, "the pecuniary " one. The research advanced at the beginning of the 20th century with a rise in another argument, "social mobility". Headed by Benabou & Ok (2001) and followed by Alesina & La Ferrara (2005), the main idea comes from the movement perceived that if an individual thinks he is going to climb the social ladder, he or she would demand less public redistribution, due to the expected increase in the taxation channel. This hypothesis is verified specially in Alesina & La Ferrara (2005), showing a negative relation between PfR and people who expect to become richer.

Another argument that is worth mentioning is the "relative income" argument, started by Ravallion & Lokshin (2000) and its "tunnel effect" stating another way of dealing with social mobility. Guillaud (2013) also follows this path of explanation, regarding individual position on social and economic scale. Taking data from OECD, she concludes that individual's relative insertion on the labor market also shapes PfR, as well as the possibility of falling from the social ladder.

We can also say that, apart from the pecuniary factor, another core of this literature is the individual characterization, discussed prominently in Alesina & Giuliano (2011). From the Meltzer-Richard model, the authors added inequality implicitly and explicitly at the individual's utility functions, alongside future revenue perception. Given a utility function that follows consumption (a radical view in which individuals care only about their income/consumption) and some level of inequality perception, they show that this perception affects the optimae of the maximization problem. It allows for a different discussion regarding personal differences such as ideological and political, flanking with the perceived trade-off between equity and individualism, creating an expansion on the empirical work of PfR. Inequality is directly added to the theoretical model through three externalities generated by inequality: education, crime, and incentive effects. The first one arises from the fact that the increase in income would generate an increase in demand for education, leading to a general higher societal productivity, therefore increasing the national wealth. The second one is more connected to the eventual decrease in security costs. Once that people are in general, richer, the number of crimes should decrease. The last one goes in the opposite direction than the first two, stating that governmental help would disincentivize people to work. This externality gives a social value to inequality, relating the redistributive issue to meritocracy.

These externalities commented above are related to the inequality indirectly inserted in the utility function. Going now for its direct analysis, given a utility function that relates consumption, some measure of income inequality, individual measure of ideal inequality and a weight to its deviation, the authors formalize four distinct views. The first one, the “libertarian”, with no governmental participation, following just the market measure of inequality. The second, “efficiency maximizing” would depend on the effects of the three externalities of the inequality indirectly inserted at the utility function. The “communist” one does not accept inequality of any kind, while the “rawlsian” aims to equalize the marginal utilities of every single individual. The authors finish the theoretical part analyzing the trade-off between luck and effort, showing that depending on which belief is stronger, the PfR is shaped. If people value more luck than effort, they tend to be, on average, more prone to redistribute, while believing in more effort, against. Apart from this major contribution to the literature, their empirical part is also the base for many other works, including this one. They have introduced income, gender, age, education, race, employment status and many other variables into the framework, dealing with two data sets: General Social Survey and World Value Survey. Their main results suggest that women and African Americans are more prone to redistribution, as

well as young and elderly individuals. The Meltzer-Richard model was corroborated and individual and the father's education (as a proxy for social mobility) presented a negative relation between the more educated and PfR. Ideology, religion, and culture also affect, depending on the country used in their work. At a previous work, Giuliano & Spilimbergo (2008) entered in a discussion about macroeconomic volatility in the impressionable years, showing that if the individual experiences a high volatility when young, it does shape PfR, being those more favorable to redistribute.

Aiming to enlarge the discussion, Dion & Birchfield (2010) added some more specific macroeconomic discussion to the literature, more precisely about the importance of inequality in shaping the preferences. As exposed in Finseraas (2006), the authors believe that more developed countries would prefer to redistribute less. They also follow studies such as Moene & Wallerstein (2001, 2003) and Iversen (2005) stating that more unequal countries would have higher PfR, on average. The main idea of solely the pecuniary factor that shapes PfR is also changed, following Reenock, Bernhard & Sobek (2007) uttering that in the developed countries, PfR would be more related to the disposition of basic conditions. Saying that, the four hypotheses of their work are: 1) the Meltzer-Richard model is correct, 2) in rich countries, the Meltzer-Richard model relation is weak, 3) unequal countries would also have a weak relation between income and PfR and 4) PfR would change with the region. Using data from 15 different international organizations, they found that the level of inequality and development does shape PfR, as well as historical and cultural differences, however, it was not possible to establish a clear direction pattern. They also conclude that different regions have different attitudes regarding PfR.

Snycer *et al* (2017) studied individual PfR through an evolutionary psychology perspective. Thinking about our ancestral past, the interactions that the first human beings had with each other shaped many attitudes that we have until today, those attitudes specifically regarding PfR, according to the authors' manifest in three different ways: 1) outlook toward the needy, 2) the positive interactions between the individuals and 3) individual attitudes. Collecting data from Israel, United States, India and the United Kingdom, the authors found that envy, compassion, and self-interest does shape PfR, but "not a taste of fairness". This taste of fairness is also presented in Fong (2001), establishing the dichotomy between believing that personal success is due to luck or effort. If one believes that it's a matter of luck, on average, one is more favorable for redistribution, and vice-versa.

Recently, the relations between inequality and Pfr have been discussed, such as in Dallinger (2010), relating culture and institutions with individual's rational responses to each country's context.

Using a multi-level model with data provided by the 1999 International Social Survey Program and macro variables, the author found that economic prosperity is negatively related to PfR. They show that inequality is also negatively correlated with PfR , but the welfare approach is not completely correlated to PfR, showing only that the maturity of the national social security systems is a determinant of the preferences here studied. Also focusing on inequality, using the European Social Surveys, Schmidt-Catran (2014) finds a direct correlation between inequality and demand for redistribution in the within-country effects, but not between countries, using data from the European Social Survey from 2002 to 2010. The paper also suggests that there is an unobserved country effect, that is the welfare regime, however, it questions its empirical relation.

Contrasting this idea, the work of Alt & Iversen (2017) discusses the idea that the support for redistribution worldwide has been falling, despite the rise in inequality. The authors created two models: social distance and segmented labor market. The first one aims to understand the rising distance between the poor and the middle class, since minorities are usually overrepresented in the poor. The second one discusses the phenomenon of migration. Given the lack of recognized prowess in the migrants, the competition for underpaid jobs increases but it also makes the natives better-off. Pooling consecutive waves from the International Social Survey Program, they find that the second model explains better the differences in PfR and its relation to inequality.

The literature review shows the importance of the studies of individual differences in understanding the different preferences for redistribution. Also, the importance of understanding the regional differences as well as the within country effects towards PfR. This work will also focus on understanding such differences but now across waves.

3. Data and Modelling

Our main explanatory model follows Meltzer & Richard (1981) and Alesina & Giuliano (2011) using a broad set of individual characterizations. The latter is also the paper from which we took our dependent variable (PfR). It establishes a 10-point Likert scale: (1) people should be responsible to provide for themselves and (10) the government should take responsibility. The idea here is that the higher an individual's response in the scale, the more favorable redistribution is for that individual. This variable is taken as continuous, following the literature[1]. The main equation can be found below.

$$PfR_i = \beta_0 + \beta_1 Income_i + \beta_2 Social\ Class_i + \beta_3 Marital\ Status_i + \beta_4 Health_i + \beta_5 Age + \beta_6 Gender_i + \beta_7 Education_i + \beta_8 Ideology_i + \beta_7 Beliefs_i + \beta_8 Employment_i + \beta_c \gamma + \beta_t \delta + u$$

The subscript "i" represents the individual index, w. The γ represents a set of country dummies with "c" being the number of countries, while δ is a set of time (wave) dummies, with "t" being the time index. Now the descriptive statistics will be presented at Table 1.

Table 1 - Descriptive Statistics

Variable/ Meaning	**Range**	**Obs**	**Proportion**	**Mean**	**SD**
Gender					
Man	0	194,841	0.48	0.519	0.499
Woman	1	210,241	0.52		
Health					
How would you describe your state of health these days?				3.813	0.885
Very Poor (b)	1	2,590	0.007		
Poor	2	25,408	0.065		
Fair	3	105,963	0.269		
Good	4	168,805	0.429		
Very Good	5	90,862	0.231		
Marital Status				2.610	2.157

[1] We estimated the models using a heteroskedasticity tobit regression, following Zeileis (2017) and had very similar results to those reported here.

Married (b)	1	236,347	0.623		
Living Together	2	24,119	0.064		
Divorced	3	14,277	0.038		
Separated	4	7,422	0.020		
Widowed	5	2,423	0.006		
Single	6	94,878	0.250		
Educational level				2.006	0.753
Lower Education (b)	1	107,736	0.281		
Middle Education	2	166,119	0.433		
Upper Education	3	109,849	0.286		
Employment Status					
Employed		222,841	0.548		
Unemployed		37,159	0.091		
Other Employment (b)		146,535	0.360		
Scale of Incomes				4.653	2.272
Lowest Income Group (b)	1	35,091	0.135		
	2	39,031	0.151		
	3	49,701	0.192		
	4	54,432	0.210		
	5	6,785	0.026		
	6	47,844	0.185		
	7	3,733	0.014		
	8	2,297	0.009		
	9	10,493	0.041		
Highest Income Group	10	9,612	0.037		
Subjective Social Class				2.677	0.983
Lower class (b)	1	47,068	0.133		
Middle-lower Class	2	99,232	0.281		
Middle Class	3	133,783	0.378		
Middle-Upper Class	4	67,482	0.191		
Upper Class	5	5,919	0.017		

Age		405,300		41.62	161.481
Beliefs				5.659	2.391
In the long run, hard work usually brings a better life	1	19,425	0.066		
	2	10,673	0.036		
	3	21,155	0.072		
	4	22,454	0.076		
(b)	5	86,014	0.291		
	6	39,953	0.135		
	7	27,958	0.095		
	8	26,996	0.091		
	9	12,996	0.044		
[...]- it's more a matter of luck and connections	10	28,110	0.095		
Ideology				4.291	2.903
Left	1	85,348	0.255		
	2	34,015	0.102		
	3	36,797	0.110		
	4	28,895	0.086		
(b)	5	44,061	0.132		
	6	22,877	0.068		
	7	22,764	0.068		
	8	21,714	0.065		
	9	12,520	0.037		
Right	10	25,112	0.075		
Religion*					
Roman Catholic		61,393	0.255		
Protestant		24,113	0.100		
Orthodox		24,651	0.103		
Muslim		45,103	0.188		
Jew		1,581	0.007		
Hindu		8,227	0.034		
Buddhist		6,164	0.026		
No Religion		41,424	0.172		

Other Religion		3,705	0.015		
Atheists (b)		23,995	0.100		

Dependent Variable	Range	Obs	Proportion	Mean	SD
PfR				6.225	3.000
People should take more responsibility to provide for themselves	1	38,482	0.0990		
	2	18,942	0.0487		
	3	31,101	0.0800		
	4	29,759	0.0766		
	5	32,066	0.0825		
	6	53,891	0.1386		
	7	30,915	0.0795		
	8	36,409	0.0937		
	9	31,864	0.0820		
Government should take more responsibility to ensure that everyone is provided for	10	85,298	0.2194		

* Base category is Atheists and the remaining religious denominations presented at List 1 at the Annex

The second wave has 6331 (20 countries) valid observations, followed by 52796 (55 countries), 41011 (41 countries), 59202 (58 countries), 73081 (60 countries) and 59933 (50 countries), in the third, four, five, six and seven waves, respectively.

Gender and age, following Alesina & Giuliano (2011) are expected to acquire a positive relation with PfR in women and the youth. Income is the standard proxy to test the Meltzer-Richard model and we expect to find a negative relation between it and PfR, as stated in Meltzer and Richard (1981). Social Class is also related to Meltzer-Richard but captures a status-seeking criteria and we also expect a negative relationship with PfR. Education is another question broadly discussed in the literature, and even though it is related to income and social class, evidence has shown different responses depending on the level attained. Health is a very important matter, however we found that it is not broadly discussed in the literature. Lastly, we have included marital status that is also discussed in Alesina & Giuliano (2011), for which there

are no robust results in the literature. We expect to find with employment status, a negative relation between PfR and being employed, and the opposite sign with unemployed. Ideology, also following the literature, left-wingers being more prone to redistribute and beliefs in luck Vs. effort showing an inverse relation between valuing more effort with PfR.

To better visualize the evolution of our unrestricted data, we now show a violin-typed plot. They show the distribution of responses between each category of our variables (blue dots) creating a distributional representation (the "body" of the violin) in each wave. The red dots are the average per wave and the black line is just used to follow these averages. These plots are representatives for the whole sample. To facilitate the interpretation, first we will provide a Table with the corresponding wave-year.

Table 2 - Wave years

Wave	2	3	4	5	6	7
Years	1989-1993	1994-1998	1999-2004	2005-2009	2010-2014	2017-2020

Figures 1 to 7 - The Distribution of Answers for the unrestricted sample (Violin Figures)

Figure 1 - PfR (1 Against - 10 Favorable)

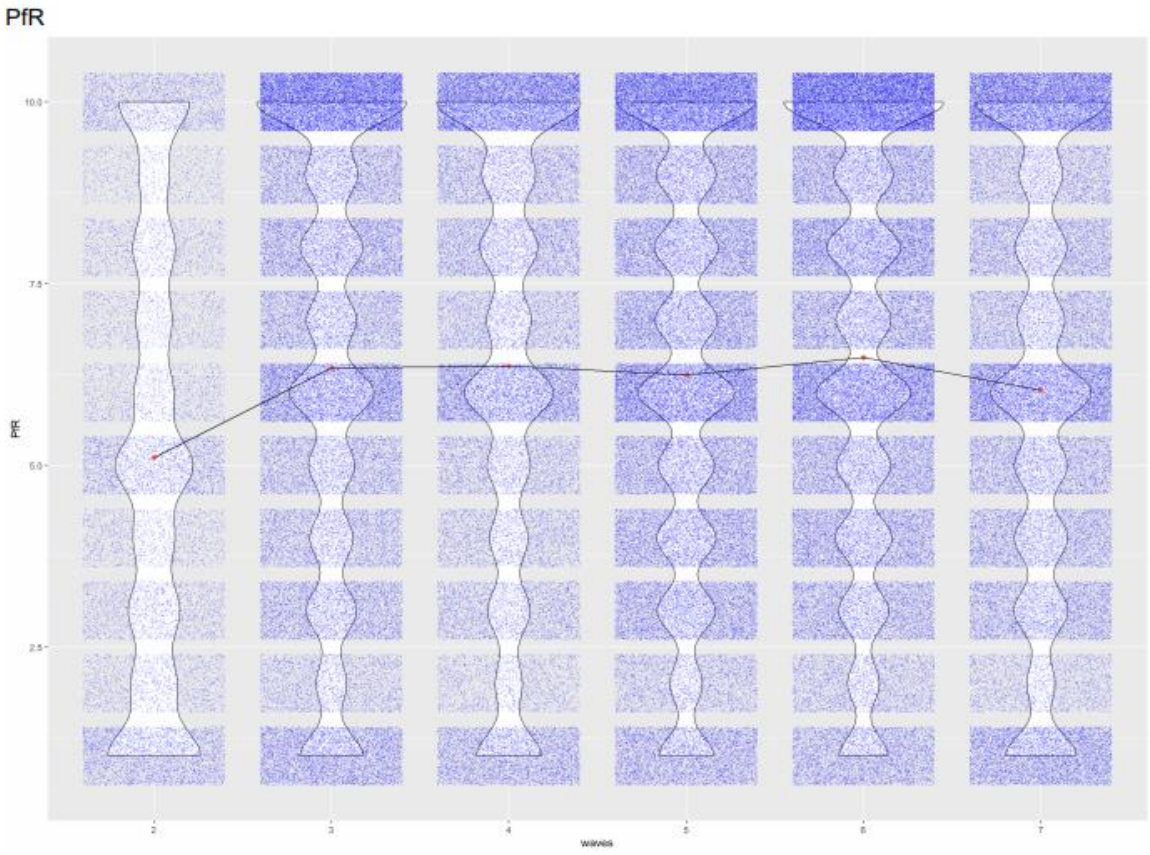


Figure 2 - Health (1 Very Poor Health - 5 Very Good Health)

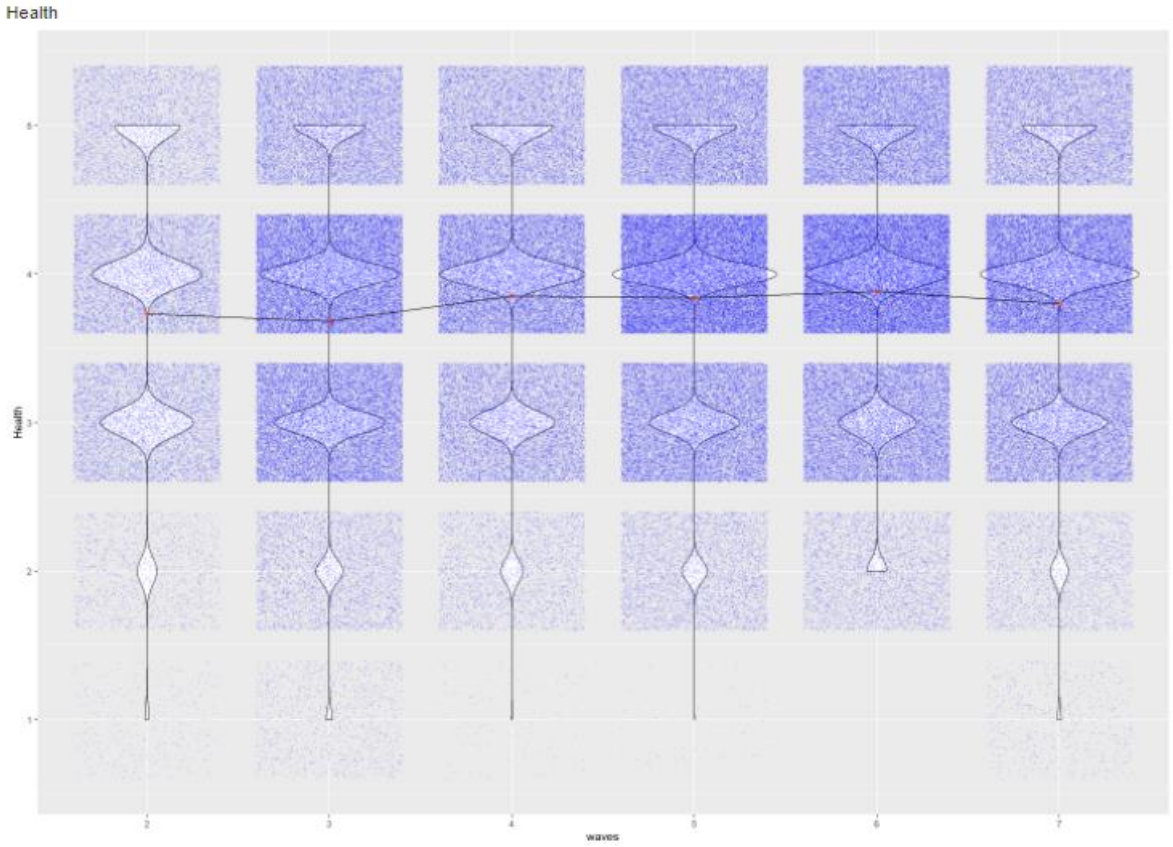


Figure 3 - Income

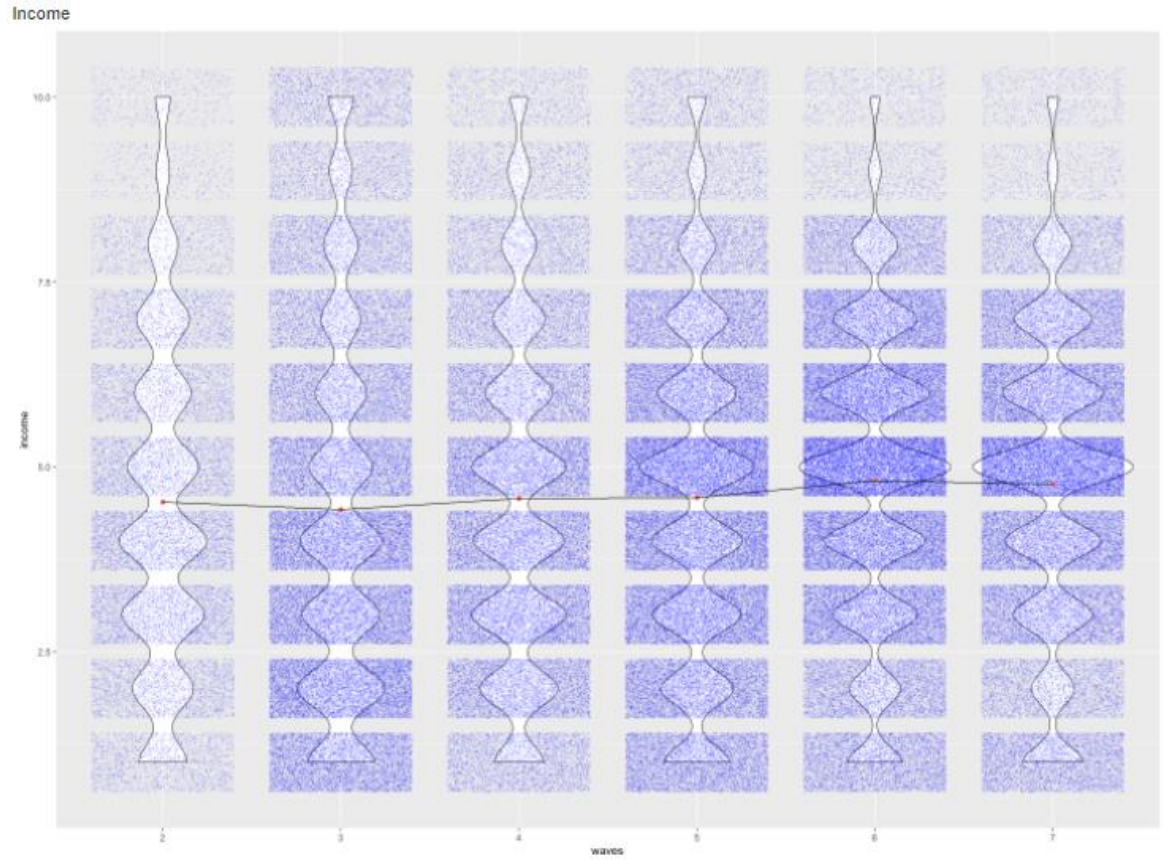


Figure 4 - - Education (1 Lower Education - 3 Upper Education)

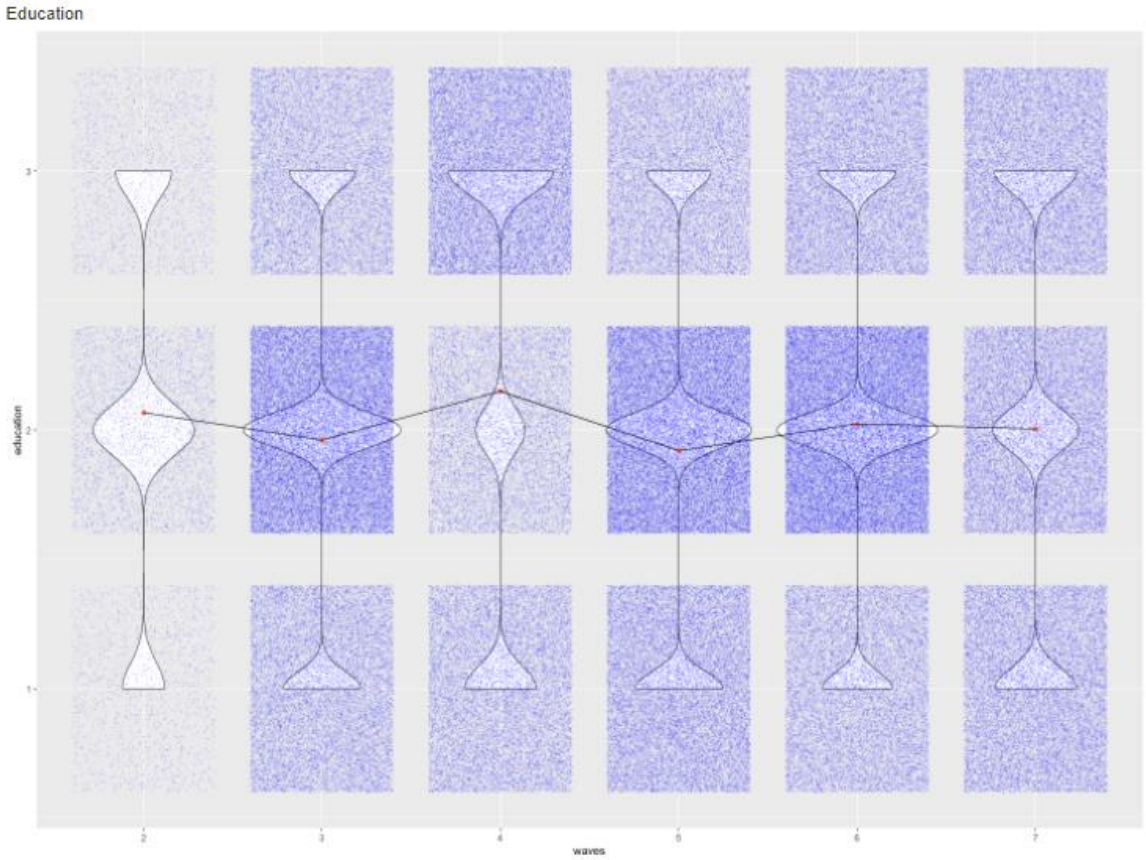


Figure 5 - Ideology (1 Left - 10 Right)

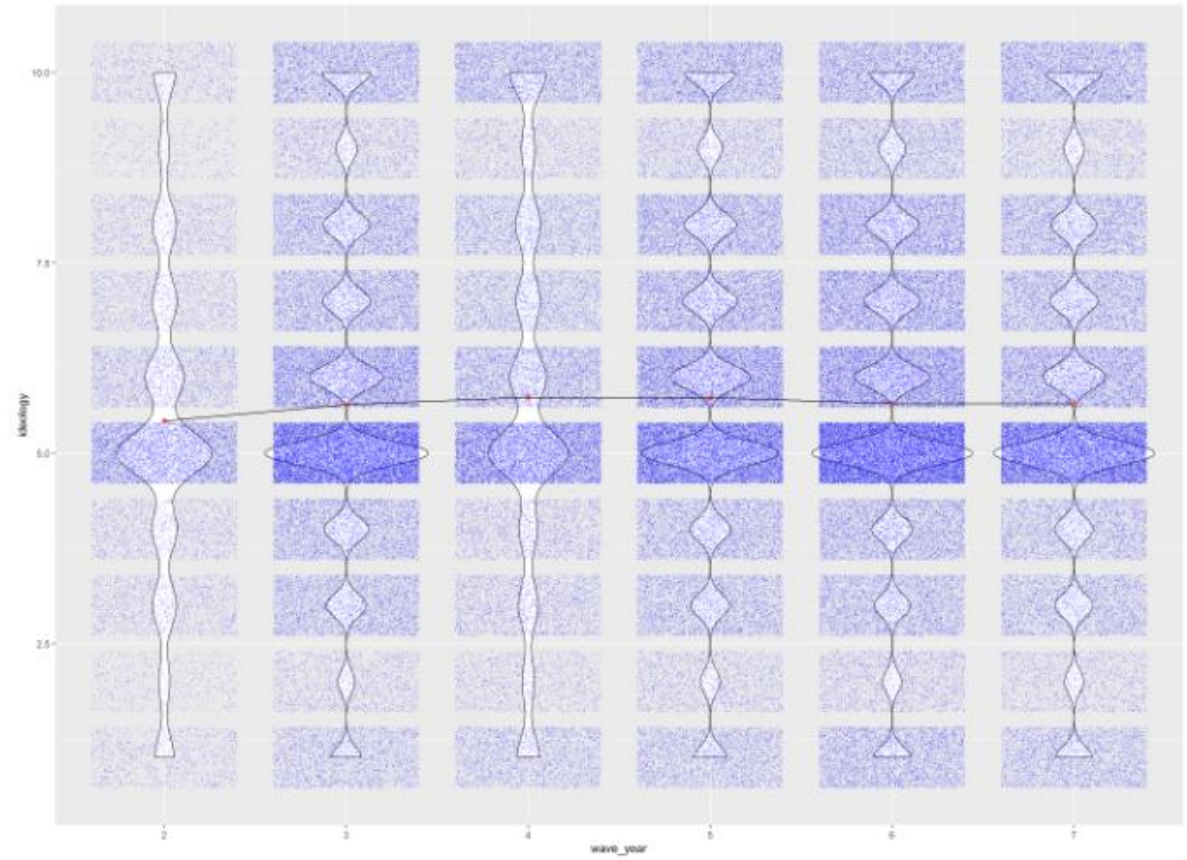


Figure 6 - Beliefs (1 Effort - 10 Luck)

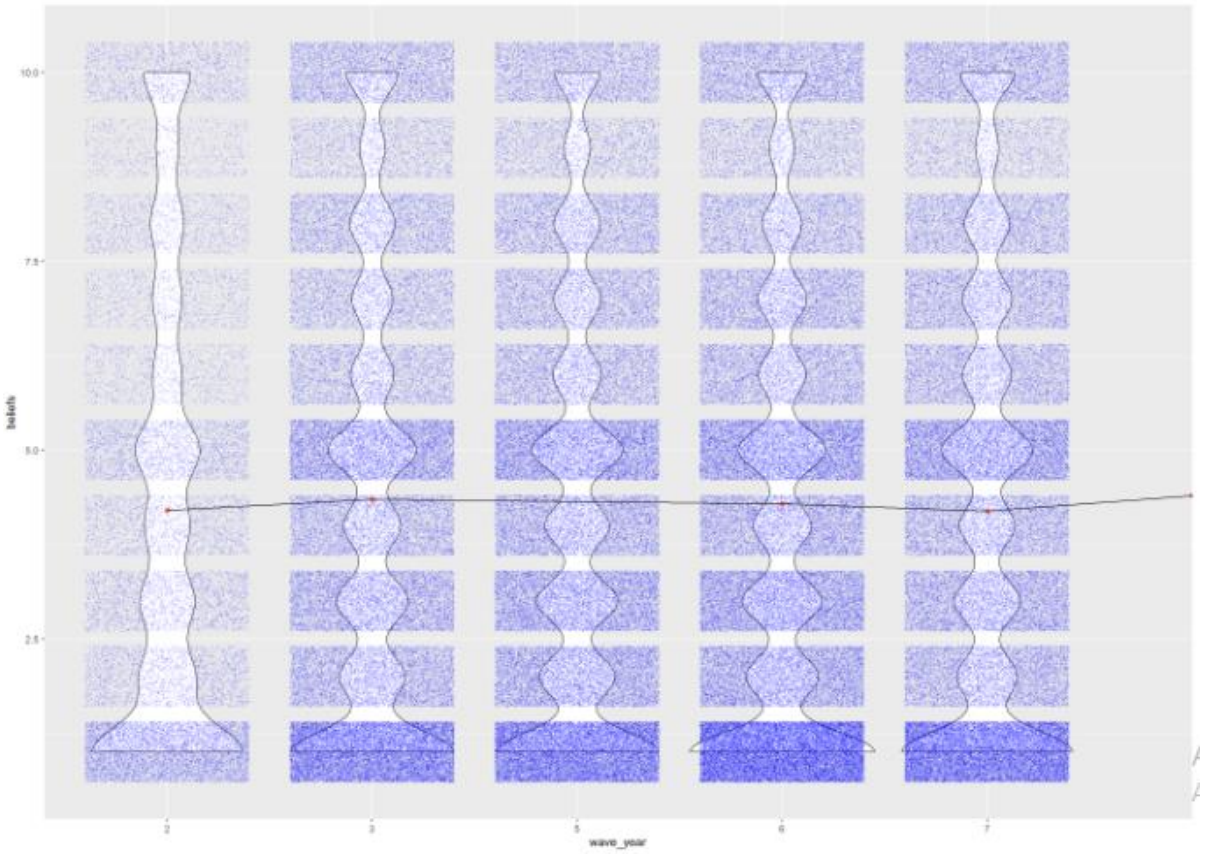


Figure 7 - Social Class (1 Lower Class - 5 Upper Class)

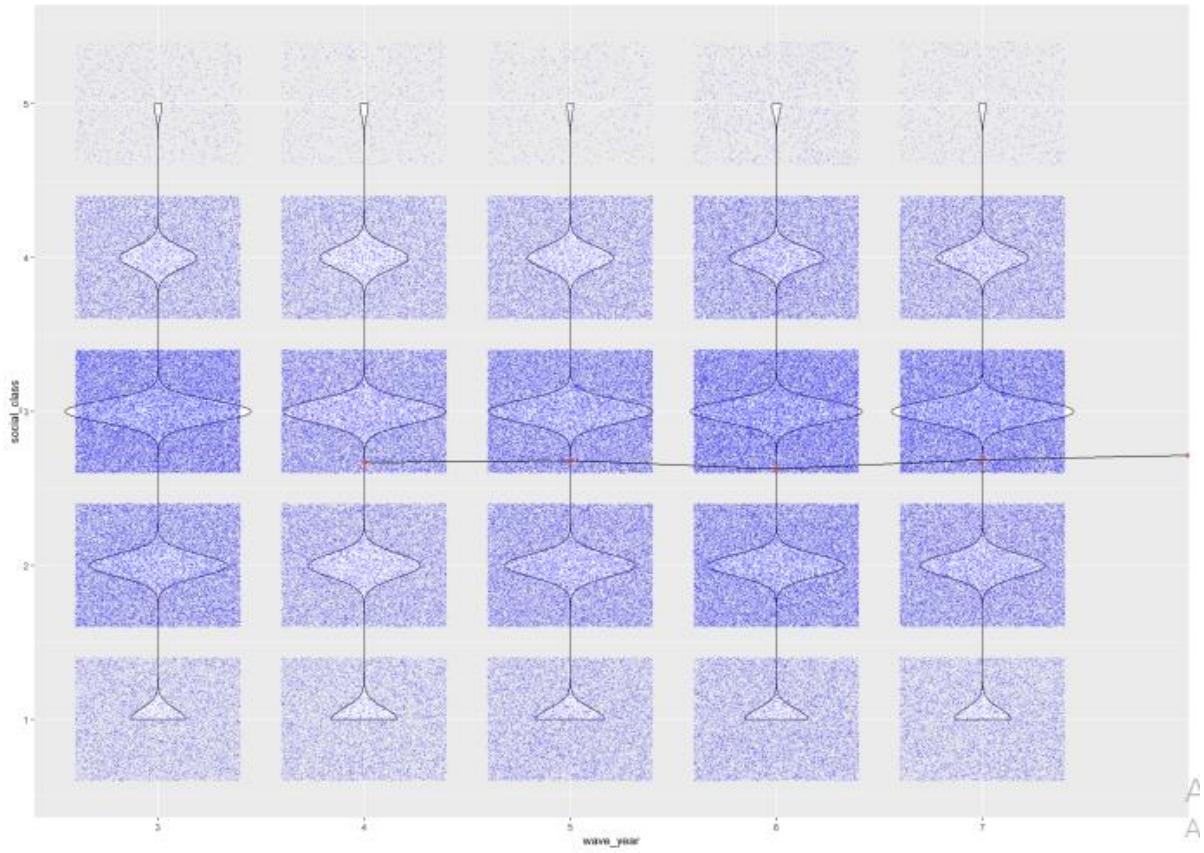


Figure 8 - Boxplot of Age

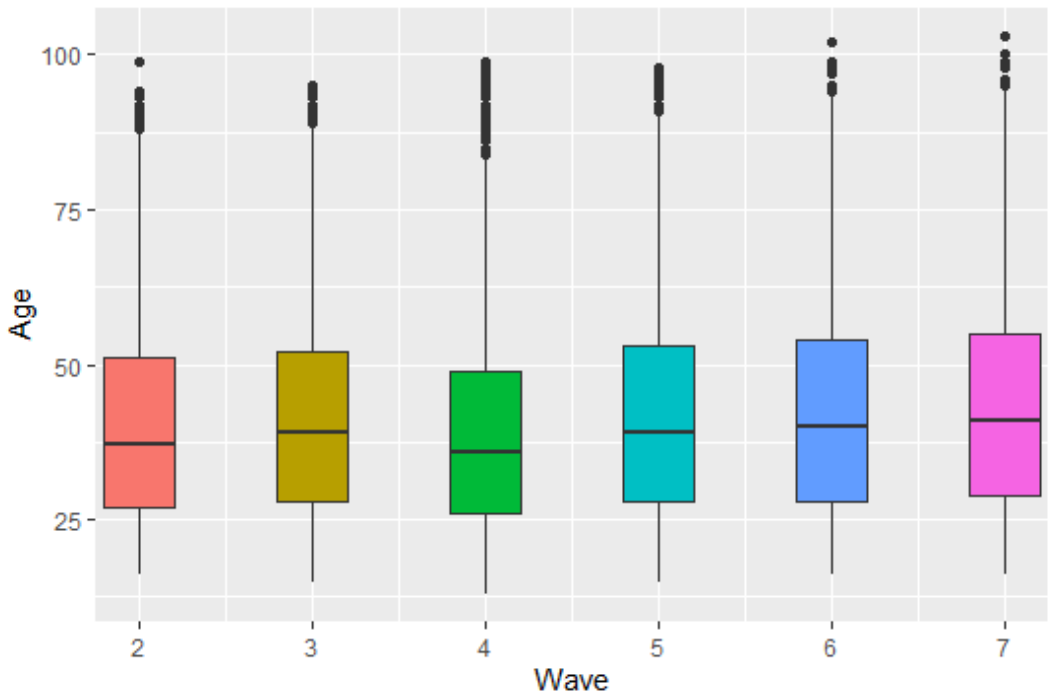
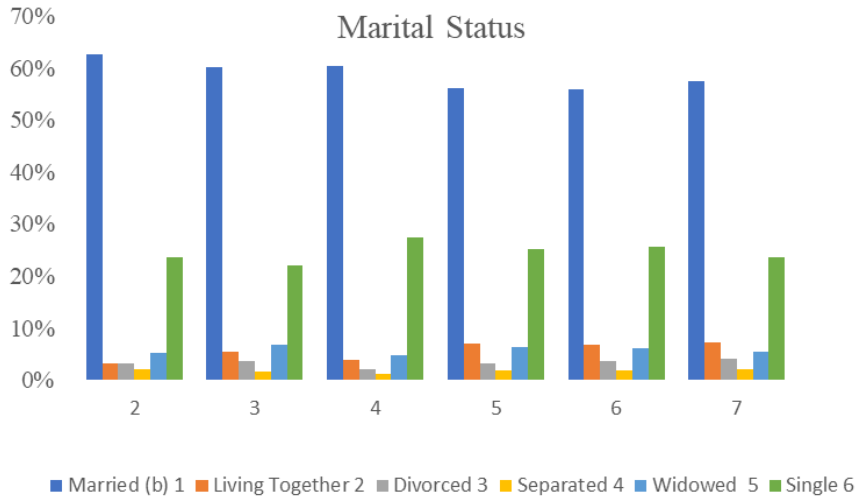


Figure 9 - Proportion of Gender per Waver

	2	3	4	5	6	7
Male	49.13%	48.07%	49.35%	47.95%	47.75%	47.47%
Female	50.87%	51.93%	50.65%	52.05%	52.25%	52.53%

Source: World Value Survey, elaborated by the authors

Figure 10 -- Proportion of Marital Status per Wave



Our dependent variable had an interesting behavior, the average value grew from the second to third waves, remaining steady until 2004, when it started to variate until reaching the lowest level since 1994. These movements do not seem to go in accordance with Alt & Iversen (2017), once that during this same period, the income variable of the WVS remained practically steady, but gradually more equal. The gini index of Income at the WVS for 1989 to 2020 reduced from 0.32 in Wave 3 to 0.246 and 0.24 in the last two waves. Dion & Birchfield (2010) and Alt & Iversen (2017) discuss how inequality affects PfR, the former paper shows that more unequal countries tend to be less prone to redistribute, while the latter that world's support for redistribution has been falling despite the rise of inequality. From our data we conclude that there does not seem to be any relation between individual's income inequality and PfR.

Ideology also follows an interesting pattern. Even though its average remained steady, going from 5.4 in the first wave to 5.6 in the last one, its dispersion changes. The variance rose from 5.2 in Wave 2 to 6.59 in Wave 4 (1999-2004) and reduced to 5.71, 5.56 in the two subsequent waves, until rising again to 5.92 in the last one. More dispersion could represent less

polarization, so we could expect less robust results when it appears. We can see from the violin of Ideology (Figure 6) that in Waves 5 and 6 (2005-2014) there are more answers (blue dots) concentrated in the left spectrum of the distribution, from Ideology 5 to 10. This may be a carry-over effect from the years of economic crisis; therefore we believe that in these waves, the left should present bigger impacts.

Beliefs are more concentrated in the fourth step, meaning that people think that luck is more important than effort, on average. Health is more concentrated in the upper categories, representing a good health status. Social Class also remains steady, concentrated in the middle class. Education changes especially due to the unbalancing of countries, therefore the average is not a good metric of comparison. What we can expect is that in waves when the overall education reduces, the impacts would be smaller or even positive (towards more redistribution), as also shown in Alesina & Giuliano (2011) where education presented a negative relation with PfR. Age is more concentrated in the younger generations in all waves; therefore we expect a steady behavior of the impacts. Gender is also steady, with more women represented in the sample.

Married remained the main marital status in every wave, followed by single, widowed, living together, divorced, and separated. The proportions remained steady, only living together gained a small participation, especially in the last 3 waves.

Table 3 - Detailed Descriptive Statistics for Income and Ideology

		Means			Variance		
Wave	Years	PfR	Income	Ideology	PfR	Income	Ideology
2	1989-1993	5,1	4,4	5,4	9,63	5,40	5,20
3	1994-1998	6,4	4,5	5,6	9,23	6,50	5,31
4	1999-2004	6,4	4,5	5,7	9,23	5,38	6,59
5	2005-2009	6,2	4,6	5,7	8,44	5,33	5,71
6	2010-2014	6,5	4,8	5,7	8,53	4,45	5,56
7	2017-2020	6,0	4,8	5,6	9,06	4,27	5,92

Our sample is very unbalanced. As we can see at the Table 7 at the annex, the same set of countries do not repeat in every wave, and even though we control for country-fixed effects, when analyzing the wave models, it is hard to conclude if the changes in the impacts and sensibilities are due to solely time aspects or if it's affected by the characteristics of these

different pool of countries. We try to solve this question by restricting our sample and taking only the countries that repeat in every wave. Their violin plots can also be found at the figures 11 to 21 in the annex, but the movements were like the ones with the complete dataset. Income and PfR seem to vary a little more in this sample. We tried to make the sample even more balanced by narrowing it to the countries and variables that appear in each wave (beliefs was not surveyed in wave 4 and social class in wave 2), however the results of the regressions were not very clear, and the sample was limited to 3 countries only.

All the models were estimated following the LSDV approach, controlled by country and time fixed effects. In the pooled models we control for both country and wave fixed effects, while in the wave models, only country. The models which presented heteroscedasticity were estimated by taking correct computation of the variance-covariance matrix, once it is necessary to estimate the robust standard-errors as described in Zeileis (2004). We used an HC method (heteroscedasticity-consistent matrix) to adjust the model. All the results presented in the next section are already with the robust coefficients.

Preliminary analysis also included attempts to create an individual level pseudo-panel data, following Guillhern (2017), however the difference in countries' samples in each wave made the models with a huge lack of robustness, therefore we decided to follow with the LSDV approach.

4. Estimating Preferences for Redistribution

Starting with the pooled models, controlling by country and time fixed effects, we are looking at a within-country analysis that enables us to have a picture of the world's individual responses to PfR. In these estimations, we expand Alesina & Giuliano (2011)'s work by additionally using the last two waves of the WVS and treating the main variables as categorical rather than continuous. Doing so we can enrich the analysis by understanding the different responses regarding each variable. Now we have coefficients estimated for each category of each variable and we will see, for example, that different income levels respond differently to PfR. They find that Income, for example, using our main model with religion has a negative impact of -0.237 (for income). We will see in column 3 of the results that this same variable, taken as categorical,

has an interesting behavior: the lower income levels have smaller impacts compared to the upper ones. Income 3 has a coefficient of -0.063 while Income 10, -0.690.

We then estimate this same model for each wave, aiming to test our hypothesis that the context indeed influences an individual's formation of PfR. Given the fact that the same set of countries do not repeat in every wave, the differences in the impacts and sensibilities of the coefficients may be due to a combination of two effects: a contextual one and a sampling one. We try to solve this question by restricting our data and using only the countries that were surveyed in each wave.

4.1 Pooled Models

Our models (presented in Table 4) follow Alesina & Giuliano (2011), which have estimated the within-country responses of Preferences for Redistribution for the whole collection of waves (using country and wave fixed effects). We expand their model in column 3 by additionally using the last two waves available in the World Value Survey. Here we estimate these models using our two samples: unrestricted and country-restricted. Column 1 (Unrestricted) shows our base model using the whole available sample while in Column 2 we use the Country-Restricted sample for the same base model.

We corroborate, with our Alesina's expanded model (Unrestricted sample, Table 4, column 3), the Alesina & Giuliano (2011) results regarding the patterns of income, gender, education, employment, and ideology. Income, also following the Meltzer-Richard model, showed a negative relation with preference for redistribution, while women, left-wingers and the unemployed are more prone to redistribute. The more educated are less prone to redistribute. In their work, this variable (education) was only significant when interacted with ideology[2].

[2] We estimated the model interacting Education with Ideology and Income; however, the results were not robust.

Our specification, allowing to partition the levels, clearly states a non-monotonic pattern of growth for Income. Income 3 has an impact of -0.061, reaching -0.171 in Income 5 and -0.960 in Income 10. Even though those impacts were higher than Alesina's work, they were smaller than the impact found in our Unrestricted model (Table 4, column 1). This difference may be due to the addition of the two new waves, they not only expand considerably the number of countries, but The impacts of education were also slightly smaller in the Unrestricted model, compared to the Alesina's expanded one. The first column of Table 4 has, for Middle Education, -0.173 and -0.196 in Upper Education, compared to -0.238 and -0.275 in Column 3.

Ideology showed a very interesting pattern. Again, we use the same variable, but divided in categories and we can see an explicit cut between the spectrums. The left, in comparison to the center, showed all positive impacts, more prone to redistribute, while the Right one negative (less prone to redistribute). The overall result, as shown in Column 3 Table 4, taking an average of the coefficients pondered by the size of the groups is -0.005. This result goes against the one presented in Alesina & Giuliano (2011). The addition of the two new waves also showed another sign of the recent change in the world's political view, the Right spectrum had a significant increase on its impacts. As shown in Table 4, Column 1, it is now almost 20% higher than Alesina's expanded model. It is true that the Left one was also higher, but only 5% more. The pondered average is again negative, but slightly stronger, -0.009. Just as we found in Income, there seems to be a movement within the variable that increases in the extremes, people who are in the middle of the distribution have smaller impacts compared to the ones in the tail.

Regarding the labor market, Alesina & Giuliano (2011) stated an average of 0.31 for being unemployed; we only found importance of this specific job status in our Unrestricted model, with an impact of 0.124. At column 3 we only found statistically significant results for being employed, with a negative response of 0.08. We, then, have two different conclusions. When adding the two new waves, being without a job shape positively the individual's PfR, compared to the other forms of employment, while the opposite status does not seem to matter. Controlling for religion, in our specification, we can only conclude that being employed reduces the preferences for income redistribution.

Alesina & Giuliano (2011) use marital status in two ways, the first one as a proxy for personal misfortune using a question that asked if the person have ever been divorced[3] and if they are married when asking the marital status of the individual. For the personal misfortune proxy, they do not find any result, while for the married one they find that it reduces the preferences for redistribution. We decided to take a different approach as to include all the status available at the WVS. We find that being divorced, in comparison to being married, increases the PfR, with a positive and significant effect of 0.052 in our complete model (Table 4, column 1) and 0.053 in the last column of this same Table. Using the last two waves and not controlling for religion we also find that living together as married strongly increases the desire for income redistribution, as stated in column 1 (0.125).

Age was significant in their work, but not very robust, with the youth being more favorable. We, however, do not find it in our complete model but we do find it at Alesina's expanded one, with smaller impacts. While they found 0.067 and -0.007 for age and age squared, respectively, we have 0.018 and -0.0002. The magnitudes of the impacts in Gender here were also smaller, 0.098, they find, on average, 0.159. This difference in result may be due to the addition of the two waves or by the new specification of our model.

Looking at beliefs, we have two different and significant results. We use the same variable, but again, we take it as categorical. Alesina & Giuliano (2011) find that people who believe that luck is more important than effort are more prone to redistribute with a coefficient of 0.076. If we take the pondered average of the *betas* in the two models in columns 1 and 2, we have -0.004 and 0, respectively. Comparing Alesina's model to our new specification, we do not have a very robust answer, only 4 categories were significant, however, when adding the two new waves and removing religion, we found the opposite relation. People who value effort seem to be more prone to redistribute. When we look at the coefficients separately, splitting the spectrum into two, with Beliefs 1 to 4 are scores marked by people that values more effort than luck and from 6 to 10, luck, we have a very interesting cut: the side that values more effort are all positive, while the other, negative. As we can see in column 2 at the next table, the results were not very robust, however we still have a clear cut between the sides. Compared to our base category, Beliefs 5, people who believe that luck is more important than effort had a negative

[3] Alesina & Giuliano (2011) highlight that they have less observations due to the fact it was -until then- surveyed only once

impact in two steps (6 and 7), with coefficients of -0.173 and -0.126. Looking at the other side, when people value more effort, we have 0.419 and 0.200 in Beliefs 1 and 2, respectively. Focusing now on the first column, our Unrestricted model, the same effect appears. Beliefs 1, for example, has a coefficient of 0.529, decreasing to Beliefs 3 to 0.163. The opposite side begins at -0.252 in Beliefs 6 and increases (becomes less prone to PfR) until reaching -0.310 in Beliefs 9 and decreases again to -0.069 in the last category. This may be another evidence on the importance of using our specification when treating Likert scale variables.

The last tested matter is religion. Using our specifications, religion lost relative importance in formation of the preferences here studied. Alesina & Giuliano (2011) find that despite Orthodox (that is, on average more prone to redistribute), the remaining religions are less prone to redistribute compared to atheists. We also find the same result to this specific religious domination (Orthodox) with a slightly smaller impact, 0.158 compared to 0.174, the difference lies in the remaining religions, that in our model do not differ to the atheists. Any other variable was significant.

We add to their model two variables: Health and Social Class. The first variable states a clear (and increasing) dislike for redistribution. The better the health, the less prone people are to it, in comparison to being in very poor health. Controlling for religion, we have, in column 3, -0.322 for Fair Health, growing, again in a non-monotonic path to -0.449 in Very Good Health. In this model being in a Poor Health does not differ to our base category. The unrestricted model shows more robust results, also growing, now, from Poor Health, -0.103 until -0.493. Social Class, taken here as a measure of status also presented an inverse relation to PfR. The Upper Classes are very against redistribution, stating -0.366 and -0.466 in the Unrestricted and Alesina's expanded model, respectively. We also found the same movement of Income, within growth of dislike for PfR. In column 1, compared to the Lower Class, Middle-Lower has a coefficient of -0.094, then -0.202 and -0.290 until reaching the Upper Class. The addition of religion increased the impact of these same categories, now, despite Lower Class, the coefficient of Middle Class was -0.267 and Middle-Upper -0.307.

Our country dummies showed that Eastern-Europe and Northern Africa are, on average, more prone to redistribute, as can be seen at Table 8 at the annex. Alesina & Giuliano (2011) found the same result regarding Eastern Europe, so we corroborate with this aspect. The North-

African countries were found after adding the two new waves, as we can also see at the Table 8

As we can observe from the comparison of these models, our specification enriched the analysis. The movements of Income, Social Class, Beliefs, and Ideology cannot be ignored once that taking them as continuous does not count with the different responses of each category and hides important information. The clearest aspect of this matter is Ideology, establishing a very strong cut between both spectrum. The self-interest aspects (social class and income) showed how the sensitivities respond to wealth.

We will finish this section describing the results of column 2 of Table 4 just as a matter of comparison with our wave models. Now we have 7 countries: Turkey, China, Chile, South Korea, Mexico, Japan, and the United States. Compared to the Unrestricted model, we lost the significance of Health, Employment, Education and Marital Status. Age and Gender are in accordance with the literature, with the youth and women being more favorable to PfR, but now with a stronger response. Gender, for example, is 0.146, compared to 0.093 and 0.096 in the other models.

Compared to the other two models at Table 4, we had similar results for the remaining variables. Income and Social class corroborated the Meltzer-Richard model, with a non-monotonic growth path within each variable. The most interesting question here was the significantly bigger impacts of Social Class. Taking the higher wealth status, Upper Class the impact was -0.856, compared to -0.364 and -0.466, respectively, in the Unrestricted and Alexina's expanded models. Despite Income 10, the impacts now were bigger than the Unrestricted model, but smaller than Alesina's expanded model. Maybe the addition of Religion indeed diminishes the effect of wealth.

Ideology also had the same clear cut in the middle, and now, despite the extreme right, all of the impacts were higher. Beliefs were again not very robust. As we can see at Column 3 in the next Table, only from the sixth to ninth steps onwards are the responses different from the base category, with a strong negative impact, -0.381, -0.448 and -0.420, all higher than the ones found at the Unrestricted model and Alexina's expanded.

All the countries are more prone to redistribute, compared to the United States, with Japan and South Korea being more favorable than the others. Argentina seems to not differ much from the US.

As shown in this section, it is clear how this specification enriches the analysis, therefore we will compare the different points in time taking the same model as the Unrestricted one for each wave.

Table 4 - Pooled Results

	Unrestricted	Country Restricted	Alesina's Model Update
	(1)	(2)	(3)
Age	-0.003	-0.009*	0.018***
	(0.002)	(0.005)	(0.003)
Age Squared			-0.0002***
			(0.0001)
Woman	0.093***	0.146***	0.098***
	(0.019)	(0.044)	(0.010)
Lower Education (b)			
Middle Education	-0.173***	-0.048	-0.238***
	(0.042)	(0.043)	(0.021)
Upper Education	-0.196***	-0.067	-0.275***
	(0.051)	(0.067)	(0.092)
Married (b)			

Living Together as married	0.125***	0.347	0.070
	(0.034)	(0.000)	(0.061)
Divorced	-0.020	-0.089	0.022
	(0.038)	(0.096)	(0.024)
Separated	0.029	-0.070	0.060
	(0.076)	(0.235)	(0.183)
Widowed	0.052*	-0.042	0.053**
	(0.027)	(0.115)	(0.021)
Single	0.026	0.044	0.106***
	(0.023)	(0.038)	(0.040)
Very Poor Health (b)			
Poor Health	-0.103***	0.100	-0.153
	(0.030)	(0.434)	(0.000)
Fair Health	-0.277***	0.101	-0.322***
	(0.039)	(0.347)	(0.029)
Good Health	-0.412***	-0.059	-0.409***
	(0.053)	(0.401)	(0.089)
Very Good Health	-0.493***	-0.163	-0.449***
	(0.079)	(0.370)	(0.141)
Lower Class (b)			
Lower-Middle Class	-0.094***	-0.189*	-0.126
	(0.020)	(0.098)	(0.000)
Middle Class	-0.202***	-0.306***	-0.267***
	(0.042)	(0.081)	(0.036)
Middle-Upper Class	-0.290***	-0.425***	-0.370***
	(0.056)	(0.115)	(0.001)

Upper Class	-0.364***	-0.856***	-0.466***
	(0.103)	(0.169)	(0.088)
Income 1 (b)			
Income 2	-0.093***	-0.217*	-0.075
	(0.026)	(0.115)	(0.050)
Income 3	-0.115***	-0.146	-0.061**
	(0.040)	(0.163)	(0.028)
Income 4	-0.212***	-0.311*	-0.099***
	(0.066)	(0.174)	(0.020)
Income 5	-0.311***	-0.344*	-0.171*
	(0.082)	(0.187)	(0.092)
Income 6	-0.436***	-0.508**	-0.296***
	(0.095)	(0.219)	(0.088)
Income 7	-0.532***	-0.574**	-0.374***
	(0.105)	(0.226)	(0.131)
Income 8	-0.617***	-0.479*	-0.417***
	(0.127)	(0.245)	(0.132)
Income 9	-0.642***	-0.529***	-0.492***
	(0.125)	(0.205)	(0.139)
Income 10	-0.852***	-0.631**	-0.690***
	(0.143)	(0.248)	(0.185)
Employed	-0.004	0.025	-0.080**
	(0.034)	(0.049)	(0.040)
Unemployed	0.124***	0.185	0.078
	(0.031)	(0.132)	(0.076)
Ideology 1 (Left)	0.408***	0.816**	0.410***
	(0.065)	(0.377)	(0.123)
Ideology 2	0.620***	0.907***	0.546***
	(0.081)	(0.303)	(0.066)

Ideology 3	0.386***	0.606***	0.384***
	(0.099)	(0.182)	(0.061)
Ideology 4	0.157***	0.303***	0.166***
	(0.057)	(0.084)	(0.062)
Ideology 5 (b)			
Ideology 6	-0.213***	-0.234***	-0.153***
	(0.029)	(0.075)	(0.038)
Ideology 7	-0.464***	-0.480**	-0.392***
	(0.052)	(0.190)	(0.049)
Ideology 8	-0.509***	-0.638**	-0.428***
	(0.054)	(0.248)	(0.025)
Ideology 9	-0.560***	-0.827***	-0.475***
	(0.086)	(0.292)	(0.112)
Ideology 10 (Right)	-0.385***	-0.332	-0.440
	(0.107)	(0.342)	(0.000)
Beliefs 1 (Effort)	0.529***	0.273	0.419***
	(0.121)	(0.379)	(0.058)
Beliefs 2	0.308***	0.077	0.200***
	(0.109)	(0.177)	(0.074)
Beliefs 3	0.163*	0.055	0.038
	(0.084)	(0.093)	(0.079)
Beliefs 4	0.046	0.012	-0.042
	(0.060)	(0.099)	(0.105)
B]eliefs 5 (b)			
Beliefs 6	-0.252***	-0.381**	-0.173***
	(0.041)	(0.166)	(0.021)
Beliefs 7	-0.295***	-0.448***	-0.126*

	(0.086)	(0.139)	(0.073)
Beliefs 8	-0.240**	-0.420**	-0.052
	(0.101)	(0.199)	(0.129)
Beliefs 9	-0.310**	-0.357**	-0.041
	(0.138)	(0.170)	(0.157)
Beliefs 10 (Luck)	-0.064***	-0.226	-0.041
	(0.024)	(0.145)	(0.082)
Roman Catholic			-0.011
			(0.111)
Protestant			-0.163
			(0.173)
Orthodox			0.158**
			(0.078)
Muslim			-0.032
			(0.286)
Jew			0.397
			(0.243)
Hindu			-0.047
			(0.000)
Buddhist			0.240
			(0.247)
No Religion			0.110
			(0.102)
Other Religion			0.076
			(0.077)
Constant	6.010***	5.956***	5.250***
	(0.316)	(0.863)	(0.506)
Observations	194,916	29,929	81,544
R2	0.123	0.124	0.130

Adjusted R2	0.123	0.123	0.129
Residual Std. Error	2.743 (df = 194776)	2.690 (df = 29873)	2.726 (df = 81422)
F Statistic	196.985*** (df = 139; 194776)	77.048*** (df = 55; 29873)	100.642*** (df = 121; 81422)

*Note: *p<0.1; **p<0.05; ***p<0.01*

4.2 Models per Wave

Now we run separate estimations to see if the time in which each survey was taken affects the formation of individuals' preferences for redistribution. To test if the coefficients differ among waves, we used a Z test inspired by Clogg *et al.* (1995) and expressed in Paternoster *et al.* (1998). All the comparisons made among wave's coefficients in this section have 5% of significance level.

Using the complete dataset, except for Wave 3, all of the Age sensitivities were negative, in accordance with what Alesina & Giuliano (2011) has found, youth are indeed more prone to redistribute. The movement increases with time, with an impact of -0,003 in wave 4 to -0,006 in wave 7, they are not statistically equal with 5% of significance level. Women are again more prone to redistribute, with an average -0.1 impact in every wave. Despite Wave 2, the impact changed little, from 0.104 in the third one to 0.126 in the last wave. Waves 5 and 6 present a decrease in this variable, 0.098 and 0.047, respectively. People with better health[4] are less prone to redistribute with a clear path inside each wave, growing the rejection for PfR if the status increases, especially starting with fair health. Between waves, we also have an increase of rejection, Very Good Health, for example, goes from -0.246 in wave 3 to -0.614 in wave 7. All the remaining categories diminishes from wave 3 to 7 using 5% level of significance

The coefficients of the education categories 2 and 3 (Middle and Upper) also are in accordance with the literature, showing lower preferences for redistribution when education increases (the exception was in wave 5 and 7), in wave 6, for example, we have, respectively, -0.119 to -0.163. Their impact did not change through the years, the effect of Middle Education going from -0.487 in wave 2 to -0.103 in wave 7, however we may not say with 5% of significance level

[4] In wave 6 health is not a good parameter because it has only 4 categories, instead of 5.

that they are different. Looking at figure 5 (Violin plot of Education) we can observe that the different pool of countries affected the average education of our sample, even with this "mix effect", education presented in every wave the same pattern within each wave, therefore we may conclude that, despite the pool of countries and time, it responds the same to PfR.

Marital status once again did not follow any pattern, however living together as married acquired importance in the last 3 waves (the same period when there are relatively more people in this status), with individuals on that status being more prone to redistribute in the same amount (compared to married) with 0.1. This result may lead to a fact that is widely changing nowadays: new family formations. It is widely known that families have been changing in modern times, not only in number but in constitution. Our result seems to point out a possible effect of these changes in the formation of preferences for redistribution. Also, being single starts statistically significant, then the effect disappears, with a positive impact of, respectively, in waves 2 and 3, 0.285 and 0.109.

Social Class showed, in every wave, the same pattern, the higher the class the less prone to redistribute, in wave 4, for example, it goes from (Middle-Lower Class) -0.206 to (Upper Class) -0.535. They all grow at different rates, also expressing the same non-monotonic characteristics. If we look at the behavior of this variable between time, we can clearly see a decrease in the impact. In the Upper Class we went from, in wave 3, -0.575 to -0.328 in wave 7. We cannot say that they are statistically different from each wave, we can conclude that the pattern within waves remains in every point of time here studied.

Income also followed the same pattern of Social Class. We again have a strong corroboration of the Meltzer-Richard model, our pooled specifications and Alesina & Giuliano (2011), the higher the income the less prone to redistribute in all waves. We also found the same within movement of our pooled samples: the higher the level, the less prone to redistribute. Wave showed an increased impact from its third to eight outcomes, from -0.341 to -1.057. The remaining categories have equal preference than our base category. Wave 3 showed that from Income 6 onwards people are against PfR, starting in -0.250 reaching, in the last level, to -0.520. In wave 4 we gain another significant category, the fifth outcome, now going from -0.268 to -0.562 in Income 10. Wave 5, despite Income 2 (-0.138), we also have the same movement on the previous wave, from Income 5 (-0.268) to Income 10 (-1.018). The last two waves show more robust results, with Wave 6 having all the categories different from our base

one and in Wave 7, from the third step until Income 10. Income 3 was -0.165 and -0.125, while the last step -1.108 and -0.776 in waves 6 and 7, respectively.

From the examples in the previous paragraph and looking at Table 4, the impacts grew from the third wave until the sixth and have a small reduction at the last one. From Income 6 onwards this U shape is very clear. In waves 3 to 5, covering 1994 to 2009 many different economic crises are captured (financial crisis in emerging markets, dot com bubble, Japan lost decade and, of course, the 2008 one). This fact may contribute to the lack of different responses to PfR in the bottom of the distribution, another indicator on the importance of the context of the survey. The differences in the impacts between waves were observed mainly in the middle-upper part of the income range, from incomes 5 to 8 and concentrated in the Waves 2 to 5.

Employment, despite waves 3, 6 and 7, had an overall impact of -0,1. Unemployed also followed our expectations, being positive in all the waves, despite the 4th one, with a mean impact of 0.17. Here we saw the same movement as in the pooled one: the unemployment status seems to be more important than the employed one, people who do not have any job are more favorable to redistribute than the ones inside the labor market, who are against redistribution

The pattern in ideology was also very clear in every wave. In comparison to those in the middle of the spectrum, left wingers are more prone to redistribute, while the right against. This result is very consistent in every wave, despite the third one, where only the left side of the spectrum showed significant results. The spectrums of the distribution showed different patterns across time: the left spectrum did not differ much between waves, only the extreme Left changes between waves 4, 6 and 7, passing from 0.476, 0.426 and 0.452, respectively. This U shape appears in the remaining categories of this spectrum (1 to 4), but we cannot affirm with 5% of significance level that they are different. The Right spectrum, however, changed more between waves, specially from Ideologies 6 to 8. The rejection, in Ideology 6, for example increases from wave 3, -0211 to -0.224 in wave 7.

Beliefs showed the same behavior as in the pooled model, despite wave 2, where we find a more similar result to the one in Alesina & Giuliano (2011), where people who think that luck is more important than effort for personal success are more prone to redistribute. The last three waves go in accordance with our model 1, column 1, but the impacts were higher here and increased from wave 5 to 7. Belief 8, but we cannot say with 5% of significance level that they

grew. It is important to highlight that the results were more consistent in the last two waves, therefore we may say that using the unrestricted sample the results of this variable were not as consistent as the other ones, especially compared to the pooled model and Alesina & Giuliano (2011). Maybe this movement was also a reflection of the later changes in the west's political order.

Table 5 - Unrestricted sample per Wave

	2	3	4	5	6	7
Age	-0.010**	0.003**	-0.003**	-0.005***	-0.002**	-0.006***
	(0.004)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Woman	0.011	0.104***	0.126***	0.098***	0.047**	0.126***
	(0.084)	(0.030)	(0.037)	(0.027)	(0.022)	(0.026)
Lower Education (b)						
Middle Education	-0.487***	-0.219***	-0.141**	-0.171***	-0.119***	-0.103***
	(0.118)	(0.043)	(0.055)	(0.035)	(0.032)	(0.037)
Upper Education	-0.620***	-0.359***	-0.233***	-0.017	-0.163***	-0.083**
	(0.134)	(0.051)	(0.051)	(0.042)	(0.038)	(0.040)
Married (b)						
Living Together as married	0.073	0.035	0.041	0.169***	0.084*	0.173***
	(0.256)	(0.067)	(0.086)	(0.056)	(0.046)	(0.050)
Divorced	-0.541*	0.039	-0.049	-0.112*	-0.010	-0.118*
	(0.301)	(0.070)	(0.110)	(0.068)	(0.056)	(0.065)
Separated	0.699*	-0.133	-0.123	0.270***	-0.041	0.001
	(0.407)	(0.110)	(0.139)	(0.099)	(0.082)	(0.084)
Widowed	0.043	0.054	0.091	0.021	0.087*	0.085
	(0.223)	(0.065)	(0.087)	(0.061)	(0.050)	(0.063)
Single	0.285***	0.109***	0.013	-0.060	-0.004	0.057

	(0.107)	(0.042)	(0.049)	(0.037)	(0.031)	(0.036)
Very Poor Health (b)						
Poor Health	-0.719	-0.076	-0.723*	-0.167	0.279***	-0.008
	(0.486)	(0.133)	(0.390)	(0.509)	(0.054)	(0.154)
Fair Health	-1.255***	-0.215*	-0.934**	-0.397	0.203***	-0.306**
	(0.452)	(0.125)	(0.385)	(0.507)	(0.034)	(0.146)
Good Health	-1.359***	-0.263**	-1.009***	-0.541	0.065**	-0.481***
	(0.449)	(0.126)	(0.385)	(0.507)	(0.028)	(0.145)
Very Good Health	-1.533***	-0.246*	-1.082***	-0.618		-0.614***
	(0.450)	(0.130)	(0.386)	(0.507)		(0.147)
Lower Class (b)						
Lower-Middle Class		-0.143**	-0.206***	-0.101**	-0.097**	-0.079
		(0.057)	(0.062)	(0.050)	(0.038)	(0.052)
Middle Class		-0.342***	-0.270***	-0.198***	-0.129***	-0.172***
		(0.057)	(0.061)	(0.050)	(0.040)	(0.051)
Middle-Upper Class		-0.429***	-0.441***	-0.322***	-0.261***	-0.207***
		(0.065)	(0.072)	(0.058)	(0.046)	(0.058)
Upper Class		-0.575***	-0.535***	-0.412***	-0.220**	-0.328**
		(0.133)	(0.143)	(0.132)	(0.094)	(0.127)
Income 1 (b)						
Income 2	-0.217	-0.009	-0.044	-0.138**	-0.101*	-0.015
	(0.157)	(0.061)	(0.082)	(0.067)	(0.058)	(0.078)
Income 3	-0.341**	-0.089	-0.102	0.005	-0.165***	-0.125*
	(0.157)	(0.063)	(0.081)	(0.064)	(0.053)	(0.070)
Income 4	-0.438***	-0.089	-0.082	-0.091	-0.310***	-0.293***

	(0.165)	(0.065)	(0.082)	(0.065)	(0.054)	(0.070)
Income 5	-0.356**	-0.059	-0.206**	-0.268***	-0.445***	-0.356***
	(0.174)	(0.066)	(0.085)	(0.064)	(0.052)	(0.067)
Income 6	-0.576***	-0.215***	-0.252***	-0.400***	-0.572***	-0.504***
	(0.180)	(0.070)	(0.090)	(0.068)	(0.055)	(0.070)
Income 7	-1.055***	-0.220***	-0.255***	-0.554***	-0.676***	-0.638***
	(0.180)	(0.073)	(0.094)	(0.071)	(0.058)	(0.074)
Income 8	-1.057***	-0.271***	-0.365***	-0.625***	-0.799***	-0.733***
	(0.191)	(0.076)	(0.104)	(0.078)	(0.065)	(0.083)
Income 9	-0.565	-0.317***	-0.381***	-0.736***	-0.899***	-0.547***
	(0.406)	(0.082)	(0.119)	(0.100)	(0.097)	(0.118)
Income 10	-0.268	-0.520***	-0.562***	-1.018***	-1.180***	-0.776***
	(0.492)	(0.087)	(0.128)	(0.105)	(0.123)	(0.135)
Employed	-0.208**	0.0001	-0.099**	-0.109***	0.062**	-0.035
	(0.093)	(0.035)	(0.041)	(0.031)	(0.025)	(0.030)
Unemployed	0.280*	0.206***	0.085	0.142***	0.112***	0.137**
	(0.152)	(0.058)	(0.063)	(0.052)	(0.041)	(0.055)
Ideology 1 (Left)	0.410**	0.298***	0.476***	0.542***	0.426***	0.452***
	(0.164)	(0.074)	(0.079)	(0.069)	(0.055)	(0.065)
Ideology 2	0.303	0.499***	0.188**	0.575***	0.608***	0.789***
	(0.193)	(0.078)	(0.093)	(0.070)	(0.060)	(0.070)
Ideology 3	0.275*	0.337***	0.180**	0.433***	0.247***	0.591***
	(0.141)	(0.052)	(0.073)	(0.050)	(0.044)	(0.049)
Ideology 4	0.114	0.221***	0.028	0.071	0.062	0.267***
	(0.135)	(0.049)	(0.070)	(0.049)	(0.040)	(0.046)
Ideology 5 (b)						
Ideology 6	0.201	-0.211***	-0.224***	-0.204***	-0.250***	-0.224***
	(0.130)	(0.044)	(0.056)	(0.040)	(0.034)	(0.040)

Ideology 7	0.115	-0.446***	-0.227***	-0.475***	-0.535***	-0.436***
	(0.146)	(0.050)	(0.062)	(0.044)	(0.037)	(0.044)
Ideology 8	-0.168	-0.418***	-0.325***	-0.526***	-0.567***	-0.531***
	(0.144)	(0.055)	(0.064)	(0.048)	(0.039)	(0.047)
Ideology 9	0.009	-0.336***	-0.147*	-0.636***	-0.676***	-0.514***
	(0.203)	(0.082)	(0.089)	(0.072)	(0.055)	(0.068)
Ideology 10 (Right)	0.200	-0.401***	-0.078	-0.511***	-0.489***	-0.151***
	(0.159)	(0.070)	(0.069)	(0.067)	(0.052)	(0.056)
Beliefs 1 (Effort)	-0.552***	0.373***		0.466***	0.725***	0.370***
	(0.123)	(0.050)		(0.048)	(0.037)	(0.046)
Beliefs 2	-0.651***	0.120**		0.235***	0.507***	0.144***
	(0.148)	(0.053)		(0.049)	(0.041)	(0.049)
Beliefs 3	-0.613***	-0.055		0.055	0.319***	0.106**
	(0.148)	(0.048)		(0.043)	(0.037)	(0.043)
Beliefs 4	-0.267*	-0.164***		0.011	0.109***	0.088**
	(0.144)	(0.049)		(0.044)	(0.038)	(0.042)
Beliefs 5 (b)						
Beliefs 6	-0.083	-0.139**		-0.200***	-0.255***	-0.302***
	(0.181)	(0.056)		(0.049)	(0.042)	(0.044)
Beliefs 7	0.002	-0.040		-0.213***	-0.339***	-0.426***
	(0.170)	(0.057)		(0.051)	(0.043)	(0.045)
Beliefs 8	0.333*	0.081		-0.164***	-0.328***	-0.380***
	(0.185)	(0.059)		(0.057)	(0.049)	(0.050)
Beliefs 9	0.471*	0.127		-0.119	-0.464***	-0.510***
	(0.243)	(0.081)		(0.081)	(0.066)	(0.075)
Beliefs 10 (Luck)	0.860***	0.034		-0.023	-0.068	-0.053
	(0.180)	(0.075)		(0.087)	(0.065)	(0.068)
Constant	7.285***	4.645***	6.229***	7.252***	5.245***	6.592***

	(0.518)	(0.186)	(0.412)	(0.514)	(0.107)	(0.180)
Observations	6,395	39,979	29,528	42,518	62,847	49,572
R2	0.124	0.143	0.107	0.101	0.167	0.092
Adjusted R2	0.118	0.141	0.105	0.100	0.166	0.090
Residual Std. Error	3.021 (df = 6348)	2.807 (df = 39889)	2.942 (df = 29459)	2.673 (df = 42454)	2.667 (df = 62748)	2.780 (df = 49486)
F Statistic	19.619*** (df = 46; 6348)	74.571*** (df = 89; 39889)	52.105*** (df = 68; 29459)	75.681*** (df = 63; 42454)	128.470*** (df = 98; 62748)	58.871*** (df = 85; 49486)

*Note: *p<0.1; **p<0.05; ***p<0.01*

The unbalancing of the surveys is clearly seen at Table 7 at the annex with the country dummies, being majorly positive (all in comparison to the United States). The exceptions were Wave 3, Switzerland, Wave 4 Puerto Rico, Wave 5 Peru, Sweden, Canada and Indonesia and Wave 7 Puerto Rico, Romania, Taiwan, Philippines, Bolivia, and Nicaragua. Almost all the countries that were surveyed more than once had its impacts diminished across time.

A movement seen in lower income levels (smaller impacts) also appeared in Wave 5 (covering the 2008 crisis). Even though we had a 50% decrease in the number of countries, the impacts cleared diminished, the bigger impact in this period was in Morocco (1.575), smaller, for this same country than in both previous and next waves 1.807 and 1.943, respectively.

We can see, from the results so far, that the context indeed seems to impact the formation of preferences for redistribution, therefore, to try to focus on the time aspects, we show the results for the country-restricted sample.

We are now excluding a possible "mix" effect provided by the comparison of many different countries at once. It is also good to remember that we still have relevant nations such as China, the United States and Turkey. The results are displayed in Table 6 below.

Table 6 - Country-Restricted Sample per wave

	3	4	5	6	7
Age	0.001	-0.007**	-0.016***	-0.006***	-0.006***
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)
Woman	-0.006	0.490***	0.167**	0.208***	0.202***

	(0.079)	(0.076)	(0.078)	(0.057)	(0.057)
Lower Education (b)					
Middle Education	-0.043	-0.050	-0.259**	-0.075	-0.078
	(0.112)	(0.110)	(0.131)	(0.093)	(0.083)
Upper Education	-0.032	-0.081	-0.067	-0.211*	-0.048
	(0.130)	(0.101)	(0.151)	(0.108)	(0.093)
Married (b)					
Living Together as married	0.336*	0.390**	0.272	0.327***	0.304**
	(0.195)	(0.188)	(0.290)	(0.119)	(0.119)
Divorced	0.097	-0.169	0.010	-0.271**	-0.297**
	(0.226)	(0.198)	(0.186)	(0.135)	(0.135)
Separated	0.166	-0.040	0.515*	-0.131	-0.445**
	(0.287)	(0.231)	(0.312)	(0.185)	(0.181)
Widowed	-0.010	-0.010	-0.040	-0.315**	0.067
	(0.185)	(0.184)	(0.209)	(0.139)	(0.153)
Single	0.132	0.023	-0.086	-0.011	0.050
	(0.099)	(0.100)	(0.103)	(0.079)	(0.078)
Very Poor Health (b)					
Poor Health	0.695	-0.780*	-1.816*	0.209	-0.085
	(0.519)	(0.413)	(1.049)	(0.164)	(0.451)
Fair Health	0.430	-0.788**	-1.633	0.230***	0.002
	(0.499)	(0.392)	(-1.033)	(0.087)	(0.435)
Good Health	0.469	-0.849**	-1.823*	0.109	-0.163
	(0.499)	(0.390)	(-1.031)	(0.073)	(0.434)
Very Good Health	0.508	-0.928**	-1.963*		-0.213
	(0.503)	(0.395)	(1.033)		(0.438)

Lower Class (b)					
Lower-Middle Class	-0.141	-0.123	-0.508***	-0.028	-0.195*
	(0.171)	(0.144)	(0.171)	(0.127)	(0.116)
Middle Class	0.050	-0.171	-0.615***	-0.296**	-0.306***
	(0.166)	(0.139)	(0.172)	(0.126)	(0.111)
Middle-Upper Class	-0.024	-0.571***	-0.880***	-0.478***	-0.418***
	(0.180)	(0.158)	(0.192)	(0.139)	(0.128)
Upper Class	-0.719*	-0.464	-1.443***	-0.991***	-0.504*
	(0.410)	(0.352)	(0.446)	(0.315)	(0.287)
Income 1 (b)					
Income 2	-0.456**	-0.091	0.097	-0.132	-0.023
	(0.187)	(0.144)	(0.172)	(0.141)	(0.169)
Income 3	-0.427**	-0.175	0.260	-0.033	-0.153
	(0.187)	(0.152)	(0.172)	(0.135)	(0.153)
Income 4	-0.355*	-0.158	-0.059	-0.221	-0.460***
	(0.191)	(0.157)	(0.174)	(0.135)	(0.154)
Income 5	-0.154	-0.271	-0.206	-0.370***	-0.452***
	(0.193)	(0.167)	(0.177)	(0.133)	(0.152)
Income 6	-0.445**	-0.340*	-0.493***	-0.589***	-0.531***
	(0.196)	(0.177)	(0.181)	(0.138)	(0.155)
Income 7	-0.503**	-0.083	-0.275	-0.627***	-0.754***
	(0.199)	(0.182)	(0.207)	(0.145)	(0.164)
Income 8	-0.316	-0.219	0.064	-0.518***	-0.914***
	(0.208)	(0.195)	(0.217)	(0.160)	(0.183)
Income 9	-0.463**	-0.214	-0.136	-0.606***	-0.904***
	(0.211)	(0.206)	(0.306)	(0.217)	(0.231)
Income 10	-0.241	-0.290	-0.640**	-0.543**	-1.099***
	(0.252)	(0.206)	(0.315)	(0.249)	(0.364)

Employed	0.097	0.106	-0.093	-0.072	0.111*
	(0.087)	(0.083)	(0.085)	(0.065)	(0.064)
Unemployed	0.138	0.104	-0.125	0.175	0.403***
	(0.173)	(0.157)	(0.200)	(0.140)	(0.136)
Ideology 1 (Left)	0.156	0.412**	0.247	0.889***	1.010***
	(0.199)	(0.184)	(0.263)	(0.170)	(0.145)
Ideology 2	0.506**	0.432**	0.527**	1.127***	0.954***
	(0.215)	(0.219)	(0.228)	(0.161)	(0.152)
Ideology 3	0.404***	0.247*	0.406***	0.694***	0.607***
	(0.145)	(0.145)	(0.139)	(0.105)	(0.101)
Ideology 4	0.260**	0.168	0.241*	0.291***	0.297***
	(0.132)	(0.146)	(0.126)	(0.093)	(0.091)
Ideology 5 (b)					
Ideology 6	-0.148	-0.171	-0.190*	-0.363***	-0.264***
	(0.111)	(0.106)	(0.111)	(0.084)	(0.086)
Ideology 7	-0.171	-0.322***	-0.669***	-0.614***	-0.591***
	(0.125)	(0.122)	(0.128)	(0.095)	(0.093)
Ideology 8	-0.178	-0.399***	-0.762***	-0.631***	-0.966***
	(0.135)	(0.124)	(0.134)	(0.099)	(0.096)
Ideology 9	-0.578**	-0.085	-0.861***	-0.932***	-0.881***
	(0.228)	(0.175)	(0.205)	(0.134)	(0.136)
Ideology 10 (Right)	-0.189	0.052	-0.848***	-0.490***	-0.336**
	(0.176)	(0.142)	(0.206)	(0.143)	(0.132)
Beliefs 1 (Effort)	-0.042		0.787***	0.439***	0.053
	(0.125)		(0.144)	(0.096)	(0.106)
Beliefs 2	-0.008		0.248*	0.146	-0.045
	(0.142)		(0.139)	(0.098)	(0.114)
Beliefs 3	-0.267**		0.114	0.095	0.096

	(0.129)		(0.118)	(0.086)	(0.092)
Beliefs 4	-0.300**		0.265**	0.021	0.106
	(0.133)		(0.120)	(0.090)	(0.087)
Beliefs 5 (b)					
Beliefs 6	-0.297**		-0.091	-0.170	-0.524***
	(0.143)		(0.130)	(0.103)	(0.087)
Beliefs 7	-0.148		-0.106	-0.439***	-0.534***
	(0.150)		(0.140)	(0.108)	(0.092)
Beliefs 8	-0.057		0.006	-0.403***	-0.675***
	(0.153)		(0.176)	(0.131)	(0.110)
Beliefs 9	-0.306		0.079	-0.246	-0.806***
	(0.215)		(0.250)	(0.188)	(0.194)
Beliefs 10 (Luck)	-1.002***		0.077	0.094	0.247
	(0.189)		(0.273)	(0.198)	(0.172)
Argentina	1.964***	2.104***		1.133***	0.887***
	(0.147)	(0.146)		(0.124)	(0.119)
Chile	2.514***	2.560***	0.684***	1.818***	1.162***
	(0.141)	(0.127)	(0.141)	(0.114)	(0.119)
Japan		2.188***	1.772***	2.381***	1.797***
		(0.129)	(0.129)	(0.098)	(0.110)
Mexico	2.016***	1.224***		1.213***	0.398***
	(0.140)	(0.153)		(0.116)	(0.105)
South Korea	3.912***		2.233***	2.786***	0.601***
	(0.117)		(0.120)	(0.091)	(0.089)
Turkey	2.107***	2.118***	0.866***	1.986***	0.995***
	(0.137)	(0.122)	(0.145)	(0.109)	(0.095)
Constant	3.830***	5.705***	8.517***	5.648***	6.526***
	(0.593)	(0.465)	(1.093)	(0.246)	(0.482)

Observations	6,445	7,318	4,78	9,168	9,536
R2	0.165	0.100	0.166	0.180	0.112
Adjusted R2	0.159	0.095	0.157	0.175	0.107
Residual Std. Error	2.903 (df = 6393)	2.963 (df = 7275)	2.509 (df = 4729)	2.592 (df = 9116)	2.579 (df = 9483)
F Statistic	24.831*** (df = 51; 6393)	19.314*** (df = 42; 7275)	18.840*** (df = 50; 4729)	39.164*** (df = 51; 9116)	23.012*** (df = 52; 9483)

*Note: *p<0.1; **p<0.05; ***p<0.01*

Apart from wave 3, age was negative and steady throughout the years, with the impact starting from -0.7, passing to -0.16 in wave 5 and reducing again to -0.6 in waves 6 and 7. This result is in accordance with not only Alesina & Giuliano (2011) but also with our models so far. Those impacts were slightly higher than the ones found with the previous sample (the whole available data), but smaller than the pooled model using only the country-restricted sample (column 2 Table 2), that had an impact of -0.9.

From wave 4 onwards, women are also more prone to redistribute, in line with the literature. We can now observe a diminishing impact in time, going from 0.49 in wave 4 to -0.202 in the last one, however, they are not statistically significant using a 5% of significance. This variable is still stable through time, despite the small increase from wave 5 was 0.167 and wave 6 0.208, we also cannot state a significant difference. The impacts were also higher than the pooled model for the same sample (0.146).

We could not find any result for marital status in the pooled model, however, when splitting for waves some things appear. Living together as married presented the more structured results, with people being, on average, more prone to redistribute. The impacts were steady floating around 0.33. Being single does not seem to affect the formation of the preferences for this portion of the data, while Divorced (in waves 6 and 7) are less prone to redistribute, with, respectively -0.27 and -0.28. Widowed, contrasting with the only pooled result in which it was significant, the one with the complete data, was also negative, only in wave 6, with -0.315. Separated presented ambiguous results, being 0.51 in wave 5 (covering 2008 crisis) and -0.44 in wave 7. Compared to the previous sample, the result for living together as married and divorced presented similar behavior, with different impacts, not at a clear path.

The results on health were less clear than the ones found with the complete sample, but in accordance with the pooled model of the country-restricted data. In this pooled model any variable on health was significant, here we found the negative relation between health and PfR just in wave 4, where it goes from -0.78 in Poor Health and scaling up to -0.92 in Very good Health. The impacts were also smaller than the ones at the previous sample for this same wave. The remaining significant variables of health appeared in wave 5, with the same pattern but with higher impacts, it goes from -1.18 to -1.96, but Fair Health presented the same impact as Very Poor Health.

Social Class was relevant only from the Wave 4 onwards, presenting the same pattern found at the complete sample: within waves, the higher the status, the less prone to redistribute and between waves this effect reduces through time. Lower Middle Class goes from, at wave 5, -0.508 to -1.443 in Upper Class, reducing both impacts in wave 7 to -0.195 and -0.504, respectively. All the impacts were, on average, smaller than the ones found at the pooled model for the same sample but higher than the ones found in the set of models using the complete data. The change here, however, lies on the same Z test made to compare the coefficients, now, almost every Social Class category was statistically different with 5% of significance level.

The income variables were also in accordance to the logic found at the pooled model for this same sample: The richer are, on average, less prone to redistribute, but the bottom of the distribution respond the same as the poorer category. We can clearly see at the pooled model that the steps are only significant from Income 6, increasing its impacts until Income 9, and when it reaches the higher step, it loses its significance. This is the most different result found so far for this variable. Using the complete data, for example, it was clear the same pattern found also for Social Class, an increasing movement within a wave and a reducing one between waves. When splitting between waves, we can only see plain results for waves 6 and 7, starting from Income 5 (-0.370) and Income 4 (-0.460), respectively, reaching -0.543 and -1.099. At the remaining waves just sporadic steps were significant, but all of them negative. It is also good to remind that those impacts are also higher than the ones found in Alesina & Giuliano (2011).

Employment was significant only at the last wave, with a different result: both employed and unemployed were prone to redistribute, with 0.111 and 0.403, respectively. The pooled regression for this set of data did not present any results on these variables, therefore we may

say that in aggregate terms this matter is not a good driver for the formation of preferences for income redistribution using the Country-Restricted sample of the WVS.

In ideology we see the same pattern found so far in this paper: the Left spectrum of the distribution are more prone to redistribute while the Right part are against. The sensitivities grow towards the extremes, showing a clear path. Wave 3 had the less consistent results, with only Ideologies 2, 3, 4 (0.506, 0.404 and 0.260 respectively) and 9 significant (-0.578). This wave also presented inconsistent patterns in the previous sample with only Ideologies 1 and 2 positive and significant. Wave 4 presented better results, but as seen at the previous wave, the left has higher impacts. The last three waves showed again a very clear path, with a simple average of 0.95 in Ideology 1, going to 0.28 in Ideology 4, -0,63 in Ideology 7 and finishing in -0.57 in Ideology 10. The impacts here were also higher than the ones found in the complete sample and consisted with the pooled regression. Looking at the evolution in time, the Left side became more prone to redistribute, with all the steps increasing from waves 3 to 7, with most of them peaking in Wave 6. The Right side also increased (became even more against PfR) but with a smaller overall impact, Ideology 9, for example, passed from -0.578 in Wave 3 to -0.881 in the last one. This movement was also found in the results using the whole available data at the WVS. Again, here we had more results that are different, using a 5% level of significance. These differences are concentrated between wave 3 and 4, however, the change occurs especially between the last two waves, where the Right spectrum reduced its rejection of PfR. Again, we are observing another sign of the hypothesis raised so far that this may reflect the loss of power of the conservative agenda.

Beliefs also presented a similar pattern as in the previous sample and with the Country-Restricted pooled regression (Table 1, column 2), going against Alesina & Giuliano (2011). The results here, however, were not as consistent as the other models, believing that is all a matter of effort, for example (Beliefs 1) was significant only in waves 5 and 7 with impacts of, respectively, 0.787 and 0.439. At the waves 6 and 7, thinking that Luck is more important than effort appeared more than the opposite belief. It was strongly negative, especially in the last wave where it goes from -0.524 in Beliefs 6 until -0.806 in Beliefs 9. This middle of the "Luck half" distribution also appeared in Wave 6 with smaller effects (-0.439 in Beliefs 7 and -0.403 in the eight step). Compared to the pooled regression in Table 1, column 2, we can also see a prevalence of the Luck side of the variable being stronger than the Effort one. Regarding the

country dummies, we can clearly see that the impacts are, again, all positive and that they reduced through time, peaking at the fourth wave.

Here we could solve part of our problem with the dropping of variables, but it still exists. As also found at the previous sample, all the country dummies left were positive in relation to the United States, showing that they are more prone, on average, to redistribute. The results here have less statistically significant variables than the unrestricted sample. The overall trends, however, remained, especially in Income, Social Class, and Ideology. Using this sample, we were also able to see more changes in time, highlighted in Social Class and Ideology.

5. Conclusion

We will start by concluding the results regarding the within wave estimations. Again, we may say that the Meltzer-Richard model was corroborated. In all our models the higher the income and social class, the less PfR. Not only this direct relation between wealth and PfR was again established, but the sensitivities between the different income groups and our dependent variable change. Highest income groups, such as Income 10 and Upper Class have a higher distaste to redistribute than Income 2 and Lowe-Middle Class, for example. This movement grows if we climb the social ladder. A summary of the results can be found at the annex XX.

Health and Education had a similar pattern: the better the health and the higher the education, the less prone to redistribute. The Pooled Country-Restricted model, however, did not show any result for both variables, and when looking at the wave models for this same sample, we can see that they are less robust in comparison with the full sample. Given the differences in the educational system (even though our variable is already an attempt of considering it) and different conceptions of subjective health may be different cultures respond differently to these matters. But even controlling for these different aspects, the overall result seems the same: the better-off individuals are, on average, against redistribution.

Marital Status was mainly inconclusive in all of our models. Looking at the pooled models, only Widowed appeared to be relevant in the formation of PfR, being positively related to redistribution. Looking at the waves model, the complete sample showed different patterns in different waves. Wave 2, for example, showed that, in relation to being married, single and separated are more prone to redistribute, while being divorced, less prone to redistribution. Wave 5 had a similar behavior, but instead of being single, living together as married showed

a positive relation towards redistribution. A better summary of these results can also be found at table XX at the annex.

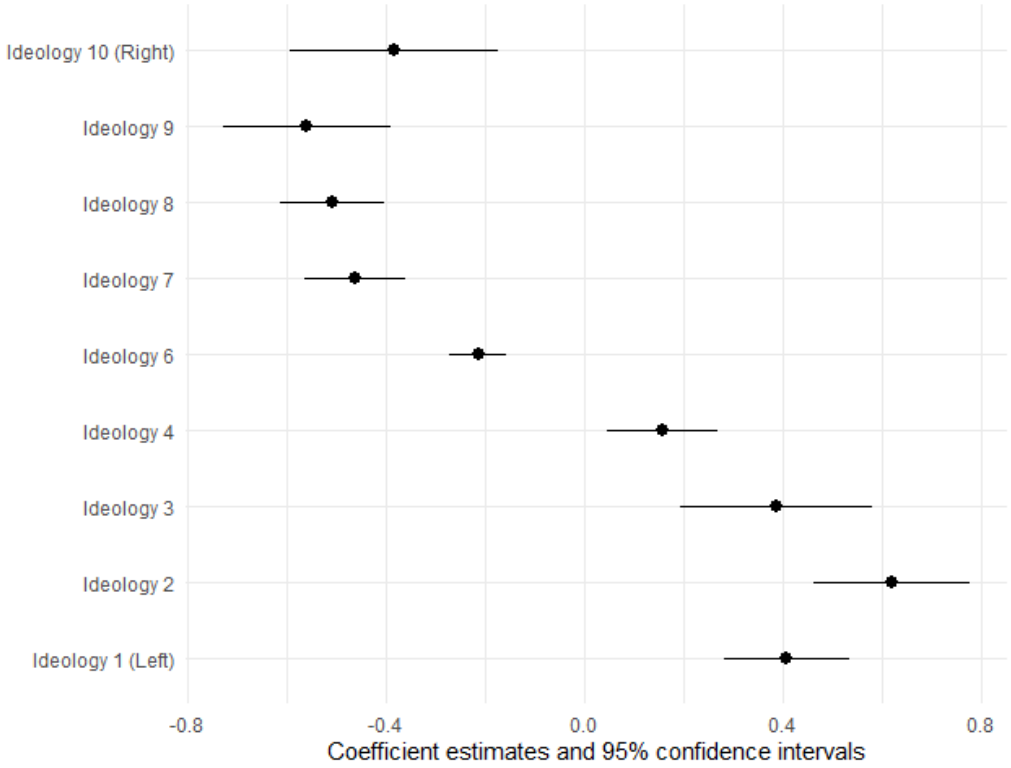
We found that gender is also relevant for the formation of PfR, with women being more prone to redistribute in almost all our models. We can also affirm that the youth are more prone, on average, to redistribute[5]. These two results go in accordance with Alesina & Giuliano (2011).

Looking at the complete sample, employment had a clear result: not only being employed decreased, on average, the taste for redistribution, but being unemployed increased. Here we may have a similar effect shown at health and education, different cultures and social security structures of the countries may affect differently the formation for PfR, that may be the reason for the lack of response to these variables in the Country-Restricted sample.

Ideology showed a very interesting pattern: not only the left is more prone, on average, to redistribute, but the right is against. There is a clear cut in the middle of the redistribution appearing in every model. Normally, as shown in Alesina & Giuliano (2011), for example, when ideology is tested, we can only see an one-way interpretation, in their case, left-wingers are more prone to redistribute as well, but once they did not use the variable as categorical, the right-wing behavior cannot be observed. A within effect, as expressed in Health, Education, Income and Social Class was also revealed here. Now we have an "S" shaped behavior in Ideology, as shown in the plot below with the coefficients from the Pooled Model with the Unrestricted Sample (Table 4, column 1):

[5] Only in Wave 3 of the complete sample that age showed a positive relation with PfR.

Figure 11 - Ideology Coefficients Pooled Estimation with Unrestricted Sample



The cut between the two sides of the distribution and the movements towards the extremes are clear. It is also good to highlight that both extremes have its taste/rejection for redistribution diminished in comparison with its subsequent values, and in this case, they are almost symmetrical.

Beliefs were the only variable that went against the results found in Alesina & Giuliano (2011). Here we found that people who value more luck than effort tend to be less favorable to redistribute, while valuing more effort, more prone to redistribute. The results, however, were not very robust, therefore we cannot reach a proper conclusion.

The exposition so far showed the importance of treating Likert-Scale typed variables as categorical; there are important non-linearities to be observed that affect the understanding of the formation of PfR.

The between wave comparison was not as strong as we expected. We can see that there are some time differences in the estimation, as shown in the Z test tables X to X in the annex, however the conclusion that the context indeed seems to affect the formation of PfR lies not in the sensitivities, but in the significance of the categories, especially the income ones. From waves 3 to 5 (covering 1994 to 2009) the difference from our base category, Income 1, appears only from the fifth step onwards in the unrestricted sample and from Income 6 in the Country-Restricted, showing that the bottom of the redistribution answered similarly to PfR. It is good to highlight that there were some differences, using 5% of confidence level, concentrated between wave 2 and the others from Incomes 5 to 8, showing a possible increase in the responsiveness of the upper-middle class. However, this pattern cannot be observed in every wave-vs-wave comparison. Despite some minor changes, the remaining variables were steady across time.

Regarding the country aspects, Eastern Europe, as also shown in Alesina & Giuliano (2011) was the region with higher relative inclination towards redistribution, but when adding the two latest waves of the WVS, Northern Africa also appeared being, on average, more prone to redistribute.

Further study needs to be taken to properly understand and evaluate the effect of the context in the formation of the preferences here studied, however we believe that the differences found in the income variable is a good indicator of such. We may conclude that, despite the economic and ideological changes happening in the past 30 years, people do not seem to change how they form their preferences for income redistribution. However, individual changes such as climbing the social ladder, or increasing health status do seem to affect.

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Annex

Table 7 - Frequency Table Country/Wave

	Wave						
Country	2	3	4	5	6	7	Total
	1989-1993	1994-1998	1999-2004	2005-2009	2010-2014	2017-2020	
Albania		999	1000				1999

Algeria			1282		1200		2482
Andorra				1003		1004	2007
Azerbaijan		2002			1002		3004
Argentina	1002	1079	1280	1002	1030	1003	6396
Australia		2048		1421	1477	1813	6759
Bangladesh		1525	1500			1200	4225
Armenia		2000			1100		3100
Bolivia						2067	2067
Bosnia Herzegovina		1200	1200				2400
Brazil	1782	1143		1500	1486	1762	7673
Bulgaria		1072		1001			2073
Myanmar						1200	1200
Belarus	1015	2092			1535		4642
Canada	1730		1931	2164			5825
Chile	1500	1000	1200	1000	1000	1000	6700
China	1000	1500	1000	1991	2300	3036	10827
Taiwan ROC		780		1227	1238	1223	4468
Colombia		6025		3025	1512	1520	12082
Croatia		1196					1196
Cyprus				1050	1000	1000	3050
Czech Rep.	924	1147					2071
Dominican Rep.		417					417
Ecuador					1202	1200	2402
El Salvador		1254					1254
Ethiopia				1500		1230	2730
Estonia		1021			1533		2554
Finland		987		1014			2001
France				1001			1001
Georgia		2008		1500	1202		4710
Palestine					1000		1000
Germany		2026		2064	2046	1528	7664
Ghana				1534	1552		3086
Greece						1200	1200
Guatemala				1000		1203	2203
Haiti					1996		1996
Hong Kong SAR				1252	1000	2075	4327
Hungary		650		1007			1657
India	2500	2040	2002	2001	4078		12621
Indonesia			1000	2015		3200	6215
Iran			2532	2667		1499	6698
Iraq			2325	2701	1200	1200	7426
Israel			1199				1199
Italy				1012			1012
Japan	1011	1054	1362	1096	2443	1353	8319
Kazakhstan					1500	1276	2776
Jordan			1223	1200	1200	1203	4826

South Korea	1251	1249	1200	1200	1200	1245	7345
Kuwait					1303		1303
Kyrgyzstan			1043		1500	1200	3743
Lebanon					1200	1200	2400
Latvia		1200					1200
Libya					2131		2131
Lithuania		1009					1009
Macau SAR						1023	1023
Malaysia				1201	1300	1313	3814
Mali				1534			1534
Mexico	1531	1510	1535	1560	2000	1739	9875
Moldova		984	1008	1046			3038
Montenegro		240	1060				1300
Morocco			1251	1200	1200		3651
Netherlands				1050	1902		2952
New Zealand		1201		954	841	1057	4053
Nicaragua						1200	1200
Nigeria	1001	1996	2022		1759	1237	8015
Norway		1127		1025			2152
Pakistan		733	2000		1200	1995	5928
Peru		1211	1501	1500	1210	1400	6822
Philippines		1200	1200		1200	1200	4800
Poland	938	1153		1000	966		4057
Portugal						1215	1215
Puerto Rico		1164	720			1127	3011
Qatar					1060		1060
Romania		1239		1776	1503	1257	5775
Russia	1961	2040		2033	2500	1810	10344
Rwanda				1507	1527		3034
Saudi Arabia			1502				1502
Serbia		1280	1200	1220		1046	4746
Singapore			1512		1972		3484
Slovakia	466	1095					1561
Vietnam			1000	1495		1200	3695
Slovenia		1007		1037	1069		3113
South Africa	2736	2935	3000	2988	3531		15190
Zimbabwe			1002		1500	1215	3717
Spain	1510	1211	1209	1200	1189		6319
Sweden		1009	1015	1003	1206		4233
Switzerland	1400	1212		1241			3853
Tajikistan						1200	1200
Thailand				1534	1200	1500	4234
Trinidad and Tobago				1002	999		2001
Tunisia					1205	1208	2413
Turkey	1030	1907	3401	1346	1605	2415	11704
Uganda			1002				1002

Ukraine		2811		1000	1500	1289	6600
North Macedonia		995	1055				2050
Egypt			3000	3051	1523	1200	8774
United Kingdom		1093		1041			2134
Tanzania			1171				1171
United States	1839	1542	1200	1249	2232	2596	10658
Burkina Faso				1534			1534
Uruguay		1000		1000	1000		3000
Uzbekistan					1500		1500
Venezuela		1200	1200				2400
Yemen					1000		1000
Zambia				1500			1500
Total	28127	77818	60045	83975	89565	72082	411612

Elaborated by the Authors, World Value Survey

Table 8- Country and Times Dummies Pooled Models

	Unrestricted	Country Restricted	Alesina's Model Update
	(1)	(2)	(3)
Wave 3	-0.217**	-0.230	-0.112
	(0.107)	(0.304)	(0.088)
Wave 5	-0.138*	0.032	
	(0.072)	(0.120)	

Wave 6	0.131	0.192	
	(0.087)	(0.138)	
Wave 7			
Argentina	1.127	1.109	1.249***
	(0.000)	(0.000)	(0.314)
Belarus	2.087***		2.330***
	(0.197)		(0.327)
Brazil	1.494		1.360
	(0.000)		(0.000)
Canada	0.654***		0.627**
	(0.065)		(0.309)
Czech Rep.	1.959***		2.106***
	(0.155)		(0.308)
Chile	1.544***	1.475***	1.633**
	(0.228)	(0.240)	(0.668)
India	1.973***		1.527***
	(0.336)		(0.579)
Japan	2.157***	2.158***	2.178***
	(0.105)	(0.037)	(0.385)
Mexico	1.006***	0.972***	1.318***
	(0.252)	(0.251)	(0.414)
Nigeria	1.904		2.232***
	(0.000)		(0.406)
Poland	1.227***		1.205***
	(0.262)		(0.294)
Russia	2.135***		2.162***
	(0.495)		(0.335)

Slovakia	2.606***		2.821***
	(0.159)		(0.354)
South Africa	0.697		1.257***
	(0.000)		(0.389)
South Korea	2.331***	2.285***	3.021***
	(0.540)	(0.499)	(0.704)
Spain	1.421***		1.648***
	(0.100)		(0.309)
Switzerland	-0.271		-0.064
	(0.000)		(0.000)
Turkey	1.306***	1.331***	1.290***
	(0.165)	(0.121)	(0.349)
Albania	1.783***		2.002***
	(0.161)		(0.549)
Armenia	2.587***		2.715***
	(0.202)		(0.274)
Australia	0.481		0.655**
	(0.000)		(0.297)
Azerbaijan	1.793***		2.716***
	(0.348)		(0.644)
Bangladesh	1.612		1.672***
	(0.000)		(0.589)
Bosnia Herzegovina	2.146***		2.321***
	(0.181)		(0.433)
Bulgaria	1.884***		1.915***
	(0.172)		(0.314)
Colombia	0.728		
	(0.485)		
Dominican Rep.	0.784***		1.069**
	(0.226)		(0.435)

El Salvador	0.069	0.242
	(0.191)	(0.281)
Estonia	2.231***	2.437***
	(0.184)	(0.405)
Finland	0.329	0.590
	(0.261)	(0.612)
Georgia	2.764***	2.722***
	(0.260)	(0.340)
Germany	1.473***	1.766***
	(0.171)	(0.107)
Hungary	1.325***	1.472***
	(0.174)	(0.361)
Latvia	2.309***	2.547***
	(0.167)	(0.371)
Lithuania	1.997***	2.094***
	(0.181)	(0.252)
Moldova	2.168***	2.235***
	(0.361)	(0.763)
Montenegro	2.552***	2.566***
	(0.182)	(0.279)
New Zealand	0.242	0.516
	(0.000)	(0.582)
North Macedonia	2.764***	2.827***
	(0.171)	(0.323)
Norway	1.093	1.339
	(0.000)	(0.000)
Pakistan	0.454**	
	(0.209)	
Peru	0.464***	0.489

	(0.141)	(0.639)
Philippines	-0.136	
	(0.000)	
Puerto Rico	-0.160	0.231
	(0.272)	(0.369)
Romania	0.640*	1.136**
	(0.349)	(0.575)
Serbia	2.103***	2.132***
	(0.350)	(0.827)
Slovenia	1.568***	1.589***
	(0.248)	(0.370)
Sweden	-0.079	-0.255
	(0.235)	(0.000)
Taiwan ROC	0.703***	1.207***
	(0.261)	(0.266)
Ukraine	2.393***	2.428***
	(0.403)	(0.512)
Uruguay	1.471***	1.889**
	(0.286)	(0.840)
Venezuela	0.956***	1.242***
	(0.209)	(0.375)
Algeria	2.033***	
	(0.197)	
Egypt	2.518***	2.770***
	(0.183)	(0.658)
Indonesia	0.784***	0.974*
	(0.112)	(0.591)
Iraq	2.956***	
	(0.206)	

Kyrgyzstan	0.974***	
	(0.207)	
Morocco	2.335	2.822***
	(0.000)	(0.541)
Singapore	1.034***	
	(0.094)	
Vietnam	0.454*	0.580***
	(0.241)	(0.209)
Zimbabwe	1.751***	
	(0.263)	
Andorra	1.691***	1.768***
	(0.132)	(0.323)
Burkina Faso	1.326***	1.502***
	(0.200)	(0.474)
Cyprus	1.931***	1.837***
	(0.327)	(0.413)
Ethiopia	0.349***	0.288
	(0.057)	(0.395)
Ghana	0.939	1.721***
	(0.000)	(0.440)
Guatemala	0.472***	
	(0.143)	
Hong Kong SAR	0.320	
	(0.000)	
Italy	1.305***	1.434***
	(0.181)	(0.322)
Malaysia	0.513	
	(0.000)	
Mali	0.937***	1.147**
	(0.198)	(0.564)

Netherlands	0.230	
	(0.189)	
Rwanda	1.669**	0.240
	(0.699)	(0.434)
Thailand	0.822***	0.357
	(0.267)	(0.462)
Trinidad and Tobago	0.309	1.210***
	(0.000)	(0.376)
Zambia	1.685***	1.944***
	(0.200)	(0.383)
Ecuador	0.561	
	(0.000)	
Haiti	1.860***	
	(0.260)	
Kazakhstan	2.050***	
	(0.206)	
Lebanon	1.318***	
	(0.204)	
Libya	2.004***	
	(0.193)	
Palestine	2.200***	
	(0.206)	
Tunisia	2.269***	
	(0.114)	
Uzbekistan	1.573***	
	(0.189)	
Yemen	2.730***	
	(0.196)	
Bolivia	0.207	

	(0.151)
Greece	2.462***
	(0.060)
Macau SAR	0.609***
	(0.103)
Nicaragua	-0.637***
	(0.166)
Tajikistan	1.168***
	(0.166)

Table 9 - Country and time dummies Unrestricted time models

	2	3	4	5	6	7
Albania		2.589***	1.854***			
		(0.118)	(0.127)			
Argentina		1.750***	2.093***			0.773***
		(0.140)	(0.139)			(0.115)
Armenia		3.289***			3.210***	
		(0.107)			(0.119)	
Australia		1.062***			0.497***	0.358***

		(0.103)			(0.106)	(0.089)
Azerbaijan		3.298***			1.539***	
		(0.119)			(0.119)	
Bangladesh		2.226***	0.669***			1.447***
		(0.135)	(0.138)			(0.107)
Belarus		2.945***			2.351***	
		(0.115)			(0.093)	
Bosnia Herzegovina		2.925***	1.846***			
		(0.116)	(0.127)			
Brazil		1.296***			1.996***	1.572***
		(0.143)			(0.113)	(0.113)
Bulgaria		2.519***				
		(0.126)				
Czech Rep.		2.628***				
		(0.121)				
Chile		2.446***	2.553***	0.008	2.008***	1.191***
		(0.129)	(0.120)	(0.106)	(0.110)	(0.114)
Dominican Rep.		1.664***				
		(0.216)				
El Salvador		0.769***				
		(0.162)				
Estonia		3.093***			2.587***	
		(0.121)			(0.091)	
Finland		1.261***				
		(0.118)				
Germany		2.188***			1.696***	0.799***
		(0.107)			(0.087)	(0.090)
India	-0.069	2.234***	1.585***	-0.091	2.733***	
	(0.131)	(0.142)	(0.140)	(0.065)	(0.083)	
Latvia		3.059***				
		(0.118)				
Lithuania		2.567***				

		(0.128)				
Mexico		1.913***	1.235***		1.352***	0.443***
		(0.122)	(0.146)		(0.100)	(0.098)
Moldova		3.375***	2.119***	0.680***		
		(0.128)	(0.143)	(0.103)		
Montenegro		3.124***	3.284***			
		(0.234)	(0.149)			
New Zealand		1.158***			0.184	-0.083
		(0.128)			(0.131)	(0.121)
Nigeria	2.015***	2.731***	2.787***		2.055***	1.752***
	(0.171)	(0.118)	(0.112)		(0.088)	(0.111)
North Macedonia		3.434***	3.105***			
		(0.151)	(0.135)			
Norway		1.532***				
		(0.111)				
Peru		1.305***	0.663***	-1.089***	0.991***	0.286***
		(0.139)	(0.125)	(0.102)	(0.113)	(0.104)
Puerto Rico		0.778***	-0.428***			-0.735***
		(0.141)	(0.160)			(0.123)
Romania		2.042***			0.801***	-0.390***
		(0.133)			(0.123)	(0.143)
Russia		2.799***			3.149***	0.970***
		(0.116)			(0.093)	(0.100)
Serbia		3.281***	2.555***	0.401***		1.560***
		(0.123)	(0.135)	(0.099)		(0.117)
Slovakia		3.337***				
		(0.118)				
South Africa	0.043	1.787***	1.622***	-0.034	0.702***	
	(0.146)	(0.112)	(0.107)	(0.068)	(0.082)	
South Korea		3.893***		1.503***	2.879***	0.608***
		(0.106)		(0.072)	(0.088)	(0.080)

Spain		2.132***	2.403***	0.406***	1.685***	
		(0.133)	(0.125)	(0.075)	(0.099)	
Sweden		-0.172		-1.076***	0.815***	
		(0.110)		(0.077)	(0.095)	
Switzerland		-0.510***				
		(0.125)				
Taiwan ROC		1.776***			0.783***	-0.153*
		(0.126)			(0.104)	(0.091)
Turkey	1.222***	1.679***	1.975***	0.177**	2.136***	0.930***
	(0.170)	(0.123)	(0.108)	(0.088)	(0.093)	(0.083)
Ukraine		3.202***			3.149***	1.106***
		(0.114)			(0.093)	(0.121)
Uruguay		2.978***			1.200***	
		(0.127)			(0.125)	
Venezuela		1.745***				
		(0.149)				
Algeria			1.198***		2.432***	
			(0.156)		(0.132)	
Canada			0.468***	-0.602***		0.248***
			(0.106)	(0.073)		(0.069)
Indonesia			1.251***	-0.374***		0.385***
			(0.145)	(0.086)		(0.090)
Iran			1.230***			
			(0.122)			
Japan			2.161***	1.067***	2.454***	1.704***
			(0.123)	(0.090)	(0.089)	(0.101)
Jordan			2.496***			
			(0.167)			
Kyrgyzstan			2.265***		1.336***	
			(0.135)		(0.105)	
Morocco			1.807***	1.576***	1.943***	

	(0.191)	(0.106)	(0.198)	
Pakistan	1.722***		0.885***	
	(0.150)		(0.109)	
Philippines	0.879***		0.086	-0.451***
	(0.123)		(0.114)	(0.107)
Tanzania	2.783***			
	(0.154)			
Uganda	2.135***			
	(0.170)			
Vietnam	-0.093	-0.575***		
	(0.139)	(0.091)		
Zimbabwe	2.010***		2.184***	1.171***
	(0.161)		(0.098)	(0.122)
Egypt		1.361***	2.858***	
		(0.052)	(0.093)	
		-0.914***		
		(0.113)		
Andorra				1.270***
				(0.108)
Bolivia				-0.256***
				(0.094)
Colombia			1.634***	-0.137
			(0.105)	(0.104)
Cyprus			2.654***	1.260***
			(0.116)	(0.127)
Ecuador			0.629***	0.419***
			(0.110)	(0.116)
Ethiopia				0.246
				(0.175)
Greece				2.057***
				(0.097)
Guatemala				-0.0002

		(0.111)
Hong Kong SAR	0.124	0.154**
	(0.104)	(0.079)
Macau SAR		0.184*
		(0.100)
Malaysia	0.538***	0.431***
	(0.097)	(0.093)
Nicaragua		-1.110***
		(0.130)
Singapore		0.598***
		(0.081)
Tajikistan		0.674***
		(0.102)
Thailand	1.510***	0.507***
	(0.108)	(0.103)
Tunisia	2.586***	1.856***
	(0.115)	(0.102)

Country-Restricted Descriptive Variables

Figure 12 - PfR - Dependent variable

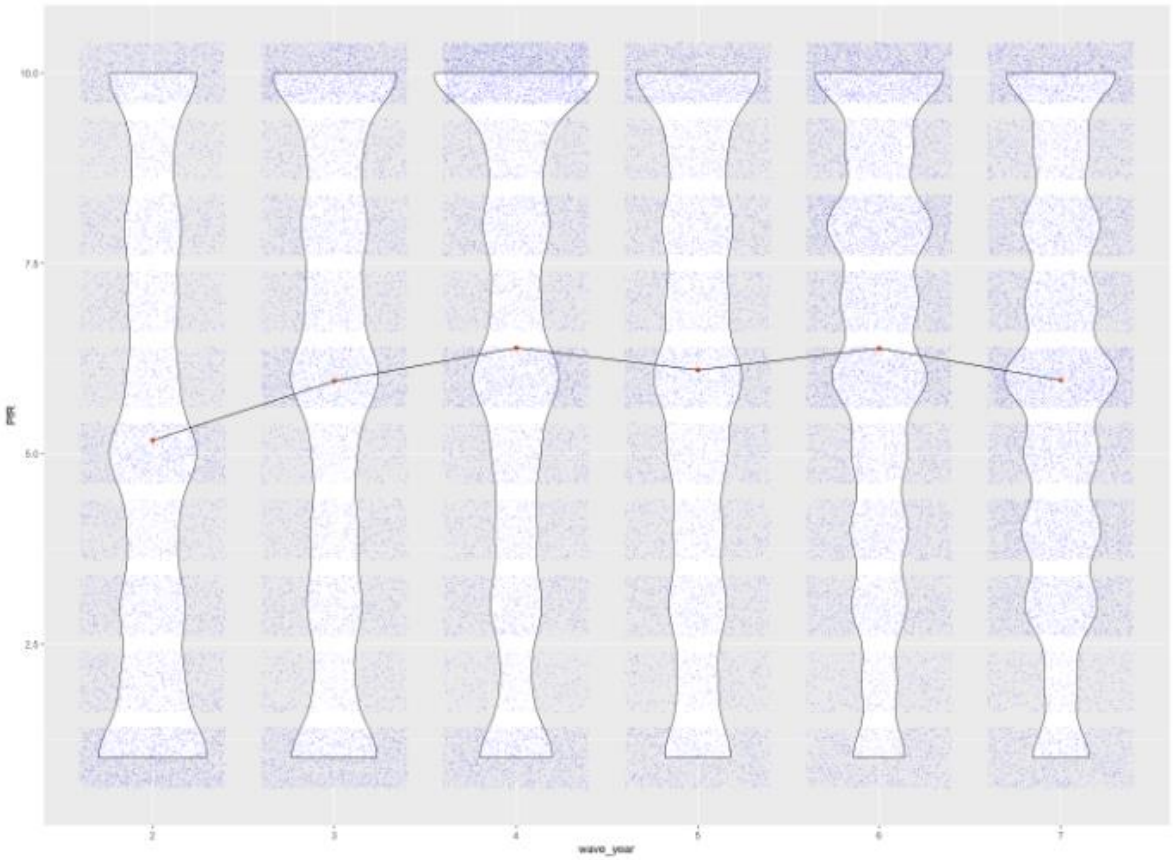


Figure 13 - Health

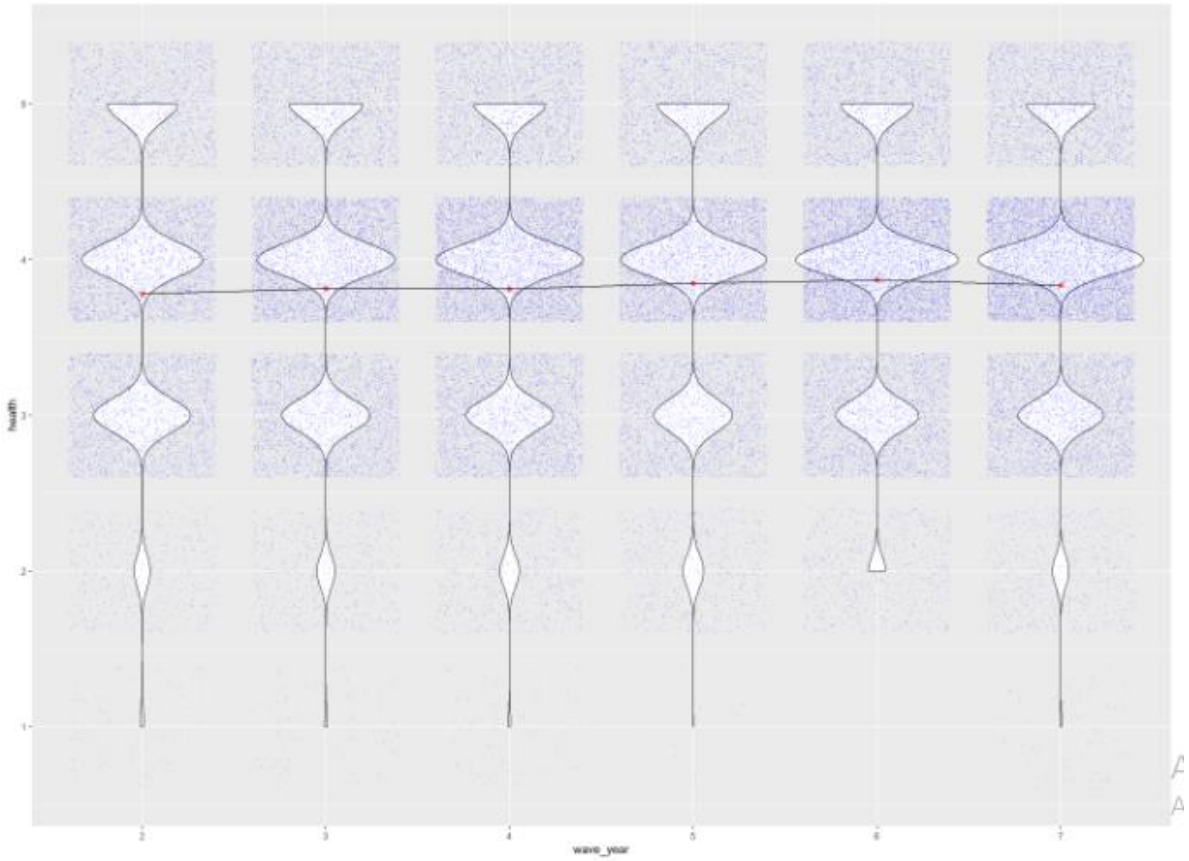


Figure 14 - Income

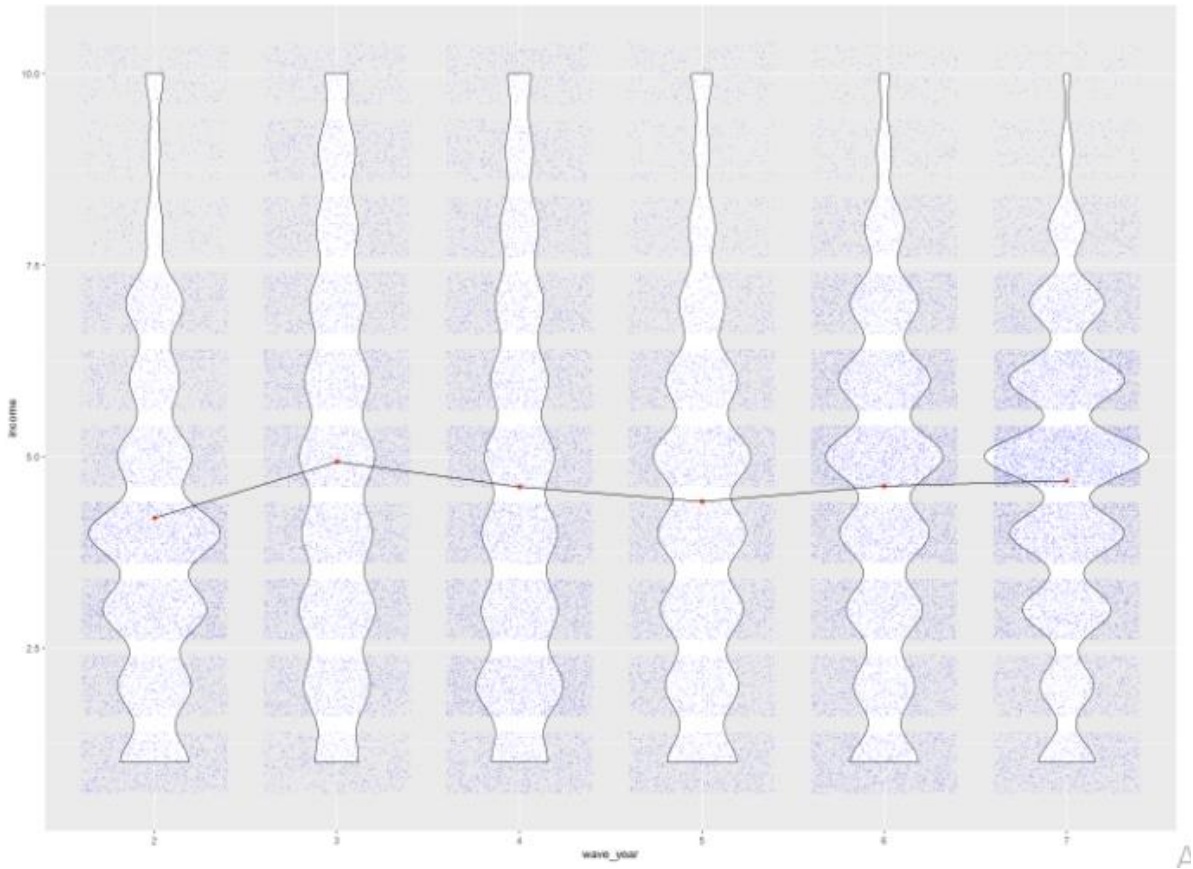


Figure 15 - Social Class

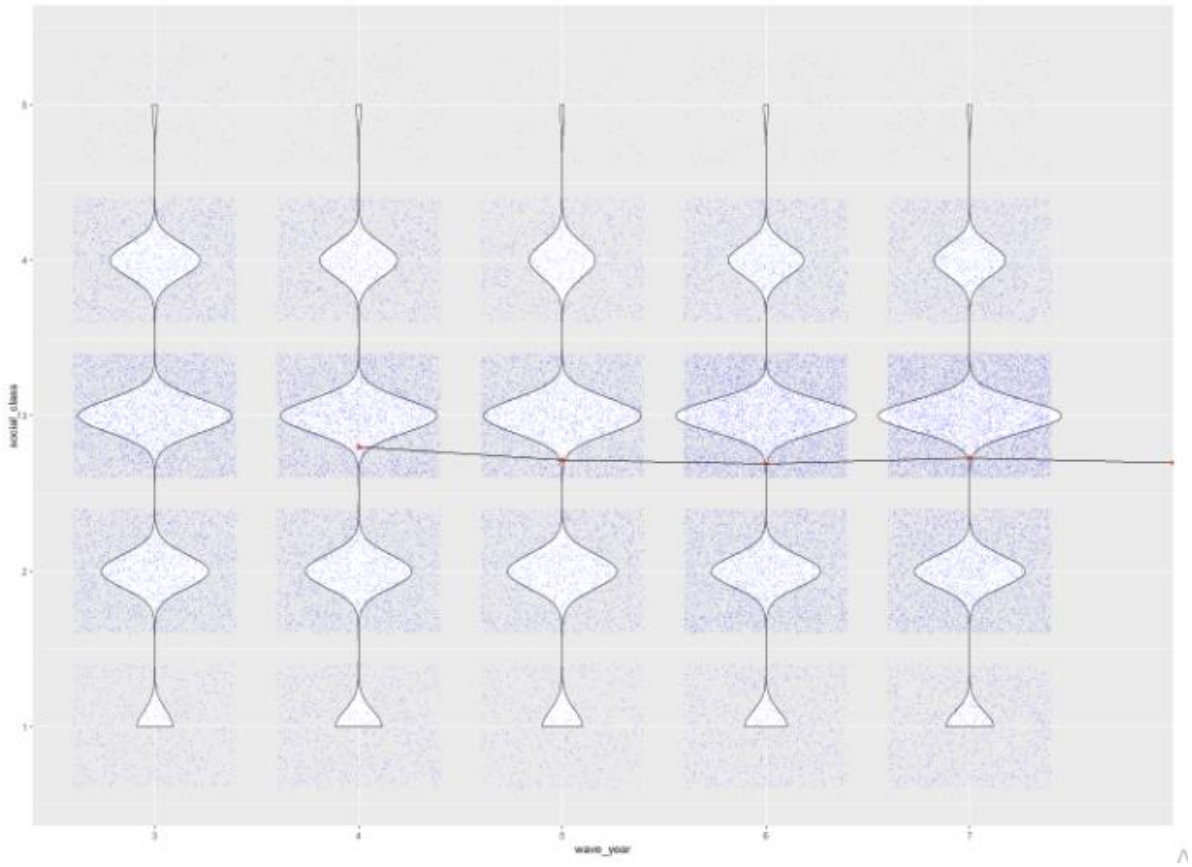


Figure 16 - Education

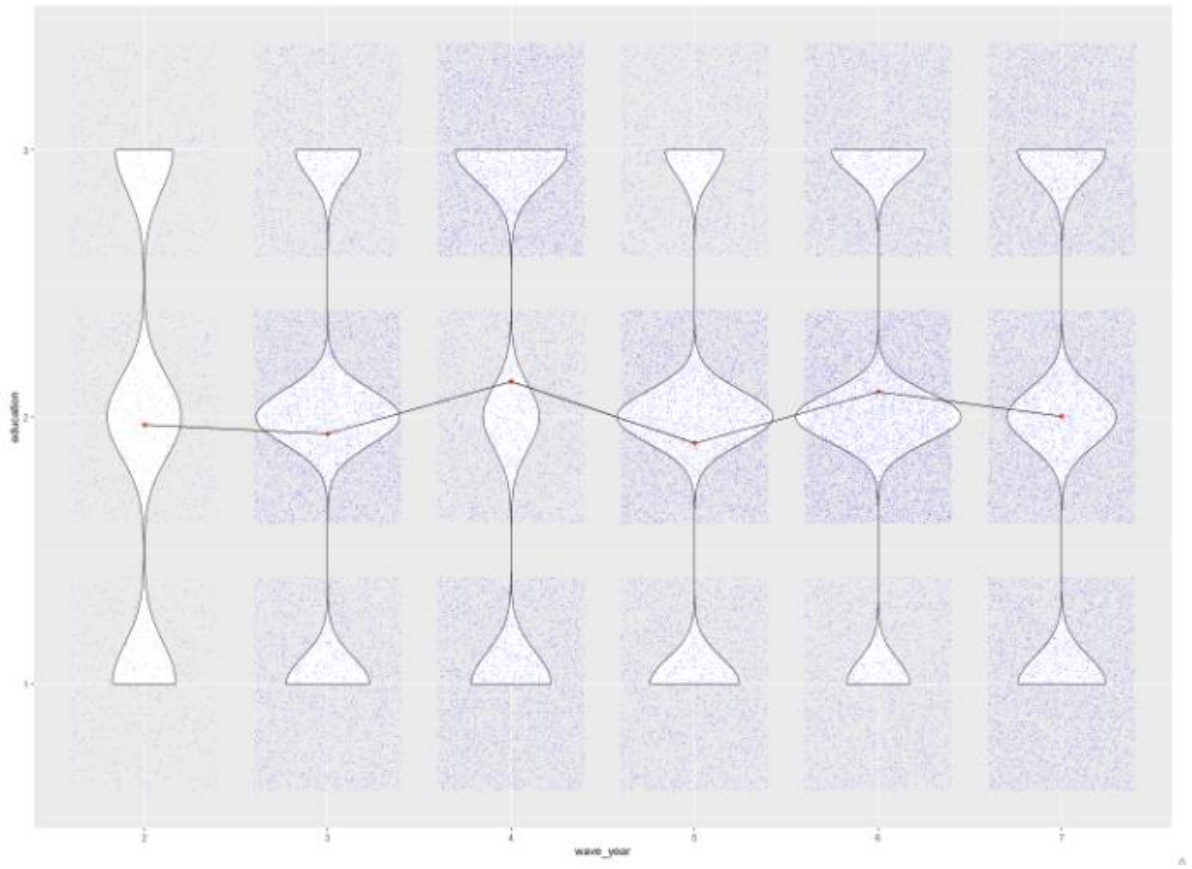


Figure 17 - Ideology

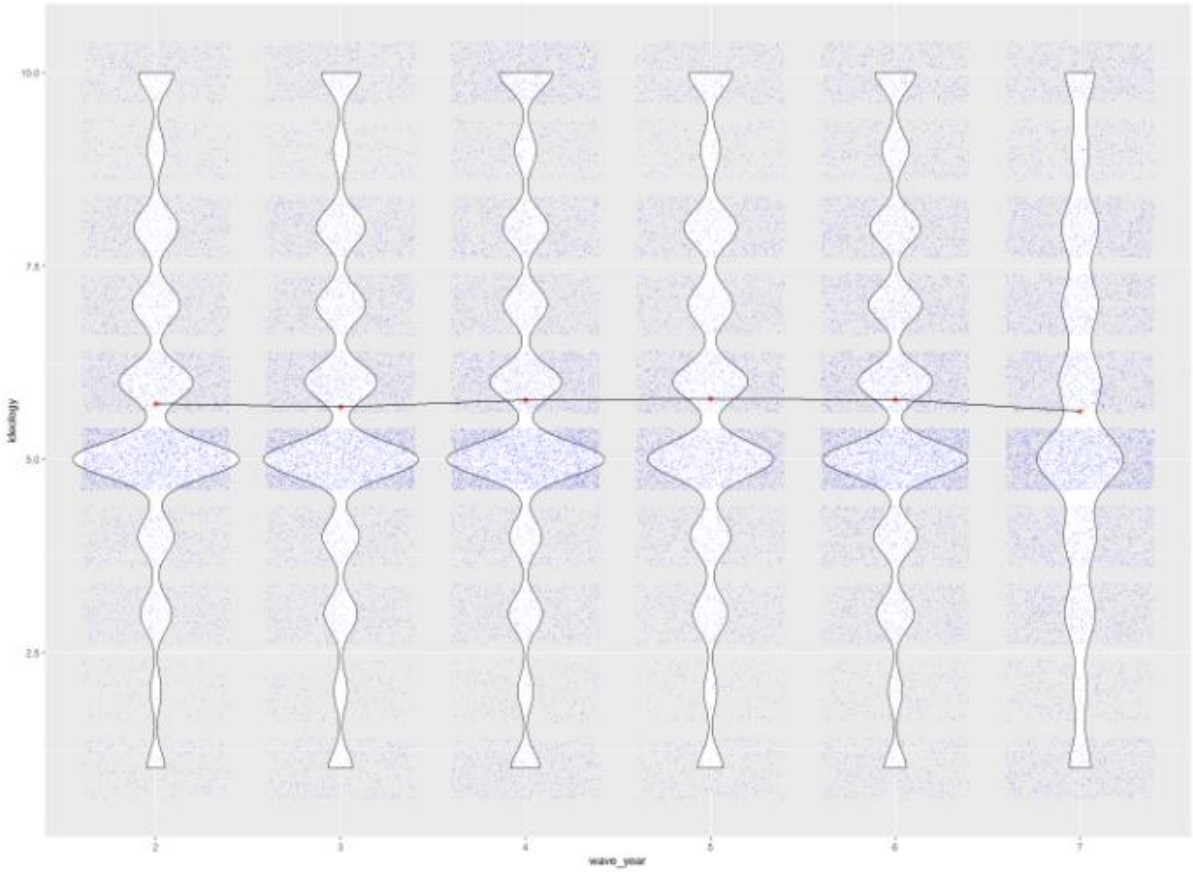


Figure 18 - Beliefs

Figure 19 - Age Country-Restricted

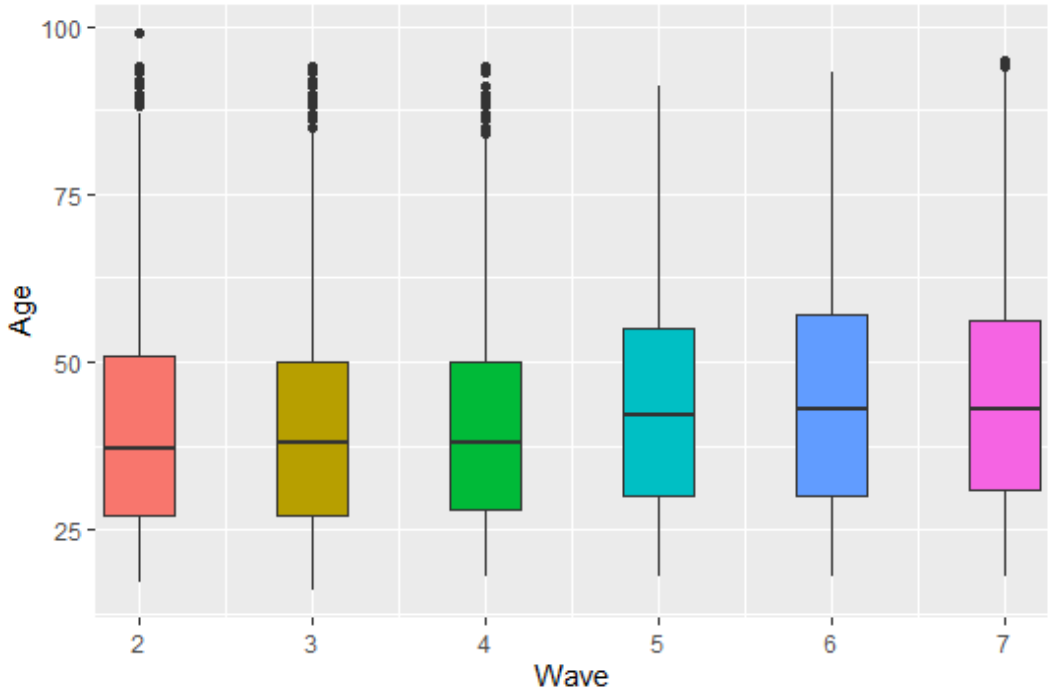
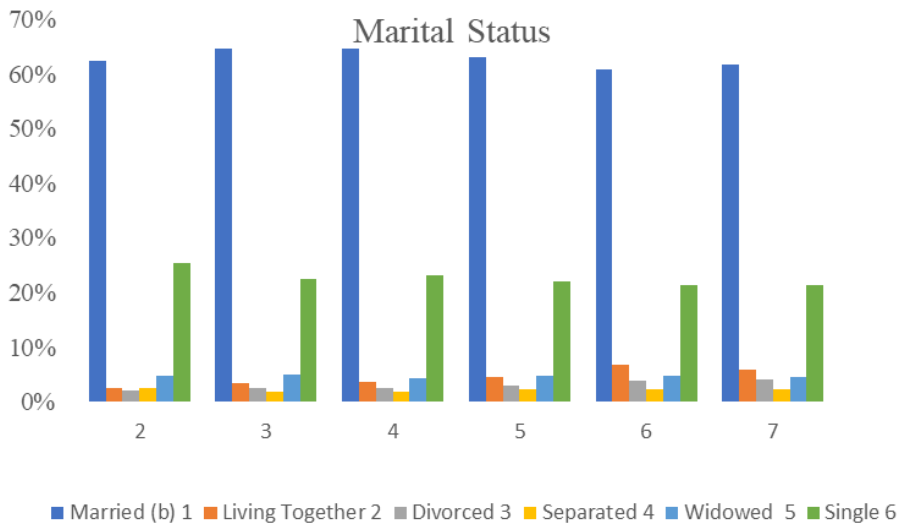


Figure 20 - Proportion of Gender per Wave Country-Restricted

	2	3	4	5	6	7
Male	50.42%	49.76%	48.05%	47.62%	48.76%	48.62%
Female	49.58%	50.24%	51.95%	52.38%	51.24%	51.38%

Source: World Value Survey, elaborated by the authors

Figure 21 - Proportion of Marital Status



Summary Results Tables

Table 10 - Pooled Models Results

Group	Variable	Meaning	Coef Sign	Unrestricted	Restricted	Alesina's Update
Age	Age	Youth are more prone to redistribute	-		X	X
Woman	Woman	Woman are more prone to redistribute	+	X	X	X
Education	Lower Education (b)					
	Middle Education	People with more formal education are less prone to redistribute;	-	X		X
	Upper Education	The higher the education, the less prone to redistribute	-	X		X
Marital Status	Married (b)					
	Living Together as married	More prone to Redistribute	+	X		
	Divorced					
	Separated					
	Widowed	More prone to Redistribute	+	X		X
	Single	More prone to Redistribute				X
Health	Very Poor Health (b)					
	Poor Health	Being with better health points out to a distaste to redistribute;	-	X		X
	Fair Health	The better the health, the less prone to redistribute	-	X		X
	Good Health		-	X		X
	Very Good Health		-	X		X
Social Class	Lower Class (b)					
	Lower-Middle Class	Compared to the base category, all steps are against redistribution;	-	X	X	
	Middle Class	The higher the Social Class, the less prone to redistribute	-	X	X	X
	Middle-Upper Class		-	X	X	X
	Upper Class		-	X	X	X
Income	Income 1 (b)					
	Income 2	Compared to the base category, all steps are against redistribution;	-	X	X	
	Income 3	The higher the Income, the less prone to redistribute	-	X		X
	Income 4		-	X	X	X
	Income 5		-	X	X	X
	Income 6		-	X	X	X
	Income 7		-	X	X	X
	Income 8		-	X	X	X
	Income 9		-	X	X	X
	Income 10		-	X	X	X
Employment	Employed	Being employed decreases taste for redistribute	-			X
	Unemployed	Being unemployed leads to a bigger taste for redistribution	+	X		
Ideology	Ideology 1 (Left)		+	X	X	X
	Ideology 2	Left Spectrum: More prone to Redistribute	+	X	X	X
	Ideology 3	The more extreme (Ideology 2) the more prone to redistribute	+	X	X	X
	Ideology 4		+	X	X	X
	Ideology 5 (b)					
	Ideology 6	Right Spectrum: Less prone to Redistribute	-	X	X	X
	Ideology 7	The more extreme (Ideology 9) the less prone to redistribute	-	X	X	X
	Ideology 8		-	X	X	X
	Ideology 9		-	X	X	X
	Ideology 10 (Right)		-	X		
Beliefs	Beliefs 1 (Effort)		+	X		X

	Beliefs 2	Effort Spectrum: More prone to Redistribute	+	X			X	
	Beliefs 3	The more extreme (Effort 2) the more prone to redistribute	+	X				
	Beliefs 4		+					
	Beliefs 5 (b)							
	Beliefs 6	Luck Spectrum: Less prone to Redistribute	-	X		X		X
	Beliefs 7	The more extreme (Luck 9) the less prone to redistribute	-	X		X		X
	Beliefs 8		-	X				
	Beliefs 9		-	X				
	Beliefs 10 (Luck)		-	X				
Religion	Roman Catholic	More prone to redistribute	+				X	
	Protestant							
	Orthodox							
	Muslim							
	Jew							
	Hindu							
	Buddhist							
	No Religion							
	Other Religion							

Table 11 - Wave Model, Unrestricted Sample

Group	Variable	Meaning Within Variable	Coef Sign	Waves 2	3	4	5	6	7
Age	Age	Youth are more prone to redistribute	-/+	X	(X)	X	X	X	X
Woman	Woman	Woman are more prone to redistribute	+		X	X	X	X	X
Education	Lower Education (b)								
	Middle Education	People with more formal education are, less prone to redistribute;	-	X	X	X	X	X	X
	Upper Education	The higher the education, the less prone to redistribute	-	X	X	X		X	X
Marital Status	Married (b)								
	Living Together as married	More prone to Redistribute	+				X	X	X
	Divorced	Less willing to redistribute	-	X			X		X
	Separated	More prone to Redistribute		X			X		
	Widowed	More prone to Redistribute	+					X	
	Single	More prone to Redistribute		X	X				
Health	Very Poor Health (b)					X		X	
	Poor Health	Being with better health points out to a distaste to redistribute;	-						
	Fair Health	The better the health, the less prone to redistribute	-	X	X	X		X	X
	Good Health		-	X	X	X		X	X
	Very Good Health		-	X	X	X			X
Social Class	Lower Class (b)								
	Lower-Middle Class	Compared to the base category, all steps are against redistribution;	-	X	X	X	X	X	X

	Middle Class	The higher the Social Class, the less prone to redistribute	-	X	X	X	X	X	X
	Middle-Upper Class		-	X	X	X	X	X	X
	Upper Class		-	X	X	X	X	X	X
Income	Income 1 (b)	Compared to the base category, all steps are against redistribution; The higher the Income, the less prone to redistribute							
	Income 2		-				X	X	
	Income 3		-	X				X	X
	Income 4		-	X				X	X
	Income 5		-	X		X	X	X	X
	Income 6		-	X	X	X	X	X	X
	Income 7		-	X	X	X	X	X	X
	Income 8		-	X	X	X	X	X	X
	Income 9		-		X	X	X	X	X
	Income 10		-		X	X	X	X	X
Employment	Employed	Being employed decreases taste for redistribute	-	X		X	X	X	
	Unemployed	Being unemployed leads to a bigger taste for redistribution	+	X	X		X	X	X
Ideology	Ideology 1 (Left)	Left Spectrum: More prone to Redistribute The more extreme (Ideology 2) the more prone to redistribute	+	X	X	X	X	X	X
	Ideology 2		+		X	X	X	X	X
	Ideology 3		+	X	X	X	X	X	X
	Ideology 4		+		X				X
	Ideology 5 (b)	Right Spectrum: Less prone to Redistribute The more extreme (Ideology 9) the less prone to redistribute							
	Ideology 6		-		X	X	X	X	X
	Ideology 7		-		X	X	X	X	X
	Ideology 8		-		X	X	X	X	X
	Ideology 9		-		X	X	X	X	X
	Ideology 10 (Right)		-		X		X	X	X
Beliefs	Beliefs 1 (Effort)	Effort Spectrum: More prone to Redistribute The more extreme (Effort 2) the more prone to redistribute	+	X	X		X	X	X
	Beliefs 2		+	X	X		X	X	X
	Beliefs 3		+	X			X	X	X
	Beliefs 4		+	X	X			X	X
	Beliefs 5 (b)	Luck Spectrum: Less prone to Redistribute The more extreme (Luck 9) the less prone to redistribute							
	Beliefs 6		-		X		X	X	X
	Beliefs 7		-				X	X	X
	Beliefs 8		-	X			X	X	X
	Beliefs 9		-	X				X	X
	Beliefs 10 (Luck)		-	X					

* The (X) - X in brackets, sinalize the variables that were not in accordance with the supposed meaning

Table 11 - Wave Model, Country-Restricted Sample

Group	Variable	Meaning Within Variable	Coef Sign	Waves 3	4	5	6	7
Age	Age	Youth are more prone to redistribute	-/+		X	X	X	X
Woman	Woman	Woman are more prone to redistribute	+		X	X	X	X
Education	Lower Education (b)	People with more formal education are, less prone to redistribute;						
	Middle Education		-			X		

	Upper Education	The higher the education, the less prone to redistribute	-				X	
Marital Status	Married (b)							
	Living Together as married	More prone to Redistribute	+	X	X		X	X
	Divorced	Less willing to redistribute					X	X
	Separated	More prone to Redistribute				(X)		X
	Widowed	More prone to Redistribute	+				X	
	Single	More prone to Redistribute						
Health	Very Poor Health (b)							
	Poor Health	Being with better health points out to a distaste to redistribute;	-		X	X		
	Fair Health	The better the health, the less prone to redistribute	-		X		(X)	
	Good Health		-		X	X		
	Very Good Health		-		X	X		
Social Class	Lower Class (b)					X		X
	Lower-Middle Class	Compared to the base category, all steps are against redistribution;	-			X	X	X
	Middle Class	The higher the Social Class, the less prone to redistribute	-		X	X	X	X
	Middle-Upper Class		-					
	Upper Class		-	X		X	X	X
Income	Income 1 (b)							
	Income 2	Compared to the base category, all steps are against redistribution;	-	X				
	Income 3	The higher the Income, the less prone to redistribute	-	X				
	Income 4		-	X				X
	Income 5		-				X	X
	Income 6		-	X	X	X	X	X
	Income 7		-	X			X	X
	Income 8		-				X	X
	Income 9		-	X			X	X
	Income 10		-			X	X	X
Employment	Employed	Being employed decreases taste for redistribute	-					(X)
	Unemployed	Being unemployed leads to a bigger taste for redistribution	+					X
Ideology	Ideology 1 (Left)		+		X		X	X
	Ideology 2	Left Spectrum: More prone to Redistribute	+		X	X	X	X
	Ideology 3	The more extreme (Ideology 2) the more prone to redistribute	+		X	X	X	X
	Ideology 4		+		X		X	X
	Ideology 5 (b)							
	Ideology 6	Right Spectrum: Less prone to Redistribute	-			X	X	X
	Ideology 7	The more extreme (Ideology 9) the less prone to redistribute	-		X	X	X	X
	Ideology 8		-		X	X	X	X
	Ideology 9		-	X		X	X	X
	Ideology 10 (Right)		-			X	X	X
Beliefs	Beliefs 1 (Effort)		+			X	X	
	Beliefs 2	Effort Spectrum: More prone to Redistribute	+			X		
	Beliefs 3	The more extreme (Effort 2) the more prone to redistribute	+	X				

Beliefs 4		+	X	(X)	
Beliefs 5 (b)					
Beliefs 6	Luck Spectrum: Less prone to Redistribute	-	X		X
Beliefs 7	The more extreme (Luck 9) the less prone to redistribute	-		X	X
Beliefs 8		-		X	X
Beliefs 9		-			X
Beliefs 10 (Luck)		-	X		

Figure 22 - Z tests Wave 2 Vs. Wave 3

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	5,78								
Inc 3		4,35							
Inc 4			3,29						
Inc 5				1,14					
Inc 6					2,66				
Inc 7						3,16			
Inc 8							0,46		
Inc 9								1,43	
Inc 10									1,96

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	1,71								
Id 2		2,25							
Id 3			1,38						
Id 4				2,60					
Id 6					10,90				
Id 7						11,78			
Id 8							5,25		
Id 9								3,62	
Id 10									10,01

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	26,26								
Bel 2		15,57							
Bel 3			11,54						
Bel 4				2,22					
Bel 6					0,79				
Bel 7						0,66			
Bel 8							3,33		
Bel 9								2,62	
Bel 10									10,86

	Health 2	Health 3	Health 4	Health 5
Health 2	1,27			
Health 3		2,36		
Health 4			2,52	
Health 5				2,93

	Educ 2	Educ 3
Educ 2	8,41	
Educ 3		6,36

Gender	5,81
Age	396,04
Employed	10,58
Unemployed	1,40
Single	6,72

Figure 23 - Z tests Wave 2 Vs. Wave 4

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	4,95								
Inc 3		3,91							
Inc 4			3,18						
Inc 5				0,58					
Inc 6					2,08				
Inc 7						2,56			
Inc 8							0,46		
Inc 9								0,71	
Inc 10									2,01

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	0,04								
Id 2		1,40							
Id 3			0,55						
Id 4				1,17					
Id 6					9,28				
Id 7						8,67			
Id 8							4,63		
Id 9								0,96	
Id 10									4,64

	Health 2	Health 3	Health 4	Health 5
Health 2	0,01			
Health 3		0,46		
Health 4			0,50	
Health 5				0,64

	Educ 2	Educ 3
Educ 2	10,17	
Educ 3		9,46

Gender	6,78
Age	183,47
Employed	5,26
Unemployed	3,60

Figure 24 Z tests Wave 2 Vs. Wave 5

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	4,04								
Inc 3		5,53							
Inc 4			3,26						
Inc 5				1,38					
Inc 6					0,53				
Inc 7						0,57			
Inc 8							3,13		
Inc 9								2,50	
Inc 10									5,20

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10

Id 1	2,08								
Id 2		3,21							
Id 3			3,51						
Id 4				1,05					
Id 6					10,89				
Id 7						12,66			
Id 8							7,75		
Id 9								6,99	
Id 10									11,96

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	29,22								
Bel 2		18,25							
Bel 3			14,08						
Bel 4				6,14					
Bel 6					1,67				
Bel 7						3,43			
Bel 8							6,62		
Bel 9								4,49	
Bel 10									11,09

	Health 2	Health 3	Health 4	Health 5
Health 2	0,56			
Health 3		0,93		
Health 4			0,89	
Health 5				1,00

	Educ 2	Educ 3
Educ 2	10,39	
Educ 3		15,34

Gender	5,57
Age	134,30
Employed	5,15
Unemployed	2,67
Divorced	2,24
Separated	1,22

Figure 25 Z tests Wave 2 Vs. Wave 6

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	4,64								
Inc 3		3,46							
Inc 4			0,58						
Inc 5				3,62					
Inc 6					1,53				
Inc 7						2,02			
Inc 8							5,08		
Inc 9								4,04	
Inc 10									5,97

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	0,28								
Id 2		3,72							
Id 3			0,64						
Id 4				1,31					
Id 6					12,49				
Id 7						14,30			
Id 8							8,90		
Id 9								7,79	

Id 10									12,32
	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	38,73								
Bel 2		24,53							
Bel 3			20,05						
Bel 4				8,46					
Bel 6					2503,00				
Bel 7						5584,00			
Bel 8							9,00		
Bel 9								7,36	
Bel 10									12,70
	Health 2	Health 3	Health 4	Health 5					
Health 2	2,09								
Health 3		3,55							
Health 4			3,52						
Health 5				NA					
	Educ 2	Educ 3							
Educ 2	12,24								
Educ 3		11,80							
Gender	2,37								
Age	256,75								
Employed	14,59								
Unemployed	3,39								

Figure 26 Z tests Wave 2 Vs. Wave 7

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	5,38								
Inc 3		3,79							
Inc 4			0,76						
Inc 5				2,40					
Inc 6					0,68				
Inc 7						1,51			
Inc 8							4,15		
Inc 9								0,71	
Inc 10									3,27
	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	0,68								
Id 2		5,74							
Id 3			7,09						
Id 4				3,78					
Id 6					11,48				
Id 7						11,85			
Id 8							7,90		
Id 9								5,73	
Id 10									6,18
	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	26,83								
Bel 2		16,33							
Bel 3			15,17						
Bel 4				7,89					
Bel 6					3,18				
Bel 7						6,97			
Bel 8							9,67		
Bel 9								7,56	

Bel 10					12,37

	Health 2	Health 3	Health 4	Health 5
Health 2	1,37			
Health 3		2,10		
Health 4			1,97	
Health 5				2,05

	Educ 2	Educ 3
Educ 2	12,47	
Educ 3		13,75

Gender	7,42
Age	124,67
Employed	9,09
Unemployed	2,74
Divorced	2,22

Figure 27 Z tests Wave 3 Vs. Wave 4

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9
Inc 2	1,67							
Inc 3		0,66						
Inc 4			0,33					
Inc 5				6,39				
Inc 6					1,43			
Inc 7						1,23		
Inc 8							2,85	
Inc 9								1,54
Inc 10								

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9
Id 1	4,87							
Id 2		2,27						
Id 3			5,63					
Id 4				3,61				
Id 6					4,01			
Id 7						9,75		
Id 8							1,32	
Id 9								8,55
Id 10								

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	4,45			
Social Class 3		5,20		
Social Class 4			0,66	
Social Class 5				0,53

	Health 2	Health 3	Health 4	Health 5
Health 2	1,91			
Health 3		2,19		
Health 4			2,28	
Health 5				2,53

	Educ 2	Educ 3
Educ 2	8,05	
Educ 3		12,20

Gender	4,91
Age	809,82
Employed	16,98
Unemployed	8,30

Figure 28 Z tests Wave 3 Vs. Wave 5

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	7,79								
Inc 3		5,79							
Inc 4			0,12						
Inc 5				12,44					
Inc 6					9,75				
Inc 7						16,23			
Inc 8							14,81		
Inc 9								12,49	
Inc 10									13,43

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	11,78								
Id 2		3,46							
Id 3			9,11						
Id 4				15,80					
Id 6					1,09				
Id 7						3,28			
Id 8							10,20		
Id 9								12,56	
Id 10									5,86

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	9,75								
Bel 2		11,10							
Bel 3			13,14						
Bel 4				20,19					
Bel 6					5,52				
Bel 7						14,83			
Bel 8							18,42		
Bel 9								9,32	
Bel 10									2,17

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	3,62			
Social Class 3		12,57		
Social Class 4			7,00	
Social Class 5				2,32

	Health 2	Health 3	Health 4	Health 5
Health 2	0,17			
Health 3		0,33		
Health 4			0,51	
Health 5				0,68

	Educ 2	Educ 3
Educ 2	7,91	
Educ 3		39,11

Gender	1,65
Age	1525,09
Employed	24,88
Unemployed	5,29

Figure 29 Z tests Wave 3 Vs. Wave 6

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	6,44								
Inc 3		5,63							
Inc 4			15,66						
Inc 5				27,27					
Inc 6					22,53				
Inc 7						26,41			
Inc 8							26,10		
Inc 9								18,05	
Inc 10									14,59

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	7,47								
Id 2		5,63							
Id 3			9,64						
Id 4				19,77					
Id 6					6,28				
Id 7						11,48			
Id 8							16,48		
Id 9								17,35	
Id 10									5,78

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	45,36								
Bel 2		42,86							
Bel 3			50,64						
Bel 4				35,03					
Bel 6					11,95				
Bel 7						29,47			
Bel 8							35,11		
Bel 9								26,97	
Bel 10									5,14

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	4,85			
Social Class 3		22,30		
Social Class 4			13,60	
Social Class 5				6,69

	Health 2	Health 3	Health 4	Health 5
Health 2	8,64			
Health 3		12,39		
Health 4			9,81	
Health 5				NA

	Educ 2	Educ 3
Educ 2	17,39	
Educ 3		24,38

Gender	20,36
Age	985,77
Employed	16,84
Unemployed	9,34

Figure 30 Z tests Wave 3 Vs. Wave 7

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10

Inc 2	0,28								
Inc 3		2,04							
Inc 4			11,30						
Inc 5				16,74					
Inc 6					14686,00				
Inc 7						19,57			
Inc 8							18,08		
Inc 9								5,56	
Inc 10									4,95

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	7,91								
Id 2		13,17							
Id 3			25,01						
Id 4				5,14					
Id 6					1,78				
Id 7						1,13			
Id 8							10,95		
Id 9								7,78	
Id 10									15,59

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	0,31								
Bel 2		2,31							
Bel 3			19,35						
Bel 4				30,14					
Bel 6					16,35				
Bel 7						36,80			
Bel 8							38,83		
Bel 9								25,91	
Bel 10									4,24

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	5,38			
Social Class 3		14,77		
Social Class 4			14,68	
Social Class 5				3,64

	Health 2	Health 3	Health 4	Health 5
Health 2	0,83			
Health 3		1,23		
Health 4			2,94	
Health 5				4,78

	Educ 2	Educ 3
Educ 2	3,55	
Educ 3		24,88

Gender	7,42
Age	1644,27
Employed	8,29
Unemployed	5,43

Figure 31 Z tests Wave 4 Vs. Wave 5

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	4,16								
Inc 3		5,01							
Inc 4			0,42						
Inc 5				2,76					

Inc 6					5,83				
Inc 7						10,72			
Inc 8							7,71		
Inc 9								7,37	
Inc 10									8,33

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	5,91								
Id 2		5,27							
Id 3			11,83						
Id 4				6,64					
Id 6					3,47				
Id 7						13,10			
Id 8							9,84		
Id 9								21,11	
Id 10									23,31

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	8,22			
Social Class 3		5,68		
Social Class 4			6,91	
Social Class 5				1,62

	Health 2	Health 3	Health 4	Health 5
Health 2	0,68			
Health 3		0,66		
Health 4			0,58	
Health 5				0,57

	Educ 2	Educ 3
Educ 2	3,55	
Educ 3		24,88

Gender	6,51
Age	275,18
Employed	1,81
Unemployed	4,32

Figure 32 Z tests Wave 4 Vs. Wave 6

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	2,80								
Inc 3		3,30							
Inc 4			11,86						
Inc 5				12,03					
Inc 6					14,41				
Inc 7						17,14			
Inc 8							14,46		
Inc 9								11,05	
Inc 10									9,86

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	0,77								
Id 2		7,17							
Id 3			0,01						
Id 4				8,03					
Id 6					9,44				
Id 7						20,21			
Id 8							14,80		
Id 9								27,09	

Id 10									27,38

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	10,19			
Social Class 3		13,15		
Social Class 4			12,23	
Social Class 5				5,39

	Health 2	Health 3	Health 4	Health 5
Health 2	3,23			
Health 3		3,80		
Health 4			3,61	
Health 5				NA

	Educ 2	Educ 3
Educ 2	2,69	
Educ 3		8,65

Gender	21,03
Age	274,10
Employed	34,26
Unemployed	2,38

Figure 33 Z tests Wave 4 Vs. Wave 7

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	1,15								
Inc 3		0,97							
Inc 4			9,11						
Inc 5				6,40					
Inc 6					9,68				
Inc 7						13,36			
Inc 8							10,40		
Inc 9								2,96	
Inc 10									3,09

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	1,94								
Id 2		13,13							
Id 3			22,40						
Id 4				7,01					
Id 6					5,72				
Id 7						9,85			
Id 8							10,44		
Id 9								17,10	
Id 10									4,61

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	2,04			
Social Class 3		1,85		
Social Class 4			1,56	
Social Class 5				1,37

	Educ 2	Educ 3
Educ 2	4,30	
Educ 3		17,84

Gender	0,16

Age	330,10
Employed	12,33
Unemployed	3,69

Figure 34 Z tests Wave 5 Vs. Wave 6

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	2,33								
Inc 3		12,20							
Inc 4			15,54						
Inc 5				12,91					
Inc 6					11,29				
Inc 7						7,26			
Inc 8							8,38		
Inc 9								4,20	
Inc 10									3,10

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	7,36								
Id 2		1,98							
Id 3			20,59						
Id 4				1,06					
Id 6					8,48				
Id 7						8,86			
Id 8							5,24		
Id 9								2,45	
Id 10									1,51

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	35,39								
Bel 2		33,65							
Bel 3			40,79						
Bel 4				14,59					
Bel 6					6,69				
Bel 7						14,51			
Bel 8							14,49		
Bel 9								15,67	
Bel 10									1,91

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	0,52			
Social Class 3		8,41		
Social Class 4			5,45	
Social Class 5				3,66

	Health 2	Health 3	Health 4	Health 5
Health 2	0,85			
Health 3		1,16		
Health 4			1,18	
Health 5				NA

	Educ 2	Educ 3
Educ 2	11,64	
Educ 3		22,65

Gender	20,44
Age	892,99
Employed	52,65
Unemployed	3,48

Living Together as Married	8174,00

Figure 35 Z tests Wave 5 Vs. Wave 7

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	5,79								
Inc 3		7,18							
Inc 4			11,20						
Inc 5				5,09					
Inc 6					5,47				
Inc 7						4,03			
Inc 8							4,12		
Inc 9								3,94	
Inc 10									4,12

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	4,98								
Id 2		10,95							
Id 3			16,20						
Id 4				21,90					
Id 6					3,20				
Id 7						5,04			
Id 8							0,51		
Id 9								6,24	
Id 10									23,31

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	11,05								
Bel 2		9,47							
Bel 3			6,84						
Bel 4				10,59					
Bel 6					12,00				
Bel 7						23,56			
Bel 8							18,70		
Bel 9								15,84	
Bel 10									1,24

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	2,14			
Social Class 3		2,56		
Social Class 4			8,51	
Social Class 5				1,26

	Health 2	Health 3	Health 4	Health 5
Health 2	0,28			
Health 3		0,16		
Health 4			0,11	
Health 5				0,01

	Educ 2	Educ 3
Educ 2	13,09	
Educ 3		9,84

Gender	9,81
Age	72,43
Employed	19,71
Unemployed	0,49

Living Together as Married	0,37
Divorced	0,34

Figure 36 Z tests Wave 6 Vs. Wave 7

	Inc 2	Inc 3	Inc 4	Inc 5	Inc 6	Inc 7	Inc 8	Inc 9	Inc 10
Inc 2	4,54								
Inc 3		2,62							
Inc 4			1,11						
Inc 5				6,08					
Inc 6					4,24				
Inc 7						2,15			
Inc 8							2,97		
Inc 9								7,54	
Inc 10									6,06

	Id 1	Id 2	Id 3	Id 4	Id 6	Id 7	Id 8	Id 9	Id 10
Id 1	1,78								
Id 2		10,61							
Id 3			39,51						
Id 4				27,32					
Id 6					4,90				
Id 7						14,95			
Id 8							4,94		
Id 9								10,61	
Id 10									28,45

	Bel 1	Bel 2	Bel 3	Bel 4	Bel 6	Bel 7	Bel 8	Bel 9	Bel 10
Bel 1	51,41								
Bel 2		44,09							
Bel 3			33,37						
Bel 4				3,23					
Bel 6					6,48				
Bel 7						11,46			
Bel 8							5,23		
Bel 9								2,29	
Bel 10									0,83

	Social Class 2	Social Class 3	Social Class 4	Social Class 5
Social Class 2	2,16			
Social Class 3		5,22		
Social Class 4			4,94	
Social Class 5				2,14

	Health 2	Health 3	Health 4	Health 5
Health 2	5,39			
Health 3		11,38		
Health 4			12,47	
Health 5				NA

	Educ 2	Educ 3
Educ 2	3,40	
Educ 3		12,95

Gender	33,27
Age	1024,48
Employed	31,57

Unemployed	2,62
Living Together as Married	9,87

List 1 - Religious Denominations

No religious denomination

Aglipayan

Al-Hadis

Alliance

Ancestral worshipping

Anglican

Armenian Apostolic Church

Assembly of God

Bahai

Baptist

Born again

Brgy. Sang Birhen

Buddhist

C & S Celestial

Cao dai

Catholic: doesn´t follow rules

Charismatic

Christian

Christian Fellowship

Christian Reform

Church of Christ / Church of Christ / Church of Christ of Latter-day Saints

Confucianism

Druse

El Shaddai

Essid

Evangelical

Faith in god

Filipinista

Free church/Non denominational church

Greek Catholic

Gregorian

Hindu

Hoa hao

Hussite

Iglesia ni Cristo (INC)

Independent African Church (e.g. ZCC, Shembe, etc.)

Independent Church

Israelita Nuevo Pacto Universal (FREPAP)

Jain

Jehovah witnesses

Jesus is Lord (JIL)

Jesus Miracle Crusade

Jew

Ka-a Elica

Lutheran

Mennonite

Methodists

Mita

Mormon

Muslim

Native

New Testament Christ/Biblist

Orthodox

Other

Other: Brasil: Espirit,candomblé,umbanda, esoterism,occultism

Other: Christian com

Other: Oriental

Other: Philippines (less 0.5%)

Other: Taiwan (taoism, protestant fundam., ancient cults)

Paganism

Pentecostal

Presbyterian

Protestant

Qadiani

Roman Catholic

Rosacruz

Salvation Army

Self Realisation Fellowship

Seven Day Adventist

Shenism (Chinese Religion)

Shia

Sikh

Sisewiss

Spiritista

Spiritualists

Sunni

Tac

Taoist

The Church of Sweden

The Worldwide Church of God

Theosophists

Unitarian

United

United Church of Christ in the Philippines (UCCP)

Wicca

Zionist

Zoroastrian

Ratana

Ringatu

New Apostolic Church

Yiguan Dao

Daolism

001 DZ: Christian (Quakers, Jehovah's Witnesses, Evangelical, Protestant)

0001 AU: Uniting Church

8001 Dutch Reformed (Nederlands Hervormd)

8002 Reformed Churches in the Netherlands (Gereformeerd)

0001 ZA: Evangelical/Apostolic Faith Mission

0002 ZA: African Traditional Religion