האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

MASTER'S THESIS

Preferences for Redistribution –

A Model for Former Soviet Union Immigrants in Israel

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December 2016

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Acknowledgements

It has been a period of intense learning for me, not only in the scientific arena, but also on a personal level. Thus, I would like to reflect on the people who have supported and helped me so much throughout this period.

Foremost, I would like to express my sincere gratitude to my advisor Prof. Momi Dahan, for being an example of a professional economist and for the support on my research. His immense knowledge and guidance helped me in conducing and concluding this thesis.

I would also thank the Faculty Staff that in many ways contributed both in the process of choosing and advancing the researched subject.

To my life partner Adam, for supporting me greatly and for always willing to help. I would also like to thank my brother and my parents for their wise counsel and sympathetic ear. You are always there for me.

Finally, there are my friends. Those who are far away and those who are closer, by supporting me anytime and by all the good moments during this period.

Abstract

This work analyzes the subject of preferences for redistribution among Former Soviet Union immigrants in Israel. We elaborate a comprehensive model which covers not only economic variables but also demographic aspects and individual beliefs. On the one hand, it was previously found that living in a communist regime is generally associated to further greater support for redistribution policies. On the other hand, due to the particularities of FSU immigrants in Israel, we expected they would follow the opposite direction. Results show that, in accordance to empirical literature worldwide, also in Israel immigrants from former communist regimes are more in favor of redistributive policies than their peers in the society.

1. Introduction

For very long researchers have being studying what lead some individuals to be more in favor of income redistribution than others. This field of research – referred as Preference for Redistribution – aims to address the explanation for one of the most important splitting points between right and left wing visions on economic issues (Alesina and Giuliano, 2009).

The Classic Economic Theory assumes that individuals are rational with defined and well known preferences over their consumption and perceive their utility maximization. It means that an individual will support a redistributive program if and only he recognizes that his net benefit is raised by this intervention (Corneo and Gruner, 2002). Nevertheless, empirical observation had proved that other dimensions, more subjective, are also responsible for influencing how people feel about inequality or fairness.

This study focuses in a specific subject that received increasing attention after the end of the Cold War: the relationship of being a Former USSR and the extent one supports welfare policies. Many researches such as Corneo (2000) and Alesina and La Ferrara (2005) investigated this topic in Germany, USA and other countries. There is a literature consensus so far that, in average, those who lived under a communist regime tend to support in a greater extent government intervention even after many years living in a capitalist country.

So far, none of them approached the case of Former USSR who immigrated to Israel. In the 90's almost 1 million Jews and Jews descendants emigrated from USSR and chose Israel as their new homeland. Between 1990-1994 they increased the Israeli population in 12% (Friedberg, 2001). Their case is especially instigating because Former USSR community in Israel is recognized as being more right-wing than the average population, what would lead them to oppose to redistributive policies. In the context of preferences for redistribution, though, this would be a contrast with previous empirical findings.

This study aims to discuss the role played by being FSU immigrant in Israel in shaping their preferences for redistribution. Controlling for a number of factors usually found to affect individual preferences in the literature, the research investigates whether FSU immigrants have different levels of support on welfare

state in comparison to the rest of Israeli population. Moreover, if it is possible that growing up under a communist regime had influenced towards a more redistributive opinion.

From a strategic point of view, it is relevant for a government to map which sectors tend to be in favor of more interventionist state policies and which tend to support more liberal approaches. It allows governments to know better its population preferences an even plan focused actions in order to achieve the greatest support of the general society.

This research follows a quantitative approach, analyzing data from the CBS 2012 Social Survey that interviews 7,160 individuals, among which 4,049 are used as observations in the tested models.

The work is organized as follows. Section 2 discusses the relevant literature on the subject, approaches the development of different models used on attempt to explain people's preferences for redistribution and introduces previous studies that investigated the influence of specific political regimes. Section 3 covers a background about FSU in Israel and formalizes the research question and the researcher hypothesis. Section 4 describes the database, the model and methodology as well as presents descriptive statistics for the selected variables. Section 5 presents the main findings. Section 6 concludes and proposes future research topics.

2. Preferences for Redistribution – A Literature Review

Initially, the development of this research field had focused only in economic variables. However, this approach fails to explain some common situations such as the support of rich people to redistributive programs. From this gap emerged a more comprehensive theory that in addition to the economic factors considered also demographic characteristics, personal beliefs and experiences to explain people's preference for redistribution.

With the fall of Communism and the beginning of emigration waves out of Communist countries, an interesting opportunity became available for researchers: compare USSR immigrants with local citizens in order to check

whether there is influence of communist regime on one's preferences for redistribution and if this is long lasting.

The present chapter discusses the theoretical background and previous empirical analysis.

2.1. *Homo economicus* assumption

The difference on individuals' perception about government intervention started to grab attention on the 1960's when the welfare state was in evidence and governments significantly expanded their share in the economy. Theories to justify this expansion argued the wide public is generally myopic and does not see the costs of redistribution. Therefore politicians would have incentives to expand public spending since it increases public approval and chances of reelection (Brunner, 1978).

In a later stage, a standard assumption in the absence of myopia started to be used on optimal taxation models – the *homo economicus* assumption. It meant that individuals are rational, willing to maximize their utility, and have complete information about taxation and income redistribution. In practical terms, agents are endowed with outcome oriented and self-regarding preferences so that only those who expect to extract net benefit from public redistribution would support it. As a consequence, individual demand for redistribution would be positively correlated to the benefits they expect to gain (Barr, 1992).

Meltzer and Richard (1981) used this assumption to explain when a society will opt for redistribute. Based on the "median voter" theory, i.e. that in universal suffrage democracies the median voter is expected to be the decisive voting, they argue that the tax level is defined by the median income.

Since individuals are self-interested on their own benefit maximization, in societies where inequality is high[1] the median income tends to benefit from redistribution and, thus, favor higher taxes. Thus, it would be expected to see redistribution on unequal societies.

[1] Inequality is measured as the distance between the median and the average income.

Alongside the development of preferences for redistribution research, the optimal tax model received some critics. Baremboim and Karabarbounis (2009) argue that it ignores that the very rich may have more influence in politics, managing to favor low taxes even under high inequality. Moreover, it wasn't consistent with empirical cases, for instance the study of Alesina and Giuliano (2009) on the US case, a remarkably unequal country with low redistribution. Despite presenting some rejection, this model was a relevant starting point to other economists who posteriorly approached the subject through the rational spectrum. Since then, the economical factor as a determinant on preferences for redistribution became widely accepted.

Another theoretical framework that relies on the *homo economicus* assumption is the social insurance model. According to Moene and Wallerstein (1996) redistribution works as a social insurance and can benefit those who are likely to suffer from negative shocks. As a consequence, the demand for redistribution is positively correlated to the degree of risk an individual feels he is exposed to. Note that it introduces to the model an intertemporal economic dimension.

The mainstream literature accepts the bottom line of the *homo economicus* assumption which is that people with higher income or wealth tend to support redistribution in a lower extent. This relationship actually was found consistent with empirical results.

Nevertheless, the purely economic measure of current and future income fails to totally explain the support for redistribution. If preferences for redistribution are explained solely by the rational model, for instance, how is it possible to justify rich people that support redistribution when they are not economically benefiting from it; or how to explain the political viability of tax-funded redistribution programs that benefits small groups? Beyond the economic factor other variables were lately addressed and tried to capture a subjective dimension, which includes people's values and beliefs about justice and their aspiration of a less unequal society. In the continuation these new dimension are formalized.

2.2. Fairness and Individual Characteristics

A new generation of models extended the set of rationales which may justify the demand for redistribution. In particular, beliefs concerning the key-determinants of socio-economic achievements and views of social justice could explain why one might support redistribution despite the fact that it does not procure any material advantages (Piketty, 1995 and Corneo and Grüner, 2002).

Preferences for redistribution that do not maximize individual's utility are not an unpredictable phenomenon *a prori*. The literature of demand for redistribution has found so far some patterns about altruism. Individual's identity potentially plays a key role in determining preferences that affect economic decisions, and it has lately gained increasing acceptance in the economics literature (Keely and Tan, 2008).

Two classes of information-based theories for redistribution preferences are commonly considered. In the first one, identity corresponds to a set of demographic conditions for the individual, and these have persistent effects. For instance, age, race, schooling and gender are found important classifiers for income redistribution (Keely and Tan, 2008 and Alesina and Giuliano, 2009).

The second class of information corresponds to two main elements commonly accessed in this literature: determinants on income prosperity and individual trajectory. If an individual catches market outcomes as unfair, as the result of family background or lucky instead of each one's effort, he tends to be more in favor of redistribution (Isaksson and Lindsko, 2009). A number of authors tested it empirically and found it consistent[2].

The last element refers to personal experience and individual trajectory. Piketty (1995) argues that histories of misfortune can lead people to be more risk-averse and to better consider a Welfare State who can secure themselves in an extreme situation. Another hypothesis for this relation links the two previous elements: people with "happy-end stories" tend to believe that it was a matter of

[2] One interesting insight of these researches is that distinct beliefs on income prosperity may be related to cultural differences. According to Alesina and Giuliano (2009) each culture emphasizes the meritocracy on society in a particular way. For instance, North Americans tend to believe that efforts lead to income upwards in a higher extent than Europeans. Thus, culture may be classified as having an indirect correlation to redistribution.

effort and merit rather than luck, and that anyone who perceives his target with sufficient effort can also achieve success.

Yet, relatively few researches focused on the influence of growing up under a specific regime in one's preferences. This issue is approached below.

2.3. The influence of communist regime over individual's preferences for redistribution

Inside the wide research field of demand for redistribution this study will focus in a sub-field that approaches the variance between Capitalist and Socialist regimes. The idea is to understand in the Socialist case to which extend the environment where one lived and was educated influences in his redistribution preferences.

The German reunification was kind of a natural experiment to study the influence of economic and political environment on social behavior. After 40 years of separation and being governed by different political systems, sixteen million citizens of a communist state found themselves living under a capitalistic system (Brosig-Koch, Helbach, Ockenfels and Weimann, 2011).

Several are the studies[3] that analyzed the differences between East and West German. For instance, Torgler (2003) reported that in the early nineties tax compliance among East Germans was stronger than among West, indicating that they had a greater acceptability of political institutions and redistribution.

In addition, Alesina and Fuchs-Schundeln (2007) found that 45 years living under a communist regime had significant and long lasting effect on East German's preferences for redistribution. Almost twenty years after the end of Communist regime, East Germans were persistently more in favor of redistribution than West Germans. Although this gap is shrinking over time, the study estimates that will take about one or two generations to equalize Germans attitude towards redistribution.

[3] Such as Ockenfels and Weimann (1999), Torgler (2003), Alesina and Fuchs-Schundeln (2007) and Brosig-Koch, Helbach, Ockenfels and Weimann (2011).

Similarly, Brosig-Koch, Helbach, Ockenfels and Weimann (2011) found that East Germans show consistently less solidarity than West Germans. Nevertheless, their results did not show that the gap is converging along the 20 years after the reunification. The authors argue, thus, that social behavior changes more slowly than political values and the regime itself.

In a cross country study, Corneo and Gruner (2002) found that, ceteris paribus, individuals living in a formerly socialist country are more likely to support an active role of the state in reducing economic inequality. They expose different interpretations to this fact. One is the uncertain environment and the absence of a fully developed private insurance market in eastern countries, raising the demand for political redistribution as an insurance device. The second is the contact with egalitarian ideas that is translated into support for political redistribution.

All these evidences lead to a relative consensus about the effect of living under a communist regime on one's position on broader governments. Next chapter discusses the background of FSU in Israel as well as presents the research question and hypothesis.

3. The Israeli case

After receiving permission to leave the Soviet Union in 1989, over 2 million persons emigrated from their countries. The overwhelming majority immigrated to one of the following destinations: USA, Canada, Israel and Germany (Lewin-Epstein, Semyonov, Kogan and Wanner, 2003).

Almost 1 million Jews and Jews descendants chose Israel as their new homeland. Between 1990-1994 they increased the Israeli population in 12% (Friedberg, 2001). Most of the new comers were skilled and well educated, but in the beginning of absorption they were confronted to high unemployment rates and tight regulation of the labor market, what lead many of them to downgrade their occupational profession and, consequently, living standards (Remmenick, 2013). Although the Soviet Union was economically deteriorated, it was hard for those new immigrants to left behind a communist government and arrive in a capitalist society that was not able to quickly absorb them as well as to provide the same standards they had before. The turmoil of post-Soviet transition impacted FSU

immigrants who were struggling to establish in Israel (Philippov and Knafelman, 2011).

Since its origins, Israel was not considered a total free market economy as a result of its historical strong Welfare State policy. Yet, many authors argue that after the inflation and fiscal crisis in the beginning on the 80's, Israel passed through a transition from a centralized model policy to a liberal orientated policy (Lewin-Esptein, Semyonov, Kogan and Wanner, 2003). While realizing the difficulties of establishment FSU immigrants were confronted, one possibly expects that they would feel nostalgia of the old times in the Communist regime and carry negative impressions of a liberal economy.

Nevertheless, according to Horowitz (1996), since their arrival, most Israeli Soviets rapidly adopted a patriotic vision and a right-wing political orientation. They were looking for strong political leadership capable of showing firm will and political direction which they saw as the only force capable of solving the complex problems faced by Israel (meaning the problems related to the Israeli-Palestinian conflict). As a consequence, since the elections of 1999, most FSU immigrants voted for right-wing parties, whose leaders they recognized as stronger.

Horowitz (1996) explains that FSU voting dynamics shifted over time from specific in-group interest (such as employment, housing and other socio-economic problems faced by immigrants) to a broader political agenda, typically viewed from the Israeli-Palestinian conflict point of view.

Beyond the reason that drove this switch, results from poll data gathered by Arian and Shamir (2004) support that more FSU immigrants declare themselves as right-wing voters then left-wing. As presented in table 1, the percentage of right-wing voters is similar both among Israelis and FSU, while the proportion of left-wing voters is remarkably smaller among Former USSR then Jewish Israeli[4].

[4] It is difficult to ignore the moderate category since it is majoritarian in both groups. A priori, there is no reason to consider that the natural tendency of self-declaring moderate rather than in the extremes applies in distinct levels among Jewish Israeli and Russian. However, is possible that both groups have different perception on what considered moderate. If this is true, it is possible that in average one of the moderate groups is more left/right-wing than the other, although the available data does not permit to infer which group.

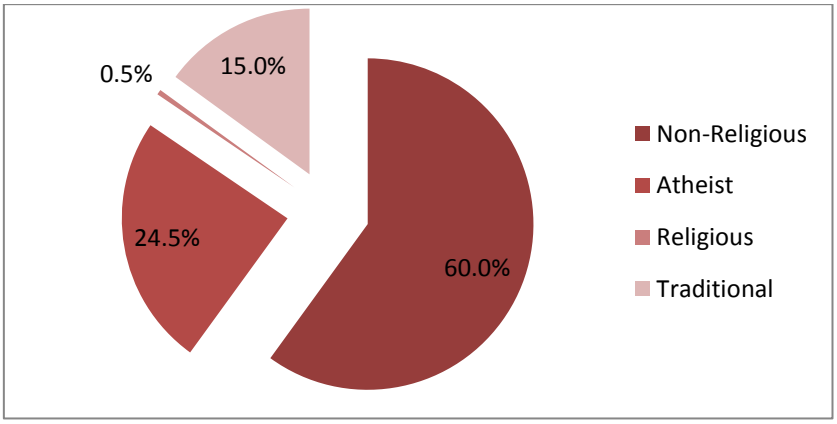
Table 1 – Comparison of Russian and Jewish Israeli Voters for Ideological Position

	FSU Voters	Jewish Israeli Voters
Right	35%	39%
Moderate	61%	44%
Left	4%	17%

Source: Arian and Shamir (2004)

The religious spectrum in the Israeli political scene is strong and influence, specially related to right-wing parties support (Peres, 1995). The next chart shows, however, that there are very few FSU that consider themselves as religious. In this sense, it is interesting to note that the religious profile of FSU not only suggests that they would be less right-wing supporter than the Jewish Israelis, but furthermore suggests a tendency towards left-wing parties.

Chart 1 - Religiosity of Israeli Russian Voters



Source: Arian and Shamir (2004)

According to the chart 1, nearly 3 in 5 Russians reported they were not religious and another 1 in 5 reported being atheist. Though, just 4% of Russians declared left-wing voters. Considering these numbers FSU' inclination towards the right is indeed remarkable and instigating.

3.1. Research Question and Main Hypothesis

This study aims to understand the preference for redistribution dynamic among Former Soviet Union immigrants in Israel. It will be investigating whether FSU immigrant in Israel tends to support in a greater extent the Welfare State.

The null hypothesis is that if political regimes had no effect on one's opinion, we should observe no difference between FSU preferences and their Israelis peers. In this case, when comparing FSU with other Israeli citizens we would observe some sectors more in favor of redistribution and other less in favor, but not the predominance of a specific opinion because, in average, the difference between both populations would be insignificant.

Nevertheless, based on the discussed literature, the researcher hypothesis is that political regimes indeed affect individual's preferences. If Communism affected FSU immigrants' preferences, there is a second issue that will be investigated: the direction of this influence – whether it is positively or negatively.

It is possible to think about two different options. One is that this population turned extremely against the interventionist state and turned their preferences toward a liberal market. In this sense, we would expect that they would be less in favor of welfare state than the average Israeli population, so negatively related. The second possibility is the opposite: state intervention positively impacted this group that believes it is necessary for social well-being. If this is true, we would expected FSU immigrants to support redistribution in a higher extend than Israelis.

In the second scenario, however, there is still space for different interpretations about the driver of this influence; either it was some kind of indoctrination or because these people experienced good standard of lives. This study will leave this question for future research. Although, it will try to analyze if being FSU is indeed the driver for the difference in the support level.

FSU immigrants' case in Israel is instigating. Influenced both by historical facts and by popular feeling, at a first glance many would classify the community of FSU in Israel as politically right-wing supporters. Thus, the hypothesis of this research is that, in average, FSU immigrants tend to be less supportive to Welfare State then their Israeli peers. If proven true, the Israeli case would be than an outlier on preferences for redistribution.

Next section will approach methodological details about this investigation.

4. Database, Methodology and Descriptive Statistics

This research adopts an empirical quantitative method in order to check the relationship between being a Former USSR immigrant and welfare state policies support. We run several logistic regression models to test it.

The cross-section data was gathered from the 2012 Social Survey conducted by the Central Bureau of Statistics of Israel. The Social Survey has a serious reputation and its database allows controlling for individual factors. The year 2012 was chosen due to the especial section about Pension Plans and Workers Organizations besides the core questionnaire that is asked on every survey.

It contains information about 7,160 individuals, but due to an age cut in the treatment and control groups this research considers only 4,049 observations. This will be further explained on section 4.3.

The process of reaching a final model was based in the combination of three variables groups usually found relevant by the preference for redistribution literature: economic interest, demographic characteristics and personal beliefs / experiences.

The groups were tested in separate with preferences for redistribution and USSR. The final and comprehensive models included only the relevant variables of each group. Variables that were not significant in the group regression stage were left behind and robustness checks were done adding each of these variables to see if nothing important was missed.

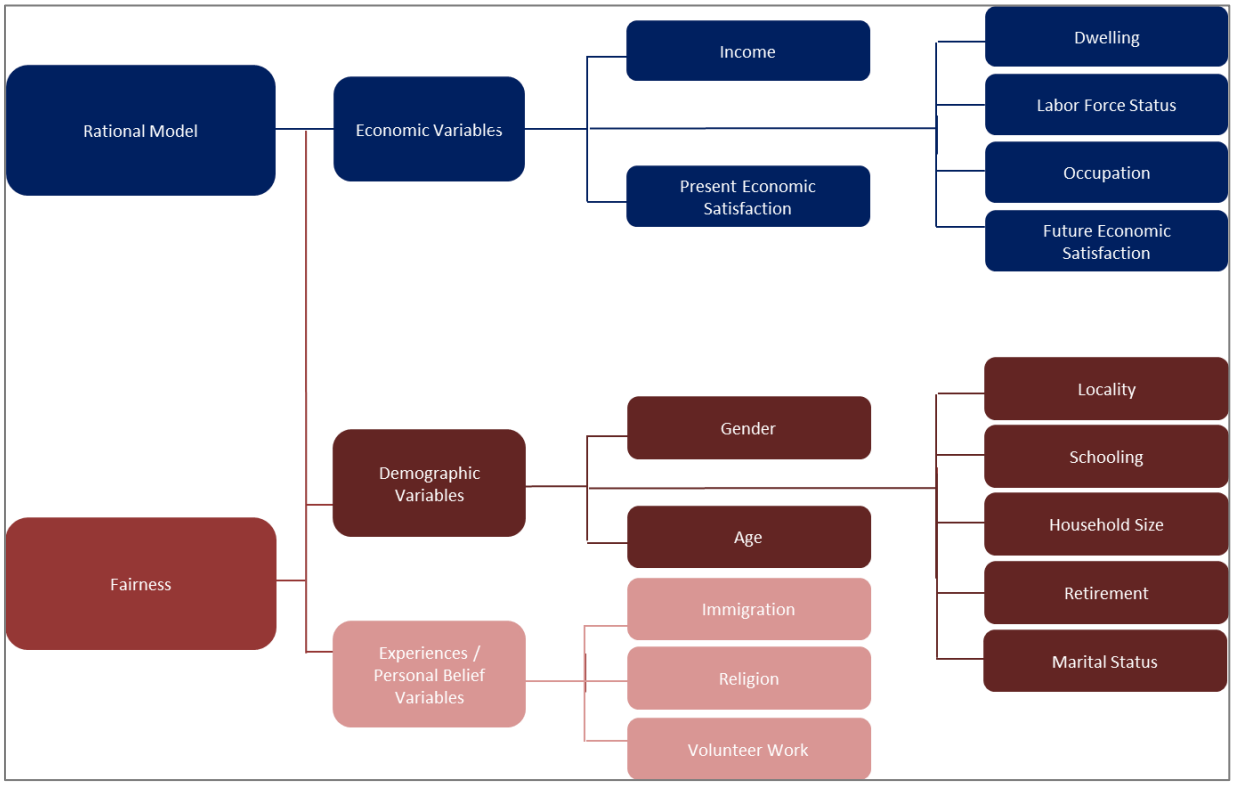
Unfortunately this study works with cross-sectional data and will not provide a full picture of the question. It will analyze if differences exist between the generation that grew up in Soviet Union and immigrated to Israel after 1990 but will not infer causality due to lack of information.

In the continuation we present the model rationale followed by the variables tested in the regressions. Lastly we present some descriptive statistics.

4.1. Preference for redistribution Model

Scheme 1 presents the variables introduced in each sub-model, which were based on theories reviewed in the second chapter of this study.

Scheme 1 – Variables considered in the regression models



The first sub-model, colored in blue, follows the rational model of Meltzer and Richard (1981) and includes economic variables. It also covers other dimensions of the *homo economicus* assumption such as current satisfaction and future expectations about income (Fong, 2001).

As a response to the rational model, 'Fairness theory' emerged to explain what was beyond the self-interest argument. It comprehends demographic and personal beliefs/experience spheres aiming to explain how people could be in favor of redistribution even when they did not extract any financial benefit from this policy. In this sense, we select several demographic variables (in dark red) as well as variables that represent individual's experiences or beliefs (in light red) on issues that can help on predicting people's preferences for redistribution.

Each of these sub-models is tested in separate but together with the dependent variable – preferences for redistribution – and the independent variable - being a FSU, in order to test its consistency. Then, they are aggregated in a selection of "most relevant variables", composing a comprehensive model that included at least one control variables from all the dimensions. The goal is to check whether being a

FSU still influences on one's preferences for redistribution after controlling for all these variables together.

4.2. Dependent variable – preferences for redistribution

Reaching a reliable answer of people's attitude towards welfare state policies demands a very well elaborated and steady question. The first step needed is to define which variable is going to be used as proxy to preferences for redistribution.

The question we decide to use is "who is mainly responsible to guarantee to a person that he or she will have a reasonable standard of living after their retirement". It represents the state responsibility for retirees' standard of life – a subject directly related to the concept of Social Insurance and usually approached in public economics studies (for instance in Rosen and Gayer, 2008).

A second question related to worker's right is approached as an alternative proxy in the sensitiveness checks. No changes in the main results are observed.

The retirement proxy was transformed from a categorical to a binary variable in order to eliminate middle-term responses and clearly separate from one side those who support state interventionism and on the other those who believe in a broader role for private institutions (see attachment 8.3 for all variables transformation). As shown on table 2, 36.4% from all sample supported that the responsibility should rely on distinct private institutions while 63.6% answered that the responsibility should be from the State.

Table 2 – Univariate analysis for preference for redistribution proxy

	Freq.	Percent	Cum.
Private Institution	2,524	36.37	36.37
State	4,415	63.63	100
Total	6,939	100	

4.3. Independent variable – the studied effect

The independent variable of most interest is a binary variable named "USSR" and indicates if individuals were born in USSR and immigrated to Israel during the Great *Alyiah*.

Many USSR immigrants immigrated very early on their lives and were little exposed to communist values because their educational processes took place

under other regime. To ensure that individuals were exposed enough time to the communist regime this variable samples only individuals who were 18 or older by the time of their immigration.

In this sense, the treatment group is formed by FSU immigrants from 1990-1995, the big immigration wave, who were aged 18 or more years by that time. In order to keep age parity, the control group is formed by the rest of Israelis that also were at least 18 years old in 1990.

Below is an univariate analysis of "USSR". 83.4% are non-FSU and 16.6% fits the characteristics of the abovementioned treatment group.

Table 3 – Univariate analysis for USSR

	Freq.	Percent	Cum.
Non FSU	3,379	83.45	83.45
FSU	670	16.55	100
Total	4,049	100	

4.4. Independent variable – control variables

The control variables used in this research were gathered from similar studies of this literature, such as Alesina and Fuchs-Schundeln (2007) and Corneo and Gruner (2002). In the continuation we present all variables divided into three sets – economic, demographic and personal experiences/beliefs.

In the attachment 8.1 is presented a summary table with descriptive statistics for each categorical control variables.

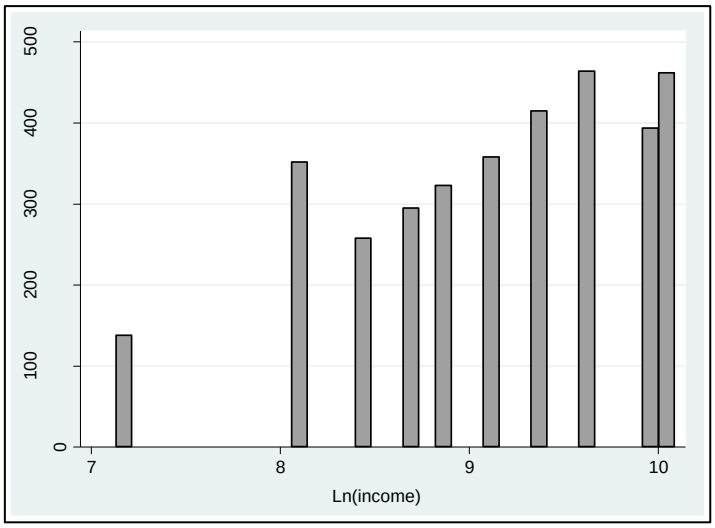
4.4.1 Economic Variables

- **Ln(income)** - This is the natural logarithm transformation of individual's monthly gross household income in current NIS and the only continuous variable of this set. As it was exposed by the *homo economicus* assumption, it is expected that the more money one earns the less supportive to welfare state he tends to be. Individuals are moved by self-interest, and richer people don't expect to benefit from a broader welfare state. Indeed, all significant studies on this field controlled for income and found it negatively correlated. As can be seen in the descriptive statistics, it has mean 9.15 and standard deviation 0.75.

Table 4 – Univariate analysis for ln(income)

Variable	Obs	Mean	Std. Dev.	Min	Max
Ln(income)	3,459	9.14	0.75	7.13	10.09

Chart 2 – Histogram Chart for Ln(income)

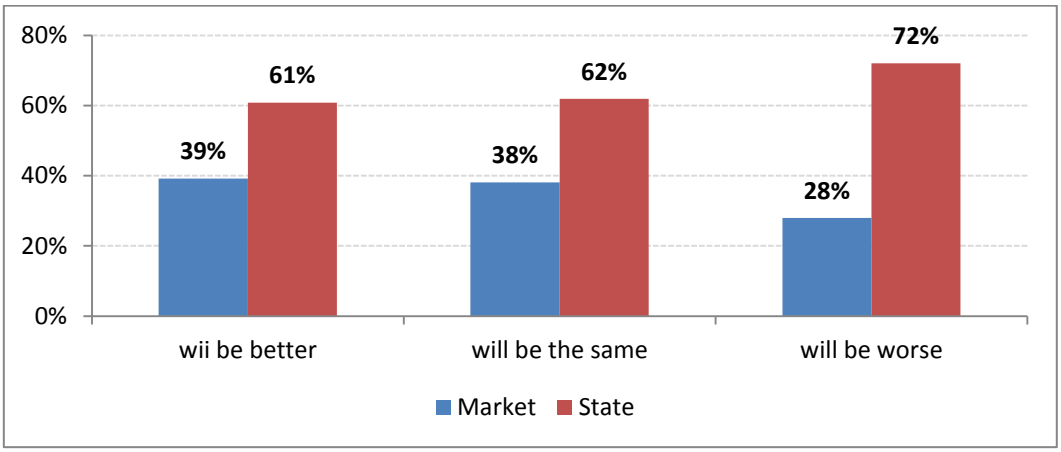


- **Dissatisf_present** – In addition to the ordinary view of current income, in order to address a complete view of the self-interest argument other dimensions are taken into account. *Dissatisf_present* captures how people perceive their economic situation. Isaksson and Lindskog (2009) used relative income to approach the same idea – how do you feel in comparison to other people. The authors found that people with higher relative income tend to be less supportive to redistribution – it is, more satisfied people are less State supportive. This is a dummy variable where 1 is dissatisfied and 0 is satisfied. 58% of the researched population answered they are satisfied, while the other 42% are dissatisfied. FSU are 24 p.p. more dissatisfied than non-FSU.

- **Economic_future** – Represents individual's expectation with their economic situation in the future. It is an ordinal variable, where the lower value represents the more optimist answer. 26% answer that the future will be better while 48% believe it will be the same. Another 26% believe it will be worse from the total 3,510 individuals who answered this question. The proportion in each category is similar between FSU and non-FSU.

Chart 3 displays the relation between this variable and government intervention support. As can be seen, there is a positive trend line between optimism on future economic situation and support on private forces.

Chart 3 – Future Economic Situation and Preferences for Redistribution



Source: Own elaboration based on CBS Social Survey 2012

It is expected that pessimists would be more likely to support the redistribution because they would have higher expectations of benefiting from government financial assistance in the in the future, so worth them to support a stronger Welfare State (Fong, 2001). This variable is especially interesting because beyond the current situation it introduces expectations as an additional variable to determine the payoffs. Ravallion and Lokshin (2000), for instance, found that not only support for redistribution is higher amongst those who expect their welfare to fall, but this effect is strongest among the currently well-off. A rising trajectory inhibits demand for redistribution.

- **Occupation** – This is a categorical variable with 4,026 valid observations. It is composed by distinct work fields and also includes a separate category for non-workers (unemployed and those who do not belong to the labor force). This last group accounts for 43% of the respondents while "managers, agents, sales workers and service workers" is the greatest employed category. In this matter, Guillaud (2013) argues that labour market position influences on shaping preferences for redistribution. For instance, the author found the odds of a manager to oppose redistributive policies are increased by 40% as compared to those of an office clerk. Alesina and Fuchs-Schundeln (2007), moreover, found white collar occupations and self-employed negatively correlated to redistribution.

- **Dwelling** - This is also a binary variable where 0 represents that the individual has no dwelling and 1 represents that he owns at least one dwelling. From the total of 4,049 valid observations, only 19% declared not owning an apartment. The incidence of individuals who have no dwelling is higher among FSU (39%), an expected gap since they are immigrants.

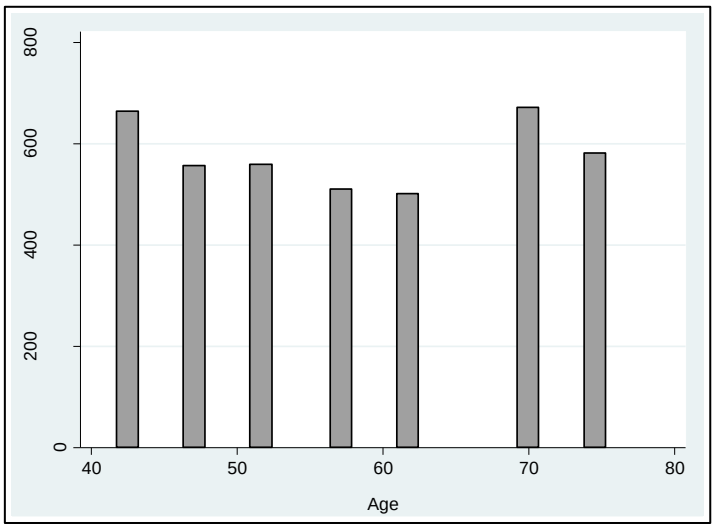
4.4.2 Demographic Variables

- **Age** – This is a continuous variable with mean 57.75 and standard deviation 11.37. Worth highlighting that the study considers only those who were 18 years or older in 1990-1995. It was originally a categorical variable and after the transformation each category received a value based on the average of each category range. The minimum value is 42 years and the mean is 57.75.

Table 5 – Univariate analysis for Age

Variable	Obs	Mean	Std. Dev.	Min	Max
Age	4,049	57.75	11.37	42	75

Chart 4 – Histogram Chart for Age



Many studies consistently found that older people are less supportive to redistribution. Actually, Alesina and Fuchs-Schundeln (2007) found a very interesting result on this matter. The authors verified that among West German the age correlated in an inverse way than among East German. In the first group it had

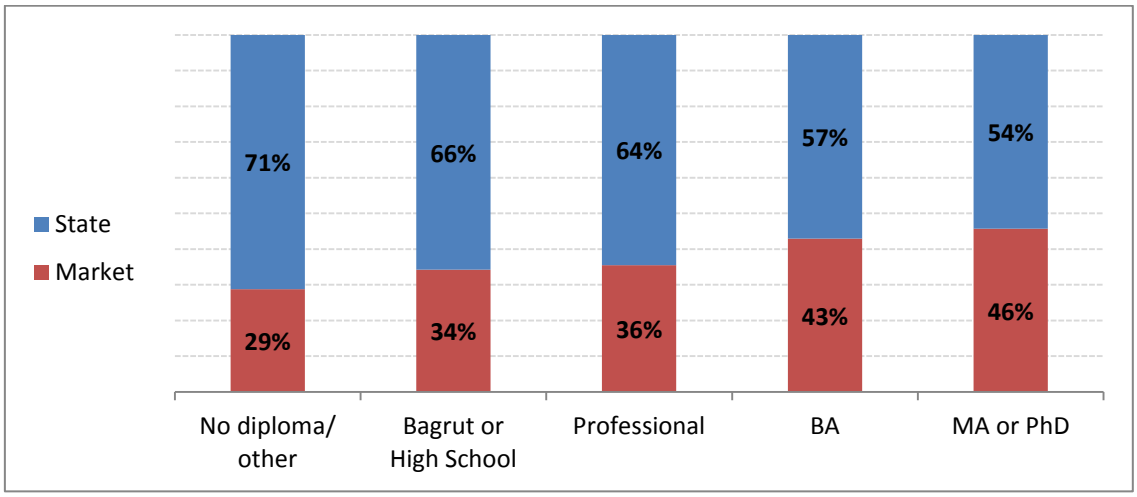
negative relation but in the second the probability of supporting redistribution increased with the age, a similar pattern found for FSU who immigrated to the United States (Alesina & La Ferrara, 2005).

- **Gender** - This is a binary variable where 0 is male and 1 is female. There are slightly more women than men in the whole sample but FSU has a slightly higher proportion of women (57%) than non-FSU (52%). Previous studies found significant role in gender, where women tend to be more supportive on redistribution policies than men (Alesina & Giuliano, 2009; Isaksson & Lindskog, 2009).

- **Diploma** – This ordinal variable represents the highest diploma received by individuals. From a total of 4,044 valid observations, 27% has *Bagrut*[5] or High School and 20% has Professional diplomas. 23% of respondents have no diploma. FSU are significantly more schooled than non-FSU. While 50% of the first group has B.A. or higher diploma, this percentage is only 26% among the latter group. Isaksson and Lindskog (2009) and Alesina and Fuchs-Schundeln (2007) found that higher educated individuals favor private forces over the State.

Chart 5 presents an interesting relationship between diploma and preferences for redistribution. Among individuals that have no diploma the state option is strongly predominant. As schooling increases, the gap between state and market shrinks significantly.

Chart 5 – Chart for Diploma and Preference for Redistribution



Source: Own elaboration based on CBS Social Survey 2012

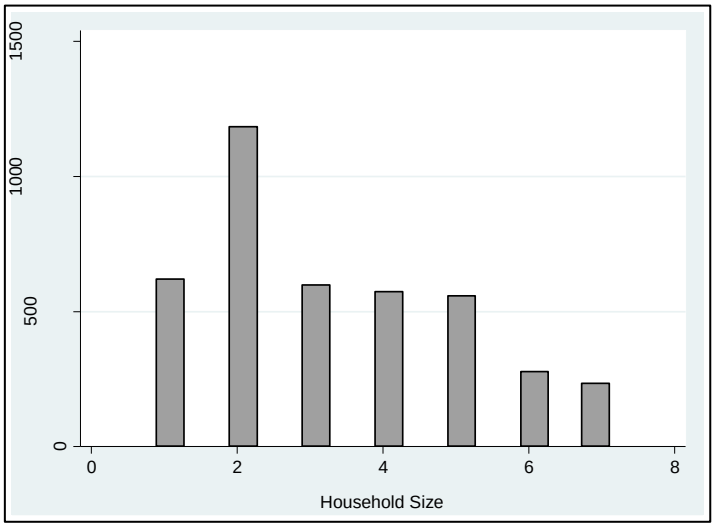
[5] *Bagrut* is a certificate which attests that a student has successfully passed Israel's high school matriculation examination. It is a prerequisite for higher education in Israel.

- **Household size** – This is a discrete variable that represents the number of individuals living in the same household. As shown in the table and histogram below, the variable varies from 1 to 7 (the last category is 7 plus), with the mode being 2 people, mean 3.26 and standard deviation of 1.75.

Table 6 – Univariate analysis for Household size

Variable	Obs	Mean	Std. Dev.	Min	Max
Household size	4,049	3.26	1.75	1	7

Chart 6 – Histogram Chart for Household Size



Alesina and Fuchs-Schundeln (2007) found a positive relation between this variable and interventionism state support, measuring household size either in terms of number of children or number of adults.

- **Marital Status** – *Marital status* is a categorical variable. From 4,048 respondents, 72% are married, 12% are separated or divorced, 11% are widowed and only 5% are single. Corneo and Gruner (2002) did not find a stable result for married people on their research.

- **District** - This is a categorical variable that represents the districts where individuals live. As expected, the great majority (55%) lives in the Center (Jerusalem, Tel Aviv, cities from the Dan Zone and Judea and Samaria). 31% live in northern cities and 14% live in southern cities. This variable aims to address the discussion of center versus periphery, not commonly approached in this research field. In the preference for redistribution context it would be expected a greater

support from periphery since the latter usually lacks in a higher extent governmental services.

- **Retired** – Represents those interviewed who are already retired, a binary variable where 0 is not retired and 1 is retired. Only 23% of the respondents are retired. Among FSU this percentage is higher, 32%. The sample was modified from its original format in order to include every individual whether or not he is on retirement age. See more details on attachment 8.3.

It is relevant to control for retiree because the question adopted as proxy is related to retirement policies. As it is known, those who came to Israel after their retirement age received a complement from the Social Insurance even if they did not contribute to the Israeli system. In order to avoid distortions that can derive from disproportionate representation of retirees in each sub-population the regressions will consider this status and control for personal interests on this subject.

4.4.3 Personal Experiences and Beliefs Variables

Individual trajectory can hardly influence on people's opinion about success and failure and, consequently, about the need of State's Social Security mechanisms (Piketty, 1995). However, due to a database limitation and no good proxy to individual trajectory or opinion about success determinants in the CBS 2012 Social Survey, this aspect will not be approached. As an alternative, other personal beliefs and experiences that could influence or predict one's preference for redistribution were selected to the regressions.

- **Religion** – This is a categorical variable which include three of the main religions in Israel. Of course, the great majority is Jew (82%) and the second most expressive is Muslim (11%). 75% of the FSU self-declared as Jew.

Alesina and Giuliano (2009) found that being raised as Catholic or Jewish increases the desire for redistribution. Moreover, their results show that being brought up religiously has the effect of increasing the support on redistribution independently on the religion. Worth highlighting, however, that this present research relates to the Israeli reality so the results are expected to differ from

those based on international databases. Jewish and Muslims, mainly, has different life conditions and access to goods.

- **Immigrant** - Controlling for immigration is relevant in order to assure that the regression captures the effect of being a FSU and not of being an immigrant. This argument presupposes that immigrants are more in need or that were probably in need in the beginning of their immigration, so they would support welfare state policies. A dummy for immigration was included as a control variable and shows that 47% of the interviewed were born in Israel and 53% immigrated.

- **Volunteer Work** - The last variable used in this research is *Volunteer Work*, a binary variable that categorizes as 1 those who were enrolled in some kind of volunteer work in the last 12 months and 0 to those do did not. Only 19% of the total interviewed did some kind of volunteer work within the last year and among FSU this number is even lower, 9%.

After reviewing all the independent variables worth checking if there is some kind of correlation between them in order to avoid multicolinearity. The complete table and discussion can be found in attachment 8.2.

The following section will first present a Chi Square analysis on the relation between USSR immigrants and the support on welfare policies. Afterwards it will show a bivariate regression and chapter 5 analyzes several multivariable regressions to check whether being FSU has a significant influence on people's preferences even controlling for other variables.

4.5. Descriptive Statistics

The first step of this analysis is to test whether there is a relationship between being USSR immigrant in Israel and supporting welfare state policies. In order to test such hypothesis, a Chi Square test will be applied, where the null hypothesis is that no relationship exists between these variables in the population, meaning that they are independent one from another.

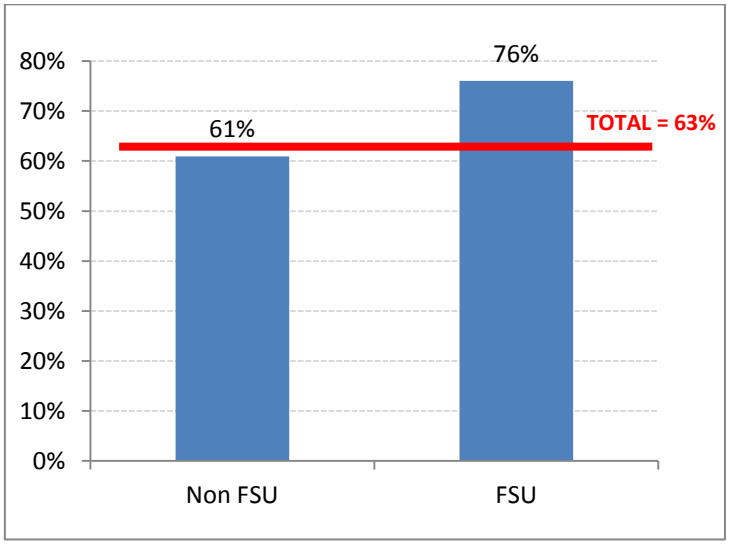
Table 7 - Chi Square and Cramer's V test for being USSR immigrant and supporting welfare state policies

Who should guarantee a reasonable standard of living on retirement?	**Non-USSR**	**USSR**
The state	1,987	489
The market	1,276	154
Total	3,263	643
Pearson chi2(1) = 53.8197 Pr = 0.000 **Cramér's V = 0.1167**		

As displayed in table 7, the significant p-value lead to refute the null hypothesis and affirm that indeed there is a relationship between the two variables. Cramer's V coefficient although shows that this relations has a small to medium effect size (Gravetter & Wallnau, 2013).

Observing deeply how each group answered the exposed question it is possible to see in chart 7 that, on the contrary of this research's hypothesis, welfare state supporters among FSU are 15 p.p. higher than among non-FSU.

Chart 7 - "State" option incidence between groups



Source: Social Survey, 2012. CBS Israel

Nevertheless, methodologically it is still not possible to affirm that this higher support derives from their background under a communist regime in the USSR. Other steps should be taken in order to verify such affirmation. The first one is to check whether the fact of growing up in USSR is indeed the driver of this result or if

it is influenced by some other characteristic of this group that is significantly different in their Israeli peers. In order to verify this point, some multivariable regression will be run, adding to the model control variables.

The second step would be to test whether growing up in a communist regime influences someone to be more favorable of redistribution. In this case, it indicates a causality rather than correlation, so it would be necessary to refute possible endogeneity problems of this model. Due to data unavailability this point will be not approached in this work.

5. Results

In order to make the interpretation more intuitive the results in the continuation are presented as OLS regression. The original regressions are run as logistic regressions and selected results are shown on attachment 8.5. Before showing the results of the comprehensive model to preferences for redistribution and the USSR effect, three sub-models are presented in separate.

5.1. Economic Model

The regressions regarding the Economic Model are presented on table 8. They include variables directly related to the economic situation of individuals but also their expectations and perceptions.

Table 8. Economic Model

Dependent Variable: responsibility for post-retirement financial security				
	(1)	(2)	(3)	(4)
C	1.84***	1.32***	1.26***	1.22***
	(0.100)	(0.116)	(0.129)	(0.155)
USSR	0.11***	0.08***	0.08***	0.08***
	(0.021)	(0.021)	(0.023)	(0.023)
Ln(Income)	-0.13***	-0.10***	-0.09***	-0.10***
	(0.011)	(0.011)	(0.012)	(0.015)
Dissatisf_present		0.15***	0.15***	0.14***
		(0.017)	(0.019)	(0.019)
Optimism_future (omitted)				

Indiference_future			0.01 (0.021)	0.01 (0.021)
Pessimism_future			0.04* (0.024)	0.04 (0.024)
Academic Professional (omitted)				
Managers, agents, sales or service workers				0.05 (0.034)
Skilled Industry or Agriculture				0.16*** (0.039)
Clerical				0.08** (0.041)
Technician or associate professionals				0.04 (0.039)
Unskilled				0.10** (0.050)
Unknown or no civil occupation				0.14 (0.268)
Unemployed or not belong to labor force				0.05 (0.034)
Dwelling owner				0.02 (0.023)
Observations	**3,352**	**3,349**	**2,967**	**2,952**
Adjusted R^2	**0.05**	**0.08**	**0.08**	**0.08**

Notes: OLS regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses. *** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

The first regression is a very simple model that considers only being a FSU and individual's household gross income. Each following regression adds a new variable until reaching the full economic model.

Table 8 presents some interesting insights. In the first regression it is possible to observe that USSR and Ln(Income) correlate with preferences for redistribution in opposite ways. Since the dependent variable is binary, where 1 is state and 0 private entities, it is possible to affirm that a one percent increase in income result in a 13% decrease in the probability of supporting the State option. Nevertheless, the USSR variable shows that being a FSU increases in 11% the probability of supporting redistribution. Both of them are significant at 1% level.

Alesina and Fuchs-Schundeln (2007), in particular, also found similar results with regarding to East German and income being significant and oppositely correlated.

The second regression adds a subjective dimension of income: people's satisfaction with their current economic status. Controlling for income,

dissatisfaction still increases in 15% the chances of supporting redistribution – a result that also matches the logic of self-interest. Worth noting that USSR and income kept the same direction and significance.

The next two regressions adds future satisfaction, occupation and if the individual own some dwelling. Although not statistically significant it is possible to observe some patterns among the newly added variables.

Regarding occupation - which also accounts for the unemployed and those not belonging to the labor work - only few categories were found statistically significant. Skilled workers in agriculture or industry have higher probability of supporting redistribution than unemployed, those not belonging to labor force or unskilled. Anyway, it presents a different behavior than as expected in section 4.2.

Owning a dwelling had a very small positive effect that was not statistically significant so not much can be affirmed about it.

Analyzing all the tested regressions beyond the first basic model, only the variables included in the second model were significant, and the R^2 Adjusted is in the same level of models (3) and (4). Thus, those variables are selected to be used in the comprehensive model.

This model accounts for a relatively small, but still the highest adjusted R^2 among the partial models that will be presented in the following. It indicates that the economic sphere – which represents the self-interest argument – is indeed a relevant reason why some individuals support redistribution more than other.

5.2. Demographic Model

The next model refers to demographic variables. Below it is possible to analyze three tested models.

Table 9. Demographic Model

Dependent Variable: responsibility for post-retirement financial security			
	(1)	(2)	(3)
C	0.73***	0.65***	0.60***
	(0.016)	(0.022)	(0.076)
USSR	0.23***	0.23***	0.23***
	(0.022)	(0.022)	(0.022)
No diploma/ other (omitted)			
Bagrut or High School	-0.10***	-0.10***	-0.09***
	(0.021)	(0.021)	(0.022)

Professional	-0.16***	-0.15***	-0.15***
	(0.024)	(0.023)	(0.024)
BA	-0.22***	-0.22***	-0.21***
	(0.025)	(0.025)	(0.026)
MA or PhD	-0.27***	-0.27***	-0.26***
	(0.026)	(0.026)	(0.027)
Center (omitted)			
North		0.08***	0.08***
		(0.017)	(0.017)
South		0.05*	0.05**
		(0.023)	(0.023)
Household size		0.01***	0.02***
		(0.004)	(0.006)
Gender			0.01
			(0.015)
Age			0.00
			(0.001)
Retired			-0.01
			(0.024)
Single (omitted)			
Married			-0.08**
			(0.037)
Separated or Divorced			-0.05
			(0.040)
Widowed			-0.08*
			(0.044)
Observations	**3,901**	**3,901**	**3,899**
Adjusted R^2	**0.05**	**0.05**	**0.05**

Notes: OLS regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.

*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

The first model tests for education effect only. As expected, the more schooled the less supportive to redistribution, and the regression shows that this is true for each additional degree level. Individuals with MA or PhD diplomas have about 27% less probability to be in favor of redistribution than those with no diploma. The variable keeps its statistical significance in all the three regressions.

The second regression includes housing district and household size. As expected, individuals living in the periphery have greater probabilities of supporting State intervention than those living on the center. For each additional member of a household, there is a very small but significant increase in the

probability of governmental intervention support, so more populous houses tend to support in a greater extent.

The third regression actually shows that single people have higher probability to support welfare state than all the other status. Both widowed and married have the lowest probabilities.

It is also verified that women are positively correlated to government interventionism. However, it has a small coefficient and lacks statistical significance so in this study no categorical affirmation should be made on this subject. When running gender alone with the dependent variable it gets positive and significant at 5%, however when introducing USSR it loses its significance.

Age is another controversial result. This present study found age to be almost neutral and without statistically significance, both when tested as a categorical or as a continuous variable.

Curiously, retired people had 1% less probability to support welfare state (in this case, specifically related to retirees' standard of life).

Worth highlighting that in every regression USSR variable was found statistically significant at the level of 1%, proving that even controlling for all these demographic characteristics, being a FSU seems to influence on one's preference for redistribution in a positive direction.

Among the sub-models, the demographic group consists in the smallest percentage of explanation on the dependent variable variation (R^2 adj. = 0.05).

5.3. Experiences and Personal Belief Model

The last model is composed by individual belief and experience.

Table 10. Experiences and Personal Belief Model

Dependent Variable: responsibility for post-retirement financial security			
	(1)	(2)	(3)
C	0.57***	0.58***	0.56***
	(0.009)	(0.012)	(0.013)
USSR	0. 18***	0. 17***	0. 15***
	(0.021)	(0.021)	(0.024)
Jews (omitted)			
Muslims	0.30***	0.29***	0.30***
	(0.024)	(0.025)	(0.026)
Christians	0.20***	0.20***	0.20***
	(0.043)	(0.043)	(0.043)
Other	0.00	0.00	0.00

	(0.036)	(0.037)	(0.037)
Volunteer Work		-0.06***	-0.05***
		(0.019)	(0.019)
Immigrant			0.03*
			(0.018)
Observations	**3,905**	**3,902**	**3,902**
Adjusted R^2	**0.05**	**0.05**	**0.06**

Notes: OLS regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

Again, it is possible to see that USSR kept the same consistency observed in the above models, significant at 1% in all regressions and positively correlating to an active State role.

Religion coefficient is consistent and significant. Jews tend to be less in favor of interventionism than other religions in Israel and Muslims have the higher probability to support. Worth highlighting that 75% of the FSU self-declared Jew.

Volunteer work result is anti-intuitive: although people enrolled in volunteer work are expected to be more socially engaged, regressions show that this variable is negatively correlated to redistribution support. Immigrant accounts for a very small positive effect, significant only at the level of 10%.

This sub-model has a slightly higher Adjusted R^2 than the demographic model but lower than the economic model.

5.4. Comprehensive Model

In the present section we present the comprehensive model for preferences for redistribution. Based on the Fairness theory, it takes into account not only economic self-interest variables but also other characteristics that may encourage individual's sense of fairness.

Table 11. Preferences for Redistribution Comprehensive Model

Dependent Variable: responsibility for post-retirement financial security			
	(1)	(2)	(3)
C	1.00***	0.90***	0.78***
	(0.135)	(0.123)	(0.191)
USSR	0.15***	0.15***	0.14***
	(0.025)	(0.025)	(0.030)
Ln(Income)	-0.06***	-0.05***	-0.06***
	(0.014)	(0.013)	(0.017)
Dissatisf_present	0.13***	0.13***	0.13***
	(0.018)	(0.017)	(0.020)
Optimism_future (omitted)			
Indiference_future			0.01
			(0.021)
Pessimism_future			0.02
			(0.025)
Academic Professional			
Managers, agents, sales and service workers			0.03
			(0.036)
Skilled Industry or Agriculture			0.08*
			(0.042)
Clerical			0.07*
			(0.044)
Technician and associate professionals			0.03
			(0.040)
Unskilled			0.02
			(0.052)
Unknown or no civil occupation			0.14
			(0.266)
Unemployed or not belong to labor force			0.00
			(0.040)
Dwelling owner			0.00
			(0.023)
No diploma/ other (omitted)			
Bagrut or High School	-0.04*	-0.04*	-0.05**
	(0.024)	(0.024)	(0.026)
Professional	-0.06**	-0.06**	-0.07**
	(0.027)	(0.027)	(0.029)
BA	-0.09***	-0.09***	-0.09***
	(0.030)	(0.029)	(0.033)
MA or PhD	-0.14***	-0.14***	-0.13***
	(0.031)	(0.030)	(0.035)
Center (omitted)			
North	0.04**	0.04**	0.03
	(0.018)	(0.018)	(0.020)
South	0.07***	0.07***	0.07***
	(0.024)	(0.024)	(0.027)
Household size	0.00		0.01
	(0.005)		(0.007)

Gender			0.00 (0.019)
Age			0.00 (0.001)
Retired			0.01 (0.031)
Single (omitted)			
Married	-0.01 (0.038)		-0.01 (0.043)
Separated or Divorced	-0.03 (0.043)		-0.01 (0.046)
Widowed	-0.05 (0.044)		-0.04 (0.050)
Jews (omitted)			
Muslim	0.18*** (0.029)	0.19*** (0.027)	0.20*** (0.032)
Christians	0.15*** (0.045)	0.15*** (0.045)	0.17*** (0.047)
Other	-0.05 (0.038)	-0.04 (0.037)	0.00 (0.040)
Volunteer Work	0.00 (0.021)		0.00 (0.022)
Immigrant			0.02 (0.022)
Observations	**3,344**	**3,345**	**2,950**
Adjusted R^2	**0.10**	**0.10**	**0.11**

Notes: OLS regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

The first comprehensive model was composed by all the variables that were found significant in the sub-models: from the economic model (income and present satisfaction), from the demographic model (schooling, household size, district and marital status) and from the personal belief / experiences model (religion and volunteer work).

When all variables are tested together - see regression (1) - some of them loose their significance. It is the case of household size, marital status and volunteer work. As shown in attachment 8.4, there are some evidences that household size is correlated to religion, explaining this behavior.

The second regression is composed only by significant variables from the first column. There is no relevant negative impact on the adjusted R^2 and the model still includes variables from all the three spheres.

The third column aims to assure that no relevant variable was left behind. It tests all the variables that appeared at least once in any sub-model. Indeed, it is possible to see that all the important variables were included in regression (2) and the others remain not significant. Therefore, we choose regression (2) as the final model for preferences for redistribution in Israel. Its equation can be written as follows[6]:

$$\mathbf{Pr}\{\mathbf{Support\ on\ redistribution\ =\ 1}\} =$$

$$= \frac{\mathbf{1}}{\mathbf{1} + e^{-\left(\beta_0 + \beta_1 USSR + \beta_2 \ln(income) + \beta_3 dissatisf_{pres} + \beta_4 diploma + \beta_5 district + \beta_6 religion\right)}}$$

The first main highlight is the consistence of being a FSU in every sub-model as well as in the aggregated model. The variable was found significant at the level of 1% at all of them, a strong indication of it's truly significance in the context of preferences for redistribution. Although it contradicts the research hypothesis, this result fits the majority findings of this literature worldwide indicating that, on the contrary of what we thought, the case of FSU in Israel is not an exception.

USSR increases in average 15% the probability of State intervention, similarly to dissatisfaction with the current economic situation. In the opposite direction, people with greater income tend to support in lower extent redistribution policies. Schooling kept its significant negative relationship. Someone with MA or PhD is 10% less probable to support welfare state policies than someone that just completed the high school. Geographically, it is found that peripheral residents are more likely to support interventionist governments than residents from central areas. Lastly, Jews are 15% less probable to support a broader government than Christians, and even less – around 20% - than Muslims. All these results kept the consistency of previous tests.

[6] The final model refers to the Logistic Regression Function, since this is the statistically most adequate regression model to be adopted.

5.5. Other Interesting Results

Even without age restriction the result keep significant and positively correlated, although with a lower coefficient nearly half of previous results. A more interesting result is achieved when considering only those who immigrated before completing 18 years by 1990-1995 and comparing their preferences for redistribution with Israelis within the same age range.

As can be seen in column (2) from table 12, the result changes drastically and the relationship becomes negative, although not significant. It indicates that being a FSU immigrant that arrived young in Israel may favor preferences for private forces.

Lastly, we tested if there was any significant difference in the results when running the final model for FSU early immigrants, the ones that immigrated to Israel between 1970 and 1990 and were age at least 18 years by then. USSR is still significant as well as positive correlated to welfare state support in the same intensity as before – when only immigrants from the Great *Alyiah* Wave (1990-1995) were considered.

Table 12 - OLS Regression for main model – distinct FSU groups

Dependent Variable: responsibility for post-retirement financial security			
	(1) no age restriction, immigration between 1990 and 1995	(2) less than 18 years when immigrating, immigration between 1990 and 1995	(3) 18 or older when immigrating, immigration between 1970 and 1990
C	0.84***	0.65***	0.79***
	(0.099)	(0.151)	(0.171)
USSR	0.07***	-0.06	0.16***
	(0.023)	(0.040)	(0.060)
Ln(Income)	-0.05***	-0.03*	-0.04**
	(0.010)	(0.016)	(0.017)
Dissatisf_present	0.13***	0.11***	0.16***
	(0.014)	(0.021)	(0.025)
No diploma/ other (omitted)			
Bagrut or High School	-0.03*	0.02	-0.07**
	(0.019)	(0.035)	(0.030)
Professional	-0.02	0.08*	-0.07**
	(0.023)	(0.041)	(0.035)
BA	-0.05**	0.01	-0.12***
	(0.023)	(0.040)	(0.040)

	-0.11***	-0.02	-0.19***
MA or PhD	(0.027)	(0.052)	(0.043)
Center (omitted)			
	0.06***	0.08***	0.02
North	(0.015)	(0.024)	(0.025)
	0.05***	0.04	0.04
South	(0.020)	(0.032)	(0.036)
Jews (omitted)			
	0.18***	0.16***	0.20***
Muslims	(0.020)	(0.029)	(0.039)
	0.13***	0.03	0.22***
Christians	(0.042)	(0.071)	(0.073)
	-0.02	0.02	-0.11
Other	(0.034)	(0.051)	(0.076)
Observations	**5,227**	**2,260**	**1,791**
Adjusted R^2	**0.07**	**0.05**	**0.11**

Notes: OLS regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

5.6. Sensitiveness Check

We applied several sensitiveness checks in order to test the results consistence. Regression tables are available on attachment 8.5.

The checks focus both in the dependent variable as well as in the control variables. Regarding the dependent variable, two main tests are applied. The first bunch adopting different variable transformations, adapting the regression approach to the relevant format. The retirement proxy is tested as categorical variable keeping its original format and as an ordinal variable, being the State the higher value and the individual itself being the lowest. Multinomial and Ordered Logistic regressions are run and the USSR variable keeps its consistency.

The second round of tests is related to adopting a new proxy. Another relevant proxy for preferences for redistribution was found in the CBS 2012 Social Survey and relates to worker's right policy[7]. The question represents the state role on the mediation between individuals and companies.

[7] The question is: "Who should bear the major responsibility for the rights of workers"

Adopting it as the model's dependent variable did not change the results both for OLS and Logistic Regressions. Although the final model for the retirement proxy did not seem a good model for worker's right proxy, USSR is still significant.

Regarding the control variables, different indicators are tested for the same subject. For instance, income is originally adopted as monthly gross household income but different definitions could be applied, such as monthly net household income or gross earnings from all activities. USSR kept positive and significant in all tests.

6. Conclusions

With the fall of the communist regime in many countries, hundreds of citizens from ex-communist nations immigrated to capitalist countries. Some years after, this fact has created the opportunity to investigate whether citizens of former communist countries, on average, support in a greater extent redistribution policies than their peers, controlling for other variables.

Israel, in particular, experienced a one million immigration wave of former USSR citizens in the beginning of the 90's that had many impacts to its society in general. Several studies address the impact of FSU on Israeli political spheres, but no previous study aimed to approach the specific topic of preferences for redistribution among that population.

This subject becomes even more attractive in the Israeli case since the community of former USSR countries appears to support right-wing parties in a higher level than the average population. Therefore, preferences for redistribution results are expected to contradict the common sense: while in other countries such as Germany and Hungary former USSR population were found to support redistributive policies in a greater extent, in Israel they would follow the opposite way.

As a result of this gap, this study focused on investigating, among other topics, whether being a former USSR correlates in a positively way with support for interventionist policies. Firstly, unlike our research hypothesis, it was found that former USSR support on welfare state approach was 13 p.p. higher than non-USSR. Furthermore, the regression models presented indicated that controlling for other

variables being a USSR immigrant in Israel increases the likelihood of supporting state interventions.

The driver of this relation is not entirely clear. Although it is possible to suppose that it may relate to the influence exerted in the education during the childhood and adolescence. The results were stronger when considering only those who immigrated after their 18's and the effect was opposite when considering only those who immigrated in their early lives. No significant difference was found between those who immigrated in the Great *Alyiah* and those who came before (70's).

The models were based on the "Fairness Theory" that argues that individuals define their views on the desired degree of state interventionism not only according to how much economic return they will have but also accounting for other social norms, usually referred as fairness beliefs. Indeed, it was verified that the general model has a greater explanation power than the economic model alone. Worth noting, however, that the economic model was found to be the most relevant dimension among the three sub-models – economic, demographic and personal belief/experience.

The result of this study totally fits previous findings on similar studies with former USSR or East Germans. The contradiction to the Israeli common sense may be related to the fact that right and left wing parties in Israel mixes both political (meaning the national conflict with Palestinians) and economic spheres. It is possible, thus, that FSU have right wing visions on political sphere although keeping center to left preference in the economic spectrum.

Yet, further investigation is needed, because there are still questions that remain unanswered. The variables chosen as proxy for preferences for redistribution were questions held only in the 2012 Social Survey, what undertook further analysis of the subject due to accessing only cross sectional date and no panel data.

Alesina and Fuchs-Schundeln (2007), for instance, had access to several surveys that asked the same question each five years and could detect that the gap between preferences for redistribution of East and West German is shrinking, and their opinion tend to converge. It would be relevant to check the same for former USSR in Israel.

Moreover, although the inverse causality is discarded in this context – since there is a temporal condition that refutes the other way round causality - it is possible that the research overlooked sample bias problems. From 1990, the focus of the immigration of Soviet Jews was mainly Israel, but there were other groups that managed to emigrate to German and US, besides those who stayed in their original countries. Yet, there is no information about those groups' preferences for redistribution, what prevents this work from seeking causality relationships.

Although no further generalization can be done, the present research indicates a positive correlation between being a USSR immigrant in Israel and welfare state support.

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8. Attachments

8.1. Bivariate analysis for Control Variables

Table 13 above presents descriptive statistics for all the aforementioned control variables.

Table 13 –Bivariate analysis for Control Variables

Variable name	Categories	Non-FSU	FSU	Total
Dissatisf_pres	Satisfied	2,075	255	2,330
		62%	38%	58%
	Dissatisfied	1,294	413	1,707
		38%	62%	42%
	Total	3,369	668	4,037
		100%	100%	100%
Economic_future	Better	767	133	900
		26%	23%	26%
	Same	1,432	266	1,698
		49%	46%	48%
	Worse	729	183	912
		25%	31%	26%
	Total	2,928	582	3,510
		100%	100%	100%
Occupation	Academic	317	62	379
		9%	9%	9%
	Managers and sales	575	91	666
		17%	14%	17%
	Skilled industry	334	100	434
		10%	15%	11%
	Clerical	278	24	302
		8%	4%	8%
	Technicians and associate	304	48	352
		9%	7%	9%
	Unskilled	113	51	164
		3%	8%	4%
	Unknown or no civil occupation	8	2	10
		0%	0%	0%
	Unemployed or not belong	1,428	291	1,719
		43%	44%	43%
	Total	3,357	669	4,026
		100%	100%	100%
Dwelling	No	506	263	769
		15%	39%	19%
	Yes	2,873	407	3,280

Variable name	Categories	Non-FSU	FSU	Total
		85%	61%	81%
	Total	3,379	670	4,049
		100%	100%	100%
Gender	Male	1,633	285	1,918
		48%	43%	47%
	Female	1,746	385	2,131
		52%	57%	53%
	Total	3,379	670	4,049
		100%	100%	100%
Diploma	No diploma/other	916	26	942
		27%	4%	23%
	Bagrut or High School	1,010	94	1,104
		30%	14%	27%
	Professional	585	209	794
		17%	31%	20%
	BA	507	96	603
		15%	14%	15%
	MA or PhD	357	244	601
		11%	36%	15%
	Total	3,375	669	4,044
		100%	100%	100%
Marital Status	Single	172	35	207
		5%	5%	5%
	Married	2,514	410	2,924
		74%	51%	72%
	Separated or divorced	346	125	471
		10%	19%	12%
	Widowed	346	100	446
		10%	15%	11%
	Total	3,378	670	4,048
		100%	100%	100%
District	Center	1,863	263	2,126
		55%	39%	53%
	North	1,061	213	1,274
		31%	32%	31%
	South	371	188	559
		11%	28%	14%
	Total	3,379	670	4,049
		100%	100%	100%
Retired	No	2,656	455	3,111
		79%	68%	77%
	Yes	722	215	937
		21%	32%	23%
	Total	3,378	670	4,048
		100%	100%	100%
Religion	Catholic	69	60	129
		2%	9%	3%
	Jews	2,803	503	3,306

Variable name	Categories	Non-FSU	FSU	Total
		83%	75%	82%
	Muslim	426	1	427
		13%	0%	11%
	Other	80	106	186
		2%	16%	5%
	Total	3,378	670	4,048
		100%	100%	100%
Immigrant	No	2,143	-	2,143
		63%	0%	53%
	Yes	1,236	670	1,906
		37%	100%	47%
	Total	3,379	670	4,049
		100%	100%	100%
Volunteer Work	No	2,662	609	3,271
		79%	91%	81%
	Yes	714	59	773
		21%	9%	19%
	Total	3,376	666	4,044
		100%	100%	100%

8.2. Multicolinearity Table

Few variables had a correlation index higher than 0.5, considered high. They are highlighted in red: (1) USSR and immigrant; (2) income and occupation, (3) retired and occupation; (4) age and household size; (5) retired and age.

A brief explanation about each of these pairs will be given in order to justify why, although a relatively high correlation, they were kept in the model.

100% of FSU in Israel are immigrants. Even so controlling for immigration is necessary to assure that the regression captures the effect of being a FSU and not of being an immigrant.

After adding "unemployed and not belonging to the labor force" to the *Occupation* variable the correlation got strong (and negative) because people this situation tend to have lower monthly gross household income. Even so it was interesting to control for this variable to avoid the influence of different group's composition.

Retired people are usually older than 62 years but not every individual older than 62 years is retired. In the same way, those retired are categorized as not belonging to the labor force. Considering that the dependent variable refers to retirement it is important to control for retirement to make sure that there are no distortions in the

support on State deriving from differences in the treatment and control groups composition.

Lastly, younger people tend to live in more populous households configuring a negative and strong correlation. Even so it was necessary to control for both in separate to avoid influences that derived from the groups' composition.

	USSR	ln(income)	Satisf_ present	Optim_ future	Occupation	Dwelling	Diploma	Household size	District	Marital Status	Age	Retired	Gender	Religion	Immigrant	Volunteer Work
USSR	1.00															
ln(income)	-0.13	1.00														
Satisf_present	0.18	-0.37	1.00													
Optim_future	0.06	-0.18	0.17	1.00												
Occupation	0.02	-0.51	0.16	0.14	1.00											
Dwelling	-0.23	0.29	-0.21	0.01	-0.11	1.00										
Diploma	0.31	0.41	-0.17	-0.10	-0.34	0.01	1.00									
Household size	-0.21	0.28	0.00	-0.19	-0.24	0.16	-0.03	1.00								
District	0.15	-0.06	0.01	0.00	0.00	-0.02	0.00	0.07	1.00							
Marital Status	0.07	-0.29	0.04	0.08	0.23	-0.11	-0.09	-0.34	-0.01	1.00						
Age	0.08	-0.29	-0.05	0.28	0.44	-0.02	-0.10	-0.60	-0.05	0.36	1.00					
Retired	0.09	-0.26	-0.01	0.16	0.55	-0.06	-0.07	-0.40	0.00	0.30	0.66	1.00				
Gender	0.05	-0.17	0.04	0.04	0.18	-0.04	0.01	-0.14	0.01	0.21	0.04	0.11	1.00			
Religion	0.11	-0.15	0.10	0.02	0.05	-0.04	-0.06	0.11	0.05	-0.04	-0.11	-0.05	-0.01	1.00		
Immigrant	0.50	-0.14	0.05	0.13	0.16	-0.13	0.13	-0.38	0.06	0.19	0.39	0.30	0.03	-0.09	1.00	
Volunteer Work	-0.11	0.19	-0.13	-0.07	-0.13	0.06	0.17	0.08	-0.04	-0.04	-0.05	-0.02	-0.07	-0.08	-0.06	1.00

8.3. Variables Transformation

In the continuation will be presented all the variables included in the models that suffer any kind of transformation. Worth noting that the transformations aimed to achieve a better model but robustness checks were made with the original variables. Despite some differences in the results, in all the verifications using the original variables, the model in general and the USSR variable in particular continued to be significant at the level of 1%. USSR and preference for redistribution presented positive relationship in every tested model.

8.3.1. Income

Income was initially a categorical variable, divided into 11 categories. Yet, income is usually treated as a continuous variable and it is more intuitive to interpret it in a regression as the increase of small amounts rather than the increase from one category to another (that sometimes can mean thousands of shkalim).

In this sense, each category's average was calculated and transformed into the value for that range, that is, everyone who declared income within that category was attributed with the range average. Since these are estimated values the regression coefficient should not be considered more in terms of significance and direction than in terms of size.

Table 14 – Income variable transformation

Original	Transformed	Freq.	Percent	Cum.
2,500 nis or less	1,250 nis	138	3.96	3.96
2,501-4,000 nis	3,250 nis	352	10.11	14.07
4,001-5,000 nis	4,500 nis	258	7.41	21.48
5,001-6,500 nis	5,750 nis	295	8.47	29.95
6,501-8,000 nis	7,250 nis	323	9.28	39.23
8,001-10,000 nis	9,000 nis	358	10.28	49.51
10,001-13,000 nis	11,500 nis	415	11.92	61.43
13,001-17,000 nis	15,000 nis	464	13.33	74.76
17,001-24,000 nis	20,500 nis	394	11.32	86.08
more than 24,001 nis	24,000 nis	462	13.27	99.35
No income	0 nis	22	0.65	100
Total	**Total**	**3,481**	**100**	

However, the intervals between the categories were not linear. The natural log transformation was applied in order to transform this variable into a normally distributed variable. Ln(income) is significant at the level 1% and keeps the coefficient negative direction.

8.3.2. Present dissatisfaction

Table 15 presents the "Current dissatisfaction" variable transformation. It was originally a categorical variable with four options representing one's satisfaction (or dissatisfaction) with his the current economic situation, an ordinal variable where the most dissatisfied had the highest number.

It was transformed into a binary variable, where 0 is satisfied – aggregation of categories "satisfied" and "very satisfied" from the original organization - and 1 is dissatisfied – aggregation of "not very satisfied" and "not satisfied at all" - in order to strengthen each category's significance.

Table 15 – Current dissatisfaction transformation

Original	Freq.	Percent	Cum.	Transformed	Freq.	Percent	Cum.
Very satisfied	295	7.31	7.31	Satisfied	2,330	57.72	57.72
Satisfied	2,035	50.41	57.72	Not satisfied	1,707	42.28	100
Not very satisfied	1,072	26.55	84.27				
Not satisfied at all	635	15.73	100				
Total	**4,037**	**100**		**Total**	**4,037**	**100**	

8.3.3. Occupation

Since there were many small groups with no clear difference between them, the transformation aimed to make each category stronger. Moreover, it included a new category to comprehend those unemployed or not belonging to the labor force. Originally a variable "labor force status" was considered but it was highly correlated with occupation, so they were merged.

Table 16 – Occupation transformation

Original	Freq.	Percent	Cum.	Transformed	Freq.	Percent	Cum.
Academic professionals	379	16.43	16.43	Academic professionals	379	9.41	9.41
Associate professionals and technicians	352	15.26	31.69	Managers, agents, sales workers and service workers	666	16.54	25.96
Managers	252	10.92	42.61	Skilled workers in industry or agriculture	434	10.78	36.74
Clerical workers	302	13.09	55.70	Clerical workers	302	7.50	44.24
Agents, sales workers and service workers	414	17.95	73.65	Associate professionals and technicians	352	8.74	52.98
Skilled agricultural workers	39	1.69	75.34	Unskilled workers	164	4.07	57.05
Skilled workers in industry	395	17.12	92.46	Unknown or no civil occupation	10	0.52	57.30
Unskilled workers	164	7.11	99.57	Unemployed or not belong to the labor force	1,719	42.70	100
Unknown occupation	8	0.35	99.91				
No civil occupation	2	0.09	100				
Total	**2,307**	**100**		**Total**	**2,307**	**100**	

8.3.4. Age

Age passed for the same transformation of income, from a categorical to a continuous variable. On both ways, presented on table 17, the variable was found not significant, although the continuous version a little more significant than the categorical.

Table 17 – Age Transformation

Original	Transformed	Freq.	Percent	Cum.
40-44 years	42 years	665	16.42	16.42
45-49 years	47 years	557	13.76	30.18

50-54 years	52 years	560	13.83	44.01
55-59 years	57 years	511	12.62	56.63
60-64 years	62 years	502	12.40	69.03
65-74 years	69.5 years	672	16.60	85.63
75+ years	75 years	582	14.37	100
Total	**Total**	**4,049**	**100**	

8.3.5. District

In order to test the relation between central cities and peripheral cities, the district variable suffered a reorganization of its categories. It passed from a 7-category to a 4-category variable. Dan Zone together with Jerusalem and settlements were considered center.

Table 18 – District Transformation

Original	**Freq.**	**Percent**	**Cum.**	**Transformed**	**Freq.**	**Percent**	**Cum.**
Jerusalem	355	8.77	8.77	Center	2,216	54.73	54.73
Northern	694	17.14	25.91	North	1,274	31.46	86.19
Haifa	580	14.32	40.23	South	559	13.81	100
Central	1,055	26.06	66.29				
Tel-Aviv	716	17.68	83.97				
Southern	559	13.81	97.78				
Judea / Samaria	90	2.22	100				
Total	**4,049**	**100**		**Total**	**4,049**	**100**	

8.3.6. Diploma

Diploma was reorganized by the common names and aggregated with correspondent diploma levels or into greater categories.

Table 19 – Diploma Transformation

Original	Freq.	Percent	Cum.	Transformed	Freq.	Percent	Cum.
Did not study at educational institute	100	2.47	2.47	No diploma or none of the below	942	23.29	23.29
Secondary school completion certificate	692	17.11	19.58	*Bagrut* or High School	1,104	27.30	50.59
Matriculation certificate	412	10.19	29.77	Professional	794	19.63	70.23
Non-academic post-secondary certificate	794	19.63	49.41	BA	603	14.91	85.14
BA, or equivalent degree, including a	603	14.91	64.32	MA or PhD	601	14.86	100
MA, or equivalent degree, including m	526	13.01	77.32				
PhD, or equivalent degree	75	1.85	79.18				
None of the above	842	20.82	100				
Total	**4,044**	**100**		**Total**	**4,044**	**100**	

8.3.7. Religion

Table 8.1.7 shows the transformation in religion. The only change applied is the unification of Druze, Atheist and Others under others. Alone these categories were not significant so there was no point on keeping it.

Table 20 – Religion Transformation

Original	Freq.	Percent	Cum.	Transformed	Freq.	Percent	Cum.
Jew	3,306	81.67	81.67	Jew	3,306	81.67	84.86
Muslim	427	10.55	92.22	Muslim	427	10.55	95.41
Christian	129	3.19	95.41	Christian	129	3.19	3.19
Druze	68	1.68	97.08	Other	186	4.59	100
Other	11	0.27	97.36				
Atheist	107	2.64	100				
Total	**4,048**	**100**		**Total**	**4,048**	**100**	

8.3.8. Immigrant

Immigrant was a new variable created from the variable “continent of birth”. Based on this, it was established a dummy for immigrant, showed below.

Table 21 – Immigrant Variable

Original	Freq.	Percent	Cum.	New	Freq.	Percent	Cum.
Israel	2,143	52.94	52.94	No	2,143	52.93	52.93
Europe-America	1,287	31.79	84.73	Yes	1,906	47.07	100
Asia	271	6.69	91.43				
Africa	347	8.57	100				
Total	**4,048**	**100**		**Total**	**7,160**	**100**	

8.3.9. Retired

Lastly, the retired variable was amended in order to fit the regression and not miss observations. The original question whether someone is or not retiree was asked only for those who do not participate in the workforce. Nevertheless, it is relevant for the study knowing if someone is or not retiree, thus the transformed variable included those who participate in the workforce as "not retirees". The unknown – only one observation – was ignored.

Table 22 – Retired Transformation

Original	Freq.	Percent	Cum.	Transformed	Freq.	Percent	Cum.
Yes	937	23.14	23.14	No	3,111	76.85	76.85
No	257	6.35	29.49	Yes	937	23.15	100
Unknown	1	0.02	29.51				
Irrelevant	2,854	70.49	100				
Total	**4,049**	**100**		**Total**	**4,049**	**100**	

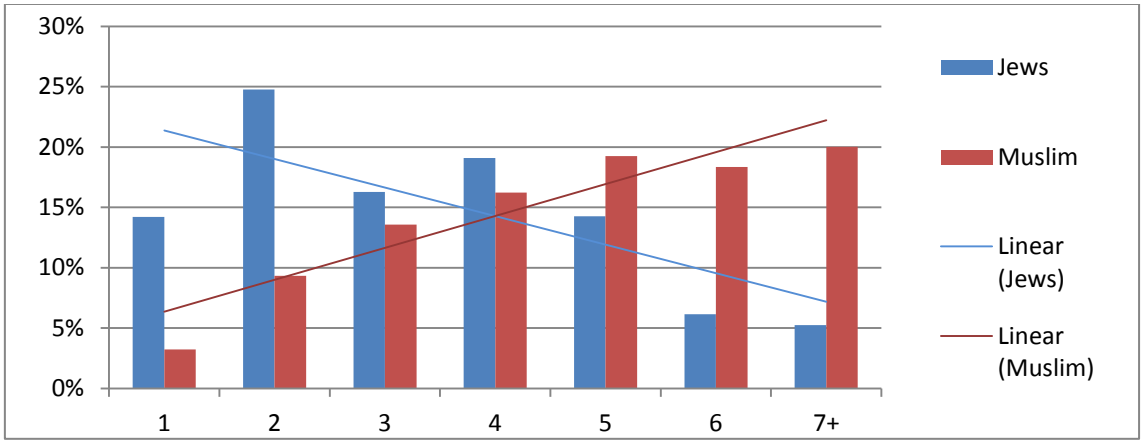
8.4. Household Size and Religion

When the sub-models were aggregated into a one comprehensive model, some of the variables lost their significance. In this attachment further investigation is presented about the household size variable.

Household size previously had a very small (0.01) but significant effect at the level of 1% become a null influence and lost its significance. When excluding the variable religion, household size returns to be significant indicating that maybe religion is the real driver of this effect.

Indeed, Chart 8 shows a clear trend line between the two main religions (that account together for 92% of the sample) and their respective household size.

Chart 8 – Relationship between household size and religion (only for Muslims and Jews)



Source: Social Survey 2012 - CBS

Muslims tend to live in more populous households and Jews, on the contrary, tend to live in less populous households. As presented in previous results, Muslim have the higher probability of supporting redistribution while Jews had the lower and household size had a positive relation to support redistribution.

8.5. Sensitiveness Tests

Table 23 Logistic Regression for main model – retirement proxy

Dependent Variable: responsibility for post-retirement financial security	
	(1)
C	1.95***
	(0.620)
USSR	0.69***
	(0.124)
Ln(Income)	-0.25***
	(0.065)
Dissatisf_present	0.65***
	(0.085)
No diploma/ other (omitted)	
Bagrut or High School	-0.22*
	(0.118)
Professional	-0.31**
	(0.131)
BA	-0.45***
	(0.140)
MA or PhD	-0.67***
	(0.147)
Center (omitted)	
North	0.18**
	(0.089)
South	0.35***
	(0.119)
Jews (omitted)	
Muslims	1.16***
	(0.166)
Christians	0.90***
	(0.270)
Other	-0.23
	(0.181)
Observations	**3,345**
Log Likelihood	**-1,993**
Pseudo R^2	**0.09**

Notes: Logistic regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

Table 24 - Logistic Regression for main model – worker's right proxy

Dependent Variable: responsibility for worker's right	
	(1)
C	3.09***
	(0.670)
USSR	0.32**
	(0.137)
Ln(Income)	-0.29***
	(0.070)
Dissatisf_present	0.28***
	(0.090)
No diploma/ other (omitted)	
Bagrut or High School	-0.05
	(0.123)
Professional	-0.35***
	(0.136)
BA	0.11
	(0.151)
MA or PhD	-0.08
	(0.157)
Center (omitted)	
North	0.07
	(0.094)
South	0.21
	(0.129)
Jews (omitted)	
Muslims	0.32**
	(0.151)
Christians	0.09
	(0.247)
Other	-0.26
	(0.199)
Observations	**3,077**
Log Likelihood	**-1,805**
Pseudo R^2	**0.02**

Notes: Logistic regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

Table 25 - Multinomial Logistic Regression for main model – retirement proxy

Dependent Variable: responsibility for post-retirement financial security				
	The state	The workplace	The person or their partner	Other family members
C	**2.85*** **	-0.61		9.73***
	(0.748)	(1.061)		(2.965)
USSR	**0.51*** **	-0.60***		1.04
	(0.143)	(0.233)		(0.682)
Ln(Income)	**-0.29*** **	0.21		-1.50***
	(0.078)	(0.110)		(0.330)
Dissatisf_present	**0.69*** **	0.14		-0.01
	(0.102)	(0.143)		(0.500)
No diploma/ other (omitted)				
Bagrut or High School	**-0.32** **	-0.20		-0.13
	(0.150)	(0.196)		(0.622)
Professional	**-0.48*** **	-0.37*		-0.49
	(0.161)	(0.215)		(0.761)
BA	**-0.74*** **	-0.70***	BASE OUTCOME	-0.14
	(0.169)	(0.229)		(0.573)
MA or PhD	**-0.97*** **	-0.77***		-1.86
	(0.175)	(0.239)		(1.218)
Center (omitted)				
North	**0.17**	-0.05		0.17
	(0.103)	(0.145)		(0.553)
South	**0.57*** **	0.54***		0.46
	(0.147)	(0.193)		(0.718)
Jews (omitted)				
Muslims	**1.60*** **	0.87***		1.18
	(0.244)	(0.310)		(0.754)
Christians	**1.00*** **	0.01		1.88**
	(0.332)	(0.550)		(0.864)
Other	**0.08**	0.88***		-13.90
	(0.227)	(0.290)		(1.130)
Observations			**3,345**	
Log Likelihood			**-2,809**	
Pseudo R^2			**0.08**	

Notes: Ordered Logistic regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.

*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.

Table 26 - Ordered Logistic Regression for main model – retirement proxy

Dependent Variable: responsibility for post-retirement financial security	
	(1)
USSR	0.62***
	(0.122)
Ln(Income)	-0.24***
	(0.063)
Dissatisf_present	0.63***
	(0.083)
No diploma/ other (omitted)	
Bagrut or High School	-0.23**
	(0.116)
Professional	-0.35***
	(0.127)
BA	-0.54***
	(0.136)
MA or PhD	-0.75***
	(0.142)
Center (omitted)	
North	0.16*
	(0.086)
South	0.41***
	(0.115)
Jews (omitted)	
Muslims	1.18***
	(0.165)
Christians	0.94***
	(0.269)
Other	-0.10
	(0.174)
/cut1	-2.59
	(0.608)
/cut2	-2.56
	(0.608)
/cut3	-1.87
	(0.608)
Observations	**3,345**
Log Likelihood	**-2,856**
Pseudo R^2	**0.07**

Notes: Ordered Logistic regressions. The dependent variable takes the value one if the individual responds "the state" to the question of who should be responsible for the financial security of people after their retirement. Standard errors in parentheses.
*** Significant at, or below, 1 percent. ** Significant at, or below, 5 percent. * Significant at, or below, 10 percent.