

STOCKHOLM SCHOOL OF ECONOMICS
Department of Economics
5350 Master's thesis in Economics
FALL SEM. 2015

Status-Seeking and the Taste for Redistribution

Nils Fergin (21745)

Abstract

This thesis follows an epidemiological approach methodology to study if cultural preferences for status-seeking has a positive effect on preferences for redistribution. I empirically evaluate a causal relationship predicted in a theoretical model, suggesting an alternative channel of cultural transmission through which preferences for redistribution are determined by cultural preferences for status. The results provide a robust indication that parent birth country preferences for status-seeking has a positive effect on individual preferences for redistribution, which is statistically significant. In addition, the findings show that the effect is consistent when estimated for a wide range of economic and demographic control variables. Further examination reveals that the effect of cultural status-seeking preferences is likely most strongly transmitted from the mother, which adds to previous research showing similar differences in cultural transmission between parents. In addition, this thesis provides an initial indication of a positive effect of cultural status-seeking preferences on individual voting behavior, adding further support that such cultural preferences matter for attitudes towards redistribution.

JEL: H23, Z13

Keywords: Preferences for redistribution, Status-seeking, Cultural transmission, Epidemiological approach

Supervisor: Kelly Ragan
Date submitted: 2016-01-01
Date examined: 2016-01-12
Discussant: Agneta Berge
Examiner: Örjan Sjöberg

ACKNOWLEDGMENTS

First I wish to thank professor Guido Cozzi, my supervisor at the University of St. Gallen, for introducing me to his paper "Rat race, redistribution, and growth" and for the inspiration to empirically test his theory. He has been a great source of knowledge and support throughout the entire process of my thesis project. I would also like to thank my supervisor at the Stockholm School of Economics, Kelly Ragan. Her encouragement, input and suggestions have been deeply appreciated. Lastly, I would like to thank Christina Felfe at the University of St. Gallen for some great discussions on empirical matters.

All errors and omissions are solely my own.

Contents

1	Introduction	1
2	Literature review	3
2.1	Common determinants of preferences for redistribution	3
2.2	The influence of culture on preferences: empirical evidence	7
3	Theoretical background	9
4	Research focus and motivation	11
4.1	Hypotheses	12
5	Data and Method	13
5.1	Classification of individual preferences for redistribution	16
5.2	Classification of cultural preferences for status-seeking	17
5.3	Identification strategy	18
5.3.1	General endogeneity concerns	19
5.4	Estimation	20
6	Results	23
6.1	Parent birth country preferences of status-seeking and the effect on individual preferences for redistribution	23
6.2	Cultural transmission from the individual parent	26
6.3	The effect of culture on second-generation immigrant voting behavior	28
7	Discussion	30
7.1	Analysis of the main results	30
7.2	Internal validity	32
7.3	External validity	34
8	Conclusion	34
9	References	36
10	Appendix	40

1 Introduction

A reoccurring observation in the economic literature are the striking differences in policies on income taxation and redistribution across countries. It has been argued that this heterogeneity mirrors systematic cross-country differences in factors that shape individual political preferences, or preferences for redistribution (Corneo, 2001; Alesina and Glaeser, 2004). Several examples of such differences can be found in the economic literature.¹ In light of this systematic variation recent empirical studies have found robust evidence demonstrating that culture has a significant influence on individual preferences for redistribution (Luttmer and Singhal, 2011; Alesina and Giuliano, 2011).² However, the effect of individual cultural values on preferences for redistribution has not been empirically examined to any greater extent (Alesina and Giuliano, 2011). Cozzi (2004) presents a compelling theoretical model linking differences in preferences for redistribution to status-seeking behavior. The author's theory points to a positive, causal relationship between how highly a society values individual success and the level of income taxation (redistribution) its citizens will ultimately vote for.

Individual preferences for status have been linked to the evolution of the human species. A common argument in economic models has been the desire of our great ancestors to improve their social standing as a means to increase the chances of survival (Robson and Samuelson, 2011). Although a lack of conclusive evidence of such evolutionary pressures, economists have long recognized that individual behavior is often motivated by a quest for social status (e.g. Smith, 1776; Veblen, 1899; Duesenberry, 1949). Postlewaite (2011) argues that even if humans are hardwired to care about social status, or their relative ranking in terms of physical- or even cognitive attributes, the degree to which aspects, such as education, wealth, or the choice of occupation enhances one's status is likely culturally determined. Experimental evidence corroborates this argument. Huberman, Loch, and Öngüler (2004) conduct a series of laboratory experiments in Europe, North America and Asia, to find that individuals are willing to give up resources in exchange for more status and peer recognition. While the results appear to hold regardless of nationality, there appear to be significant cross-country differences in the intensity level of such

¹Americans, for example, have been found to exhibit lower preferences for redistribution than individuals living in Europe (e.g. Alesina and Glaeser, 2004; Alesina and Giuliano, 2011). Other empirical findings suggest that individuals from societies ruled by socialist- or communist regimes in modern history, on average, have higher preferences for redistribution than individuals from other Western countries (e.g. Corneo and Grüner 2002; Alesina and Fuchs-Schündeln, 2007).

²I follow Luttmer and Singhal (2011), as well as Guiso et al. (2006) in defining culture as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation."

status-seeking behavior.

Although Cozzi's (2004) theory of a relationship between cultural status-seeking preferences and preferences for redistribution could potentially explain the endogenous emergence of fiscal policy, it has not yet (to the best of my knowledge) been empirically examined. Moreover, much of the previous research addressing the effect of status-seeking preferences on preferences for redistribution has, from a cultural perspective, been indicative at best. Corneo (2001) finds that relative income has a negative effect on individual preferences for redistribution in both Germany and the U.S. Similarly, Corneo and Grüner (2000, 2002) find empirical evidence suggesting that relative income, and occupational prestige (as measured by the 1989 General Social Survey) both have a negative effect on individual preferences for redistribution. However, it is not clear to which extent these findings are driven by actual preferences for status in the presence of other economic factors.

In general, there appears to be a gap in the economic literature of studies considering the cultural dimension of status-seeking attitudes. A possible explanation for why could be the difficulty of empirically separating cultural effects from those coming from the economic and institutional environment, in a credible way. Moreover, the potential relationship between cultural status-seeking values and preferences for redistribution appears to have been given little (if any) attention in previous empirical research despite the existence of a convincing theoretical model by Cozzi (2004) that provides a clear and definitive connection between the two. This could, in part, be due to a lack of conviction in Cozzi's (2004) theory since the causal relationship between status-seeking preferences and redistribution is neither obvious nor easy to prove in an econometric model. However, given that recent empirical findings explicitly suggest there to be a cultural component determining individual preferences for redistribution, it is indeed relevant to examine Cozzi's (2004) prediction further. Following Luttmer and Singhal's (2011) findings of a significant cultural effect on individual preferences for redistribution, this thesis examines a distinct channel of cultural transmission based on the prediction of Cozzi (2004). More specifically, I study the intergenerational effects of cultural preferences for status-seeking using survey data from 32 European countries.³ Since culture is difficult to separate from the contemporaneous effects of the economic and institutional environment, I implement an epidemiological approach strategy and study the outcome of individual preferences for redistribution among second-generation im-

³I follow Cozzi (2004) and define status-seeking preferences as the strife for success (e.g. achieve more than one's peers) and the esteem of others.

migrants.⁴ First I examine the effect of average cultural coming from both parents on individual preferences for redistribution. Secondly, I consider the effects of each parent's country of birth, separately. Lastly, I re-estimate the effect of the combined culture coming from both parents but with voting behavior as the outcome variable, as an alternative to only using preferences for redistribution.

This thesis contributes to the current state of knowledge in at least two ways. First, it adds to an ongoing discussion about what factors determine individual preferences for redistribution, by highlighting an interesting theory that empirical economists seem to have overlooked. That is, I empirically evaluate whether the causal relationship of the theory holds in reality. Something that does not appear to have been tested in any previous empirical economic research. Second, it adds new empirical evidence regarding the cultural relationship between status-seeking behavior and its effect on altruism. The remainder of the thesis is structured as follows. Section 2 provides a summary on previous related research. A brief summary of Cozzi's (2004) model, and its main implication are provided in section 3. The research focus and motivation of the study are stated in section 4 together with the hypotheses of this thesis. Section five provides a description of the data set as well as for the strategies for identification and estimation. All results of the estimated models are reported in section 5, and the thesis concludes with section 6 with a discussion on internal- and external validity of the findings.

2 Literature review

2.1 Common determinants of preferences for redistribution

A large economic literature offers various explanations for the determinants of individual preferences for redistribution. These range from individual attitudes and characteristics to personal background. Standard economic theory, such as Meltzer and Richard (1981), point to income, in terms of gains or losses made from redistribution as the single most important source of influence. In principle, the Meltzer-Richard model predicts that if the decisive voter of an election outcome under majority rule earns less than the mean level of income, she/he will vote for increased income redistribution. And so, the size of government increases. The theory has received mixed empirical support, with many arguing that the model fails to take into account that "one individual, one vote" may not always be a realistic assumption considering the difference in political influence between the rich and the poor (Karabarbounis, 2011). Still, there are voices in the

⁴See section 2.2 of the Literature review for more details on the methodology.

economic literature arguing that income is the only variable that truly matters in determining political orientation and, ultimately, preferences for redistribution (McCarty, Poole, and Rosenthal, 2006). The idea that individual income is indeed an important determinant of preferences for redistribution seems fairly intuitive. Nevertheless, given the empirical significance of other factors found in previous empirical works, it would seem that reality is a bit more complicated. As argued by Fong (2001), there appears to be substantial support for redistribution among those who are unlikely to benefit from it.

Although a large literature on social status suggests that aspiration towards increased status has a clear effect on individual behavior, and therefore preferences, the link between status-seeking and preferences for redistribution has not been empirically studied to any greater extent. Corneo and Grüner (2000) examine the relationship between wealth inequality and redistributive taxation in the U.S. Based on previous studies in relating fields of research (i.e. sociology and economic psychology), individual social status is argued to be signalled through one's consumption relative to the poor and the rich. The authors predict that the middle class will want to limit redistribution in order to distance itself from the poor, and at the same time demand more redistribution in order to mimic the rich. Using average occupational prestige scores for different income levels as a proxy for social standing, Corneo and Grüner (2000) show that individual preference for redistribution depends on one's relative position on the social ladder and that individuals tend to be more averse towards social mobility when the gap in social prestige associated with their income class between them and the poor is small, and more in favor of redistribution if the social gap is large. However, the information on occupational prestige, obtained from a separate dataset, are subjective scores of the occupations importance collected in 1989. Hence, it is difficult to assess how accurate such attitudes are more than 25 years later. In a relating study Corneo and Grüner (2002) study the effect of attitudes towards income on preferences for redistribution. More specifically, the authors focus on views about income as either being determined by family background or hard work. Using U.S. data from the International Social Survey Programme, the authors attempt to capture the effect of public values using the following survey question as a proxy: "*How important is hard work for getting ahead in life?*." In a logistic regression with country fixed effects (controlling for marital status, employment status, age, and gender) Corneo and Grüner (2002) find that public values about income, being determined through hard work, are likely to have a negative impact on preferences for redistribution. These studies provide some indication to suggest different attitudes towards redistribution between different social groups in society. Still, it is not clear whether these differences are due to a variation in the desire for

status or if they are purely reflecting other factors of the economic and institutional environment in the U.S. In contrast, it has been shown that among people in rural Asian villages, those with a higher socioeconomic status will use her/his influence and resources to provide either/both protection or/and benefits to someone with lower status (Hayami, 2001). Yamamura (2012) finds supporting evidence of such behavior using data from the Japanese General Social Survey.

Other economic determinants that have been found significant in previous research include expected future income and social mobility. Using response data from the U.S. General Social Survey between 1972 and 2004, Alesina and Giuliano (2011) test two measures for upward social mobility past earnings and father's level of education. The results suggest that both individuals whose fathers were highly educated, and those who earned more than average when young, are less in favor of redistribution. A potential issue with these results is the fact that the prospect for upward social mobility only has a significant effect when controlling for occupational prestige.⁵ This is consistent with the findings of Alesina and El Farara (2005). Still, Alesina and Giuliano (2011) also find a negative effect on redistribution preferences for respondents whose occupations are associated with a higher prestige score than the occupation of their fathers. While the effects appear significant, studies of this kind rely on the strong assumption of perfect foresight among all individuals. However, future income may not be of equal importance to everyone, and future prospects may depend on the individual's past. Previous research suggests that events in one's life have a significant impact on attitudes towards redistribution. A history of misfortune can make people more risk-averse and less optimistic about the prospects of future upward social mobility (Piketty, 1995). Such experiences could, therefore, change peoples' views of redistribution from negative to being more positive. Although empirical evidence of this theory has been mixed, there are findings suggesting that larger macroeconomic shocks experience at young age (< 26) has a significant impact on individual preferences for redistribution (Giuliano and Spilimbergo, 2014). For example, experiencing widespread macroeconomic volatility during the years of development, i.e. when humans are most impressionable) significantly increases an individual's preference for redistribution.

Over the past decade, an increasing number of empirical studies have examined the cultural component in preferences for redistribution. Guiso et al. (2006) use data from the U.S. General Social Survey in a regression model with ancestral country fixed effects and find that origins appear to have a significant effect on redistribution preferences. Despite the fact that their results indicate a potential role of culture in explaining individual preferences for redistribution,

⁵Alesina and Giuliano (2011) use the same data on occupational prestige as in Corneo and Grüner (2002).

the authors note that it is difficult to know what exactly these fixed effects really capture. In order to distinguish factors that are likely to be related with culture, e.g. the influence coming from the economic and institutional environment, economists often attempt to measure such effects by conducting quasi-experiments based on naturally occurring differences in otherwise homogenous settings. Using the separation and reunification as a natural experiment setting to examine the effects of Communism on preferences for redistribution, Alesina and Fuchs-Schündeln (2007) find that East Germans favor redistribution more than West Germans. However, given the design of their empirical study it is difficult to accurately determine whether the differences in preferences between East and West Germans are due to ideology alone or some other pre-existing factors. Basten and Betz (2013) use data on referendum outcomes in Western Switzerland to study the effect of religious differences on individual economic and political preferences. In their historical quasi-experiment in a homogenous setting of two French-speaking cantons, the authors show that people in municipalities that converted to Reformed Protestantism in the sixteenth-century are generally less in favor of redistribution than those living in municipalities that remained Catholic. In addition, the authors argue that their use of referendum election data provides an indication of individual preferences stronger than survey data, since referendums receiving majority support by voters are turned into policy. As Basten and Betz (2013) mention in their paper, an issue with relying on referendum data is the difficulty of identifying who the voters are, beyond descriptives of the municipal electorate and the participation rate. It could very well be the case that those who do vote have a special interest in the referendum outcome. Nevertheless, the results support previous empirical findings by Alesina and Giuliano (2011), suggesting a lower preference for redistribution among Protestants compared with Catholics. A commonality in the quasi-experiments is the empirical pattern of a significant persistency in preferences for redistribution. Still, Basten and Betz (2013) note that religious denominations, such as Protestantism vary across countries which makes it difficult to draw general conclusions about the importance of certain religious features.

Studies of individual preferences of immigrants in relation to the average preference among individuals living in their native countries has become an increasingly popular method to examine the effects of culture on individual preferences. In the literature on preferences for redistribution only a few papers have applied this empirical strategy, known as the epidemiological approach (see a detailed discussion in the following section). Two related studies, Alesina and Giuliano (2011) and Luttmer and Singhal (2011), both study the effects of ancestral cultures on individual preferences for redistribution among immigrants. Alesina and Giuliano (2011) show

evidence of a positive effect of birth country preferences for redistribution and own preference among first-generation immigrants U.S. Luttmer and Singhal (2011) use data from the European Social Survey to evaluate the effect of first and second generation immigrants' country of ancestry on their own preference for redistribution. Beyond the obvious difference of a different geographical scope, the authors add to the findings by Alesina and Giuliano (2011) by reducing the risk of potential selection bias in their results. Instead of U.S. as the unique destination country, Luttmer and Singhal (2011) study immigrants from multiple source countries in multiple destination countries. Despite the fact that both studies find that cultural preferences for redistribution are highly significant, no attempts are made to examine any particular cultural channel of transmission beyond preferences for redistribution in general.

Although previous research indicate a number of potential determinants of preferences for redistribution it appears that both culture and the contextual environment are relevant, within and across countries.

2.2 The influence of culture on preferences: empirical evidence

Advancements made in the development of empirical research methods in recent years have resulted in an increased number of studies examining the significance of culture in relation to individual preferences and behavior (Fernandez, 2011). Evidence from such research indicate that attitudes are transmitted from parents to their children. Using German survey data, Dohmen et al. (2008) find a strong positive correlation between attitudes of children and their parents towards risk and the propensity to trust.⁶ Interestingly, the results from examining parents separately reveal that the strongest correlation in attitudes towards trust is found between mother and child. Farre and Vella (2007) also find a significant correlation in attitudes transmitted from mother to child regarding the role of women in the labor market. However, while supporting the idea of intergenerational transmission of attitudes, these results only provide evidence of correlation, not causation.

A more precise alternative is offered in the epidemiological approach. Termed by Fernandez (2007), the methodology is used to examine the effect of culture through variation in economic outcomes among individuals who share the same economic and institutional environment, but whose social beliefs are likely to differ. As the name suggests, the method resembles that used by epidemiologists when distinguishing between genetic and environmental factors in order to better

⁶Children's attitudes towards risk and trust are measured via answers to survey questions at age 23.

understand diseases and other health-related issues. Applied in empirical economic research, the method allows researchers to better separate cultural- from environmental factors that contribute to individual variation (Fernandez, 2011). A common practice in such studies is to use data on first-generation immigrants, since they constitute a group of individuals whose economic and institutional environment is identical but, who are likely to have different beliefs (or preferences). The idea that people assimilate at a quick pace when arriving in a new country has repeatedly been rejected by empirical studies showing that culture from the country of origin does not only remain strong among first-generation immigrants, but also demonstrates a persistence of cultural traits among second- and third-generation immigrants (Bisin and Verdier, 2011 pp. 55-56). Antecol (2000) examines the inter-ethnic gender gap in the U.S. labor force participation rate, using male and female labor force participation rates in the country of ancestry among first-generation, as well as second- and higher-generation immigrants. The evidence suggest that ancestry, or ethnicity, not only matters, it is a highly persistent determinant. A potential problem with Antecol's (2000) model specification, however, is that it omits relevant individual-level variables, such as education and differences in parental backgrounds, that may drive the results. Thus, raising a concern over reverse causality. Fernandez and Fogli (2009) address this issue, by extending the model with controls for parental education, including their test-scores. The authors find that culture plays a statistically significant role in explaining the variation in both work and fertility outcomes among women. Fernandez (2007) argues that the use of prevalent social preferences in the country of ancestry is a more appropriate proxy for culture given the serious issue of reverse causality associated with the use of aggregate economic variables, e.g. labor force participation rate. Her study shows that attitudes towards women's work in the country of ancestry has a significant effect on work outcomes among second-generation American women. Beyond the research by Fernandez (2007, 2011) the use of social preferences in ancestral countries has frequently been implemented in other empirical studies focusing on the relevance of culture, which have all added to the evidence suggesting that culture does matter (e.g. Almond et al., 2013; Alesina and Giuliano, 2009; Alesina et al. 2011; Aghion et al. 2008; Fisman and Miguel, 2007; Luttmer and Singhal, 2011).

3 Theoretical background

"In nearly every society, the individual success in accumulating at least a slightly higher level of wealth or human capital than her or his peers is given some form of social reward. In a multicultural world this is likely to generate nontrivial implications for economic growth." - Guido Cozzi (2004, p. 911)

Cozzi's (2004) theory is based on the standard AK growth model, which is extended by introducing status-seeking preferences into the household maximization problem. The underlying argument is that status is generally rewarded, through public recognition or the esteem of others, to individuals who succeed in being wealthier than the local average. Utility is therefore gained from accumulating more capital, i.e. a greater wealth. How much utility one gains from being more accomplished than the average is determined by a combination of the level of social recognition, locally rewarded by others in the economy, and the size of individual wealth in excess of the local average. In a multi-country setting, "locally" can be thought of as "nationally" and the level of social reward a society attributes to individuals with a private wealth greater than the national average, is constant within but varies across countries. Such variation is then expressed in the amount of utility gained from increases in status, i.e. status-seeking preferences (Cozzi, 2004). The utility function (1) along its following constraints, as stated in the basic model setup with optimal taxation of the Cozzi-model, illustrate the representative household's maximization problem.⁷

$$\max_{c(\cdot) \in PC(R_+, R_+)} \int_0^\infty [\ln c(t) + v(\bar{p}(t) [k(t) - \bar{k}(t)])] e^{-\rho t} dt \quad (1)$$

subject to:

$$\dot{k}(t) = r(t)k(t) - \tau [r(t)k(t)] - c(t) + \tau [r(t)\bar{k}(t)], \quad (2)$$

$$\lim_{t \rightarrow +\infty} k(t) e^{-\int_0^t r(s) ds} \geq 0, \quad k(0) > 0$$

In the utility function $c(t)$ denotes real consumption and $k(t)$ denotes the representative household's real capital ownership at time $t \geq 0$. The utility gained from acquiring more status

⁷It is worth noting that my use of the term "Cozzi-model" throughout this thesis refers to the theory by Cozzi (2004) and thus not to some other theoretical model by Cozzi available in the economic literature.

is captured in the function $v(\cdot)$. An intuitive interpretation of $\bar{p}(t)$, in the case with multiple-countries, is that it represents a society's appreciation for individual success, e.g. in accumulating above-average wealth.⁸ Lastly, $r(t)$ denotes the real interest rate.

Firms operate under perfect competition, following the basic AK technology: $y(t) = Ak(t)$, where $y(t)$ and $k(t)$ denote per-capita output and capital, and A is a constant productivity parameter. As can be seen in law of motion for capital (2), households earn income via interest on already-accumulated wealth in each period.⁹ More specifically, households supply all of their capital (remaining after consumption expenses, taxes and transfers) to the firms, who in turn make an interest payment going into the next period.¹⁰

Before looking at the solution to the model, it is worth considering the "rat race"-part of Cozzi's (2004) theory. When societies reward success based on relative wealth there will be an incentive for people to over-accumulate, especially when the social reward increases with relative wealth. While the observational externalities of others' wealth encourage all individuals to become the one with the greatest wealth, this also implies that such a position will never be achievable. A "rat race"-situation emerges. As a consequence people become unhappy because over-saving has forced them to hold back on consumption. Cozzi (2004, p. 901) argues that if agents are rational, and if government intervention is an option, there will be an incentive for citizens to support a distortionary income tax/transfer scheme which discourages accumulation to restore the socially optimal pace of accumulation.

Solving the model (see Cozzi 2004, Appendix A for proof) shows that, in a majority vote economy, the proportional tax-schedule elected by households follows from (for all capital incomes $x \geq 0$):

$$\tau(x) = \left(\frac{v'(0)}{A} \right) x$$

Simply put, tax schedules are thus resulting from the variation in preferences for redistribution across countries, driven by local (i.e. national) status-seeking preferences ($v'(0)$). In this basic model, countries are assumed homogenous. Thus, the model only predicts the general response to high levels of preferences for status-seeking. However, as Cozzi (2004) demonstrates in his paper, the prediction holds in a setting with heterogeneous agents (or countries), i.e. stronger status-

⁸See Cozzi (2004) pp. 902-904 for mathematical details.

⁹It should be noted that this does not limit the implications of the model to wealth generated via capital income. This is merely how household income is defined in the model.

¹⁰Thus, $r(t) = A$ for all $t \geq 0$.

seeking preferences leads to stronger preferences for redistribution. It should also be noted that the Cozzi-model maintains the equity/efficiency-tradeoff (i.e. Mirrlees, 1971). That is, higher levels of wealth will still generate negative preferences towards positive redistribution, but the effect is mitigated by citizen's desire to discourage over-saving.

As argued by Cozzi (2004, p.912), the mathematical link makes it hard to dismiss the whole causal channel, unless one literally assumes that real world countries have no degree of social reward for individual achievement. However, he also warns that if redistribution systems have indeed been put in place to correct for the "rat race"-externality, the predicted relationship between cultural status-seeking preferences and redistribution may be difficult to observe in the data. Still, it is relevant to bear in mind that politics is about more than just individual preferences for redistribution. Thus, it is difficult to evaluate to what extent historical election outcomes have already corrected for the negative externality.

4 Research focus and motivation

The Cozzi-model states a clear theoretical channel of cultural transmission, implying that differences in the intensity of status-seeking behavior across countries contributes to the observed variation in redistribution preferences. Again, to the best of my knowledge, there is no previous empirical study in the economic literature devoted to evaluating Cozzi's causal relationship between cultural status-seeking preferences and preferences for redistribution. Findings from relating studies, explicitly focusing on preferences for status, have not considered the effect of culture and some even take preferences for status as given (e.g. Corneo and Grüner, 2000, 2002). Previous research provides compelling evidence, indicating that culture is a significant determinant of preferences for redistribution (e.g. Alesina and Giuliano, 2010; Luttmer and Singhal, 2011). The aim of this thesis is therefore to examine to what extent cultural values of status effect preferences for redistribution. More precisely, I attempt to answer the following research question.

Do preferences for status-seeking in the country of ancestry have a positive effect on individual preference of redistribution among second-generation immigrants?

Previous research on culture and social preferences has highlighted the importance of the empirical setting. There have, for example, been arguments against the use of aggregated economic variables when trying to identify cultural effects since such variables are likely to reflect more

than just cultural traits (e.g. Fernandez, 2011). If the Cozzi-model holds in reality, there should be a positive relationship between cultural values of status and individual preferences for redistribution. I follow an epidemiological approach to examine this relationship in detail. The geographic scope is limited to a dataset based on three waves of the European Social Survey, constructed according to the specifications of Luttmer and Singhal (2011).¹¹ This is a favorable setting since the use of survey data for multiple European countries in combination with multiple countries of ancestry, reduces the potential issue of selection bias among respondents.

Within the field of economics, preferences for redistribution can be found in many research areas. As a variable, it is an important component in most models that attempt to explain economic growth, and has an even more significant role in the field of public economics. It is therefore highly relevant to better understand the relationship between cultural values and attitudes towards redistribution, as well as to find ways through which the effect can be estimated in a credible way. In general terms, the reason why preferences for redistribution matter is fairly straight forward: stances on whether or not the government should redistribute from the wealthy to the poor, and to what extent, is likely the most important dividing line between the political left and the political right. At least on economic issues. Identifying the determinants of attitudes towards redistribution almost amounts to providing an explanation to where ideological preferences on economic issues come from (Alesina and Giuliano, 2011). Moreover, in times of increased human mobility following the rise of globalization, and the flows of migration resulting from disruptive events throughout history (i.e. war, and other contextual factors limiting future prospects of individuals), it becomes important to understand how inherited cultural values of immigrants can shape the policies of the societies to which they migrate (Luttmer and Singhal, 2011). Therefore, with the discoveries of new empirical methods, it is highly relevant to examine economic theories, such as the Cozzi-model, that may ultimately help researchers and policymakers better understand economic outcomes.

4.1 Hypotheses

In order to answer the research question of this thesis, I state the following two hypotheses.

H1: Preferences for status-seeking in parental birth countries has a positive effect on individual preferences for redistribution among second-generation immigrants.

¹¹See section 5 Data and Method, for a detailed explanation.

H2: The magnitude of the effect of the mother’s culture is equal to the effect of the father’s culture, on individual preferences for redistribution.

The first hypothesis tests the effect of the average culture of both parents, and is in line with the epidemiological approach as described by Fernandez (2007). However, if this specific cultural effect is predominantly transmitted from one parent, e.g. the father, the results of the first hypothesis could be misleading. In the second hypothesis, I therefore examine the strength of the transmission coming from mothers and fathers, separately. This also relates to findings from in previous research, suggesting a stronger effect of the mother’s culture on individual preferences than the effect of the father’s culture (e.g. Dohmen et al., 2008; Luttmer and Singhal, 2011). While the second hypothesis adds depth to the analysis, there is always a possibility that other relevant, although unknown, angles of this transmission are not fully accounted for. Such a possibility must therefore be kept in mind when assessing the results.

In addition I state a third hypothesis based on the use of an alternative outcome variable. Although social preferences for redistribution are likely a more accurate measure than aggregate data on election outcomes or income tax rates, it is difficult to know with certainty whether the survey data reflects true preferences of the respondents and not only reporting behavior. Therefore, I also examine the effects of ancestral country preferences for status-seeking on individual voting behavior.¹²

H3: Parent birth country preferences for status-seeking has a positive effect on individual behavior to vote for a left-wing political party.

This final hypothesis is meant to provide an early indication of the cultural effect on individual preferences for redistribution, based on voting behavior. Hence, the possibility of noise coming from individual attitudes towards other political issues is recognized, and the results will be analysed with caution.

5 Data and Method

I use data from the three first rounds of the European Social Survey (ESS): 2002/2003, 2004/2005, and 2006/2007. This cross-sectional survey, covering a large sample of 32 European countries, was

¹²Luttmer and Singhal (2011) perform a similar test on first-generation immigrants and the effect of birth country preferences for redistribution.

initiated by the European Science Foundation with a mission to measure and compare attitudes and behavior across countries and over time, in a methodologically rigorous way. Again, the creation of the final dataset follows the steps taken in the paper by Luttmer and Singhal (2011).

TABLE 1 – ORIGINS OF SECOND-GENERATION IMMIGRANTS WITHIN ESS SAMPLE COUNTRIES

Country:	ESS Round			Full native sample	Second generation immigrants	Obs. with one ESS immigrant parent	Obs. with two ESS immigrant parents	Distinct parental birth countries	(Sum) Most prevalent birth country
	1	2	3						
Austria (AT)	*	*	*	5 866	300	264	36	24	(82) DE
Belgium (BE)	*	*	*	4 629	237	157	80	15	(71) FR
Bulgaria (BG)			*	1 299	30	16	14	4	(11) GR
Switzerland (CH)	*	*	*	4 709	429	307	122	21	(129) IT
Cyprus (CY)			*	874	16	16	0	6	(7) GR
Czech Rep. (CZ)	*	*		3 810	122	88	34	8	(84) SK
Germany (DE)	*	*	*	7 512	256	175	81	21	(80) PL
Denmark (DK)	*	*	*	3 948	114	99	15	16	(46) DE
Estonia (EE)		*	*	2 591	546	312	234	9	(453) RU
Spain (ES)	*	*	*	4 543	25	21	4	5	(13) PT
Finland (FI)	*	*	*	5 429	25	23	2	3	(15) RU
France (FR)	*	*	*	4 677	241	154	87	18	(92) IT
Great Britain (GB)	*	*	*	5 487	144	114	30	14	(84) IE
Greece (GR)	*	*		4 276	159	50	109	6	(135) TR
Hungary (HU)	*	*	*	4 339	90	79	11	12	(43) RO
Ireland (IE)	*	*	*	5 199	111	104	7	9	(96) GB
Israel (IL)	*			1 458	—	—	—	—	—
Iceland (IS)		*		525	9	9	0	6	(4) DE
Italy (IT)	*	*		2 571	9	9	0	7	(2) FR
Luxemburg (LU)	*	*		1 946	257	170	87	15	(63) DE
Latvia (LV)			*	1 517	177	125	52	5	(137) RU
Netherlands (NL)	*	*	*	5 452	130	116	14	14	(79) DE
Norway (NO)	*	*	*	4 980	96	92	4	15	(25) SE
Poland (PL)	*	*	*	4 993	71	51	20	7	(39) DE
Portugal (PT)	*	*	*	5 124	8	8	0	2	(6) ES
Romania (RO)			*	1 932	6	6	0	3	(3) BG
Russia (RU)			*	2 105	82	76	6	5	(73) UA
Sweden (SE)	*	*	*	4 951	264	212	52	20	(115) FI
Slovenia (SI)	*	*	*	3 718	68	64	4	12	(21) AT
Slovakia (SK)		*	*	2 860	140	122	18	9	(68) CZ
Turkey (TR)		*		1 632	30	16	14	4	(14) BG
Ukraine (UA)	*	*		3 294	436	345	91	9	(391) RU
Sum:				118 246	4 628	3 400	1 228		

Notes: Author's own computations based on Luttmer and Singhal (2011). Data sources collected from the European Social Survey (see dedicated section in the Appendix for more details).

Dataset creation

The three rounds of survey data contains information from wide range of survey items. These range from basic characteristics, such as gender, age, and country of birth, to more detailed information on educational attainment, occupational status, income variables, and other descriptives of relevance when studying preferences for redistribution. All data from the ESS integrated datasets were merged along with supplementary country specific files, containing information

left out by the ESS due to minor discrepancies or measurement errors.¹³ The merged dataset contains information on 118,246 native respondents. It has been restricted to individuals who are at least 18 years old and have a reported preference for redistribution (i.e. the value of the dependent variable is not missing). In addition, individuals whose age is missing are also dropped from the sample.¹⁴ The first column of Table 1 provides an overview of the countries participating in each round of the ESS survey. Out of the 32 residence countries listed below, 17 participated in all three rounds and seven only participated once.

For this thesis, the primary sample consists of second-generation immigrants. These are all respondents, living in their native countries, with at least one parent who was born in a different ESS survey country. Thus, either both parents immigrated from another ESS survey country or, one parent immigrated and the other parent is a native. Information on parent birth countries is provided by survey items found in ESS Rounds 2 and 3. Since Israel only participated in Round 1, there is no data on any second-generation immigrants from that country of residence. The number of observations classified as second-generation immigrants in each country are listed in the third column of Table 1. Columns 4 and 5 divide the number of second-generation immigrants into two groups, those with one immigrant parent and those having two parents that immigrated from another ESS country. This data is unweighted, and primarily meant to provide an overview of the sample variation and respondent diversity, in terms of ancestral backgrounds.¹⁵ Among the respondents in the dataset, it is more common to have one immigrant parent than it is to have two. Columns 6 and 7 illustrates the diversity of cultural backgrounds found in the sample. For example, in the first row it reads that among the 300 second generation immigrants, there are 24 distinct parental birth countries, from which at least one parent migrated. Germany is the most prevalent parental birth country among second generation immigrants in Austria, with 82 observations. Summing up the values in column 6 illustrates the level of diversity in the dataset. There are, in total, 324 unique combinations of residence/ancestry-country pairs in the sample.

¹³Supplementary files refer to country specific data that either deviated from reporting standards (i.e. sample selection, answer registration procedure, etc.). At the time of access, however, ESS have had time to revise some of the data, making some of the data mergers in Luttmer and Singhal's (2011) instructions redundant.

¹⁴In their STATA do-file, Luttmer and Singhal (2011) refer to these observations as being "untrustworthy" and state that such basic information is necessary (for access, see the dedicated section in the Appendix). Following a similar logic, the authors also drop observations who did not report their gender. However, there were no observations with missing gender data among the sample of second-generation immigrants. Additional descriptives of the data are found under Summary statistics in the Appendix.

¹⁵The flows of parental migration described here should thus not be seen as a representative illustration of actual migration patterns among the participating countries.

Additional data on political party alignment

As stated earlier, the aim of the third hypothesis is to examine the effect of cultural preferences for status-seeking on individual voting behavior, as an alternative measure of preferences for redistribution. The ESS survey questionnaires contain items regarding respondent voting behavior. That is, information on whether they voted in the most previous national election, and which specific political party they voted for. Luttmer and Singhal (2011) use data from the Database of Political Institutions, created in the Development Research Group of the World Bank by Beck et al. (2001). This database classifies the three largest government political parties and the largest opposition party as right, center, left, or N/A. These are coded on a three point scale ranging from 1 to 3 (right=1, center=2, left=3). Luttmer and Singhal (2011) supplement the Beck data with political classifications by Huber-Inglehart (1995) to cover even more political parties, and add their own cases when sources were available to make a clear match between a party and its location on the left-right scale. However, about a third of all political parties could not be classified. In the sample of second-generation immigrants, a total of 3,164 respondents stated that they voted in the last national election. Out of these, there are party-alignment matches available for 2,185 respondents. Moreover, the party-alignment cases where Luttmer and Singhal (2011) consider the classifications to be of high certainty (or "high quality") make up a total of 1,854 respondents.

5.1 Classification of individual preferences for redistribution

The main outcome variable in this thesis is individual preference for redistribution, measured and coded identically to Luttmer and Singhal (2011). In all three ESS rounds, respondents were asked to rate their level of compliance with the following statement: "*The government should take measures to reduce differences in income levels.*"¹⁶ Answers were recorded on a five-point bipolar categorical-scale ("agree strongly," "agree," "neither agree nor disagree," "disagree," "disagree strongly"), which I code on a five-point scale in the final dataset ranging from 1="disagree strongly" to 5="agree strongly" (i.e. the opposite order of how the answers were originally recorded in the survey data). While the policy measure discussed in Cozzi's (2004) model is restricted to income taxation (on capital), this measure concerns redistribution in general. However, since income taxation is far from being the sole policy instrument through which governments address inequality, this is not considered to be an issue.

¹⁶As is acknowledged by Luttmer and Singhal (2011), the statement does not provide any information about which country the "government" belongs to. However, the preceding question in all three surveys, also focused on political views, explicitly refer to the country of residence.

5.2 Classification of cultural preferences for status-seeking

In order to control for average status-seeking preferences among different countries of ancestry, an appropriate proxy needs to capture the specification of the theory in Cozzi's (2004) paper. That is, a valid proxy should on the one hand capture the individual "need for achievement," while on the other hand also reflect the "social reward" associated with such success (Cozzi, 2004 pp. 911-912). The author himself suggests the use of religious affiliation as a proxy for cultural status-seeking preferences, motivated by the arguments put forth by Max Weber (1930) in his thesis about the Protestant "work ethic." Cozzi (2004) predicts that Protestants should have a higher preference for redistribution than, for example, individuals who adhere to Catholicism.¹⁷ However, using Weber's (1930) work ethic hypothesis to motivate the use of religious affiliation as a proxy in a cross-country setting is problematic. In his work, Weber (1930) specifically refers to the branch of Christianity known as Reformed Protestantism, which spread throughout large parts of Switzerland in the sixteenth-century. Thus, the work ethic hypothesis does not concern Protestantism in general. This is significant since Reformed Protestantism was more radical and, allegedly, independent of the teachings spread by Martin Luther around the same time (Basten and Betz, 2013). Given the scope of this thesis, I therefore find it more suitable to consider another proxy for status-seeking preferences. The proposed alternative is found in the section of the ESS surveys covering human values. Respondents were asked to state how well they identify with a person fitting the following description:

"Being successful is very important to her/him. She/he hopes people will recognize her/his achievements."

Answers were recorded on a six-point bipolar categorical-scale (from 1="very much like me" to 6="not like me at all"). In the dataset, I recode this question into ranging from 1="not like me at all" to 6="very much like me" (i.e. the opposite order of how the answers were originally recorded). The strength of using this survey item as a proxy for status-seeking preferences is that the question manages to capture the essence of status-seeking as it is described in Cozzi's (2004) model. The very same survey item has also been featured in empirical sociology studies, where researches attempt to estimate preferences for status-seeking (e.g. Paskov et al., 2013; Paskov,

¹⁷In his well known work "The Protestant Ethic and the Spirit of Capitalism," Weber (1930) argues that the Protestant ethic, promoting excellence through hard work, provided the foundation to the evolution of Capitalism. The use of Protestantism as a proxy for economic prosperity or a strong work ethic can be found in previous empirical studies (see e.g. Becker and Woessmann (2009)).

2015). The final proxy variable is created in two steps. First, I define the preference for status-seeking in a parent’s country of birth. Second, to get a combined value for both the mother and father of a respondent: I calculate the average of the mean preferences in each parent’s country of birth.¹⁸

It is worth noting that the nature of the question, containing two parts, might have an important effect on the respondents’ answers. An individual who, for example, strongly identifies with placing a high value on personal success, does not necessarily have to feel a strong need for others to recognize her/his achievements. Moreover, there is always the question of how individuals interpret and perceive success as well as recognition from others. However, even with the potential of variation across some of the observations in the accuracy of the measure, it should still serve as a good proxy for the average country-level of status-seeking preferences.

5.3 Identification strategy

Estimating the causal effect of cultural preferences for status-seeking and individual preferences for redistribution is a challenging task. In order to identify this effect I follow an epidemiological approach, where status-seeking culture is proxied by social preferences in the ancestral countries of second-generation immigrants. Fernandez (2007) notes that there are important advantages with studying descendants of immigrants. First of all, second-generation immigrants have grown up in the same economic and institutional environment as any other native resident (i.e. those whose parents did not immigrate from another country). Thus, there should be little worry that the economic and institutional environment in the country of ancestry has had an impact on individual preferences, which is likely the case when studying first-generation immigrants. The second advantage is concerns the potential issues associated with cultural shocks. First-generation immigrants may be subject to shocks, such as language barriers or discrimination, which could result in deviations from their traditional behavior. Hence, having been raised in the residence countries, such shocks should not be relevant for second-generation immigrants (Fernandez, 2007). A potential downside of the epidemiological approach, especially when studying the effect of culture on preferences among the descendants of immigrants, is assimilation. Despite convincing evidence of persistent cultural preferences, Fernandez (2011) notes that if we consider culture as socially constructed to be replicated, such behavior may require incentives provided by a larger social body (e.g. a neighbourhood or school). Assimilation to the dominant culture will therefore, presumably, weaken the influence of the original culture. Thus, attenuation bias

¹⁸See section 5.4 Estimation for more details.

is a potential threat to this methodology. It is likely that there will be downward bias of the effect of ancestry country culture on individual preferences (Fernandez, 2011). This is important to keep in mind as it implies that even if the regressions produce insignificant results, it does not necessarily mean that cultural values of status do not have an effect on individual preferences for redistribution.

5.3.1 General endogeneity concerns

Selection bias

A general concern found in papers studying preferences of immigrants is selection bias. Given that the decision to migrate is most likely endogenous, it is possible that there is a commonality among immigrants that influenced their choice of destination country (e.g. Fernandez, 2007; Alesina and Giuliano, 2010). Previous research has argued that this issue is of a greater concern in studies focusing on only one destination country (e.g. studies using data on immigrants, or their descendants, living in the U.S.). Luttmer and Singhal (2011) manage to reduce this problem by using data on multiple countries of birth and multiple countries of residence in their analysis. I follow the same approach since it results in a sample characterized by different combinations of ancestry- and residence countries. Thus, with the 324 unique residence/ancestry-country pairs available in the dataset of this thesis, the issue of selection bias should be considerably smaller than in other settings with one country of residence and several countries of origin. Still, it is important to bare in mind that while reduced, selection bias may still be present and affect the estimated effect of cultural status-seeking preferences.

Omitted variable bias

Another issue that needs to be addressed before proceeding is omitted variable bias. In order to reduce the likelihood of this potential problem, multiple sets of control variables will be used to test the robustness of the results. These sets of controls follow those used in the robustness analyses of Luttmer and Singhal (2011), concerning individual characteristics. Many of these variables are directly related to factors of importance found in much of the previous research on determinants of preferences for redistribution, while others serve to increase the richness of the estimations (i.e. using more narrowly defined controls). Although adding more controls reduces the risk of having omitted variable bias in the estimated regressions, it is not possible to fully exclude the possibility that the problem still persists. Thus, it will be necessary to interpret the results with caution.

Missing values

There is an ongoing discussion in the literature about the best way to deal with missing values, and the effect they have on regression output. While some methods appear more promising than others, in most cases the choice of how to treat missing values depends on the researcher's empirical strategy. When using survey data, researchers commonly (1) include dummy variables in the regression, or (2) run iterations and estimate likely values to replace the missing values altogether (Allison, 2009). There are pros and cons to both methods.¹⁹ In order to limit the loss of observations due to missing values, Luttmer and Singhal (2011) include dummies in their regressions taking the value 0 if a certain variable value exists for an observation, and 1 if it is missing. The use of missing value-dummies is a common feature in empirical research models, as it limits the potential selection bias associated with missing responses to questions that may not occur at random (Geishecker and Görg, 2013). Following Luttmer and Singhal (2011), I include dummy variables for missing control values in the analysis of this thesis, while still recognizing that this may cause distortions in the estimated coefficients.

5.4 Estimation

Given the many challenges associated with attempts to estimate the effect of cultural values, I implement an empirical strategy used in a growing number of studies examining intergenerational transmission of social values. In addition, I follow some of the steps used to generate estimations in Luttmer and Singhal (2011), since they perform similar tests but for a different, although related, research question. As is standard procedure when following the epidemiological approach, the model will be estimated using an Ordinary Least Squares (OLS) model (Fernandez, 2007, 2011).

Empirical definition of the proxy for culture

The following steps illustrate how the proxy for parental birth country status-seeking preferences is calculated.²⁰ First, I define the preference for status-seeking in a parent's country of birth as follows. I calculate the mean preference of natives in every birth country for each ESS round,

¹⁹Econometricians whose main interest lies in studying the actual models that are eventually estimated, tend to favor of the latter approach (Allison, 2009). However, when estimating values to replace missing ones, the researcher must feel confident about not removing important information from the empirical model. It may be the case that people systematically refuse to answer certain questions, which could be tied to cultural values (e.g. discussing money or personal income).

²⁰The calculations follow Luttmer and Singhal (2011) for their proxy of birth country preferences for redistribution.

weighted by individual weights, and then average across rounds.²¹ If a country did not participate in all rounds of the survey, the birth country preference is defined through the average of data available across all rounds.²² Second, I define "preferences for status in the parent country of birth" as follows:

$$\overline{status}_{pi} = \frac{(\overline{status}_{mi} + \overline{status}_{fi})}{2}$$

where \overline{status}_{pi} denotes preferences for status in the parent country of birth of a second-generation immigrant i . As was mentioned in the classification of cultural preferences for status-seeking (see section 5.2), this value is the average of the mean preferences in the mother's country of birth (\overline{status}_{mi}) and the mean preferences in the father's country of birth (\overline{status}_{fi}). Given that, for a slight majority of the sample, the observations have one native parent and one foreign-born parent, this measure will include both the foreign and the native culture for those observations.

Empirical model specifications

The main model will be estimated according to the following specifications:

$$pref_i = \alpha + \beta_1(\overline{status}_{pi}) + X_i + \theta_{ri} + \varepsilon_i$$

The dependent variable $pref_i$ denotes second-generation immigrant i 's preference for redistribution. First among the control variables, \overline{status}_{pi} is the parent birth country mean preference for status-seeking. X_i represents a vector of individual characteristics.²³ These include demographic variables, such as age and gender. To capture effects of expected gains and losses from redistribution, as in theory of Meltzer and Richard (1981), the vector also contains individual characteristics related to education, and individual income. If the Meltzer-Richard model is correct, preferences for status-seeking in the parent's country of birth should not be significant, since preferences for redistribution are solemnly determined by the expected gains or losses from redistribution. In the sensitivity analyses of the models, examples of other relevant factors that will be included, such as occupation and industry of employment (e.g. Corneo and Grüner 2002), religious affiliation (e.g. Alesina and Giuliano, 2011; Basten and Betz, 2013; Luttmer and Sing-

²¹The weights are the ESS survey's own within country weights, found in the survey data.

²²The mean value of preferences across countries are nearly perfectly correlated, hence observations will not be excluded if (one of) their country of ancestry did not participate in the same wave of data.

²³See Summary statistics in the Appendix for details about the selection of characteristics that are considered for the different estimations presented in the following section.

hal, 2011), and parents educational attainment (e.g. Fernandez, 2009; Luttmer and Singhal, 2011). These additional controls, related to determinants of preferences for redistribution found to be significant in previous research, also include a time dummy indicating the round/year when the respondent was interviewed. The final element of the regression model is θ_{ri} , which denotes a fixed effect variable for second-generation immigrant i 's country of residence r . It ties the model together by controlling for country specific factors (such as institutions, economic environment, etc.). Moreover, it also controls for the culture specific to the residence country, which is significant given the specification of the proxy-variable for ancestry-culture. That is, with the residence country fixed effect included, \overline{status}_{pi} will only reflect the effect of the cultural preferences coming from the foreign-born parent. For all estimations, the standard errors are adjusted to allow for clustering of error terms by parental birth country.²⁴ The model specification above will first be estimated to examine the effect of status-seeking culture transmitted from both parents combined. It will then be adjusted to test the transmission of preferences from the mother's culture only, and similarly estimated using only the culture transmitted from the father's birth country culture.

²⁴For all second-generation immigrants with one native parent, the clustering of error terms is set to the birth country of the immigrant parent. Among the observations whose parents both immigrated from another ESS survey country, 88% were born in the same country. The remaining 12% are clustered after the mother's country of birth, based on observations in previous research suggesting a greater influence coming from the mother's culture (e.g. Dohmen et al. 2008; Luttmer and Singhal, 2011).

6 Results

6.1 Parent birth country preferences of status-seeking and the effect on individual preferences for redistribution

The results of the estimated model, using both parent's birth country status-seeking preferences are reported in column 1 of Table 2. In the sample of second-generation immigrants, culture of status-seeking has a positive effect on the individual preference for redistribution, significant at the ten percent level.

Among the remaining control variables, the estimated results suggest a pattern of individuals acting out of economic self-interest. Those with more than secondary education have significantly lower preference for redistribution than individuals whose highest completed level of education is secondary school or less. The effect on preferences for redistribution appears to follow the same pattern for educational attainment of spouses. It is not very surprising to see that high-income households favor less redistribution. Specific controls for main source of income, where "wage and salary" is the omitted income variable, reveal that self-employed individuals (relative to the omitted category) have lower redistribution preferences. A similar effect is observed for those with a main source of income other than the specified categories.²⁵ Moreover, it is interesting to see that there is no significant effect coming from the primary income sources of pensions, unemployment benefits, or social benefits. As a measure to control for the effects of unemployment, the regression includes controls for working the previous week and periods of long term unemployment. While having a paid job in the week prior to the survey interview does not appear to have a significant effect on redistribution preferences, individuals with a history of having been unemployed for a period in excess of 12 months exhibit higher preferences for redistribution. While size of the household does not appear significant in the regression results, having a child living in the household appears to increase the preferences for redistribution. Even after controlling for the above variables, both gender and age have a positive, statistically significant, effect on preferences for redistribution. Thus, women appear to be more altruistic than men. Still, it may be the case that the set of controls used in the estimated regression of Table 1 is not detailed enough to capture some other relevant variable that may reduce this significant difference between the sexes.

²⁵This category is somewhat difficult to interpret since the ESS survey does not provide any specific information as to what this "other" source of income refers to. Hypothetically, it could potentially be anything from student loans, or stipends, to money provided by some private benefactor.

TABLE 2: PREDICTORS OF PREFERENCES FOR REDISTRIBUTION

Dependent variable: Subjective preference for redistribution	Second generation immigrants		Second generation immigrants		Natives	
	Coefficient	(SE)	Coefficient	(SE)	Coefficient	(SE)
Parent birth country status-seeking pref.	0.106*	(0.060)				
Age	0.005**	(0.002)	0.004**	(0.002)	0.004***	(0.001)
Female	0.137***	(0.034)	0.135***	(0.046)	0.118***	(0.018)
Own education low	0.067	(0.053)	0.069	(0.046)	0.019	(0.018)
Own education high	-0.124**	(0.051)	-0.126***	(0.037)	-0.180***	(0.020)
Spouse education low	-0.019	(0.059)	-0.019	(0.066)	0.018	(0.015)
Spouse education high	-0.102**	(0.037)	-0.106**	(0.049)	-0.136***	(0.024)
Divorced or separated	-0.17	(0.063)	-0.018	(0.073)	0.097***	(0.015)
Widowed	-0.119	(0.074)	-0.118**	(0.055)	0.002	(0.022)
Never married	-0.027	(0.058)	-0.031	(0.047)	0.048***	(0.015)
log household income	-0.102***	(0.025)	-0.103***	(0.021)	-0.083***	(0.013)
<i>Primary source of income</i>						
Self employed	-0.242***	(0.085)	-0.243***	(0.053)	-0.192***	(0.027)
Pension	-0.017	(0.048)	-0.015	(0.059)	-0.009	(0.020)
Unemployment benefits	-0.065	(0.138)	-0.065	(0.150)	0.156***	(0.037)
Social benefits	0.066	(0.089)	0.066	(0.096)	0.126**	(0.053)
Investment	-0.092	(0.253)	-0.081	(0.284)	-0.419***	(0.071)
Other	-0.367**	(0.137)	-0.373***	(0.123)	-0.121***	(0.042)
log household size	-0.013	(0.048)	-0.011	(0.037)	0.035***	(0.012)
Paid work last week	-0.034	(0.031)	-0.034	(0.027)	-0.003	(0.012)
Has a child in the household	0.099**	(0.042)	0.099**	(0.044)	-0.005	(0.014)
Ever unemployed > 12 months	0.192***	(0.059)	0.194***	(0.040)	0.141***	(0.026)
Lives in metropolitan area	0.009	(0.021)	0.012	(0.035)	-0.044**	(0.019)
ESS Round 2	-0.118***	(0.043)	-0.118**	(0.046)	-0.051*	(0.029)
Country dummies (31)	YES		YES		YES	
Constant	4.033	(0.409)	4.478	(0.246)	4.239	(0.124)
<i>N</i>	4,628		4,628		76,271	
Adjusted <i>R</i> ²	0.1161		0.1155		0.1293	

Notes: The dependent variable is subjective support for income redistribution by the government. Robust standard errors adjusted for clustering by country of origin are in parentheses. Country status-seeking preferences are measured as the mean subjective preference for status-seeking (Q: Important to be successful and that others recognize achievements) in the parent birth country. Low education includes the category "Primary or less." Secondary education is the omitted category and corresponds to the category "Lower secondary or second stage of basic." High education includes the following three categories: "Upper secondary," "Post-secondary, non-tertiary," "First stage of tertiary." The omitted marital category is "Married." The omitted income source is "Salary and wages." The dummy variable for ESS round 3 is omitted since ESS2 and ESS3 are the only waves including information on parental birth countries. (Unreported) dummies are included for missing regressors.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

Table 1 also illustrates that the estimated effects of the demographic and economic control variables on preferences for redistribution are similar for second-generation immigrants (column 2) and natives whose parents were born in the residence country (column 3). Parent birth country preferences for status-seeking are not included as a variable in columns 2 and 3 for comparison purposes, since this variable cannot be identified separately from the country fixed effects for

respondents whose parents are both non-immigrants.²⁶ Moreover, comparing the explanatory powers (adjusted R -squared) of the estimations in columns 1 and 2 shows that including parent birth country culture in the regression adds to the explanatory power of the model from 0.1155 to 0.1161.

Sensitivity analysis

A concern regarding the estimated results in Table 2 is the significance level of the coefficient for parent birth country preferences for status-seeking. Since the effect is only statistically significant at the ten percent level, it raises the question of how robust the result really is. Therefore I re-estimate variations of same model to examine how sensitive the result is to the choice of economic controls.²⁷

TABLE 3: ROBUSTNESS OF THE PARENT CULTURE ESTIMATE

Dependent variable: Subjective preference for redistribution				
Specification:	Parent birth country status- seeking pref.	(SE)	Adjusted R^2	N
1. Only including country fixed effects:	0.133*	(0.059)	0.0743	4628
2. Baseline regression, with fewer controls (Table 2):	0.106*	(0.060)	0.1161	4628
3. Baseline regression:	0.129*	(0.065)	0.1210	4628
4. Baseline regression, with more controls:	0.115*	(0.061)	0.1306	4628
5. Baseline regression, with extensive controls:	0.091	(0.064)	0.1357	4628

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. (Unreported) dummies are included for missing regressors. The baseline regression with fewer controls corresponds to the regression used in Table 2. **The baseline regression adds several controls:** More detailed controls for own education ("primary or less," "lower secondary or second stage of basic," "upper secondary," "post-secondary, non-tertiary," "first stage tertiary," and "second stage tertiary"); third order polynomials in the logs of household income and household size; a quadratic term for age; indicators for whether the spouse is currently working and whether the respondent has ever had a paid job; a set of eight 1/0 dummies expressing religious affiliation. Row 4 adds more controls: a dummy for linguistic minority; coded as 1 if the respondent's primary language spoken at home is spoken by less than 30 percent of the native population; a dummy equal to 1 if the respondent attends religious services once a month or more; a dummy equal to 1 if the respondent voted in the last national election; set of 0/1 dummies for main activity over the last week; three 0/1 dummies to indicate union membership; 10 occupational categories; 16 industry categories. Row 5, includes background controls for mother's and father's education (defined as in Table 2).

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

²⁶Running the model for both groups and include a sample dummy, one cannot reject the hypothesis that the individual characteristics predicting preferences for redistribution have the same effects for both sample groups (p-value: 0.78).

²⁷In order to monitor any potential presence of multicollinearity, I continuously check the Variance Inflation Factor (VIF) for the variable concerning parent culture. However, since I am only interesting in the one relationship between individual preferences for redistribution and cultural preference for status-seeking, there is no need for concerns over multicollinearity among the remaining controls (Wooldridge, 2012).

Table 3 illustrates the estimated coefficients for parent birth country preference for status-seeking. The estimated coefficient is significant at the ten percent level when estimated with more basic controls (row 1). In row 2 the estimated coefficient is generated from at model, identical to that of column 1 in Table 2. More narrowly defined, and additional, controls are added in the regression of row 3. Educational attainment is controlled for with greater detail (now five different dummies, ranging from "primary or less" to "first stage tertiary"), allowing for preferences to vary more with educational background. Differences in the effects of household income and size are controlled for by adding a squared and quadratic terms for both variables, and a squared term for age is added following the same logic. Eight dummy variables for religious affiliation are also included. In addition, the regression in row 3 controls for the spouse's employment status, and whether the respondent has ever had a paying job.²⁸ The estimated coefficient for a one unit increase in the parent birth country preferences for status-seeking is 0.129, which remains significant at the ten percent level. I use this set of controls as the baseline set of controls, and they will be included in all further analyses (unless otherwise stated).

In row 4, I include additional controls for religiousness (religious attendance), whether or not the language spoken at home is a minority language in the country of residence, and voting history (i.e. voted or not) in the most recent national election. Additionally, more economic controls are added, such as respondent's main activity in the previous week, union membership, controls for occupational categories, and controls for occupation industry. Including more controls, seems to decrease the magnitude of the estimated effect of parent birth country culture, although it still appears to be significant at the ten percent level. The more extensive set of controls in row 5 also controls for the educational attainment of the the respondent's parents. Parent birth country preferences for status-seeking still have a positive effect on individual preferences for redistribution, but this effect is no longer statistically significant.

6.2 Cultural transmission from the individual parent

With the results above indicating a significant effect on individual preferences for redistribution coming from the parent birth country preferences for status-seeking, I turn to examining the cultural transmission of preferences coming from the individual parent (i.e. the mother's or the father's culture only, not both). Before proceeding with the results for the effect of the individual parent's birth country preferences for status-seeking on individual preferences for redistribution,

²⁸The motivation of the controls is found in section 5. All controls relate to findings in previous research about determinants deemed significant for preferences for redistribution.

I consider the overlap in observations between observations with either one or both parents immigrating from another ESS survey country. More specifically, I examine the possibility of a stronger cultural effect among those respondents whose parents immigrated from the same country. A re-estimation of the model specification in row 3 of Table 3, using an interaction term between the parent birth country preferences and a dummy variable indicating if parents immigrated from the same country, shows that there is no immediate significant difference in the effect on individual preferences for redistribution. In fact, the estimates suggest a slightly negative (insignificant) effect of parent birth country preferences if both parents migrated from the same ESS survey country.²⁹ Thus, this aspect should not affect the results and hence, the evaluation of whether there is a difference in the effect of cultural preferences for status-seeking when considering the parents cultural preferences separately.

TABLE 4: CULTURAL TRANSMISSION FROM THE INDIVIDUAL PARENT

Dependent variable:					
Subjective preference for redistribution		Parent birth country status- seeking pref.	(SE)	Adjusted R^2	N
Specification:					
Mother's birth country preferences for status-seeking					
1. Baseline regression		0.082**	(0.038)	0.1352	2913
2. Baseline regression, more controls		0.084**	(0.032)	0.1473	2913
3. Baseline regression, extensive controls		0.066**	(0.031)	0.1499	2913
Father's birth country preferences for status-seeking					
4. Baseline regression		-0.002	(0.088)	0.1160	2943
5. Baseline regression, more controls		0.000	(0.083)	0.1261	2943
6. Baseline regression, extensive controls		-0.001	(0.089)	0.1264	2943

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in rows 3, 4, and 5 of Table 3. (Unreported) dummies are included for missing regressors.

- *** Significant at the 1 percent level.
- ** Significant at the 5 percent level.
- * Significant at the 10 percent level.

Table 2 illustrates the results from the estimated regressions. In rows 1-3, I use data for the 2,913 individuals whose mothers immigrated from an ESS survey country different from the respondent's birth/residence country. For these three regressions, the parent culture effect is estimated using the mother's birth country preferences for status-seeking. Similarly, the estimated regressions in rows 4-6 are estimated using data for people whose fathers immigrated from another ESS survey country, where the parent birth country preference for status-seeking are set

²⁹See the estimated coefficients in Table A1 in the Appendix.

to equal the preferences in the father's birth country.

In rows 1 and 4, using the baseline set of controls (see notes for Table 3), the estimated effects of the individual parent's birth country preferences for status-seeking are strikingly different. Statistically significant at the five percent level, the mother's birth country culture has a positive effect on individual preferences for redistribution. Looking at row 4, the father's culture has a small negative effect on individual preferences for redistribution, although this effect is not statistically significant. The remaining results in Table 4 indicate a consistency in the effect of the mother's birth country preferences for status-seeking on individual preferences for redistribution. In row 3, where I include a control for the mother's level of education, the cultural effect appears to still be of significance. As expected, the effect of the mother's birth country decreases when adding more controls to the regression, and the explanatory power of the model increases (evident by the increase in the adjusted R -squared value). In rows 5 and 6, I re-estimate the regression but include more control variables (just as in rows 2 and 3). While the goodness-of-fit of the estimations increase with the inclusion of more control variables, both estimates in rows 5 and 6 for the effect of the father's culture show a weak influence on individual preferences for redistribution, which remains insignificant at all levels.³⁰ While the results suggest a difference in the cultural effect coming from the individual parent, there is still slight overlap of the two samples. As an additional sensitivity analysis I re-estimate the coefficients in rows 1 and 4, using only observations with one immigrant parent, which yields statistically insignificant estimates. Still, the signs of the coefficients are the same as in rows 1 and 4 of Table 4.³¹

6.3 The effect of culture on second-generation immigrant voting behavior

Since the variable used to measure the individual preference for redistribution does not necessarily reflect how an individual would actually behave, thus not mirroring "true preferences," I use an alternative measurement focusing on second-generation immigrants' voting behavior. That is, I test for the effect of intergenerational cultural transmission on redistribution preferences, expressed through voting behavior.³²

³⁰Estimations of the model using more basic sets of controls are consistent with the findings listed in Table 4. See Table A2 in the Appendix for specific results.

³¹See table A3 in the Appendix.

³²To summarize the dependent variable once again: all political parties that respondents voted for are coded by Luttmer and Singhal (2011) using data from the Beck database as being either right (=1), center (=2), or left (=3).

TABLE 5: THE CULTURAL IMPACT ON SECOND-GENERATION IMMIGRANTS' VOTING BEHAVIOR

Dependent variable: Left-right party scale using Beck database				
Specification:	Parent birth country status- seeking pref.	(SE)	Adjusted R^2	N
1. Parent birth country preferences for status-seeking:	0.164**	(0.068)	0.1367	1854
2. Mother's birth country preferences for status-seeking:	0.101*	(0.053)	0.1161	1180
3. Father's birth country preferences for status-seeking:	0.061	(0.066)	0.1667	1099

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3. (Unreported) dummies are included for missing regressors.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

Moreover, In Table 5, using observations with high quality matches for party-alignment, the parent culture effect is listed for three estimated model specifications: (1) the general effect of parent birth country preferences for status-seeking, (2) the effect of mother's birth country preferences, and (3) the effect of father's birth country preferences.

The estimated effect, according to the specification of parent birth country preferences for status-seeking in row 1, shows that a higher preference for status-seeking in the culture of ancestry is associated with a movement to the left on the three-unit Beck scale. An effect that is statistically significant at the five percent level. Rows 2 and 3 indicate that the effect is positive coming from both the mother's and the father's birth country culture. However, the result is not statistically significant for the the effect of the father's culture in row 3. Adding more observations where the party-alignment matches are of lower accuracy, does not change the signs of the estimated coefficients and the effect of parent birth country preferences for status-seeking remains positive (i.e. a left-movement on the Beck left-right scale). While the estimated effect remains statistically significant at the five percent level for the specification in row 1 of Table 5, individual contributions from the mother's and the father's cultures display some changes. The cultural effect coming from father's birth countries has a statistically significant impact on individual voting behavior, while the culture of the mother's birth country has no significant effect.³³ Still, both model specifications estimate positive effects on individual voting behavior, to vote left.

Given the results presented in tables 2 and 3, I cannot reject the first hypothesis of this thesis, which is that preferences for status-seeking in parental birth countries have a positive effect on

³³See Table A4 in the Appendix.

individual preferences for redistribution among second-generation immigrants. Considering the results in Table 4, there are indications in favor of rejecting the second hypothesis. However, given the overlap in observations and the sensitivity analysis using only respondents with one immigrant parent, I cannot with certainty reject that the magnitude of the effect of the mother’s culture is equal to the effect of the father’s culture, on individual preferences for redistribution.

Having examined the effect of parent birth country preferences for status-seeking on individual voting behavior, as an alternative measure of preferences for redistribution, I cannot reject the third hypothesis of this thesis. With the results listed in Table 5, there are robust indications of a significant, positive effect resulting in a tendency of voting for a left-wing party in national elections.

7 Discussion

In this thesis, the aim has been to examine to what extent second-generation immigrants are influenced by cultural preferences for redistribution transmitted from their parents, in a setting of multiple combinations of residence/ancestry-country pairs. Based on an epidemiological approach, the results suggest a significant and robust effect of cultural preferences for status-seeking on individual redistribution preferences.

7.1 Analysis of the main results

In the baseline model, using survey data from 32 European countries, I find both consistent and significant coefficients of the effect from the parent birth country preferences for status-seeking on individual preferences for redistribution. In contrast to previous studies focusing on the influence of status-seeking preferences on preferences for redistribution, such as Coreneo and Grüner (2000, 2002), suggesting a negative relationship, I find that cultural preferences for status-seeking have a positive influence on preferences for redistribution. This may seem counterintuitive, but unlike previous studies on the effect of status-seeking on preferences for redistribution, they are obtained in a cross-country setting, using an empirical method designed to separate the effects of culture from those of the surrounding context. Further sensitivity analyses indicate that the estimates are robust to individual controls in the country of residence, but potentially sensitive to controls relating to parental background. In addition, adding parent birth country status-seeking preferences to the regression model, i.e. columns 1 and 2 in Table 2, only provides a slight increase of the model’s R -squared value. Still, given the risk of attenuation bias, i.e. the likelihood

of obtaining downward biased estimates, when studying the effects of ancestral cultural values on individuals who grew up in a different cultural environment, these results still provide a strong indication that individuals in status seeking cultures are likely to favor more redistribution than individuals in cultures where status, or individual success are (in general) of lesser importance. Among the remaining controls in the initial estimation, my results are consistent with previous research. Economic variables, and relating variables concerning educational attainment, tend to have a negative effect on preferences for redistribution (e.g. Alesina and Giuliano 2010; Luttmer and Singhal, 2011). In contrast to the arguments of McCarty, Poole, and Rosenthal (2006), i.e. that economic factors alone determine political preferences and therefore ultimately also preferences for redistribution, my results echo those of other economists, suggesting a wider range of significant determinants. For example, the estimates for basic demographic controls verify previous findings of gender and differences as significant determinants of preferences for redistribution, even after having controlled for economic variables (e.g. Corson and Gneezy, 2009; Alesina and Giuliano, 2011). Although most importantly, my results indicate a significant cultural determinant through the effect of parent birth country status-seeking preferences.

By further examining the effect of cultural status-seeking preferences I find evidence suggesting that the cultural transmission of preferences in the mother's birth country is stronger than that of the transmission of preferences in the father's birth country (which are insignificant). These findings are in line with previous research (i.e. Luttmer and Singhal, 2011; Dohmen et al., 2008), indicating the effect of cultural preferences is not necessarily transmitted equally from, for example, mother and father. It is interesting to see the mother's birth country culture being both more significant and greater in magnitude than the estimated effect of the father's birth country culture. However, the data does not offer any information to further study potential underlying factors contributing to this observed difference. As further support of the initial findings, the results obtained when examining the effect of parent birth country status-seeking preferences on individual voting behavior prove to be consistent with the estimates generated when using preferences for redistribution as the dependent variable.

Are the results enough to indicate a causal relationship between parent birth country preferences for status-seeking and individual preferences for redistribution among second-generation immigrants? Or, in more general terms: do the results point to a causal relationship between cultural preferences for status-seeking and actual preferences for redistribution? Given the scope of this thesis and the dataset used to test its hypotheses, it is hard to convincingly state that the results imply general causality. The next step of the analysis is therefore to discuss the internal and

external validity of the results.

7.2 Internal validity

Estimating the effect of culture on preferences is challenging, and there are likely many in the field of economic research who would question whether it is possible to evaluate such an effect in a credible way. In order to find a causal effect of cultural status-seeking preferences on individual preferences for redistribution, the proxy for status-seeking preferences must be independent of any omitted variables that influence individual preferences for redistribution. Despite extensive sensitivity analyses and consistent results, I cannot fully exclude the possibility of omitted variable bias in the estimation specifications. There is some concern about the robustness of the results as the effect of parent birth country preferences become insignificant once I include controls for parental educational attainment. On the one hand, such variables could be the outcome of living in a society where individual success is highly valued. It could also be that background variables, on the other hand, are simply more relevant than general preferences for status-seeking. Still, the significance of the results do appear to remain when controlling for the effect of the mother's birth country preferences. In addition, the consistency of the results indicates a positive general effect from parent birth country status-seeking preferences. Taken together with the fact that the epidemiological approach is likely to produce downward biased results, makes the findings more convincing. Still, it is important to address the weaknesses of my empirical strategy. First of all, by following the dataset construction of Luttmer and Singhal (2011) I only use data from three out of seven available waves of ESS survey data. Given the novelty of my thesis topic, the 4,638 of my dataset covering 32 European countries, may not be enough to produce accurate, high quality estimates. Including supplementary data that were omitted by the ESS from the integrated datafile may also distort the results. Moreover, the set of ESS survey countries have developed at different paces throughout history under very different forms of political leadership. One could argue that perhaps living in a ex-Communist country not only influences preferences for redistribution (as previous research indicates), but also influences status-seeking preferences. It could then be the case that my estimated results are partly driven by this effect, and hence do not reflect a general relationship between cultural status-seeking preferences and individual preferences for redistribution. There is also the question of selection bias. It is evident that the majority of countries in the dataset share a border with their most predominant ancestry country. In terms a systematic pattern in migration, it is justified to ask what effect this might have on the results. Given the diversity of countries

in the ESS survey data, possible motives behind relocation to neighbouring countries could be anything from family ties, escaping poverty, to distrust in the government or job-related issues. Thus, while migration is likely not an exogenous event in peoples lives, it is difficult to identify a single commonality that drives this decision. In terms of a possible effect on the results, the primary worry, beyond loss of generality, is that it causes an upward bias of the estimated effect of cultural status-seeking values on preferences for redistribution. Still, even though this may be an issue, I find no evident explanation to support this effect.

It should also be noted that the results may not just suffer from empirical limitations. While increasingly applied in the economic literature, and intuitively appealing, there is no guarantee that, in this setting, the epidemiological approach perfectly manages to isolate the effect of culture on redistribution preferences. Specifically, although I manage to find significant estimates that are in line with Cozzi's (2004) predictions, it is possible that other econometric specifications could provide more accurate results. However, this moves the discussion to questions about refining the epidemiological approach (or finding new methodologies). Something that is beyond the scope of this thesis. In addition, such concerns do not make my results less relevant since this is the first study of, hopefully, many studies to come on this topic.

A general validity concern is the use of dummy variables to indicate missing values, in order to keep as many observations as possible. While this could result in biased estimates of variables with missing values, it is not expected to reduce the validity of the parent birth country culture estimates, as these variables do not contain any missing values. Since the parent birth country preferences for status-seeking is of main interest to this thesis, I will not discuss validity issues among the remaining individual controls.

Do parent birth country preferences for status-seeking affect true preferences for redistribution, in terms of individual voting behavior? The results provide an indication that the relationship between status-seeking preferences in the country of ancestry and preferences for redistribution also holds for voting preferences. However, given the limitations of the data used to estimate this effect, these results should not be considered as anything more than an indication. Voting behavior is likely to depend on many factors, and could be sensitive to macroeconomic fluctuations. Hence, while the results indicate a significant effect, it is difficult to determine their validity. Moreover, one could also question whether individuals who vote for the left-wing parties also have a high preference for redistribution. Since income redistribution is not likely to be the only political issue that separates individual parties, it is possible that the results do not reflect

the intended effect in the estimation.

The issues and concerns discussed above could decrease the validity of the results. While the results provide a first indication of empirical support to Cozzi's (2004) idea that status-seeking cultures promote preferences for redistribution, these results should be interpreted with care.

7.3 External validity

Although my findings appear robust in a setting with 324 unique ancestry/residence-country-pairs, it is difficult to convincingly argue that they would hold if the study was performed using data on another country. An example could be the United States, where general status-seeking preferences are likely very high. A limitation to the dataset in this thesis is that it does not include observations whose parents migrated from the U.S. to an ESS survey country, since the ESS does not cover individuals living there. As noted earlier, much of the previous research on status-seeking has been conducted using either survey data on American residents or other U.S. national data. It is possible that my results would not hold if applied on such data. However, from a global perspective it is more difficult to predict what the outcome would be. As a result, I cannot claim that the findings of this thesis are general enough to guarantee similar results if one were to apply the estimation model on other data sources.

8 Conclusion

This thesis follows an epidemiological approach methodology to study if cultural preferences for status-seeking has a positive effect on preferences for redistribution. It is a first empirical attempt to test the implications of Cozzi's (2004) theoretical model, which suggests an alternative channel of cultural transmission through which preferences for redistribution are partially determined by cultural preferences for status. The results provide a robust indication that parent birth country preferences for status-seeking has a positive effect on individual preferences for redistribution, which is statistically significant. Although the results of a cultural effect are convincing given the persistency exhibited among second-generation immigrants, more research is required before claiming the existence of a causal relationship. However, this thesis shows that the effect is consistent when estimated for a wide range of economic and demographic control variables. Further examination reveals that the effect of cultural status-seeking preferences is likely most strongly transmitted from the mother, which adds to previous research showing similar differences in cultural transmission between individual parents. In addition, the results indicate a positive

effect of cultural status-seeking preferences on individual voting behavior, adding further support that such cultural preferences matter for attitudes towards redistribution. Thus, the answer to the research question of this thesis is that cultural status-seeking preferences are likely to have a positive effect on individual preferences for redistribution among second-generation immigrants. These findings contribute to the ongoing discussion on potential determinants of preferences for redistribution, and offers empirical evidence of a determinant that has received little attention in the economic literature.

The significance of the results in this thesis makes cause for future research to further explore this channel of cultural transmission. Since the topic of this thesis has not been explored to any greater extent in the previous economic literature, a suggestion for future research would be to explore the role of cultural preferences for status-seeking as a determinant of preferences for redistribution in greater detail. While my findings indicate a significant and robust effect, it is still possible that data limitations, model misspecification, or unidentified endogeneity issues have influenced the results. A first step to advance my study could therefore be to re-estimate the model specifications on all available waves of ESS data, or simply evaluate the findings against estimations using other sources of data (e.g. for other regions in the world, such as the United States). Moreover, it would be interesting to see estimation specifications using other proxies for status-seeking preferences in order to further evaluate the validity of the results found in this thesis. Again, preferences for redistribution are likely affected by many different factors. Cozzi's theoretical model is likely to be one piece to explain where from differences in such an important policy issue come from. Still, this thesis presents a strong argument for why this theory deserves more attention from empirical researchers in the future.

9 References

- Aghion, P., Algan, Y. and Cahuc, P. (2008), *Can Policy Influence Culture? Minimum Wage and the Quality of Labor Relations*, IZA Discussion Paper No. 3680, The Institute for the Study of Labor, Bonn.
- Alesina, A. and El Ferara, E. (2005), "Preferences for Redistribution in the Land of Opportunities", *Journal of Public Economics*, Vol. 89, pp. 897-931.
- Alesina, A. and Giuliano, P. (2009), "Family Ties and Political Participation", *Journal of the European Economic Association*, Vol. 9 (5), pp. 817-839.
- Alesina, A. and Giuliano, P. (2011), "Preferences for Redistribution", *Handbook of Social Economics*, Vol. 1A, pp. 93-131, North-Holland.
- Alesina, A. and Glaeser E. (2004), *Fighting Poverty in the US and Europe: A World of Difference*, Oxford University Press, Oxford.
- Alesina, A. and Fuchs-Schündeln N. (2007), "Good Bye Lenin (or not?) The Effect of Communism on People's Preferences", *American Economic Review*, Vol. 97 (4), pp. 1507-1528.
- Allison, P.D. (2009), "Missing Data" in Millsap, R. & Maydeu-Olivares (Eds.), *The SAGE Handbook of Quantitative Methods in Psychology*, pp. 73-91, SAGE Publications, London.
- Almond, D., Edlund, L. and Milligan, K. (2013), "Son Preference and the Persistence of Culture: Evidence from South East Asian Immigrants to Canada", *Population and Development Review*, Vol. 39 (1), pp. 75-95.
- Antecol, H. (2000), "An Examination of Cross-Country Differences in the Gender Gap in Labor Force Participation Rates", *Labour Economics*, Vol. 7 (4), pp. 409-426.
- Basten, C. and Betz, F. (2013), "Beyond Work Ethic: Religion, Individual, and Political Preferences", *American Economic Journal: Economic Policy*, Vol. 5 (3), pp. 67-91.
- Beck, T., Clarke, G., Groff, A., Keefer, P. and Walsh, P. (2001), "New Tools in Comparative Political Economy: The Database of Political Institutions", *World Bank Economic Review*, Vol. 15 (1), pp. 165-176.
- Becker, S.O. and Woessmann, L. (2009), "Was Weber Wrong? A Human Capital Theory of Protestant Economic History", *Quarterly Journal of Economics*, Vol. 124 (2), pp. 531-596.
- Bisin, A. and Verdier, T. (2011), "The Economics of Cultural Transmission and Socialization", *Handbook of Social Economics*, Vol. 1A, pp. 339-416, North-Holland.
- Corneo, G. (2001), "Inequality and the State: Comparing US and German Preferences", *Annales D'Économie et de Statistique*, Vol. 63-64, pp. 283-296.

- Corneo, G. and Grüner, P.H. (2000), "Social Limits to Redistribution", *American Economic Review*, Vol. 90 (5), pp. 1491-1507.
- Corneo, G. and Grüner, P.H. (2002), "Individual Preferences for Political Redistribution", *Journal of Public Economics*, Vol. 83, pp. 83-107.
- Croson R. and Gneezy, U. (2009), "Gender Differences in Preferences", *Journal of Economic Literature*, Vol. 47 (2), pp.448-474.
- Cozzi, G. (2004), "Rat Race, Redistribution, and Growth", *Review of Economic Dynamics*, Vol. 7, pp. 900-915.
- Dohmen, T.J., Falk, A., Huffman, D. and Sunde, U. (2008), *The Inter-generational Transmission of Risk and Trust Attitudes*, Working Paper No. 2307, Center for Economic Studies (CESifo), Munich.
- Dusenberry, J. (1949), *Income, Saving, and the Theory of Consumer Behavior*, Harvard University Press, Cambridge, MA.
- Farre, L. and Vella, F. (2007), *The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labor Force Participation*, IZA Discussion Paper No. 2802, The Institute for the Study of Labor, Bonn.
- Fernandez, R. (2007), "Women, Work and Culture", *Journal of the European Economic Association*, Vol. 5 (2-3), pp. 305-508.
- Fernandez, R. (2011), "Does Culture Matter?", *Handbook of Social Economics*, Vol. 1A, pp. 481-510, North-Holland.
- Fernandez, R. and Fogli, A. (2009), "Culture: An Empirical Investigation of Beliefs, Work and Fertility", *American Economic Journal: Macroeconomics*, Vol. 1 (1), pp. 146-177.
- Fisman, R. and Miguel, E. (2007), "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets", *Journal of Political Economics* Vol. 115 (6), pp. 1020-1048.
- Fong, C. (2001), "Social Preferences, Self-Interest, and the Demand for Redistribution", *Journal of Public Economics*, Vol. 82, pp. 225-246.
- Geishecker, I. and Görg, H. (2013), "Services Offshoring and Wages: Evidence from Micro Data", *Oxford Economic Papers* Vol. 65 (1), pp. 124-146.
- Giuliano, P. and Spilimbergo, A. (2014), "Growing up in a Recession", *Review of Economic Studies*, Vol. 81, pp. 787-817.

- Guiso, L., Sapienza, P. and Zingales, L. (2006) "Does Culture Affect Economic Outcomes?", *Journal of Economic Perspectives*, Vol. 20 (2), pp. 23-48.
- Hayami, Y. (2001), *Development Economics: From Poverty to the Wealth of Nations*, 3rd edition, Oxford University Press, New York, NY.
- Huber, J. and Inglehart, R. (1995), "Expert Interpretations of Party Space and Party Locations in 42 Societies", *Party Politics*, Vol. 1 (1), pp. 73-111.
- Huberman, B.A., Loch, C.H. Öncüler, A. (2004), "Status As a Valued Resource", *Social Psychology Quarterly*, Vol. 67 (1), pp.103-114.
- Karabarbounis, L. (2011), "One Dollar, One Vote", *The Economic Journal*, Vol. 121 (553), pp. 621-651.
- Luttmer, E. (2005), "Neighbours as Negatives: Relative Earnings and Wellbeing", *Quarterly Journal of Economics*, Vol. 120, pp. 963-1002.
- Luttmer, E. and Singhal, M. (2011), "Culture, Context, and the Taste for Redistribution", *American Economic Journal: Economic Policy*, Vol. 3, pp. 157-179.
- McCarty, N., Poole, K. and Rosenthal, H. (2006), *Polarized America: The Dance of Ideology and Unequal Riches*, MIT Press, Cambridge, MA.
- Meltzer, A.H. and Richard, S.F. (1981), "A Rational Theory of the Size of Government", *Journal of Political Economy*, Vol. 89 (5), pp. 914-927
- Mirrlees, J.A. (1971), "An Exploration in the Theory of Optimum Income Taxation", *The Review of Economic Studies*, Vol. 38 (2), pp.175-208.
- Paskov, M. (2015), *Is Solidarity Less Important and Less Functional in Egalitarian Contexts?* [Online], Acta Sociologica, available at: <http://asj.sagepub.com/> [Accessed 10 November 2015]
- Paskov, M., Gërzhani, K. and Van de Werfhorst H.G. (2013), *Income Inequality and Social Anxiety*, GINI Discussion paper No.90, AIAS, Amsterdam.
- Piketty, T. (1995), "Social Mobility and Redistributive Politics", *Quarterly Journal of Economics*, Vol. 110 (3), pp. 551-584.
- Postlewaite A. (2011) "Social Norms and Preferences", *Handbook of Social Economics*, Vol. 1A, pp. 31-67, North-Holland.
- Robson, A.J. and Samuelson, L. (2011), "The Evolutionary Foundations of Preferences", *Handbook of Social Economics*, Vol. 1A, pp. 221-310, North-Holland.
- Smith A. (1776), *The Wealth of Nations*, Reprint 1937, Random House, New York, NY.

Veblen, T. (1899), *The Theory of the Leisure Class*, Reprint 1965, MacMillan, New York, NY.

Weber, M. (1930), *The Protestant Ethic and the Spirit of Capitalism*, George Allen & Unwin, London.

Wooldridge, J.M. (2012), *Introductory Econometrics: A Modern Approach*, 5th edition, South-Western College Publishers, Mason, OH.

Yamamura, E. (2012), "Social Capital, Household Income, and Preferences for Income Redistribution", *European Journal of Political Economy*, Vol. 28, pp. 498-511.

10 Appendix

Summary statistics

MAIN DEPENDENT/CONTROL VARIABLES					
Variable	N	mean	sd	min	max
<i>Dependent variables</i>					
Subjective preference for redistribution	4628	3.839	1.068	1	5
Beck right-left scale	2185	2.044	.948	1	3
<i>Main explanatory variables</i>					
Parent birth country status-seeking pref.	4628	3.916	.347	2.919762	4.71779
Mother's birth country status-seeking pref.	2913	3.991	.415	2.919762	4.793553
Father's birth country status-seeking pref.	2943	4.026	.419	2.919762	4.793553

CONTROL VARIABLES IN TABLE 2					
Variable	N	mean	sd	min	max
Age	4628	45.552	16.997	18	97
Female	4628	0.531	0.499	0	1
Own education low	4611	0.230	0.421	0	1
Own education secondary level	4611	0.462	0.499	0	1
Own education high	4611	0.308	0.462	0	1
Partner's education low	2586	0.220	0.414	0	1
Partner's education secondary level	2586	0.427	0.495	0	1
Partner's education high	2586	0.353	0.478	0	1
Married	4603	0.501	0.500	0	1
Separated or divorced	4603	0.129	0.336	0	1
Widowed	4603	0.081	0.273	0	1
Never married	4603	0.289	0.453	0	1
log household income	3636	9.552	1.309	6.397	12.388
log household size	4625	0.867	0.531	0	2.485
Had paid work last week	4613	0.589	0.492	0	1
Unemployed >12m	4602	0.140	0.347	0	1
<i>Primary source of income</i>					
Wage or salary	4546	0.648	0.478	0	1
Self-employed	4546	0.056	0.230	0	1
Pension	4546	0.226	0.418	0	1
Unemployment benefits	4546	0.023	0.151	0	1
Social benefits	4546	0.026	0.160	0	1
Investments	4546	0.005	0.072	0	1
Other	4546	0.016	0.124	0	1
Children living at home	4614	0.415	0.493	0	1
Living in metropolitan area	4623	0.379	0.485	0	1
ESS wave 2	4628	0.533	0.499	0	1

OTHER CONTROL VARIABLES					
Variable	N	mean	sd	min	max
Voted in last national election	4579	0.691	0.462	0	1
Attending religious services min. once/week	4607	0.190	0.392	0	1
Lingustic minority 30%	4605	0.243	0.429	0	1
<i>Industries</i>					
Agriculture	4211	0.035	0.184	0	1
Fishing	4211	0.002	0.046	0	1
Mining	4211	0.009	0.095	0	1
Manufacturing	4211	0.197	0.398	0	1
Utility	4211	0.014	0.118	0	1
Construction	4211	0.068	0.251	0	1
Trade	4211	0.127	0.333	0	1
Hotel	4211	0.035	0.184	0	1
Transportation	4211	0.067	0.250	0	1
Finance	4211	0.035	0.183	0	1
Real Estate	4211	0.090	0.286	0	1
Public admin	4211	0.052	0.223	0	1
Education	4211	0.086	0.280	0	1
Health and Social work	4211	0.103	0.303	0	1
Service	4211	0.072	0.259	0	1
House work	4211	0.008	0.090	0	1
Extra territorial work	4211	0.000	0.022	0	1
<i>Main activity last week</i>					
Work	4610	0.545	0.498	0	1
Education	4610	0.070	0.256	0	1
Unemployed looking for job	4610	0.042	0.200	0	1
Unemployed not looking for job	4610	0.018	0.133	0	1
Permanently sick/disabled	4610	0.024	0.154	0	1
Retired	4610	0.198	0.399	0	1
Community/military service	4610	0.002	0.039	0	1
Childcare	4610	0.092	0.288	0	1
Other	4610	0.009	0.096	0	1
<i>Occupations</i>					
Armed forces	4266	0.003	0.051	0	1
Legislators and managers	4266	0.084	0.277	0	1
Professionals	4266	0.141	0.348	0	1
Technicians	4266	0.180	0.385	0	1
Clerks	4266	0.105	0.307	0	1
Service workers	4266	0.152	0.359	0	1
Skilled agricultural workers	4266	0.023	0.151	0	1
Craftsmen	4266	0.134	0.340	0	1
Operators	4266	0.083	0.275	0	1
Elementary occupations	4266	0.096	0.295	0	1
Member of union	4628	0.484	0.500	0	1
Even been union member	4628	0.213	0.410	0	1
Mother's education low	4198	0.562	0.496	0	1
Mother's education secondary level	4198	0.266	0.442	0	1
Mother's education high	4198	0.172	0.377	0	1
Father's education low	4034	0.459	0.498	0	1
Father's education secondary level	4034	0.313	0.464	0	1
Father's education high	4034	0.228	0.420	0	1

OTHER CONTROL VARIABLES (CONTINUED)					
variable	N	mean	sd	min	max
<i>Own education</i>					
Primary or less	4611	0.082	0.274	0	1
Lower secondary	4611	0.148	0.355	0	1
Secondary school	4611	0.462	0.499	0	1
Upper secondary	4611	0.027	0.162	0	1
Tertiary	4611	0.281	0.450	0	1
<i>Religious affiliation</i>					
No religion	4497	0.466	0.499	0	1
Catholic	4497	0.244	0.430	0	1
Protestant	4497	0.095	0.293	0	1
Orthodox	4497	0.147	0.354	0	1
Other Christian denominations	4497	0.020	0.141	0	1
Jewish	4497	0.002	0.039	0	1
Muslim	4497	0.021	0.142	0	1
Other denominations	4497	0.006	0.077	0	1
Ever had a paid job	4608	0.934	0.249	0	1
Partner had paid work last week	2677	0.646	0.478	0	1

Tables

TABLE A1: CULTURAL TRANSMISSION FROM THE INDIVIDUAL PARENT

Dependent variable:				
Subjective preference for redistribution		Parent birth country status-seeking pref.		
Specification:		(SE)	Adjusted R^2	N
1. Parent birth country preferences for status-seeking		0.129*	(0.065)	0.1210
2. Baseline regression with interaction:		0.092	(0.112)	0.1202
Parents sharing the same birth country		−0.018		4628

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE A2: CULTURAL TRANSMISSION FROM THE INDIVIDUAL PARENT

Dependent variable: Subjective preference for redistribution				
Specification:	Parent birth country status- seeking pref.	(SE)	Adjusted R^2	N
Mother's birth country preferences for status-seeking				
1. Only including country fixed effects	0.094**	(0.039)	0.0862	2913
2. Baseline regression, fewer controls	0.074**	(0.033)	0.1312	2913
Father's birth country preferences for status-seeking				
3. Only including country fixed effects	0.008	(0.074)	0.0750	2943
4. Baseline regression, fewer controls	-0.009	(0.084)	0.1102	2943

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in rows 1 and 2 of Table 3.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE A3: CULTURAL TRANSMISSION IN HOUSEHOLDS WITH ONE IMMIGRANT PARENT

Dependent variable: Subjective preference for redistribution				
Specification:	Parent birth country status- seeking pref.	(SE)	Adjusted R^2	N
Mother's birth country preferences for status-seeking				
1. Baseline regression	0.049	(0.054)	0.1118	1685
Father's birth country preferences for status-seeking				
4. Baseline regression	-0.108	(0.118)	0.1085	1715

Notes: Robust standard errors are adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE A4: THE CULTURAL IMPACT ON VOTING BEHAVIOR INCL. LOW QUALITY OBSERVATIONS

Dependent variable:				
Left-right party scale using Beck database		Parent birth country status-seeking pref.		
Specification:		(SE)	Adjusted R^2	N
1. Parent birth country preferences for status-seeking:	0.154**	(0.075)	0.1001	2185
2. Mother's birth country preferences for status-seeking:	0.037	(0.048)	0.0990	2165
3. Father's birth country preferences for status-seeking:	0.126***	(0.043)	0.1020	2159

Notes: Robust standard errors adjusted for clustering by birth country are in parentheses. All regressions include the same control variables as the baseline regression reported in row 3 of Table 3.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

Luttmer and Singhal (2011) do-file

The STATA do-file and additional non-ESS data were accessed and downloaded on October 15th (2015) from the official website of the American Economic Association (AEA) via the following link:

<https://www.aeaweb.org/articles.php?doi=10.1257/pol.3.1.157>

European Social Survey (ESS) data

Below follows a list of data files accessed via the official ESS website (europeansocialsurvey.org), on October 15th (2015). Integrated files were selected according to the specifications provided in the STATA do-file by Luttmer and Singhal (2011). All additional country-specific data were selected according to the specifications by Luttmer and Singhal (2011) as well as the documentation reports containing information regarding revisions made to the integrated files:

- ESS1 Data Documentation Report ed. 6.4
- ESS2 Data Documentation Report ed. 3.5
- ESS3 Data Documentation Report ed. 3.5

Integrated files:

- ESS1 - integrated file, edition 6.4
- ESS2 - integrated file, edition 3.4
- ESS3 - integrated file, edition 3.5

ESS DATA SUMMARY						
Country:	Country-Specific data			Country File		
	1	2	3	1	2	3
Austria (AT)	*					
Belgium (BE)						
Bulgaria (BG)			*			
Switzerland (CH)		*				
Cyprus (CY)						
Czech Rep. (CZ)	*					
Germany (DE)						
Denmark (DK)		*				
Estonia (EE)		*				
Spain (ES)						
Finland (FI)	*	*				
France (FR)	*	*				
Great Britain (GB)		*				
Greece (GR)						
Hungary (HU)	*	*				
Ireland (IE)	*					
Israel (IL)						
Iceland (IS)						
Italy (IT)					*	
Luxembourg (LU)						
Latvia (LV)			*			*
Netherlands (NL)						
Norway (NO)					*	
Poland (PL)						
Portugal (PT)						
Romania (RO)			*			*
Russia (RU)			*			
Sweden (SE)	*	*				
Slovenia (SI)						
Slovakia (SK)						
Turkey (TR)		*				
Ukraine (UA)		*	*			

Notes: Column 1 illustrates for which countries, country-specific data files were accessed and later merged into the final dataset. Column 2 provides additional indications as to which countries had not been fully included in the integrated ESS files. At the top of each column are indicators of which ESS Round the specific data file belongs to. More information on the data and the procedures of the ESS can be found on the organization's official website (europeansocialsurvey.org).