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## Understanding Social Mobility, Economic Environment, and Their Effects on Social Policy Attitudes

A Dissertation presented

by

Patrick L. Lown

to

The Graduate School

in Partial Fulfillment of the

Requirements

for the Degree of

Doctor of Philosophy

in

**Political Science** 

(Concentration - Political Psychology/Behavior)

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#### Abstract of the Dissertation

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Economic opportunity has long been a topic of interest among students of society and politics, and has made its way back to the forefront of inquiry with the resurgence of levels of inequality beyond those observed during the Gilded Age in the 1920s. Recent studies conducted by The Pew Charitable Trust Mobility Project, as well as others, have revealed that despite Americans' beliefs in a land of opportunity, the chances to get ahead in life have dwindled for many. However, there is a dearth of information about what members of the public think about their own economic mobility and the effect this has on important political questions, such as preferred levels of redistribution and amount and type of social spending. This dissertation examines the role of mobility in determining attitudes with consideration to aspects of one's economic environment including the presence of poverty or high inequality. Unlike most of the prior research on social mobility and political attitudes, Studies 1 and 2 rely on panel data to examine actual change in income over time. Study 1 explores the effects of long-term social mobility as well as examines the durability of the effects of economic environment during primary political socialization in adolescence. Study 2 examines short-term mobility during the Great Recession and the effects of experienced economic hardships. Finally, Study 3 expands the scope of the dissertation to a cross-national perspective and explores the relationship between perceived social mobility, attitudes toward the wealthy, and social welfare attitudes in forty-one countries. Ultimately, the dissertation reinforces prior findings that upward mobility is generally associated with political conservatism, but finds that these effects are more modest than might otherwise be expected. Additionally, in terms of relationship between personal economic fortune and political attitudes, it matters more where you are going than where you have been.

#### **Dedication Page**

This dissertation is dedicated to my parents, to whom I owe everything and whose love, pride, and faith in me have never wavered. My parents have played many roles in my life, for all of which I am grateful: travel agent, chef, councilor, doctor, banker, legal advisor, confidant, friend, mom, and dad. Thank you for always being there and for putting up with my voluntary vow of poverty for the last five years.

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#### List of Abbreviations

Include this list if applicable.

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## Chapter 1

# Introduction: Social Welfare Attitudes and Mobility as a Process of Socialization

The United States of America has long been viewed as the land of opportunity, a place where success is ripe for the taking for those who show hard work, tenacity, and ingenuity. It is the nation of the upwardly mobile. However, the financial crisis following the collapse of the sub-prime housing market in 2008, commonly known as the Great Recession, has caused many to question the health of this American Dream. Despite a growing economy, one of the most conspicuous trends of the post-recession recovery has been that a substantial portion of post-recession gains have gone to the top echelons of society, with income inequality reaching record highs beginning in 2012 (Piketty and Saez 2003). Accompanying this trend has been the continued difficulties facing the rest of Americans, for whom unemployment and stagnated wages have been an unremitting issue.

Classical theories of redistributive democracy suggest that such adverse economic circumstances should spur reaction from the majority of the public who would be relatively advantaged by using their superior numbers at the polls to elect candidates who will redistribute wealth through taxation (Lenski 1966; Lipset and Bendix 1959; Meltzer and Richard 1981). Yet, in America, just over half (55%) of poor respondents indicated that they would support raising taxes on the wealthy to fund programs to aid the poor (Hochschild 1981), which of course is in their own economic interests. Further, a recent post-recession survey of Americans from the Pew Research Center found that only 44% believed that raising taxes on high-earners would make the tax system more fair. Overall, there is a very limited segment of the American public that supports increasing redistributive taxation to provide a wider variety social benefits, particularly when compared to European counterparts (Alesina, Glaeser and Sacerdote 2001).

During the Great Recession, the unemployment rate topped 10% with an estimated additional 6.5% of Americans being underemployed, according to the Bureau of Labor Statistics (Sum and Khatiwada 2010). These trends potentially have great consequences for the economic beliefs and social policy attitudes of those experiencing such immediate downward social mobility. Indeed, the impact of social mobility on political beliefs and attitudes has been left largely unexplored by political scientists over the last few decades.

 $<sup>^1{\</sup>rm The}$  full details of the survey may be found on the Pew Research Center's website: http://www.people-press.org/2012/07/16/raising-taxes-on-rich-seen-as-good-for-economy-fairness/

While the consensus in political science appears to be that there is a lack of evidence for self-interested behavior (Kinder and Kiewiet 1981, 1979; Sears and Funk 1991; Schlozman and Verba 1979), there is still a large body of work that suggests individuals are greatly impacted by their economic standings and hardships, including unemployment (Eisenberg and Lazarsfeld 1938; Clark 2003; Liem and Liem 1988) and poverty (Mani et al. 2013). For example, a recent report from the American Psychological Association found a growing gap in financially oriented stress between the 'haves' and 'have-nots' in society (Anderson et al. 2015), suggesting that the emotional impact of a recession may differ on average by how much one is affected. Adverse financial situations that result for individuals are not only measured in dollars and cents; such situations also level an emotional toll as well. This divide represents a growing experience gap that is worth exploring, between those who are doing well in America and those who struggling.

The key to understanding relatively low levels of support for the welfare state in the United States has often been attributed to American beliefs about success (Feldman 2003; Feldman and Zaller 1992; Fong 2004; Hochschild 1981; Kluegel and Smith 1986). However, the exact nature of the relationship between beliefs and one's economic status is still hotly debated, with some scholars attributing ignorance (Bartels 2005, 2008) or ideologically-induced blindness (Hochschild 1981; Jost, Banaji and Nosek 2004) to lower-class citizens who do not appear to support their own interests, while others argue that it is simply that they are prospective in their thinking toward their own prospects rather than focused on contemporary economic status (Benabou and Ok 2001). Additionally, recent work suggests that individuals hold latent beliefs regarding the fairness of their economic circumstances, but that these must be 'activated' by contextual triggers such as local economic inequality (Newman, Johnston and Lown 2013).

While a great deal is known about the sets of beliefs that are relevant to how citizens relate to the economic world, much less is known about how these beliefs develop. Economic beliefs, particularly those regarding the relation between hard work and success, are sometimes seen as fairly uniform among Americans (relative to Europeans, for example). In reality there is quite a bit of variation: Why do some individuals see the economic system as fair? Why do some individuals prefer redistribution instead? And where do these beliefs originate? The goal of this dissertation project is to explore a variety of sources of economic experiences and how they relate to individuals' economic beliefs and preferences for government redistribution and social programs.

Below and in the subsequent chapters I develop a socialization theory that holds economic experiences to be a central factor in fostering economic beliefs and social policy preferences. In particular, social mobility plays a major role in determining the types of experiences to which individuals will be exposed, and as a result the types of beliefs that they will develop. The majority of the work involving mobility to-date has been cast in a rational choice framework in which individuals are simply responding to incentive structures, be it through monitoring their own likely future financial states (Benabou and Ok 2001) or through learning about the potential pay-offs of personal effort (Piketty 1995). My socialization theory offers a much broader scope that incorporates a wide range of sources of personal economic experiences, beginning with those during adolescent socialization and continuing through adulthood, as well as their psychological consequences on economic beliefs and social policy preferences.

## Political Socialization of Economic Beliefs and Social Welfare Attitudes

The recent realization that social mobility is more limited than has been believed historically is a true threat to the American ideal of a meritocratic environment where hard work, dedication, and ingenuity are appropriately rewarded. It is of paramount importance to understand not only the dynamics and causes of social mobility, as has been the focus of economists, sociologists, and other observers of economic life, but also to understand how it is itself perceived by the individuals in its midst and the consequences it holds for their beliefs and attitudes. Of particular importance is the relationship between mobility and support for social welfare policies that have often been advocated as the solution to the high levels of inequality and associated low levels of mobility found in contemporary American society (Urahn et al. 2012; Chetty et al. 2014).<sup>2</sup> In understanding these effects, it is crucial to explore the underlying process of socialization that shapes citizens as they move between economic strata, attitudes and beliefs adapting to their new socio-economic circumstances.

Models of public opinion and voting would benefit greatly from broadening the understanding of how individuals comprehend and are influenced by the ebb and flow of the financial tide in their lives. In addition to more accurately reflecting an individual's economic history than point estimates of income, a focus on social mobility also offers the opportunity to explore how individuals' beliefs change to reflect those circumstances. Social mobility represents a more complex process than is represented solely by a change in income, a process of learning in which individuals rely on information from their changing economic environment to update their beliefs (Piketty 1995; Abramson and Books 1971).

#### **Understanding Self-Interest**

Self-interest is the baseline by which individual behavior is often judged and is perhaps one of the oldest explanations of the source of political preferences and economic beliefs. Despite the lack of evidence for self-interested behavior from other areas of political science (Kinder and Kiewiet 1981, 1979; Sears and Funk 1991; Schlozman and Verba 1979), there are well-documented effects of income on beliefs about success and attitudes towards redistribution. The wealthy are by and large the strongest adherents to meritocratic beliefs and the most averse to progressive taxation and social programs, and this is even more true of the very top tiers of the economic elites (Page, Bartels and Seawright 2013). Furthermore, there is a growing body of evidence that suggests that mobility is consistently associated with beliefs about success and attitudes regarding mobility moving in a more conservative direction (Alesina and Giuliano 2009; Piketty 1995). A second approach, the prospect of upward mobility (POUM) hypothesis (Benabou and Ok 2001), suggests that it could be rational for individuals to oppose redistribution in the present if they expect to be upwardly mobile in the future. However, POUM is theoretically based on the assumption that individuals rationally hold the expectation upward mobility. Even if it is assumed that people accurately perceive their chances of mobility, the problem still remains that mobility itself is often very restricted in the United States, particularly at the ends of the income distribution.

<sup>&</sup>lt;sup>2</sup>The connection between high rates of inequality and stunted mobility has been colloquially termed the "Great Gatsby Curve" (Krueger 2012).

A recent study from the Pew Center's Economic Mobility Project (Urahn et al. 2012) titled "Pursuing the American Dream" showed that while the vast majority (84%) of Americans have higher incomes than their parents at the same age, it is very difficult for individuals to rise above their parents' position relative to others. Nearly half of Americans (43%) born into in the bottom quintile of the country, remain there, with a full seventy percent remaining below the middle. This pattern is also mirrored by the top quintile, where forty percent of those born there remain throughout their lives, and sixtythree percent remain above the middle. Only a relatively small portion (8%) of those born at the top, slip all the way to the bottom, just as there are only a fairly small number (4%)of "rags-to-riches" stories in which individuals born into the bottom quintile are able to climb all the way to the top of the income ladder. And by some accounts, these estimates of societal mobility rates may be a bit generous. By ingeniously using records of surnames and occupations, Clark (2012) finds that individuals' economic stations have even higher inter-generational retention of status when considered from a historical perspective. By all accounts, the objective state of mobility in the United States makes it difficult to believe that individuals would oppose redistribution because they rationally expect to move from richer than average to poorer than average as the POUM hypothesis suggests (Benabou and Ok 2001).

As a theoretical exercise, the POUM hypothesis makes its point: if individuals could rationally expect to experience upward mobility, it would be in their interest not to support any measure of redistribution that would potentially effect them in the future. Indeed, given the rates of mobility observed in the U.S., it seems unlikely that many Americans would be able to rationally deduce that they will soon be upwardly mobile. Additionally, POUM's outlook is prospective. While it provides some basis by which individuals who are currently economically disadvantaged might rationally oppose redistribution, it provides very little insight into how individuals beliefs are shaped by their economic experiences. Furthermore, the lack of redistribution in the US would seem to suggest a counter-example of rational position-taking, suggesting that a self-interested approach cannot provide a full explanation.

As a retrospective process, mobility represents much more than moving from a current income state to an expected one. Mobility is instead a much fuller process of accumulating economic experiences. As individuals' economic circumstances change, so do the contexts of their material and social lives. These changes can include a new material environment, for example as an upwardly mobile individual grows into a larger disposable income or as someone who is downwardly mobile must tighten their belt. An upwardly mobile individual may be able to relocate geographically to a nicer area, while someone who is downwardly mobile may be forced to take up residence somewhere more humble than that to which they were accustomed. A new job or living in a new area brings with it exposure to new people and the acquisition of new friends, individuals of a social class that is likely to be different than former members of a mobile individuals' social network. And while all of these changes have plausible influences on individuals' political outlooks, it is difficult to capture them with a fully-rational approach.

Self-interest need not be completely expunged from an understanding of economic preferences and beliefs. Instead, economic beliefs may change in tandem with changes in more objective self-interest. All of these changes resulting from social mobility represent potential sources of economic information that shape beliefs. As individuals move between income brackets, and potentially classes, their political interests and beliefs may change as well. A change of circumstance that becomes enduring may produce a process

of re-socialization (Abramson and Books 1971). While the socially mobile tend to hold attitudes and beliefs that fall somewhere in between their points of origin and destination (Piketty 1995), both higher income and upward mobility are associated with more economically conservative political attitudes (Alesina and Giuliano 2009; Alesina and Angeletos 2005; Di Tella, Galiani and Schargrodsky 2007). The relatively wealthy are more likely to believe that opportunity for advancement exists for everyone, that people earn their economic position through hard work or lack thereof, and that the inequality that exists in the system is just (Rytina, Form and Pease 1970). Indeed, they may be motivated to foster these beliefs as a psychological defense mechanism to defend their elevated states in the face of perceived unfairness (Benabou and Tirole 2006; Jost, Banaji and Nosek 2004). However, it is important to recognize that these the development of beliefs in line with self-interest will be a gradual process, especially to the extent that new economic experiences provide information that is difficult to integrate with their current outlook.

#### Primary Socialization and the Development of Political Beliefs

Beliefs about success and opportunity have previously been shown to have important impacts on the willingness of people to support social welfare efforts to redistribute wealth (Alesina and Angeletos 2005; Alesina and Giuliano 2009; Di Tella, Galiani and Schargrodsky 2007). Those who believe that everyone has a fair chance to get ahead in life and that it can be achieved solely or mostly through personal effort or ability are less likely to think that the government has a role in elevating the poor or needy and curbing inequality. However, it is less clear where these beliefs originate.

As with most political beliefs, attitudes, or attachments, the often untested assumption regarding the origin of economic beliefs is that they are the result of the primary socialization process during adolescence (Sears 1975). Early work on socialization including The American Voter (Campbell et al. 1960) identified parental influence as a powerful force in the transmission of political attitudes, most specifically that of partisanship. In a landmark study, Niemi and Jennings (1991a) found that parental partisanship continues to influence the partisanship of their children well into adulthood, though this influences diminishes noticeable after the separation of children from their parents. Ghitza and Gelman (2014) also find that the political events of a citizen's adolescence and early adulthood are crucial in the formation of long-term partisan attachments. However, Sears (1975) offers a word of caution regarding the limited body of evidence for the transmission of specific beliefs or orientations from parent to child, suggesting that the transmission of partisanship is much more well supported and may be a special case.

While Sears (1975)' misgivings are well-noted, many of these questions about the socialization of beliefs remain open and somewhat unanswered because, as Sapiro (2004) notes, the sub-field is a little behind the times. Of particular note, and the focus of this dissertation, is the socializing effects of changes in personal socio-economic environment. One possible reason that the effects of parental influence on specific beliefs and attitudes have been observed to be somewhat weak may be because they are more difficult to detect because of change over one's lifetime due to changes in life circumstances. With specific regard to changes in economic position, Piketty's (1995) theoretical model emphasizes the importance of family background and economic mobility for beliefs about success and preferences for redistribution. The model assumes that individuals begin their political lives with initial preferences based on those of their parents as well as their social origin

(which in this case refers to social class). As their lives progress, the now-adult children update their economic beliefs based on the relative success that they observe within their family.

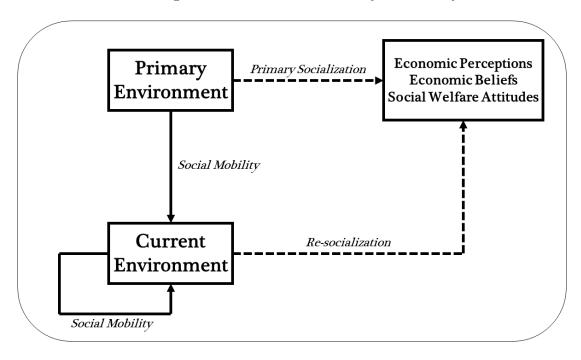
Piketty's model therefore also emphasizes the importance of the parental role in political socialization, but adds to this an understanding that the development of economic beliefs is an ongoing socialization process, though he does not name it as such. As people move from their primary socialization environments that are largely governed by their parents into their own adult lives, they continue to acquire experiences that, while weighted by their beliefs acquired in adolescence, influence their future views of the political world. Rogoff et al. (2003) identify two models of socialization. First, there is the direct transmission of information from an expert (parent, teacher, etc.) to a learner (child or other individual), known as the transmission model. Alternatively, socialization may take place through "observing and listening in anticipation of or in the process of engaging in an endeavor." The political socialization literature focuses primarily on the first and often leaves change due to new experiences to be explored through the lens of specific events such as political campaigns (Valentino and Sears 1998; Sears and Valentino 1997) or pertinent historical events like the September 11th terrorist attacks. Yet this all falls under the process of socialization, which is a lifelong process of inheriting and disseminating aspects of culture such as norms, beliefs, or customs (Clausen 1968).

This second, more direct process of socialization is the central process at work in the socialization approach to mobility in this dissertation, however both processes are present. Consider that socio-economic circumstances are inherently abstractions. When we speak of unemployment status or income level having an effect on or association with a political belief or attitude, we are often omitting possible causal explanations for the sake of simplification. There are almost without doubt more proximate causes responsible for this association for which income, unemployment, or other economic indicators serve as proxies. Income in particular, while representing a concrete amount of money, signifies a host of other things including social status, a certain lifestyle, the types of people who may be found in your social network, and so forth.

In order to fully explain the changes in attitudes or beliefs of the socially mobile, it is necessary to personalize the process of mobility and consider the social consequences of changes in economic surrounding. On one hand, many of these experiences are captured by this second, more direct type of socialization. For example, personal experiences with the frustrations of economic hardship or poverty for low-income individuals provide a first-hand understanding of the challenges of being poor and shape beliefs regarding personal responsibility for circumstance. Wealthier individuals may, by contrast, be largely shielded from these types of experiences and not receive any information regarding the experience of poverty, even second hand.

Other direct experiences could come from the local economic environment itself. For example, in residing in a high-poverty area, an individual may have a very different set of economic experiences, such as constant exposure to want, desperation, and disrepair. Inequality in the local environment also provides information upon which to base economic beliefs. Direct manifestations of inequality might be the coexistence of signs of affluence and marks of poverty, such as a gated community of million dollar homes across the tracks from public tenement buildings. Indeed, Newman, Johnston and Lown (2013) find that local inequality can polarize economic beliefs along class lines, suggesting that individuals draw economic information from their immediate environments, but synthesize it in line with their previous experiences. Thus, this process is not one of perfect Bayesian updat-

Figure 1.1: Socialization Theory of Mobility



ing. Economic information can also be be acquired from friends, other social network members, and perhaps even encounters with strangers in one's economic environment. For example, Newman (2014) shows that having low-income individuals in one's social network increases perceptions of systemic unfairness and support for government efforts to address inequality.

#### A Socialization Theory of Personal Social Mobility

The theoretical perspective of this dissertation is based in part on Piketty's (1995) theory of social mobility in that it begins with individuals being socialized in adolescence by their parents and suggests that they update their beliefs as they move into their adult lives. Diverging from Piketty, I suggest that beyond individuals updating their beliefs based on their mobility and current economic status, that this process is also contingent on aspects of their economic and political environment.

Additionally, Piketty's focuses on individual agents gathering information about the payoffs of various levels of effort in the form of social mobility. In his model, agents receive information both from their belief 'dynasties' which are made up of previous generations of agents (i.e. parents) as well as their own individual experimentation with personal effort. To this I also add a host of other potential economic experiences that provide other forms of information as well, including one's local economic environments.

#### Social Mobility: A Process of Adulthood Re-socialization

The engine of my socialization model is the process of mobility itself. Throughout adulthood, individuals social and economic environments change largely as a result of social mobility. Based on previous research we would expect that upward mobility is

associated with movement of economic preferences and beliefs in a conservative direction. However, this is a gradual process. The upwardly mobile tend to be more moderate than their more stable counterparts (Lopreato and Hazelrigg 1970), as they are in the process of re-socializing from their former class to the class of their destination (Jackman 1972; Graaf, Nieuwbeerta and Heath 1995). Specifically, youths will tend to learn and approximate the norms and values of their social class of origin. If they then attain jobs in the same class, their early learning experiences become reinforced, whereas if they enter a different class they may become exposed to new norms and values and, with time, come to absorb them (Abramson and Books 1971). Thus, the following hypotheses largely replicate previous work on the subject:

**Hypothesis 1** Upward mobility is associated with increasingly conservative economic attitudes, while downward mobility is associated with increasingly liberal economic attitudes.

Although this largely serves as a replication of previous work, it is also the crux of the socialization explanation of mobility. The dotted lines in Figure 1.1 represent that the socialization process cannot be observed directly. Instead, this process is explored by examining social mobility which creates the changes in environment that drive the (re-) socialization process. Throughout the dissertation mobility is represented by change in income. Indeed, this is an important relative advantage over previous work which largely estimates the effects of mobility based on two points in time: the current status of an individual and that of their parent(s). By contrast, this dissertation examines mobility at multiple points during the lifetime of respondents, giving a much more nuanced picture of mobility.<sup>3</sup> It is important to note that, theoretically, income is a proxy for a wider variety of social and economic influences as detailed above, not all of which are explored in the present work. Chapter 3 presents one foray into exploring the economic experience of mobility in terms of experienced economic hardships rather than income, but this largely represents an area to be expanded upon by future work.

As income theoretically serves as a proxy for other aspects of economic experience, and indeed as mobility is here operationalized as the change between income states, it is also an important part of this dissertation project to explore to what degree income itself influences economic beliefs and policy preferences. If mobility does not affect attitudes, the question arises as to whether economic circumstance drives attitudes at all, which would deviate widely from the expectations of H1. An advantage of the panel data used in Chapters 2 and 3 is that it allows a more accurate examination of income through the use of fixed effects models to control for unobserved heterogeneity in the data. Using this approach, I expect to find that income is still associated with economic beliefs and social policy attitudes, but finding that the effect is smaller than observed with more conventional methods provides evidence that it is a proxy for other unobserved factors. Thus:

**Hypothesis 2** As a proxy for economic experiences, the unique effect of income on attitudes is weaker than its effects more generally.

<sup>&</sup>lt;sup>3</sup>There is also an important distinction between these two measures of mobility as the difference between individuals and their parents represents inter-generational mobility while change in income represents intra-generational mobility. While previous research focuses on the former, both are components of the theory presented in this dissertation, although it focuses largely on the latter.

## Primary Socialization Environment as an Anchor for Adult Resocialization

Politics is an aspect of adult life that we only become aware of vaguely and gradually during childhood, most often through our parents and in conjunction with major political events such as campaigns and elections but also others such as economic downturns, wars, or other similarly high-profile events that are difficult to avoid or be affected by in some regard. (Sears 1975; Niemi and Jennings 1991a).

As shown by a wide range of prior research discussed above, there is a powerful role for parental influence in the socialization process (Sears 1975; Niemi and Jennings 1991*a*; Piketty 1995). With specific regard to mobility, Abramson (1972) finds that, in the UK, the conservative shift in the beliefs of upwardly mobile working class individuals is offset somewhat if they were the child of a Labor Party supporter. Similarly, the downwardly mobile children of Conservative Party supporters remain more conservative than stable members of the working class that they are entering, but show a decided shift in the Labor direction when compared to stable members of the middle class (see also Piketty 1995).

Beyond the influence parents exert on their children, there are other aspects of the primary socialization environment. Local economic environment may shape children's beliefs. Family income is an aspect of a child's immediate economic environment and one that is difficult to avoid. For example, growing up poor could very likely shape outlook on the political and economic world, even beyond the influence of parental ideology. Having experienced poverty first-hand, children who grow up poor should continue to be influenced by it throughout their adult lives. It should serve as counterweight to the conservative effects of upward mobility:

Hypothesis 3 Individuals who grow up poor are less economically conservative, regardless of adult mobility experience.

Additionally, living in areas of high poverty or inequality should also leave marks on young individuals during political socialization. Similar to H2, living in poor areas also provides firsthand experience with poverty, though not as powerful on an experience as growing up poor oneself:

**Hypothesis 4** Individuals who grow up in poor areas should be more liberal than those who grow up in richer areas.

Similarly, inequality may also condition the effects of mobility. Inequality has been found to make individuals more aware of their position in the socio-economic hierarchy (Newman, Johnston and Lown 2013). Such awareness could have a profound impact on the socialization process, especially as it comes to economic beliefs. If the lines of class are made more apparent to a young adult during socialization (particularly in combination with parental instruction), then it may lead to firmer identification with their class of socialization and a more steadfast adoption of associated economic beliefs and political attitudes:

**Hypothesis 5** Individuals who grow up in highly unequal areas should be less effected by mobility than those in more equal areas.

## Political Culture: Meritocratic Belief and the Relative Suppression of Mobility

The majority of the dissertation focuses on the analysis of social mobility as a socializing process within the context of the United States. However, the question remains whether the process of mobility functions the same in other nations with different political and cultural environments. Indeed, the analyses of this dissertation consistently show at best very small substantive effects for both upward mobility and income – is this unique to the American case?

Political socialization is rarely considered comparatively (Sapiro 2004), but it is important to understand the relationship between the political culture at large and the ways in which citizens interpret their own economic circumstances to form beliefs. Theoretically, as a general process, mobility should largely function the same way across country contexts, with citizens re-socializing as they acquire new information from their economic environment. However, country level differences may affect the strength of this relationship and thus help explain the relatively weak effects in the American context.

As Sapiro (2004) suggests, one important factor of political culture at a very basic level is the degree to which a culture is individualist or collectivist in nature. This will determine the types of beliefs emphasized during socialization and differs across political contexts. In this sense, the United States has long been considered an outlier relative to other countries, particular in terms of the strength of Americans beliefs in a meritocratic system, often referred to as "American exceptionalism" (Lipset 1996; Jantti et al. 2006). Indeed, many scholars hold that the strong meritocratic beliefs (Alesina, Glaeser and Sacerdote 2001; Hochschild 1981, 1995; McCloskey and Zaller 1984) and high levels of optimism (Benabou and Tirole 2006) found in the US are much unique to it and responsible for the relatively low levels of welfare spending found there (Alesina and Angeletos 2005; Alesina, Glaeser and Sacerdote 2001). As such, the strength of meritocratic belief within a political culture may act as a suppressing force on the effects of social mobility. In contrast to highly meritocratic cultures like the U.S., countries where such beliefs are less prevalent, mobility may be more strongly related to political attitudes:

**Hypothesis 6** There is a stronger relationship between mobility and economic beliefs and political attitudes in less meritocratic political cultures.

#### Overview of Empirical Chapters

In the subsequent chapters I present three studies where I explore the effects of economic experiences on political beliefs and attitudes. The first study (Chapter 2) relies upon the Youth-Parent Socialization Panel Study (1965-1997) to test, to my knowledge for the first time, the effect of upward mobility on political attitudes in a panel study where the same respondents are tracked over a significant period of their lives. The initial respondents were interviewed as high school students in 1965 and were re-interviewed three times subsequently at roughly ten year intervals. Whereas previous studies most commonly create proxies for mobility, such as through difference in education, occupation, or SEI with one's parents (Alesina and Angeletos 2005), Study 1 operationalizes mobility as actual change in reported income between the waves of a panel survey. While the findings confirm the commonly observed association between income and more con-

servative political values, I find that these effects are quite modest. Additionally, I do not find any association between over-time income change (i.e. upward mobility) and broad political attitudes. Study 1 also explores the effects of political and economic environment during primary socialization, including parental party identification, family income, and inequality in the county of residence. I find no conclusive results of these effects.

The shortcoming of the first study is that the sample size is relatively small as well as more affluent than the American population at large, which also reduces the variance of income that can be observed. The second study (Chapter 3) relies upon data from the General Social Survey's (GSS) 2006-10 three-wave national panel that spans the time period now commonly known as the Great Recession. This study explores the possibility that individuals may be re-socialized in response to their changing economic circumstances. The GSS sample is larger and more representative of the American public and also provides a wider selection of survey items with which to examine the effects of mobility on political beliefs and attitudes. Additionally, it also collected information on economic hardship which is useful in exploring one potential mechanism for the effects of mobility. Study 2 finds that an upward change in income is associated with greater perceptions of personal mobility and self-placement into higher social classes, as well as less support for government helping the sick or helping to provide healthcare. However, along with Study 1, the effects of both income and upward mobility are shown to be substantively small.

Social mobility and the process of socialization of success beliefs and attitudes about the role of government is not limited to the United States alone. Chapter 4 explores the process of mobility more broadly across 41 nations relying on the Inequality IV module of the International Social Survey Programme's 2009 survey. This third study also expands on Study 1 in looking at how mobility can be conditioned by characteristics of the political and economic environment in which one resides by examining both the economic inequality of countries in the sample as well as the prevalence of beliefs in meritocracy in their political cultures.

Overall, the findings indicate that the effects of income and mobility both have significant but small effects on political beliefs and attitudes relevant to social welfare policy and the redistribution of wealth. I conclude with a discussion of why this may be, including the difficulties presented by income as both a theoretical concept and measurement tool, and suggest provisions for future research to continue to expand on this present work.

### Chapter 2

## The Influence of Economic Environment During Primary Socialization and Mobility into Adulthood

The literature on political socialization has largely focused on the transmission of partisanship from parent to child (Niemi and Jennings 1991a), and with the exception of civic values (Jennings 2002; Jennings and Stoker 2004)), rarely examines whether enduring beliefs can result from the socialization process. Additionally, it also often fails to consider other possible factors during during adolescence aside from the influence of parents or so-called "critical events" (Ghitza and Gelman 2014; Sears and Valentino 1997; Valentino and Sears 1998). In particular, to my knowledge, no research has addressed the effects of the economic environment of socialization. Does it matter where you grow up? Perhaps you grow up in an apartment in poor repair in a low-income urban environment sharing a pull-out bed with your siblings or if you instead grow up in a gated community in a four-bedroom house with a yard and a barbecue – does this affect how you will view the political world in adulthood? Prior research has established that characteristics of one's economic environment during adulthood, in particular economic inequality (Newman, Johnston and Lown 2013), can activate political beliefs. However, what is known about the effects of economic environment during socialization tend to be in large brushstrokes, such as the finding that growing up during a depression or recession creates a Democratic shift in voting pattern (Ghitza and Gelman 2014). A more nuanced picture of this process is one of the goals of this chapter.

The socialization process is undoubtedly complex. There are many potential factors that vie for influence over the young mind: parents, friends and relatives, school, religion, cultural outlets such as the media or political outlets such as the government itself, even one's genetics may play an enduring factor in determining political outlook as an adult. However at its most fundamental level, socialization is a process of experience accumulation, be it a conversation with your father regarding the dangers of government overreach or personally viewing a political protest for the first time. Rogoff et al. (2003) identify two models of socialization in such a way, one that is based on vicarious learning through an expert – the transmission model – and one that is based in actual observation or participation in political action – the experiential model. While economic environment does not per se determine the type of political learning that will take place, it is very likely

true that it does influence the type and tenor of the events that do take place. In some regards, it is therefore irrelevant the type of learning that takes place if the information is the same, though the effect of first-hand knowledge is likely to be stronger.<sup>1</sup>

This discussion has so far largely reflected events that occur during an individual's primary socialization, which takes place during adolescence and early adulthood. Yet, this is but a small portion of our experiences and is fixed in time as our lives move forward and socialization continues. Socialization is a lifelong process of inheriting and disseminating aspects of culture such as norms, beliefs, or customs (Clausen 1968), and a process that extends beyond this period of early life as it is traditionally characterized. One source of ebb and flow in life is captured by social mobility, from which major changes in many aspects of one's life can result including geographic location, social circles, and lifestyle. And indeed, social mobility has notable effects on political attitudes and values. Previous research shows that among the mobile, attitudes and values on average fall between those of the more stable members of social classes. Thomas Piketty (1995) in particular states that while we often think of individuals as voting or not voting in their own interests that instead "it may sometimes be valuable to consider that the main difference between voters is not their differing interests and objective functions but rather the information and ideas about policies that they have been exposed to during their social life" (p. 578). Thus mobility represents an accumulation of economic experiences beginning, but not ending, with those during primary socialization. It is also connected with the types of political events that individuals are likely to experience as members of a certain class or as residents in a specific economic environment.

Effectively capturing this process quantitatively, however, is a difficult task. Most often in the literature, researchers use difference in child and parental status to capture this process (Alesina and Angeletos 2005). More generally in political science, income is often used as a catch-all for all things related to a certain social status or life-style, but not often unpacked for what it is actually capturing. In line with Piketty (1995), I view mobility as a broad process that results in a variety of changes not limited to only income. Income is however associated with many of these more experiential components that I am here alluding to, aspects of social class: where one lives, where one works and how they commute there, social network membership, and much else. It is important to recognize that while income can tap into much of this, it does not measure these directly.

This chapter has three overarching goals. First, using a unique panel study that follows its original respondents over a large segment of adult life, I assess the effects of income on general political identification and social welfare attitudes. Income is associated with many other factors, but is rarely parsed for unique effects in the way that is possible with a panel approach that can effectively remove unobserved heterogeneity in the data that does not result from over time change from the analyses. Second, I trace the effects of mobility, as measured by change in income over time, and show that it corresponds with change in meaningful political attitudes relevant to the provision of welfare redistribution. I find some evidence consistent with previous research on the subject suggesting that upward mobility has a generally conservative effect on political attitudes and orientations. Finally, unlike previous studies, I also examine the early economic environments of these respondents during their primary socialization. I find some evidence, though limited by aspects of the data, that these have a lasting effect that is distinct from that of mobility. This suggests that while political attitudes are influenced by the constant shift

<sup>&</sup>lt;sup>1</sup>As a brief aside, it is also possible that poverty exposes a person disproportionately to "real" events. Wealthier individuals tend to isolate themselves from such events in suburban or gates communities.

in economic status over adult life, that economic characteristics of the early political environment in which one is raised does may have enduring effects.

#### Hypotheses

Income is a near-ubiquitous control variable in political science analyses. It is not often tested, however, for its unique influence and this is an important first step as well for understanding social mobility as measured by *change in income*. As in most analyses income captures more than only its own unique influence, I hypothesize the following:

**Hypothesis 1** The unique influence of income as estimated by leveraging panel data will be smaller than its influence as seen in a cross-sectional design.

Social mobility represents a major process of change through an individuals life. However, it must be considered in the presence of the contextual factors of one's political and economic background. In keeping with prior findings, I expect upward social mobility throughout the life-cycle will affect political attitudes in a conservative direction. As an individual moves up the economic ladder, her life begins to be shaped by her new socio-economic environment including her geographic location, material possessions, and social circles. Ultimately, this process also affects political values and attitudes as the upwardly mobile individual takes on beliefs and attitudes that reinforce their new status. Thus:

**Hypothesis 2** Upward mobility, or a positive change in income, will be associated with more conservative political attitudes.

While social mobility should have a generally conservative effect on political beliefs and attitudes, I also do not expect that these effects are unconditional. Behind this process of change lies that fact that all individuals come from different political and economic backgrounds that should mitigate or intensify the effects of mobility. Largely these fall into two categories: the effects of economic environment and the effect of parental political attitudes during primary socialization. Separate from the effects that individuals experience as their economic environments change over time, I expect the economic environments of their youth to represent a particularly enduring influence. Primary political socialization during adolescence and early adulthood has been shown to be a particularly impressionable period of development and thus the economic environment in which one resides should leave a lasting mark on political attitudes and orientations. In particular, certain characteristics of the local environment that structure interactions between individuals should have an enduring influence. For example, those in highly impoverished areas experience a very different set of economic relationships between people than those who grow up elsewhere. Additionally, having first hand experience living in an area experiencing various types of economic distress should make individuals more aware of and sympathetic to the plights of those in economic distress. Thus:

Hypothesis 3a The local economic environment should have a discernible influence on political attitudes that lasts beyond the period of socialization and into adulthood.

Additionally, parental political attitudes play a known role in the development of a child's political attitudes. Upward mobility is the actualization of conservative political

beliefs in the importance of merit for determining success that the children of Republicans are most likely taught, while liberal values are more allowing of circumstantial influences in the determination of success. Therefore, I expect that a Republican upbringing may heighten the effect of mobility on political attitudes while a Democratic one will temper it:

**Hypothesis 3b** Parental party identification will be strongly associated with child party identification, and weakly associated with other political attitudes.

Finally, the effects of contextual factors may function in two ways:

Hypothesis 4a The effect of contextual factors will affect political attitudes separate from social mobility (additive).

**Hypothesis 4b** The effect of contextual factors will serve as a lens through which individuals interpret their own mobility (interactive).

Together, these hypotheses provide a potential overall understanding of the effects of economic forces on individual political attitudes and orientations that begins during adolescence but continues to evolve over a lifetime as the economic circumstances of the individual continue to change.

#### Data and Methods

Unlike previous forays into understanding the political consequences of social mobility, one of the main objectives of this dissertation project is to examine the relationship between political attitudes and changes in income over time as measured directly, rather than by relying on proxy measures.<sup>2</sup> Of course, availability of data adequate for the task is one of the main reasons that such a effort has not been attempted previously. Fortunately, I have secured two data-sets that not only capture actual change in income but have a host of political variables that are oriented to economic beliefs and attitudes toward social welfare programs. The data in the present chapter is a long-term panel that comes from the Youth-Parent Socialization Panel Data which allows the tracing of social mobility over a lifetime. The data in the next chapter is a panel that takes place over a shorter time period of six years spanning the Great Recession and comes from the General Social Survey.

#### Overview: The Youth and Parent Socialization Panel Study

The Youth and Parent Socialization Panel (YPSP) Study is a series of surveys originally collected by Kent Jennings, Gregory Markus, Richard Nimei, and Laura Stoker (Jennings et al. 2005), designed to assess the longitudinal affects of family political socialization as well as the impact of events at key points during individuals life-cycles.

<sup>&</sup>lt;sup>2</sup>As mentioned previously, change in income is itself a proxy for a much broader process. It does however provide a higher resolution image over previous measures which often difference educational or occupational status of parent and child. These measures are static at two time points while here I am able to take these factors into account while re-examining and individuals political attitudes at multiple points during their adult lives.

The YPSP has been used to examine a variety of important topics since its completion that has largely focused on the transmission of political attitudes and dispositions from parent to child (Jennings and Niemi 2014), including political knowledge (Jennings 1996; Levendusky 2011), political interest and engagement (Jennings 2002; Jennings and Stoker 2004), social trust (Jennings and Stoker 2004), and party identification (Niemi and Jennings 1991b; Ammann 2014). However, it has not been used to examine either the effects of social mobility or the economic environment during primary socialization as it is herein.

The YPSP is unique in that it follows a single age cohort over 32 years, beginning when the respondents were aged approximately 18 years as high school seniors in 1965 and re-sampling in 1973 (age 26) and 1982 (age 35), and concluding with a final wave in 1997 (age 50). It is therefore well-situated to examine the political development of these individuals over time, providing detailed information about respondent' life histories. Aside from their age, largely fixed for the purpose of the study, this also includes, sex, ethnicity, educational achievement, religious affiliation and participation, marital and employment status, and most importantly for the purpose of the present study, income. In addition to the information collected in each wave, the respondents' parents were also surveyed, providing another layer of detail into the social development of the respondents.

By restricted access, geocoding information is also available with the YPSP data, providing the location of the respondent in the form of ZIP codes. This was useful for merging in data from the 1970 US Census, which provides yet another layer of detail about the economic environment of respondents' socialization, in particular including the average levels of income in their county.

Table 2.1: Percentage Imputed by Income Category and Wave

Income Percentile	1973	1982	1997
0th	0	0	0
$10\mathrm{th}$	0.029	0	0
$20 \mathrm{th}$	0.065	0.035	0
$30 \mathrm{th}$	0.255	0.486	0.011
$40 ext{th}$	0.247	0.345	0.077
$50 \mathrm{th}$	0.238	0.567	0.142
$60 \mathrm{th}$	0.167	0.390	0.044
$70 \mathrm{th}$	0.020	0.047	0.090
$80 \mathrm{th}$	0	1.00	0.016
$90 \mathrm{th}$	0	0	0.048

#### Sample Demographic Characteristics

Originally, 1669 high school seniors from 97 public and private schools participated in the YSPS Study, based on a national probability sample. Data were collected solely by in person interviews in 1965. Subsequently, 83% were collected in person in 1973 and 85% in 1982. Follow-ups in 1997 were conducted either by computer assisted in person interviews (50.5%) or computer assisted telephone interviews (48.6%). The remainder of

the sample was collected by self-administered questionnaires. The response rate for the study was initially 99% in 1965, with the rates for 1973, 1982, and 1997 being 81%, 84% and 82%, respectively. The 935 respondents who remain in the final, four-wave panel used for the following analyses represent 56% of the original sample from 1965. Those missing predominately were not able to be located, the main source of attrition, but also includes the deceased, incapacitated and refusals (Jennings et al. 2005).

Table 2.2: Mean Values of Variables by Wave

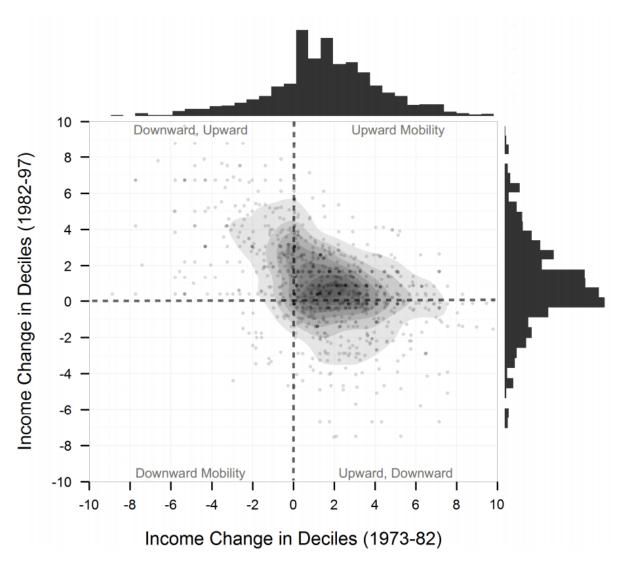
Variable	1973	1982	1997
Income	4.17 $(2.46)$	5.59 $(3.07)$	6.55 ( 2.62)
Party Identification	0.51 $(0.25)$	0.54 $(0.26)$	0.57 $(0.29)$
Ideology	0.54 $(0.17)$	$0.60 \\ (0.18)$	0.61 $(0.18)$
Government Jobs	0.52 $(0.24)$	0.44 $(0.21)$	0.46 $(0.19)$

Given the design of the YSPS, it is by definition unrepresentative of the larger United States in terms of age. It is also very white ethnically with 85.3% of the sample being white. This is, however, somewhat under-representative for the time, as whites made up 88.6% of the population of the U.S. in 1960 and 87.7% in 1970 according to the U.S. Census (Humes, Jones and Ramirez 2011). With respect to gender, the sample is almost perfectly split with 476 women (50.9%) and 459 men (49.1%) participating. In terms of education, the sample is much more educated than average, particularly by the completion of the study when the respondents are well into adulthood. A full 66% had attended college by 1970, with 34% having already completed degrees. By 1997, these numbers had reached 72.7% and 38.2% respectively. Additionally, by this time almost 13% had received post-graduate degrees. For reference, the national rates in 1996 were roughly 50% having at least attended some college, 23.6% having at least a bachelors degree, and only 7.8% having achieved a post-graduate degree.

In regards to other important demographic variables, personal income,<sup>4</sup> partisan identification, and ideological self-identification all had non-trivial amounts of missing cases in the sample. Multiple imputation was used to fill in missing values for income and partisanship while missing values on the ideology variable were replaced by the "moderate"

<sup>&</sup>lt;sup>3</sup>This information comes from Figure 5 of the National Center for Education Statistics 1997 Digest of Education Statistics. The full report can be found here: http://www.finaid.org/educators/educatat.pdf <sup>4</sup>Household income would be preferable here, as it better captures the fuller experience of an individual's social status and lifestyle. Consider a housewife who in 1973 has no real income of her own, but whose husband makes enough money to place the family solidly in the top 10% of the country. Her lifestyle and status are on par with her husband's income, not her own (which is none). However, the amount of missing data on household data is substantially larger, so personal income is used in order to minimize the amount of missing data that must be imputed.





Note: This figure displays the average income change in personal income between panel Wave 2 and Wave 3, and between Wave 3 and Wave 4. Income potentially has different values across the ten imputations and has been simply averaged for the purposes of presentation. In the analyses, the imputations are combined through the use of the mi command in Stata. The dashed lines indicate quadrants of overall mobility throughout the panel, as noted on the figure.

Table 2.3: Income Change in Deciles in the Youth-Parent Socialization Panel

Period of Change	Minimum	1 SD Below Average	Average Change in Income	1 SD Above Average	Maximum
1973-82	-9.360	-1.692	1.432	4.557	9.780
1982-97	-8.566	-1.837	0.938	3.712	9.9
Full Panel	-8.894	-0.600	2.372	5.345	9.95

Note: income change is calculated by differencing income between the specified waves.

category.<sup>5</sup> Ideology and partisanship were both measured on a traditional 7-point scale, where 1 is most liberal/Democratic and 7 is most conservative/Republican. The income variable was recoded from its original ordinal scales which varied by wave in number of categories as well as the income bounds that each category signified. Using data from the U.S. Internal Revenue Service (IRS) for each year, the survey categories were matched to percentiles in the national population. The income variable is thus made common across the waves and is roughly, given that the variable is still effectively categorical, an individual's position in the national income distribution. The final variable was rescaled by a factor of 10, and can thus be roughly thought of as being in terms of income deciles.

As might be expected given social desirability pressures in reporting income, the income variable displayed the most missing cases, particularly from those in the top and bottom categories as displayed in Table 2.1. The analyses presented below center on change between these income categories over time as a measure of social mobility. Figure 2.1 presents a density of mobility in the sample between 1973 and 1982 and between 1982 and 1997. Overall, it is evident that the majority of the sample has stayed within roughly 20 percentiles of where it began. This is also depicted in Figure 2.2 as a distribution of total panel mobility and broken down by minimum value, maximum value, and standard deviation change from the average in Table 2.3. Relatively few respondents in the YPSP Study experienced solely downward mobility during their adult lives, as indicated by the sparsity found in the lower left quadrant of Figure 2.1. This is likely the result of a very affluent sample relative to the national population, who on average have a higher probability of financial success during their lifetimes (Urahn et al. 2012). On average, the parents of the students in the sample were at the 72nd percentile for income, eventually to be surpassed by their children who averaged at the 78th percentile by the third wave of the study. The implications of this for the results of the analyses in this chapter will be discussed below.

Examining the means of each variable, as found in Table 2.2 suggests that there is a general cohort shift over time toward both higher income and more conservative political values. One final variable used in the analysis measured support for the government ensuring a job for anyone who wanted one was also measured on a 7pt scale, coded in direction of strongest support, but for which missing values were not imputed or replaced due to a lack of theoretical clarity regarding whether a non-response concealed any meaningful ideological position. Instead, missing cases were coded as "moderate," which allows the analysis to proceed in light of missing data, but biases efforts to uncover significant results downward by reducing sample variance on ideology.

As mentioned above, the YSPS Study also affords the opportunity to include variables in the analysis beyond the information respondents provided when they were surveyed.

<sup>&</sup>lt;sup>5</sup>All imputations were conducted through the Amelia II package in R (Honaker, King and Blackwell 2011).

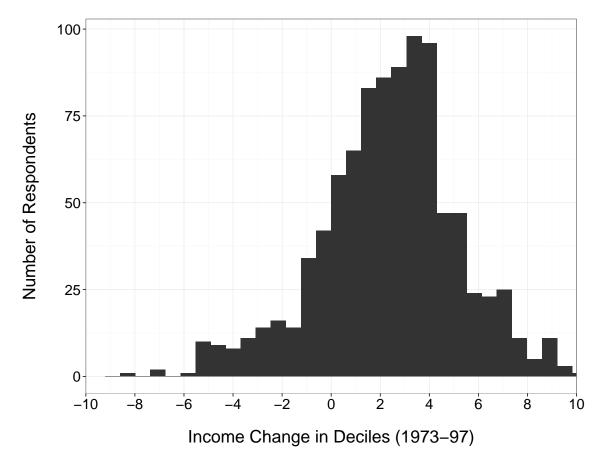


Figure 2.2: Overall Sample Mobility (1973-1997)

Income potentially has different values across the ten imputations and has been simply averaged for the purposes of presentation, similar to Figure 2.1.

Respondents' parents were also surveyed and their responses can provide useful insight into the political and economic characteristics of the socialization environment of their children. Specifically, I rely on parents' party identification, coded as a 7pt scale as in the case of the child/student respondents, and family income during 1965, as coded to percentiles using IRS data as discussed above. Beyond the information provided by parent surveys, I was also able to acquire information regarding the county in which respondents resided in 1965 during their senior year of high school.<sup>6</sup> Specifically, I use information about trends in income, and derive three measures of the economic environment during the respondents primary socialization: median county income, county poverty rate, and county inequality as measured by the GINI coefficient.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>It should be noted that county FIPS codes were crosswalked from the original ZIP codes given in the restricted data file for the survey code. Additionally, as this is data from the decennial census, data from the 1970 U.S. Census was used.

<sup>&</sup>lt;sup>7</sup>GINI values were created by disaggregating census income categories to create a full distribution for the county and utilizing the ineq package in R.

#### Analyses

#### Model Specification: Fixed and Random Effects Models

As a first step in understanding the effects of social mobility and the change in income that takes place over a respondent's lifetime, I first conduct a series of fixed effects panel models to estimate the effects of income using over time variance. For comparison sake, I also present a parallel set of random effects models. Each type of model offers a number of advantages while retaining associated drawbacks. Fixed effects models allow an accurate estimation of the effects of income by holding constant all factors that are time invariant. In essence, its main advantage is using respondent information in earlier waves as a form of statistical control for themselves, as in a within-subjects experimental design, thus considering their unobserved characteristics to be fixed over time. This substantially reduces the amount of error in estimation. Fixed effects models of income are presented for three dependent variables partisan identification, ideology, and the belief that the government should provide jobs to everyone who desires one. Thus the following equations will be estimated:

$$PartyID_{it} = \beta_1 Income_{it} + \beta_2 Education_{it} + \alpha_i + u_{it}$$
 (2.1)

$$Ideology_{it} = \beta_1 Income_{it} + \beta_2 Education_{it} + \alpha_i + u_{it}$$
(2.2)

$$GovernmentJobs_{it} = \beta_1 Income_{it} + \beta_2 Education_{it} + \alpha_i + u_{it}$$
 (2.3)

While this series of fixed effects models will allow a clear estimation of the direct effects of change in income on change in the political dependent variables, its shortcoming is its inability to examine other variables we might be interested in that are fixed over time. This includes, of course, those variables that pertain to characteristics of our respondents' economic environment during primary socialization, as these are fixed in 1970, as well as time invariant qualities inherent to the respondents themselves like gender or race. Therefore if we are interested in examining the effects of these elements in relation to variables such as respondent income that are changing with regard to time, a fixed effects model is not the right tool for the job. Instead, a random effects model allows the estimation of the effects of fixed quantities while still incorporating the temporal variance into the model. As such, I also estimated the following equations:

$$PartyID_{it} = \beta_1 Income_{it} + \beta_2 Education_{it} + \beta_3 Female_i + \beta_4 White_i + \beta_5 CountyIncome_{it} + \beta_6 CountyGINI_i + \beta_7 CountyPoverty_i + \beta_8 ParentPID_i + \beta_9 FamilyIncome_i + \alpha + u_{it} + \epsilon_{it}$$
 (2.4)

$$Ideology_{it} = \beta_1 Income_{it} + \beta_2 Education_{it} + \beta_3 Female_i + \beta_4 White_i + \beta_5 County Income_{it} + \beta_6 County GINI_i + \beta_7 County Poverty_i + \beta_8 Parent PID_i + \beta_9 Family Income_i + \alpha + u_{it} + \epsilon_{it}$$
 (2.5)

Government Jobs<sub>it</sub> = 
$$\beta_1 Income_{it} + \beta_2 Education_{it} + \beta_3 Female_i + \beta_4 White_i + \beta_5 County Income_{it} + \beta_6 County GINI_i + \beta_7 County Poverty_i + \beta_8 Parent PID_i + \beta_9 Family Income_i + \alpha + u_{it} + \epsilon_{it}$$
 (2.6)

As evident in these equations, in the fixed effects context, all of the within respondent error is being incorporated into a single term for each respondent, whereas in the random effects model this constitutions a separate term. As such, the random effects model also assumes that this respondent-specific error term is uncorrelated with any of the predictor variables in the model. In order to evaluate the amount of variance that income uniquely accounts for relative to other unmeasured quantities that it could be tapping into, I also run a sets of models estimated using OLS with each wave of the panel being estimated separately. By comparing OLS estimates to those from the fixed effects models, we can obtain some frame of reference for how much OLS tends to over- or under-estimates the effects of income. Recall that as I suspect income largely serves as a proxy for other underlying processes relevant to mobility, that I expect the OLS estimates to be noticeably larger than those of the fixed effects models.

#### Results: Estimating the Effects of Income with Panel Data

Table 2.4 presents the results of fixed and random effects estimates alongside standard OLS estimates by wave for the effects of income on support for government job creation. From the fixed effects estimation (Model 1) we can see that personal income is significantly and negatively associated with attitudes toward government jobs ( $\beta = -0.009, p < .01$ ). The coefficients in a fixed effects model can be interpreted similar to those from an OLS model, as the resulting change in y from a one unit change in x. Additionally, recall that fixed effects models are estimated relying solely on variance that arises from differences between the panel waves with all time invariant sources held constant. This is the main advantage of a fixed effects approach and helps to rule out unobserved heterogeneity in estimation as well as more precisely establish the unique effects of a given variable. A coefficient here can loosely also be thought of as the result of a one unit change moving forward one time period within the same individual. In this specific instance, a one decile increase in income between panel waves produces roughly a 1% decrease in support for the government ensuring jobs. An average respondent increasing 2.37 deciles in income would be associated with a decrease in support by about 2.1%. Change in education also has significant effects. Recall that education is coded from 0 to 1, so a one unit increase represents a change from a high school education to a post-graduate education and results in an 8.6% increase in support for the government ensuring jobs. Overall, I here find some support for Hypothesis 2.

Table 2.4: Linear Model Estimates for Effects of Income on Government Jobs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Fixed	Random	Random	Random	Random	Random	Random	Random	ÒĹS	ÒLŚ	ÒLŚ
	Effects	Effects	Effects	Effects	Effects	Effects	Effects	Effects	'73	'82	'97
Individual Variables											
Personal Income	-0.009**	-0.009**	-0.009**	-0.009**	0.003	-0.008*	-0.012**	-0.024	-0.005	-0.003	-0.006*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.007)	(0.003)	(0.003)	(0.019)	(0.004)	(0.003)	(0.003)
Education	0.086**	0.094**	0.096**	0.102**	0.092**	0.094**	0.096**	0.102**	0.199**	0.095**	0.091**
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.043)	(0.036)	(0.033)
Female	()	0.011	0.010	0.011	0.012	0.011	0.010	0.011	0.017	0.033+	0.027+
		(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.018)	(0.017)	(0.015)
Non-white		0.036*	0.038*	0.038*	0.037*	0.036*	0.039*	0.038*	0.029	0.047	0.031
Iton winte		(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.028)	(0.029)	(0.020)
Parental Variables '65		(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.020)	(0.020)	(0.020)
Parent's Party ID		-0.035*	-0.037*	-0.035*	-0.034*	-0.024	-0.037*	-0.034*	-0.031	-0.071**	-0.009
1 arche 3 1 arty 1D		(0.017)	(0.018)	(0.018)	(0.017)	(0.031)	(0.018)	(0.017)	(0.029)	(0.027)	(0.025)
Family Income '65		-0.001	-0.001	-0.001	0.007	-0.001	-0.001	-0.001	0.000	-0.008+	-0.001
ranniy income 05		(0.003)	(0.003)	(0.003)	(0.007)	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)	(0.004)
County Variables '70		(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)
Median Income		0.113**			0.112**	0.113**			0.144**	0.113*	0.086+
Median Income											
ъ.		(0.036)	0.100**		(0.036)	(0.036)	0.10=*		(0.056)	(0.049)	(0.045)
Poverty			-0.126**				-0.197*				
0.77			(0.043)				(0.083)				
GINI				-0.242**				-0.357*			
				(0.090)				(0.179)			
Interactions											
Income X Median Inc.					-0.002+						
					(0.001)						
Income X Parent PID						-0.002					
						(0.005)					
Income X Poverty							0.013				
J							(0.012)				
Income X GINI							( /	0.021			
								(0.028)			
Constant	0.483**	0.405**	0.509**	0.644**	0.340**	0.399**	0.525**	0.724**	0.332**	0.377**	0.357**
Constant	(0.015)	(0.036)	(0.034)	(0.074)	(0.050)	(0.039)	(0.039)	(0.133)	(0.057)	(0.055)	(0.049)
	(0.010)	(0.050)	(0.004)	(0.014)	(0.000)	(0.055)	(0.055)	(0.155)	(0.001)	(0.055)	(0.043)
N	931	931	931	931	931	931	931	931	857	877	893
Т	3	3	3	3	3	3	3	3	1	1	1
Total Observations	2,627	2.627	2,627	2,627	2,627	2,627	2,627	2,627	857	877	893
	-,	-,~	-,~	-,	-,~	-,	-,	-,~		~	
Hausman Test		-3.062	-4.798	-8.241	-5.965	-2.503	-4.748	-7.525			
Notes: Dependent variable i	a recooled	O to 1 Inc	omo oon be	intonnato	d on donilo	a nolotimo t	the notice	nal distrib	ition		

Notes: Dependent variable is rescaled 0 to 1. Income can be interpreted as deciles relative to the national distribution.

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Models 9 through 11 in Table 2.4 present the OLS estimates for each wave of the study. In comparison, we can see that income only has a significant effect in one of the three models, Model 11 in 1997, where its effect is slightly smaller than in the fixed effects estimation in Model 1. This suggests that there is idiosyncratic variance that is at least obscuring the unique effect of income, possibly the coefficient for education which is larger, especially in Model 9. Thus, the fixed effects approach is a useful exercise for separating the unique effect of these two factors related to social mobility. However, in this case, Hypothesis 1 is rejected as it seems that the effect of education is what is actually being over-estimated in the OLS models.

In order to examine Hypotheses 3a and 3b regarding the effects of parental and economic environmental influence, I turn to random effects estimation as the fixed approach is ill-suited due to its exclusion of time-invariant variables. Models 2 through 8 in Table 2.4 present these results. Before any interpretation of the results of random effects can be done it is essential to examine the result of the Wu-Durbin-Hausman test for consistent estimation. Unfortunately, the results for the models of support for government jobs reject the null that the random effects estimates are consistent and they are largely presented here for completeness sake. More precisely, the negative result of the Hausman Test signifies that the model fitted on the data fails to meet the asymptotic assumptions of the test.<sup>8</sup> Thus, for these model specifications, the fixed effects estimates presented above are the best we are able to do and cannot move to including time-invariant variables using panel models. Notably, this makes it difficult to test Hypotheses 4a and 4b using this approach, as none of the random effects models that would allow interactions between income and time-invariant environmental factions are consistent, so we will return to them in the next section.

However, the OLS estimates can still provide some insight into how these time-invariant factors influence political attitudes. Turning first to the parental factors, parental party identification ( $\beta = -0.071, p < .01$ ) and family income ( $\beta = -0.08, p < .10$ ) during primary socialization are both significant predictors of support for government jobs. The effect of between being raised by strongly Republican parents is a reduction of about 7% in terms of support for government jobs, while that between being raised in a wealthy family is one of about 8%. However, these effects only hold in the 1982 Wave of the panel. Turning to the effects of median county income during socialization, there are significant effects across all three waves. Interestingly, median income is positively associated with support for government jobs, suggesting that being from a a wealthier background results in an average increase in support for government jobs of 11.4% across the three waves. Also interesting, the strength of this effect decreases across the waves, suggesting perhaps the further an individual moves into adulthood, the more the effects of their primary socialization dissipate. Finally, being male is also associated with a ~3% decrease in support.

<sup>&</sup>lt;sup>8</sup>There exist generalized tests that are more robust to assumptions, such as the *suest* command in *STATA* which is applied in some cases in Chapter 3, but unfortunately these are not available for multiple imputation data sets.

Table 2.5: Linear Model Estimates for Effects of Income on Party Identification

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Fixed	Random	Random	Random	Random	Random	Random	Random	OLS	OLS	OLS
	Effects	Effects	Effects	Effects	Effects	Effects	Effects	Effects	'73	'82	'97
Individual Variables											
Personal Income	0.006**	0.006**	0.006**	0.006**	-0.000	0.009**	0.006 +	-0.001	0.003	-0.001	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.007)	(0.003)	(0.003)	(0.019)	(0.004)	(0.004)	(0.004)
Education	0.020	-0.019	-0.020	-0.017	-0.019	-0.020	-0.020	-0.017	-0.085*	-0.040	-0.068
	(0.034)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.041)	(0.041)	(0.048)
Female		-0.027+	-0.027+	-0.027+	-0.028+	-0.027+	-0.027+	-0.027+	0.000	-0.049*	-0.081**
		(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.018)	(0.021)	(0.021)
Non-white		-0.074**	-0.073**	-0.071**	-0.074**	-0.074**	-0.073**	-0.071**	-0.063*	-0.075**	-0.079**
		(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.024)	(0.028)	(0.030)
Parental Variables '65		,	,	,	,	,	,	,	,	,	,
Parent's Party ID		0.209**	0.208**	0.208**	0.209**	0.242**	0.208**	0.208**	0.283**	0.263**	0.176**
J		(0.020)	(0.021)	(0.020)	(0.020)	(0.036)	(0.021)	(0.020)	(0.029)	(0.031)	(0.037)
Family Income		-0.001	-0.001	-0.001	-0.005	-0.001	-0.001	-0.001	-0.002	0.003	0.000
Toming meetine		(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)
County Variables '70		(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Median Income		-0.008			-0.008	-0.008			-0.029	0.002	-0.014
Wedtan meeme		(0.048)			(0.048)	(0.048)			(0.054)	(0.062)	(0.065)
Poverty		(0.040)	-0.013		(0.040)	(0.040)	-0.010		(0.004)	(0.002)	(0.000)
Toverty			(0.057)				(0.089)				
GINI			(0.001)	-0.096			(0.003)	-0.145			
OIIVI				(0.120)				(0.185)			
Interactions				(0.120)				(0.100)			
Income X Median Inc.					0.001						
mediai me.					(0.001)						
Income X Parent PID					(0.001)	-0.006					
Income A Parent PID											
I VD						(0.005)	0.001				
Income X Poverty							-0.001				
I V CINI							(0.012)	0.000			
Income X GINI								0.009			
	0.40=44	0 1	0.4=0355	0 = 1044	0 = 00 + 1	0.40044	0.4=044	(0.027)	o .o=##	0 = 0 = 444	0.01044
Constant	0.497**	0.477**	0.476**	0.542**	0.509**	0.460**	0.476**	0.576**	0.437**	0.501**	0.648**
	(0.019)	(0.045)	(0.044)	(0.097)	(0.058)	(0.048)	(0.046)	(0.137)	(0.056)	(0.067)	(0.071)
N	934	934	934	934	934	934	934	934	934	934	934
T	3	3	3	3	3	3	3	3	954	954	934 1
Total Observations	2,802	2,802	$\frac{3}{2,802}$	2,802	2,802	$\frac{3}{2,802}$	2,802	2,802	934	934	934
TOTAL ODSELVATIOUS	4,004	2,002	2,002	2,002	2,002	2,002	2,002	2,002	994	994	954
Hausman Test		7.219*	7.110*	6.183*	13.88**	17.59**	16.99**	17.98**			
Notes: Dependent variable i	is rescaled								ution		

Notes: Dependent variable is rescaled 0 to 1. Income can be interpreted as deciles relative to the national distribution.

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table 2.6: Linear Model Estimates for Effects of Income on Ideology

	(1)	(2)	(3)	(4)	(F)	(e)	(7)	(0)	(0)	(10)	(11)
	(1) Fixed	(2) Random	(5) Random	(4) Random	(5) Random	(6) Random	(7) Random	(8) Random	(9) OLS	(10) OLS	OLS
	Effects	Effects	Effects	Effects	Effects	Effects	Effects	Effects	'73	'82	'97
	Lifecto	Lifecto	Lifecto	Lifecto	Lifecto	Lifecto	Lifecto	Lifecto	10		
Individual Variables											
Personal Income	0.008**	0.008**	0.008**	0.008**	0.004	0.007**	0.009**	0.021	0.002	0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.002)	(0.002)	(0.014)	(0.003)	(0.002)	(0.003)
Education	-0.079**	-0.075**	-0.077**	-0.082**	-0.075**	-0.075**	-0.077**	-0.082**	-0.141**	-0.066*	-0.132**
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.029)	(0.029)	(0.030)
Female		-0.010	-0.009	-0.010	-0.010	-0.010	-0.009	-0.010	0.000	-0.033*	-0.065**
		(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.012)	(0.014)	(0.013)
Non-white		-0.018	-0.021	-0.019	-0.018	-0.018	-0.021	-0.019	-0.009	-0.023	-0.026
		(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.019)	(0.017)	(0.021)
Parental Variables											
Parent's Party ID		0.052**	0.055**	0.052**	0.052**	0.045 +	0.055**	0.052**	0.053*	0.062**	0.040+
		(0.015)	(0.015)	(0.015)	(0.015)	(0.025)	(0.015)	(0.015)	(0.021)	(0.021)	(0.023)
Family Income '65		-0.005+	-0.005+	-0.005*	-0.007+	-0.005+	-0.005+	-0.005*	-0.008*	-0.001	-0.004
		(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
County Variables '70											
Median Income		-0.106**			-0.106**	-0.106**			-0.096*	-0.098*	-0.098*
		(0.031)			(0.031)	(0.031)			(0.038)	(0.039)	(0.040)
Poverty			0.144**				0.176**				
			(0.036)				(0.065)				
GINI				0.217**				0.323*			
_				(0.078)				(0.131)			
Interactions											
Income X Median Inc.					0.000						
					(0.001)						
Income X Parent PID						0.001					
						(0.004)					
Income X Poverty							-0.006				
							(0.010)				
Income X GINI								-0.019			
_								(0.020)			
Constant	0.585**	0.684**	0.577**	0.466**	0.703**	0.687**	0.570**	0.391**	0.703**	0.730**	0.870**
	(0.012)	(0.030)	(0.030)	(0.064)	(0.039)	(0.032)	(0.032)	(0.097)	(0.040)	(0.044)	(0.044)
N	934	934	934	934	934	934	934	934	934	024	934
N T										934	
Total Observations	3	3	3	3	3	3	3	3	1 934	1	1 934
10tal Observations	2,802	2,802	2,802	2,802	2,802	2,802	2,802	2,802	934	934	934
Hausman Test		2.181	0.688	-0.135	-4.188	-4.132	-0.953	-1.702			
National Test	1 1		0.000	-0.100	-4.100	-4.132	-0.955	-1.702			

Notes: Dependent variable is rescaled 0 to 1. Income can be interpreted as deciles relative to the national distribution.

Standard errors in parentheses
\*\* p<0.01, \* p<0.05, + p<0.1

Turning to the results for party identification in Table 2.5, we see a similar picture of results. In the fixed effects model (Model 1), personal income is associated with an increase in Republicanism ( $\beta=0.006, p<.01$ ), with a one decile change in income resulting in a 0.6% increase in Republicanism. Education is found to not significantly predict partisanship. The random effects estimates (Models 2-8) are also inconsistent, though in this case it results from an outright rejection of the null hypothesis of the Hausman test rather than a failure to meet its asymptotic assumptions. The OLS models (Models 9-11) once again appear to underestimate the effects of income while overestimating those of education. They also provide some information regarding the effects of primary socialization environment. As could be predicted, parent party identification is strongly predictive of respondent's identification, with growing up with the most Republican parents producing a 24.1% in Republicanism among children. This influence also seems to dissipate the older the respondent becomes, with the coefficient reducing in size by 38% by 1997. Other factors of socialization environment are not significantly associated with Party ID.

The last dependent variable is ideological self-identification, presented in Table 2.5. The results here are also consistent with what was found with both government jobs and partisan identification. In the fixed effects model (Model 1) we see that personal income  $(\beta=0.008,p<.01)$  and education  $(\beta=-0.079,p<.01)$  are both significantly associated with ideology, in a conservative and liberal direction respectively. Additionally, all of the environmental variables in the OLS models are significant, though the effect of family income dissipates by 1982. Being raised by Republican parents is associated with on average a 5% increase in Republicanism, while being raised in a wealthier county has a constant influence across the waves of about a 9.8% shift in a liberal direction. Finally, while most of the random effects models again fail to pass the Hausman Test, Models 2 and 3 are consistent and present a similar picture as a combination of the fixed effects and OLS models.

### Model Specification: OLS with Differenced Income and Lags

Overall, this first set of models provides some evidence that both mobility and aspects of the primary socialization environment have effects that endure well into adulthood, however modest. While the fixed effects models are very using for accurate estimation of the effects of income, they provide very little information about the effects of change in income, or social mobility. In order to estimate the effects of mobility, I instead estimate OLS models with the values of income differenced between the waves. Thus, a one unit change in the measure of mobility represents a one unit change over time in income. In order to model only the variance of the dependent variables between the waves, I also include a lagged value of the dependent variable from the starting wave. For example, the following three models below estimate the effect of the change in income between 1973-97 on the dependent variables in 1997, holding constant the variance accounted for by the DVs in 1973:

$$Government Jobs_{97i} = \beta_1 Government Jobs_{73i} + \beta_2 (Income_{97i} - Income_{73i}) + Controls + u_i \quad (2.7)$$

$$PartyID_{97i} = \beta_1 PartyID_{73i} + \beta_2 (Income_{97i} - Income_{73i}) + Controls + u_i$$
 (2.8)

$$Ideology_{97i} = \beta_1 Ideology_{73i} + \beta_2 (Income_{97i} - Income_{73i}) + Controls + u_i$$
 (2.9)

#### Results: the Effects Differenced Income

The results for the first set of lagged differenced models are presented in Table 2.7. Models 1 through 3 show the effects of differenced income on support for government jobs across each combination of the panel waves (i.e. 1973-82, 1982-97, 1973-97). Differenced income as a measure of mobility does not appear to be associated across any of the models. There is some evidence for the effect of socialization environment in between 1973-82, but this vanish between 1982-97 and are undetectable over the entire panel. In fact, the only consistent result across the models is the effect of being female, which is associated with an increased support for government jobs by an average of 4%.

Part of the aim of using the lagged difference approach is also to examine whether the contextual factors of socialization environment interact with mobility, as was also attempted in the random effects models but prevented due to the inconsistency of the model estimates. Here, I find scant evidence for such interactions. There is a marginally significant interaction between personal income and family income in 1965, but the effect size is also so small as to be of little consequence. These results are mirror in the other two dependent variables in Tables 2.8 and 2.9, though in the case of ideology education also has a significant effect in most models. This seems to be driven largely by the changes that occur between 1982-97.

# Socialization Environment as a Moderator of the Effects of Social Mobility

Another possible way in which socialization environment could come to bear on young individuals' developing attitudes is to condition the effects of mobility. It may be that individuals of certain backgrounds are less affected by subsequent changes in their economic status throughout their adult life. In particular, inequality may heighten awareness of class lines in local society and may lead to firmer identification with the class of socialization.

Tables 2.7 through 2.9 also present interactive models between mobility and economic environment as well as parental partisanship. The results provide no amount of evidence that economic environment moderates the effects of social mobility.

#### Discussion

The results in this chapter provide an important first cut of the dynamic effects of economic forces on personal political attitudes and orientations. In the first goal of the chapter, I find that, contrary to expectation, OLS underestimates the effects of income in this particular cross-sectional data. This original expectation was based on the

Table 2.7: Lagged Difference Model Estimates for Effects of Income on Government Jobs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Lagged Difference						
	1973-82	1982-97	1973-97	1973-97	1973-97	1973-97	1973-97
Individual Variables							
Mobility	-0.000	-0.001	-0.002	0.003	0.014	-0.002	-0.007
-	(0.002)	(0.002)	(0.004)	(0.009)	(0.005)	(0.028)	
Education	0.032	0.046	0.036	0.050	0.044	0.037	0.042
	(0.036)	(0.031)	(0.034)	(0.031)	(0.032)	(0.034)	(0.034)
Female	0.037*	0.031*	0.047**	0.029*	0.029*	0.046**	0.047**
	(0.014)	(0.013)	(0.013)	(0.012)	(0.012)	(0.013)	(0.013)
Non-white	0.041	0.006	0.022	0.007	0.006	0.023	0.024
	(0.031)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Parental Variables '65	a a = colodo						
Parent's Party ID	-0.071**	0.014	-0.014	0.030	0.011	-0.016	-0.015
D 11 I 105	(0.027)	(0.023)	(0.025)	(0.028)	(0.024)	(0.025)	(0.025)
Family Income '65	-0.008+	0.002	0.000	0.002	0.007	0.000	0.000
C 1 V : 11 200	(0.004)	(0.004)	(0.004)	(0.003)	(0.005)	(0.004)	(0.004)
County Variables '70	0.002	0.024	0.069				
Median Income	0.083+	0.034	0.068				
Dovontry	(0.048)	(0.042)	(0.045)	-0.048	-0.046	-0.082	
Poverty				(0.050)	(0.050)	(0.072)	
GINI				(0.050)	(0.050)	(0.072)	-0.232
GIIVI							(0.149)
Interactions							(01110)
Income X Parent PID				-0.008			
				(0.007)			
Income X Family Inc.				,	-0.002+		
					(0.001)		
Income X Poverty					, ,	0.001	
Ç						(0.020)	
Income X GINI							0.008
							(0.041)
Lags							
Lagged DV '73	0.292**		0.196**	0.196**	0.196**	0.196**	0.197**
	(0.029)		(0.028)	(0.030)	(0.030)	(0.028)	(0.028)
Lagged DV '82		0.359**					
		(0.030)					
Constant	0.255**	0.177**	0.230**	0.207**	0.180**	0.296**	0.435**
	(0.048)	(0.042)	(0.044)	(0.043)	(0.047)	(0.045)	(0.114)
N	811	844	824	844	844	824	824
11	011	044	024	044	044	024	024
F	13.23**	18.79**	8.72**	16.78**	16.38**	7.65**	7.84**
df	(8, 440.7)	(8,719.9)	(8, 742.0)	(9,720.6)	(9, 651.2)	(9,734.9)	(9,740.2)

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table 2.8: Lagged Difference Model Estimates for Effects of Income on Partisan Identification

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Lagged	Lagged	(3) Lagged	Lagged	Lagged	Lagged	Lagged
	Difference	Difference	Difference	Difference	Difference	Difference	Difference
	1973-82	1982-97	1973-97	1973-97	1973-97	1973-97	1973-97
T 1 1 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1							
Individual Variables	0.000	0.004	0.001	0.004	0.000	0.005	0.010
Mobility	-0.002	0.004	-0.001	-0.004	-0.002	-0.005	-0.016
T.1	(0.002)	(0.003)	(0.003)	(0.006)	(0.015)	(0.006)	(0.036)
Education	0.026	-0.037	-0.006	-0.007	-0.006	-0.006	-0.006
	(0.033)	(0.038)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)
Female	-0.043**	-0.058**	-0.081**	-0.081**	-0.081**	-0.081**	-0.081**
	(0.014)	(0.015)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
Non-white	-0.036	-0.027	-0.047+	-0.046	-0.046	-0.046	-0.047
	(0.022)	(0.029)	(0.028)	(0.028)	(0.028)	(0.029)	(0.029)
Parental Variables '65							
Parent's Party ID	0.090**	-0.004	0.029	0.014	0.028	0.028	0.030
	(0.028)	(0.030)	(0.037)	(0.051)	(0.037)	(0.037)	(0.037)
Family Income '65	0.003	-0.001	0.001	0.001	0.000	0.000	0.001
	(0.004)	(0.004)	(0.005)	(0.005)	(0.007)	(0.005)	(0.004)
County Variables '70							
Median Income	0.016	-0.013	-0.000				
	(0.050)	(0.054)	(0.059)				
Poverty	,	,	,	-0.016	-0.016	-0.056	
·				(0.070)	(0.070)	(0.091)	
GINI				()	()	()	-0.029
_							(0.193)
Interactions							(0.200)
Income X Parent PID				0.006			
moomo II I di ono I IB				(0.010)			
Income X Family Inc.				(0.010)	0.000		
meeme n raming me.					(0.002)		
Income X Poverty					(0.002)	0.017	
income A 1 overty						(0.024)	
Income X GINI						(0.024)	0.021
meome A Givi							(0.051)
Interactions							(0.051)
Lagged DV '73	0.618**		0.521**	0.523**	0.521**	0.520**	0.521**
Lagged DV 75	(0.031)						
I 1 DV 100	(0.051)	0.677**	(0.037)	(0.038)	(0.037)	(0.037)	(0.037)
Lagged DV '82		0.677**					
Comment	0.000**	(0.031) 0.329**	0.410**	0.400**	0.402**	0.432**	0.435**
Constant	0.206**		0.416**	0.428**	0.423**		
	(0.049)	(0.054)	(0.059)	(0.059)	(0.067)	(0.058)	(0.147)
N	934	934	934	934	934	934	934
F	65.03	61.47	30.33	26.66	25.32	26.99	27.09
df	(8,526.4)	(8,599.9)	(8,652.8)	(9,654.4)	(9,574.9)	(9,675.0)	(9,684.7)
	( ) - )	( , )	( ) )	( / - /	( , · - )	( ,)	( ) )

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table 2.9: Lagged Difference Model Estimates for Effects of Income on Ideology

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Lagged						
	Difference 1973-82	Difference 1982-97	Difference 1973-97	Difference 1973-97	Difference 1973-97	Difference 1973-97	Difference 1973-97
	1975-62	1902-91	1975-97	1975-97	1975-97	1975-97	1975-97
Individual Variables							
Mobility	0.001	0.002	0.001	-0.000	0.002	0.002	0.013
	(0.002)	(0.002)	(0.002)	(0.004)	(0.009)	(0.004)	(0.024)
Education	0.007	-0.101**	-0.071*	-0.073**	-0.073**	-0.073*	-0.073*
	(0.027)	(0.025)	(0.028)	(0.028)	(0.028)	(0.028)	(0.029)
Female	-0.030**	-0.047**	-0.061**	-0.060**	-0.060**	-0.060**	-0.060**
NT 1.4	(0.011)	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Non-white	-0.019	-0.013	-0.023	-0.024	-0.024	-0.024	-0.022
D	(0.016)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
Parental Variables '65 Parent's Party ID	0.041*	0.006	0.021	0.018	0.022	0.023	0.019
rarent's rarty 1D	(0.041)	(0.019)	(0.021)	(0.018)	(0.022)	(0.023)	(0.019)
Family Income	0.019	-0.003	-0.001	-0.001	-0.001	-0.001	-0.002
ranny meome	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.002)
County Variables '70	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)
Median Income	-0.059+	-0.045	-0.065+				
Wiedlan Income	(0.036)	(0.034)	(0.038)				
Poverty	(0.000)	(0.001)	(0.000)	0.071	0.071	0.091	
1 3 7 5 1 6 7				(0.045)	(0.045)	(0.061)	
GINI				(010 = 0)	(0.0.20)	(0.00-)	0.079
							(0.127)
Interactions							
Income X Parent PID				0.002			
				(0.008)	0.000		
Income X Family Inc.					-0.000		
I VD					(0.001)	0.000	
Income X Poverty						-0.008	
Income V CINI						(0.016)	0.017
Income X GINI							-0.017 $(0.034)$
Lags							(0.054)
Lagged DV '73	0.418**		0.370**	0.369**	0.369**	0.369**	0.374**
Lagged DV 15	(0.032)		(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Lagged DV '82	(0.002)	0.543**	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
208804 2 7 02		(0.028)					
Constant	0.424**	0.465**	0.589**	0.533**	0.526**	0.525**	0.497**
	(0.042)	(0.039)	(0.044)	(0.044)	(0.049)	(0.043)	(0.099)
N	934	934	934	934	934	934	934
11	JU4	9 <del>94</del>	JU4	JU4	994	JU4	J-0-4
F	23.14	45.70	20.55	17.47	17.21	18.10	18.00
df	(8,759.8)	(8,571.2)	(8,652.4)	(9,605.0)	(9,582.6)	(9,663.7)	(9,680.6)

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

presupposition that the income variable in cross-sectional OLS models would "soak up" the effects of unobserved heterogeneity in the data produced by omitted variables while the fixed effects approach would much more accurately model the effects by focusing only on those that vary over time. As suggested previously, it seems that education perhaps serves this role instead. Even so, the effect sizes are relatively small, and income is shown to have a small effect over time that is difficult to detect in this data without the aid of fixed effects models. This is a topic to which I will return below.

Another goal of this chapter was to examine the role that political and economic environment play during primary socialization and assess the durability of such effects beginning during socialization and moving forward over time well into adulthood. As previous work has illustrated, parental influence is an important factor in the determination of political beliefs and this this chapter replicates those findings as well as specifically the results of Niemi and Jennings as they pertain to partisanship. While parental influence on child partisanship is the strongest, it is also shown in the analyses to affect ideology and preferences for government provision of jobs as well. Parental financial status also has some limited influence on child ideology as well.

Beyond the influence of parents, I also find some evidence of other aspects of economic or political factors of one's environment during socialization affecting political attitudes. While economic environment does not seem to matter for respondent partisanship, both support for government jobs and ideology are associated with county median income or poverty rate, but in the opposite direction as predicted. Growing up in a wealthier area makes one more, rather than less, supportive of government jobs as well as making one more likely to identify as liberal.

There are two possibilities for this result that are not necessarily mutually exclusive. First, it could be an artifact of a sample that is much wealthier and more educated than the general public. Recall that on average the parents of the students in the sample were at the 72nd percentile for income in 1965 while the students respondents moved on average to the 78th percentile by the conclusion of the study. In terms of education, 72.7% had at least been to college and 38.2% had received a degree by 1997. Additionally, by this time almost 13% had received post-graduate degrees. This is relative to the national population for which the rates were 50% having been to college, 23.6% having received a degree, and only 7.8% having achieved a post-graduate degree respectively. A second possibility is that these high income areas happen to be disproportionately in relatively liberal states predominately in the Northeast.

The Youth Parent Socialization Panel data provides a unique opportunity to understand the relationship between early socialization environment and adult political attitudes and orientations. It does also have its limitations. Aside from the the affluence and relative economic homogeneity of the sample, the spread of dependent variables paint a picture with a fairly broad brush. Attitudes toward social welfare are much more complex than can be expressed in a desire toward the government providing jobs to those who want them, and certainly more than can be captured by either partisan or ideological self-identification. Second, though the large time period that the data spans is one of its major advantages, it is also a drawback. A significant amount can take place in a period of seven or more years. The data thus does not provide a picture of change over time that is of a very high resolution.

Despite the drawbacks of the sample, the analyses still yield some evidence of mobility effects. However, the effects are relatively muted given the amount of emphasis that may be placed on income by some scholars of class. These results may come as no surprise

to yet another group of scholars who theorize that individuals, at least in the United States, place very little stock in class or economic position due to a heightened belief in meritocratic values. In closing, I re-suggest one final possibility I have stated previously. It could be that the important elements of mobility lie not in the effects of income per se, in factors that sometimes correlate with income such as the locale in which one lives and the individuals to whom one is exposed. For example, Newman (2014) finds that having low-income friends in one's social network is associated with higher levels of support for government social aid. As I continue to explore in the next chapter, socialization is a process of cumulative experiences, which coalesce to form our political attitudes and identities. Income is a proxy for a probability to experience certain types experiences, but it does not capture these experiences themselves. In Chapter 3, I addresses these many of the problematic aspects of the YPSP data by utilizing a different set of panel data. The General Social Survey panel takes place over a short period of time (four years) and contains a host of different measures that tap into different aspects of social welfare attitudes and beliefs about success beyond the simple range present in the analyses in the previous chapter. Additionally, I also explore the effects of experiencing financial hardships as the result of the Great Recession, which represents an experiential measure of mobility rather than only the proxy that income represents.

# Chapter 3

# Mobility, Economic Hardship, and Resocialization During the Great Recession

The preceding chapter begins to explore mobility as a process of socialization and the interplay between economic circumstance and social welfare attitudes. The results provide some support for conservative shifts as the result of upward mobility, though these results are much smaller than expected. Indeed, the analyses also explore the effects of income in general and find evidence that normal cross-sectional analysis tends to over-estimate their effects. The consistent but weak effects of income suggest that mobility does play a role in determining political attitudes, but that it is perhaps not fully captured by financial status alone.

The present chapter runs parallel to Chapter 2 in again analyzing the effects of changing income, but also offers a much broader perspective than was possible given the limitations of the data in the Youth-Parent Socialization Panel data. The General Social Survey 2006-10 Panel offers a more representative sample, shorter time-scale, and a wider array of dependent measures that tap into more specific aspects of social welfare attitudes than the small handful available in the YSPS Panel. Finally, it also allows the deeper exploration of the theoretical mechanism of economic experiences by examining the effects of experienced economic hardships on social welfare attitudes.

While generally socialization is characterized as a process that takes place early on in life and holds its effect well into adulthood, it can also be conceptualized as a process that continues to take place over a lifetime as individuals are shaped by changes in their environments and experiences. Piketty (1995) shows how individuals party identifications are anchored by the political attachments of their parents, but continue to be shaped by their social mobility into adulthood. This is most often measured by changes in financial status such as income, but this only represents a proxy for a variety of economic experiences that take place. Normally, this process is portrayed as taking a long period of time, representing a shift from parent to child status. However, social mobility is a process that is at work all the time as people move in and out of the labor market as well as up and down the financial ladder.

Resocialization is also typically seen as only requiring a major political event (e.g. depression, war, etc.) to take place (Sears 1975). Instead, I conceptualize it here as a process that is ongoing hand-in-hand with social mobility. As an individual's economic status changes, to the extent that it brings other changes in lifestyle and social contact,

it also resocializes them to new economic and political experiences. Indeed, while it is undeniable that cohort shifts occur from major events, it seems that particularly pronounced personal experiences should change our attitudes as well or that relocation into a new socio-economic environment should do the same gradually over time. The latter was the aim of the previous chapter, while the former is what we continue to explore below.

### Data and Methods

While the Youth Parent Socialization Panel Study relied upon for the analyses in the previous chapter provides a unique look into the effects of economic circumstance during socialization and mobility over a lifetime, one of its main drawbacks is its dearth of items measuring political beliefs and attitudes in a higher resolution than partisanship, ideology, and fairly general attitudes towards government action. The present chapter relies on a second set of panel data to conduct a parallel set of analyses that expand on the previous chapter in a number of meaningful ways. First, the wider array of available survey items makes it possible to test the breadth of the effects of mobility on attitudes. Second, the panel takes place over a shorter period of time, but also includes some limited background information about respondents' parents. It is therefore useful for testing the differences between long and short-term mobility which to my knowledge has not before been examined. Finally, the data is from a recent contemporary time period centered around an important event now commonly known as the Great Recession. In addition to likely creating more downward mobility in the data as measured by respondent income, a set of survey items the data also spans the contains specific items that can be used to directly measure a number of hardships experienced as a result of the economic downturn. Overall, the analyses in this chapter broaden the understanding of the political effects of mobility by filling in many of the shortcomings of the Youth Parent Socialization Panel data used in Chapter 2.

## Overview of the General Social Survey Panel

The General Social Surveys (GSS) have been conducted by the National Opinion Research Center (NORC) for most of the last four decades. The analyses in this chapter rely on a three wave panel survey of 2000 respondents who were originally sampled and interviewed in 2006 and subsequently reinterviewed in 2008 and 2010. Of the original 2000, 1255 remained in the final wave after attrition. Of the original respondents, 1146 (57.3%) were female and 1464 (73.2%) were white with the remainder being black (14.3%) or other non-white (12.6%). The average respondent was 47 years old (sd = 1.72), had some college education (13.5 years, sd = 3.1), and attended religious services roughly several times a year. In terms of income, the key variable of interest for determining social mobility as will be discussed below, the sample is much more representative than the YPSP data with the average respondent falling at the 36th percentile (sd = 28). Finally, politically the sample leans slightly Republican and ideologically conservative, with the average respondent scoring a 3.7 (sd = 2.2) and 4.1 (sd = 1.4) on the traditional seven-point scales of partisan identification and ideology respectively.

<sup>&</sup>lt;sup>1</sup>This particular dataset is housed in the Association of Religion Data Archives and was originally collected by Davis, Smith, and Marsden (2011), all of to whom I am grateful for its use.

Table 3.1: Effects of Listwise Deletion on Variables in Sample  $\,$ 

Variable	Total # of Non-Missing	Mean	Mean	Difference
Variable	Cases Dropped	(Full sample)	(Listwise)	of Means
Demographics				
Female	1766	0.5723	0.5687	0.0036
Race	578	0.2359	0.2284	0.0075
Age (10 yr)	527	4.8923	4.8273	0.065
Income	38	0.3003	0.2998	0.0005
Education	568	0.681	0.6843	-0.0032
Intergen. Mob. (SEI)	206	-0.0178	-0.0162	-0.0015
Party ID	552	0.5223	0.5203	0.002
Ideology	1715	0.5827	0.5823	0.0003
Church Attendance	564	0.4627	0.4576	0.0051
Hardships				
No insurance	276	0.2029	0.2105	-0.0075
Bill Collectors?	278	0.2359	0.2456	-0.0097
Can't Pay Mortgage	275	0.1087	0.1134	-0.0047
$Dependent\ Variables$				
Intergen. Mob. (Perceived)	367	0.7675	0.7663	0.0012
Social Class	565	0.6098	0.6079	0.0019
Hard work	383	0.6665	0.6718	-0.0053
Healthcare	553	2.599	2.6027	-0.0037
Help Poor	356	0.6189	0.6207	-0.0019
Help Sick	352	0.7103	0.7091	0.0012
Childcare	501	0.8145	0.8153	-0.0008
Opportunity	372	0.7013	0.702	-0.0007
Reduce Ineq.	364	0.6117	0.6135	-0.0019
Social Security	530	0.8573	0.8558	0.0015

As previously mentioned, like any panel study, the 2006-10 GSS Panel suffers from a problem of attrition. Out of the original 2000 respondents, only 1255 remain in the final wave. Additionally, as with most survey data there are also non-responses, particularly on the income variable. Of the 1255 in the final wave, an additional 107 subjects were omitted from analysis because they did not report their income. In an ideal world we may often assume that data are missing completely at random (MCAR), and while this is often an assumption that goes untested, it becomes increasingly more important the greater the proportion of the missing data. In order to examining this issue in the GSS panel, I ran non-parametric tests for MCAR data separately on each wave of the panel using the TestMCARNormality function in R. $^2$  The results rejected the null that the missing data in the panel was MCAR (p< .05, p< .001, p< .001, respectively for Waves 1 through 3).

While the data does not confirm the stronger assumption of MCAR, it is still a reasonable assertion it could be missing at random (MAR). Table 3.1 shows the total number of cases dropped, which are spread across the three waves, as well as the difference in means between the original sample and the sample that results from listwise deletion. The sample appears to be largely unaffected by the missing cases in the data. Missing data is a much more problematic for dependent variables than for regressors, and in this case the lost is most prominent on the income variable (likely for well-known reasons of social desirability). Notice that only 38 non-missing cases of income are dropped. This is due to the fact that the majority of the missing cases are removed by listwise deletion for missing income. As I will discuss in a moment, while the remaining observations of income seem slightly over-representative of the lower-middle class, they are not skewed in a drastic way.

#### Variable Descriptions

The measures of income and mobility in this study are very similar to those used in the previous chapter. Again using IRS data, I recoded income from its original categorical form to percentiles from cutoffs defined in the national population, though in this case it is household income instead of personal income as was the case in Chapter 2.<sup>3</sup> It is then rescaled by a factor of ten so that each unit change signifies roughly a one-decile change in income. Mobility is represented by the difference in these values between waves. Figure 3.1 depicts the mobility between the waves of the GSS Panel, while Figure 3.2 shows the mobility over the entire panel (2006-10). As you can see, while there is variance, including some very upwardly or downwardly mobile individuals, almost all respondents remain within about two deciles of where they began. Between Waves 1 and 2, the mean mobility is a shift of about 2.2 percentiles upward, whereas between Waves 2 and 3 it is less that a percentile shift downward. Thus, in a shorter panel we observe that mobility is present but somewhat restricted.

This income measure of mobility is the central measure in the analyses and it is used to explore three broad areas of dependent variables that relate to both individuals economic self-perceptions and beliefs, their general economic attitudes toward the role of government, and their attitudes toward specific social welfare programs.

<sup>&</sup>lt;sup>2</sup>The function first runs a Hawkins test of normality and homoskedasticity to determine whether the parametric test is necessary, as it was in this case.

<sup>&</sup>lt;sup>3</sup>Recall that household income is the preferred measure here, as it better captures an individual's social status and standard of living. Additionally, the GSS panel did collect personal income, but the degree of missing data is far and above that observed on household income.

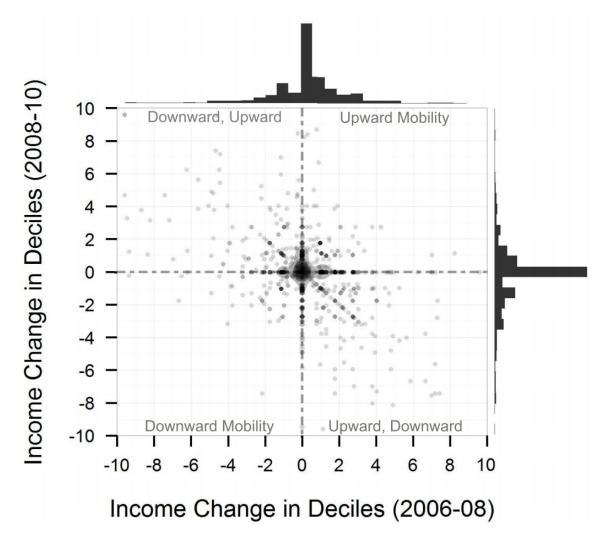


Figure 3.1: Density of Mobility Between Panel Waves

Note: This figure displays the difference in income decile for each respondent between Wave 1 and Wave 2, and between Wave 2 and Wave 3. The dashed lines indicate quadrants of overall mobility throughout the panel, as noted on the figure.

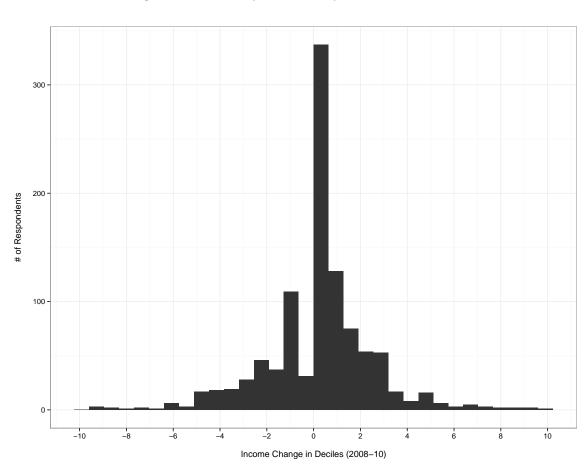


Figure 3.2: Density of Mobility Across Full Panel

Note: This figure displays the difference in income decile for each respondent between Waves 1 and Wave 3. The dashed lines indicate quadrants of overall mobility throughout the panel, as noted on the figure.

#### Dependent Variables

This section outlines the dependent variables used in the analyses. Unless otherwise mentioned all dependent variables in the analyses are re-scaled from a multi-response format to range from zero to one. Additionally, all original item phrasings can be found in the Appendix.

Economic Perceptions: How do people perceive their own economic status? I measure this in two ways: first, where individuals perceive themselves relative to other Americans, and second, where they perceive themselves relative to their parents when they were at the same age that the respondent is currently. Both items were collected as five-point scales.

Economic Beliefs: There are two beliefs arguably key to understand both one's own mobility as well as that of other citizens: opportunity and success. How much opportunity is available in America and how do individuals achieve it? Opportunity was recorded as a five-point agree/disagree measure, and rescaled from zero to one for analysis. Belief in hard work is coded as a dummy variable for the belief that hard work is the most important for success.

Political Identities: Though they are very broad outcome measures, for the sake of comparison with Chapter 2, I examine both ideological and partisan identity coded for conservatism and Republican identity respectively which were measured as seven-point scales and re-scaled from zero to one.

Attitudes Toward the Role of Government: The government can intervene in economic affairs in any number of ways. Here I am specifically concerned with their intervention as it relates to the individual, redistribution, and the provision of social welfare programs. What should the government do, and how much? Obviously individuals differ widely in their opinions on this question, which in fact historically is the foundation of the American party system (Aldrich, why parties). I examine four different aspects of the role of government. First, generally should the government do more or less to solve the country's problems? Second, should the government concern itself with raising the standard of living of the poor? Third, is it responsible for helping people to pay their medical bills and visit doctors and hospitals? And finally, should the government reduce income differences between the rich and poor? All variables were asked as seven-point scales, are coded in the liberal direction or in support of the government doing more, and re-scaled from zero to one.

Social Welfare Programs: The last set of dependent variables contains items regarding specific government programs: Social Security, national health, childcare and Welfare. These questions were asked as three-point items: does the government spend too much, too little, or about the right amount on each? All variables are re-scaled zero to one and coded in the direction of "too little" spending.

#### Extension: Economic Hardship

In addition to examining the effect of income on political attitudes, I also examine the effect of more concrete economic factors: experienced hardships. In this second set of analyses, I use a set of items that are only available in the second two waves of the panel that ask respondents about the types of financial hardships they have experienced in the last year including falling behind on the rent or mortgage, not being covered by health insurance, and being pressured to pay bills that were overdue. I used these three items to create a scale which was then re-scaled to range from zero to one.

#### **Demographics**

Finally, a standard set of demographic controls were included in the analyses. This includes sex coded as a dummy for female, race coded as a dummy for non-white, age re-scaled in tens of years, education in number of years re-scaled to range from zero to one, and church attendance as a seven-point scale re-scaled to range from zero to one.

# Estimating the Effects of Income with Panel Data

#### Model Specifications: Fixed and Random Effects Models

As in Chapter 2, I here employ both fixed and random effects estimation to achieve the most leverage from the GSS panel data. Recall that while the chief advantage of the fixed effects approach is that it allows consistent estimation of parameters by effectively canceling out all unaccounted for heterogeneity in the data. Fixed effects essentially uses the fact that individuals are observed over multiple time points to employ them as statistical controls for themselves, similar to a within-subjects experiment, thus accounting for any possibly omitted variables. However, in doing this it means that all variance being modeled in a fixed effects model is over-time variance because all time-invariant heterogeneity is held constant. The following equation is estimated for each dependent variable:

$$DV_{it} = \beta_1 Income_{it} + \alpha_i + u_{it} \tag{3.1}$$

While the fixed effects approach has some notable advantages, its shortcoming is its inability to examine other variables we might be interested in that are fixed over time. This includes most demographic variables such as gender and race, as well as effectively education in this context given the short time period of the study. Additionally, if random effects models are consistent, they not only allow the modeling of cross-sectional variance in addition to temporal variance, but are also more efficient than fixed effects models. I therefore also estimate the following equation for each dependent variable:

$$DV_{it} = \beta_1 Income_{it} + \beta_2 Education_i + \beta_3 Female_i + \beta_4 Nonwhite_i + \beta_5 Age_{it} + \beta_6 Church Attend_{it} + \alpha + u_{it} + \epsilon_{it}$$
 (3.2)

In addition to the fixed and random effects models, I also estimate the effects of income with ordinary least squares so that it can be compared to the panel estimates. If the coefficient for income in cross-sectional data is accounting for more than just the unique effect of income, it should be much larger when estimated with OLS than with fixed effects.

#### Fixed Effects Versus OLS Estimates of Income

As detailed above, I examine the effects of income on three sets of dependent variables: economic perceptions and beliefs, political identities and general attitudes toward the role of government, and attitudes toward specific social welfare policy dimensions and programs. Unlike in the Youth-Parent Socialization Panel used in Chapter 2, the wealth

of relevant items found in the General Social Survey Panel allow the examination of the breadth of the effect of mobility.

First, I examine the effects of income as estimated by both fixed effects and OLS. If the coefficient for income is in fact absorbing variance that is not unique to the effect of income, it should be much larger when estimated with OLS than when estimated with fixed effects. Figure 3.3 compares the size of the two coefficients.<sup>4</sup> In this case, they should only be compared between models rather than between dependent variables as the estimates for OLS represent the largest effect present when the model is estimated separately for each individual wave in the panel. Thus, these effects can be interpreted as the maximum extent to which OLS overestimates the effect of income in this sample. Furthermore, as a binary variable effects of the hard work variable is estimated using a maximum likelihood-based logistic regression. I will return to relative effect sizes between the dependent variables below.

As Figure 3.3 illustrates, the difference between OLS and fixed effects is often large, though the substantive effects sizes remain small. In many cases, the OLS coefficient is at least twice the size of the fixed effects coefficient, suggesting that in cross-sectional analysis, the income variable is absorbing variance that is not uniquely attributable to it (or the standard battery of controls included in the OLS estimation). This additional variance may represent other factors that are related to income but not income itself, such as aspects of social class, lifestyle, or other types of economic experiences that may shape individuals beliefs and attitudes. One specific example, as I explore in a subsequent section of this chapter, are economic hardships such as being unable to pay bills or not being covered by medical insurance. These factors have an independent influence on political attitudes regarding government assistance, and while they are certainly related to one's level of income (or employment status), they are not synonymous with it. Thus we see here that while income does have a unique influence, to be explored next in more depth, the fixed effects approach suggests that it does not have as potent an effect as would be attributed to it if it were being estimated solely in a cross-sectional design.

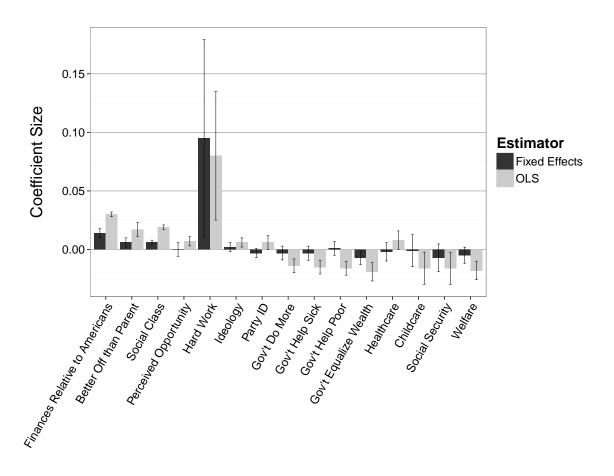
The next relevant question is how broad are the effects of income. Recall that the GSS data set makes available a spectrum of items range from more general economic perceptions to more specific policy attitudes, which I categorize into roughly three groups: economic perceptions and beliefs (Figure 3.4), basic political identities and general beliefs about the role of government (Figure 3.5), and specific social welfare policy attitudes (Figure 3.6). Figures 3.4 through 3.6 display the coefficients for the effect of income on the dependent variables. The coefficient displayed in the figures was estimated using a random effects model unless otherwise noted, based on the results of the Hausman test. These can be found in the Appendix along with the results for both fixed and random effects estimation for each dependent variable.

Figure 3.4 presents the first set of coefficients for economic beliefs and perceptions. Recall that income is measured in deciles and the dependent variables have been re-scaled from zero to one.<sup>5</sup> Fixed effects coefficients can be roughly interpreted as the resulting change in a dependent variable from a one unit change in a regressor. Thus, fixed effects coefficients here can be interpreted as the resulting change in percentage points from a one decile increase in over-time income. Random effects coefficients yield more efficient

<sup>&</sup>lt;sup>4</sup>All original model estimates for both fixed effects and OLS can be found in the Appendix.

<sup>&</sup>lt;sup>5</sup>The exception is the coefficient for Hard Work where the variable is coded as a dummy and the coefficient is the result of a logistic regression. Effects in terms of predicted probabilities for this variable will be discussed for a subsequent model.

Figure 3.3: Comparison of Fixed Effects and Ordinary Least Squares Estimates of the Effect of Income



Note: OLS coefficients displayed are for the largest effect estimated in the three waves. For most dependent variables the coefficient sizes are similar across the waves, but for others the effect is isolated to one year. This figure therefore displays the largest potential over-estimation of the effect of income in this data. Refer to the tables in the Appendix for more information.

estimates, but are somewhat more difficult to interpret directly, as the coefficients capture variance that is both temporal and cross-sectional.

The results show that income has a significant association with a variety of economic perceptions and beliefs. An increase in income is associated with perceiving oneself in a better position financially, both relative to other Americans ( $\beta=.014, p<.01$ ) and to one's parents when they were the same age as the respondent ( $\beta=.006, p<.01$ ). It is also positively related with a self-placement in a higher social class ( $\beta=.006, p<.01$ ). Finally, an increase in income also results in an increase in perception of more opportunity in the U.S. ( $\beta=.005, p<.01$ ) and that hard work is the most important aspect of taking advantage of this opportunity to achieve success ( $\beta=.060, p<.01$ ).

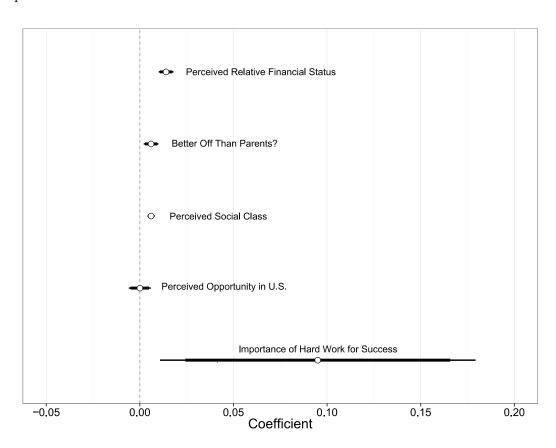
Moving to Figure 3.5, there is also some evidence that increasing income is also associated generally with political outlooks toward the role of government. An increase in income is associated with general ideological self-placement as conservative ( $\beta = .004, p < .01$ ) as well as negatively with the belief that the government should generally do more to solve the country's problems ( $\beta = -.008, p < .01$ ). It is also negatively associated with more domain-specific beliefs that the government should help individuals to pay for medical care ( $\beta = -.008, p < .01$ ) and that it should work to reduce inequality ( $\beta = -.008, p < .01$ ). On the other hand, increasing income seems to have little bearing on political party affiliation ( $\beta = -.003, p < .11$ ), which falls short of significance in opposite of predicted direction, or the belief that the government should help the poor ( $\beta = .001, p > .10$ ).

Finally, Figure 3.6 shows the effects of increasing income on more specific policy attitudes. There are significant and negative effects on desires for social security spending  $(\beta = -.009, p < .05)$ , childcare spending  $(\beta = -.008, p < .05)$ , and welfare spending  $(\beta = -.009, p < .01)$ . Interestingly, given the results for beliefs about helping the sick from Figure 3.5, income does not significantly predict attitudes toward healthcare spending  $(\beta = .001, p < .05)$ .

Overall, the first set of analyses serves two purposes. First, along with the results of Chapter 2, it helps to establish that income as estimated normally in cross-sectional data by OLS has the potential to greatly overestimate the *unique* influence of income per se. This means that there are likely other factors associated with income that are often not directly being accounted for, some of which could be other relevant aspects of economic experience and social class. Second, it provides a first cut at a more diverse set of dependent measures and their relationships with income and mobility. In line with the results of Chapter 2, I find also in the GSS data that generally higher income and upward mobility are associated with more conservative political attitudes. This includes general ideological self-placement as well as more domain- and policy-specific attitudes. Upwardly mobile respondents are more likely to see themselves as upwardly mobile, both in the short- and long-term sense, and more likely to see opportunity in America and believe that hard work is the tool for exploiting it.

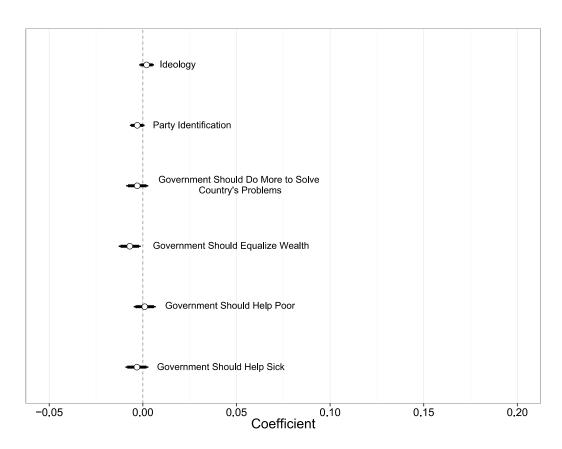
Now that we have established that such effects are present, the next section is focused solely on the effects of mobility. I apply a different methodological approach that, while lacking some of the characteristic advantage of explicit panel modeling, still leverages the panel structure of the data and is more easily interpretable in terms of understanding the effects of mobility.

Figure 3.4: Fixed and Random Effects Coefficient Estimates of Income Across Economic Perceptions and Beliefs



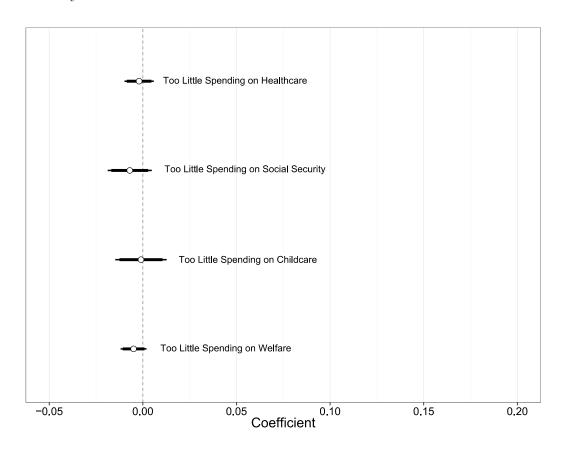
Note: Coefficients shows the effect of a one decile change in income across each dependent variable, which are all scaled range from zero to one. All estimates are from fixed effects regression models generated with xtreg in STATA, except the coefficient for the Hard Work variable which was generated with xtlogit. The original models can be found in tables in the appendix.

Figure 3.5: Fixed and Random Effects Coefficient Estimates of Income Across Political Identities and General Economic Attitudes



Note: Coefficients shows the effect of a one decile change in income across each dependent variable, which are all scaled range from zero to one. All estimates are from fixed effects regression models generated with xtreg in STATA.

Figure 3.6: Fixed and Random Effects Coefficient Estimates of Income Across Specific Welfare Policy Attitudes



Note: Coefficients show the effect of a one decile change in income across each dependent variable, which are all scaled range from zero to one. All estimates are from fixed effects regression models generated with xtreg in STATA.

## The Effects of Mobility During the Great Recession

The previous section has provided evidence to establish a relationship between income and social welfare attitudes, but the question remains yet to be answered how much of this influence can be accounted for by the *change* in income (i.e. mobility) and exactly how large these effects are. Fixed effects models are helpful tools in working with panel data and in establishing the unique effects of variables without explicitly identifying all possible influential variables. However, they do not effectively test the effects of a *change* in a variable over time even though they rely on over-time variance for estimation. In this section, I explore mobility more explicitly by using differenced measures of income that can be directly interpreted as change in income.

## Model Specification: OLS with Differenced Income and Lagged Dependent Measures

I will refer to the modeling approach in this section as lagged-difference models. Simply put, this approach applies standard OLS and regresses a differenced measure of income from two time points on the dependent measure from the later time point while including a lagged value of the dependent variable from the first time point. Thus, this approach models the effect of the *difference* in income on the variance of the dependent variable that is unique to the period between the two time-points. More formally, the model looks as follows:

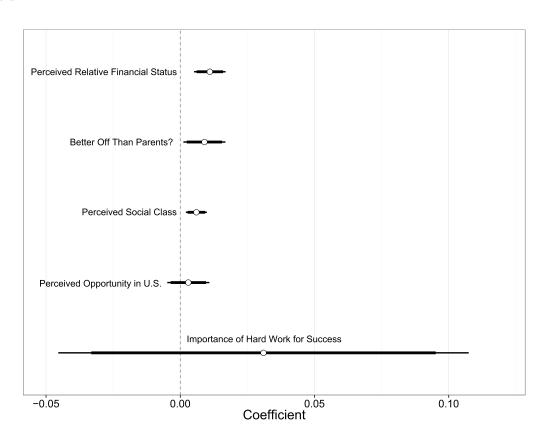
$$DV_{2010i} = \beta_1 DV_{2006i} + \beta_2 (Income_{2010i} - Income_{2006i}) + Controls + u_i$$
 (3.3)

This lagged difference approach is useful in two main ways. First, to the point of this section, it is more easily interpretable; it is both linear and has units that are meaningful—change in income deciles. Second, unlike panel models, it also more easily allows testing for effects that are isolated between only two specific panel waves that might be otherwise obscured by analyzing the overall panel. The downside of course is that it is less robust to issues of model specification such as omitted variable bias. It is however a good complement to the analyses in the preceding section.

#### Results

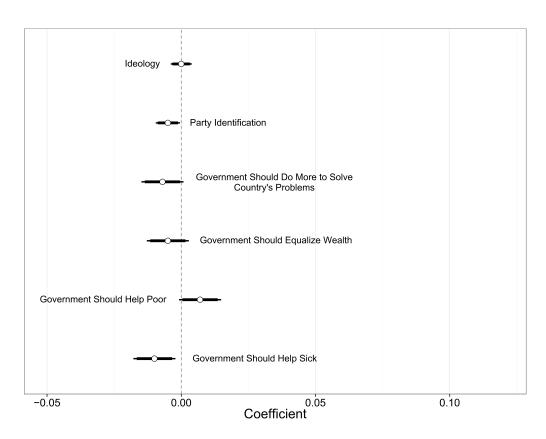
Figures 3.7 through 3.9 display the results of the lagged difference models, once again broken up into three broad groupings. In general, the results are much weaker than in previous analyses. Figure 3.7 shows the effects of mobility on economic perceptions and beliefs, which are the strongest of the three. Upward mobility is significantly associated with the belief that one is better off relative to other Americans financially ( $\beta = .011, p < .01$ ) as well as when compared to their own parents in the past ( $\beta = .009, p < .05$ ). It is also associated with self-placement into a higher social class. However, it is no longer associated with either perceptions of opportunity ( $\beta = .003, p > .10$ ) or belief in the importance of hard work ( $\beta = .031, p > .10$ ). As will be discussed more below, these effects can be interpreted as a percentile change in the dependent variable for each income decile moved up or down between the panel waves (see 3.10).

Figure 3.7: Coefficient Plot of Differenced Income Across Economic Perceptions and Beliefs



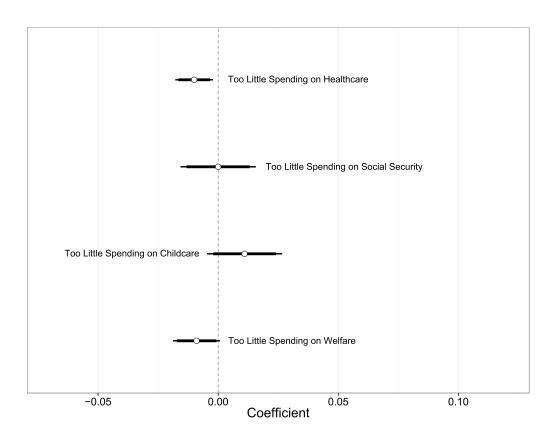
Note: The coefficients for income in the differenced models were constructed by difference income in 2006 from income in 2010 and regressed on dependent variables in 2010. The original models can be found in tables in the appendix.

Figure 3.8: Coefficient Plot of Differenced Income Mobility Across Political Identities and General Economic Attitudes



Note: The coefficients for income in the differenced models were constructed by difference income in 2006 from income in 2010 and regressed on dependent variables in 2010. The original models can be found in tables in the appendix.

Figure 3.9: Coefficient Plot of Differenced Income Across Specific Welfare Policy Attitudes



Note: The coefficients for income in the differenced models were constructed by difference income in 2006 from income in 2010 and regressed on dependent variables in 2010. The original models can be found in tables in the appendix.

The results are much more sparse for more the more explicitly political dependent variables. Of the six variables measuring general beliefs about the role of government in Figure 3.8 and the provision of government aid, only partiaenship ( $\beta = -.005, p < .05$ ) and the belief that the government should help the poor ( $\beta = .007, p < .10$ ) are significant (the later marginally and in the opposite direction of expectation). Of the four specific social welfare policy items in Figure 3.9, only that for welfare is significantly associated with upward mobility ( $\beta = -.027, p < .05$ ).

While the results of the lagged difference analyses over the whole duration of the panel are somewhat underwhelming, the use of OLS makes it easy to fit each model on data from each set of panel waves (i.e. Waves 1 & 2, Waves 2 & 3). This explores whether there are any effects that are bound to specific time periods, but still allows assertions to be made about the effects of mobility, which would not be the case were the models to be estimated as cross-sectional data by wave. Indeed, in doing so I find that there are effects that are limited to certain time periods, though given this, caution should be exercised in drawing conclusions from these results. Upward mobility between Waves 1 & 2 (2006-8) is negatively associated with support for more healthcare spending ( $\beta = -.010, p < .01$ ). Upward mobility between Waves 2 & 3 (2008-10) is negatively associated with believing that the government should do more generally ( $\beta = -.007, p < .10$ ) or has a duty to help the sick with healthcare costs ( $\beta = -.010, p < .05$ ) and positively associated with the belief that hardwork is the most important determinant of success ( $\beta = .098, p < .05$ ).

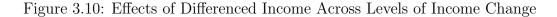
Instead of viewing these particular results of firm effects for the effect of mobility on social welfare attitudes, they should instead be viewed as what is within the realm of possibility and as a piece of a larger picture. Figure 3.10 presents the substantive effects of upward mobility measured in percent change in the dependent variable across various levels of mobility observed in the sample. Each effect is given for the minimum, maximum, and mean values of mobility as well as for one standard deviation in mobility above and below the mean. Expressed in decile change these range from a minimum of -9.65 to a mean of .157 (+/-sd = 2.291) to a maximum value of 9.65 over the full panel.<sup>6</sup> For example, one standard deviation in upward mobility results in an increase in belief that one is better off than the average American of about 2.7%, while a maximum increase of 9.65 results in a shift in the same direction of about 10.5%.<sup>7</sup> The rest of the effects in Figure 3.10 may be interpreted in similar fashion.

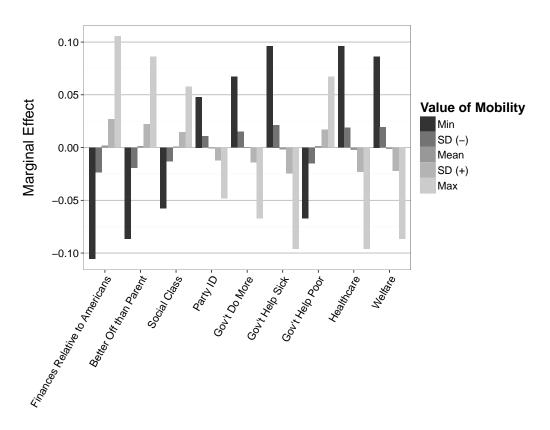
Marginal effects of the belief in hard work variable do not appear in Figure 3.10 as they are instead marginal changes in predicted probability, calculated from a logistic regression model instead of OLS. At average mobility, the probability of saying that hard work is the most important determinant of success is .67, shifting .038 with a standard deviation change in mobility in either direction. At the most upward mobility, there is a .82 probability of saying hard work is most important, while at the most downward mobility there is a .48 probability.

In sum, this second set of analyses provides again some evidence for the effects of social mobility on social welfare attitudes. The effect sizes, however, are shown to be quite small, with substantively very large shifts in income resulting in changes in attitudes that could

<sup>&</sup>lt;sup>6</sup>The mean and standard deviation varies by survey wave pair, but not drastically. The values of income used to calculate the effects presented in Figure 3.10 are adjusted accordingly if the effect is calculated for a subset of waves and not the entire panel.

<sup>&</sup>lt;sup>7</sup>While not outside the realm of possibility, these individuals are, of course, extreme cases. Only 9 respondents in the sample fall above + 9 or below - 9 change in income deciles over the three panel waves.





Note: This figure depicts the effects of diffenced income mobility at various levels of income change, from the minimum to maximum values observed in the sample. The full distribution of the income variable can be seen in Figure 3.1. The effects can be interpreted as a percent change in the dependent variable. Only variables for which the coefficient was significant are pictured. Additionally, the effects on Gov't Do More and Gov't Help Sick are isolated to the change between the 2008-10 waves, while the effects on Healchare are isolated to the change between 2006-10. Finally, the Hard Work variable is not displayed here because its effects are presented as predicted probabilities from a logistic regression.

be described as modest at best. This issue will be revisited below.

## Economic Hardship

To this point, the analyses have centered on the effects of income and change in income as a representation of the process of social mobility. Recall that this is hypothesized to be a much broader process than can be captured by such a variable alone, and indeed the modest results found for income suggest that this is at least one plausible possibility. Social mobility as a socialization process involves being exposed to and absorbing new experiences that come along with new social standing. Certain experiences may be associated with the process of upward or downward mobility that are themselves more impactful than only the loss or gain of income alone. For example, loss of income may itself have a psychological impact (e.g. prospect theory, Kahneman and Tversky (1979), but it is often associated events such as being unable to maintain one's standard of living, pay one's bills, or even provide for one's children as having a deeper impact emotionally. Income is only a number, experienced cognitively, what it buys (or does not buy) is experienced in a different way entirely, though income may be a proxy for this.

One final set of analyses therefore examines not change in income, but exposure to negative economic situations that occurred during the beginning of the Great Recession (i.e. between Waves 2 & 3). These negative economic hardships include falling behind on paying one's rent or mortgage, being pressured by bill collectors, and lacking health insurance coverage. The three are added together and re-scaled from zero to one to form a scale of economic hardship ( $\alpha = .57$ ), which will be the basis of this set of analyses instead of income. In Wave 2, 51 (3.4%) individuals experienced all three hardships while 1,007 (66.2%) experienced none. Similarly, in Wave 3, 60 (4.7%) individuals experienced all three hardships while 797 (62.7%) experienced none. To reiterate, I expect that such hardships will have a more powerful effect on both economic perceptions and political attitudes relevant to provision of government social welfare assistance.

# Model Specification: First Difference Estimation of the Effects of Economic Hardships

The estimation of the effect of economic hardship will rely on first difference models, which are similar to fixed effects models and in fact I identical for two time points. This is appropriate as the hardship items were only collected in Waves 2 & 3. As with fixed effects, the first difference estimator holds constant time invariant quantities, thus there are no need for standard controls. The equation for estimation looks as follows:

$$\Delta DV_{it} = \beta_1 \Delta Income_{it} + \Delta u_{it}, t = 1, 2 \tag{3.4}$$

#### Results

The results for the first difference models are once again presented as coefficient plots for the estimates of the income coefficient across the dependent variables. Figure 3.11 presents the effects of experiencing hardships on economic perceptions. Experiencing hardships are significantly and negatively associated with perceiving oneself as better off than fellow Americans ( $\beta = -.087, p < .01$ ) or ones parents at a similar point in their

adult lives ( $\beta = -.078, p < .05$ ). Individuals who experience hardships are also less likely to perceive opportunity in America ( $\beta = -.058, p < .10$ ) and less likely to see hard work as being key to success ( $\beta = -.142, p < .05$ ). The coefficients from these models can be interpreted as the resulting change in the dependent variable from experiencing all three hardships where previously experiencing none.

Figure 3.12 shows the results for political identification and general postures towards government social assistance. Only ideological self-placement is significantly associated with experiencing hardship, and in the opposite direction as predicted ( $\beta = .044, p < .05$ ). Figure 3.13 shows that the first difference estimates of hardships yield no effects on specific social welfare policy attitudes.

Similar to the effects found for income and mobility, given the likely emotional impact of the experiences in the hardship scale substantively, the effect sizes appear very modest in result. Additionally, the more specific the attitude, the more diffuse the results become. This will be discussed in more detail below.

#### Discussion

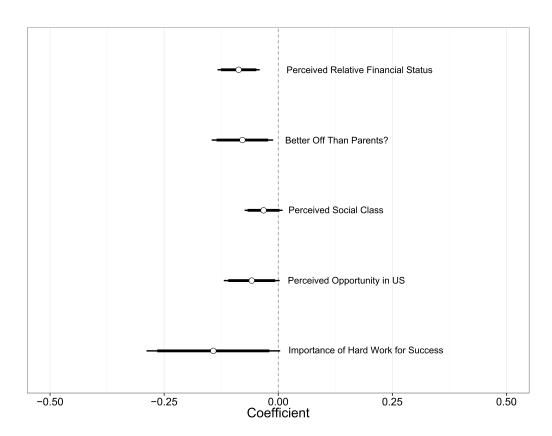
The analyses in this chapter relying on the GSS Panel expand upon those from Chapter 2 built on the more longitudinal Youth-Parent Socialization Panel Data. The two provide a complementary look at the influence of income and the process of mobility by offering both a short- and long-term view of the economic changes in the lives of individuals. Compared to the YSPS, the GSS data is also more contemporary and more representative of the national population. Additionally, it also allowed the analyses to be expanded beyond a scant handful of general dependent measures to explore a whole spectrum of beliefs and attitudes relevant to the government provision of social aid.

In line with expectations, and with the results of Chapter 2, I find that there is some evidence for the effect of mobility on social welfare attitudes. This extends from general ideology and disposition toward the government explored in the previous chapter to attitudes toward more specific social policy domains and programs. I also find once again that cross-sectional designs tend to over-estimate the effects of income and when isolated to a within individual effect using a fixed effects design the effects are more modest. Given that the effect sizes are already modest, this leaves much room for other factors to further our explanations on the subject, which is in line with the conceptualization of mobility as a much broader process of socialization and change within an individual's personal and inter-personal environments. As individuals economic situation changes, so does the range and type of their experiences.

One set of possible experiences is explored in this chapter: the effects of economic hardships experienced. I find that experiencing economic hardship affects economic perceptions and beliefs, extends somewhat to general feelings regarding the role of government, but does not extend to more specific policies. Additionally, the effects of experiencing hardship are substantively small, as were the effects of experiencing upward or downward social mobility. This raises an important question: why is this the case?

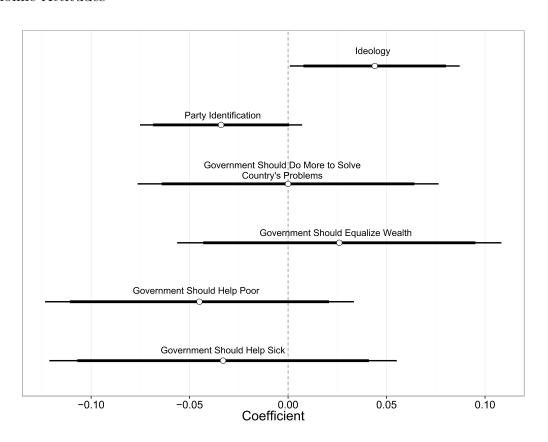
Given the sometime major shifts observed in mobility as well as the expected emotion impact of the economic hardships examined, the effect sizes observed are somewhat underwhelming. Observing that someone who experiences as startling a fall from grace as a downward shift in income of roughly 90 percentiles only a roughly 10% shift in an attitudinal scale is quite limited. Additionally, finding that the effect of experiencing

Figure 3.11: Coefficient Plot of Economic Hardship Across Economic Perceptions and Beliefs



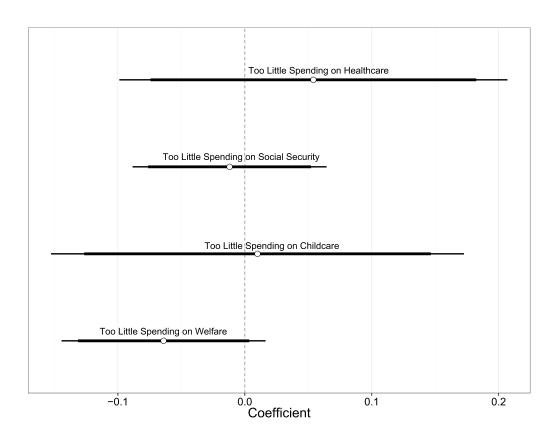
Note: The coefficients are for all models shown to be consistent while including the prejudice scale. Coefficients show the effect of change across across the entire range of the prejudice scale for each dependent variable, which are all scaled range from zero to one. Estimates are from random effects models generated with xtreg in STATA.

Figure 3.12: Coefficient Plot of Economic Hardship Across Political Identities and General Economic Attitudes



Note: The coefficients are for all models shown to be consistent while including the prejudice scale. Coefficients show the effect of change across across the entire range of the prejudice scale for each dependent variable, which are all scaled range from zero to one. Estimates are from random effects models generated with xtreg in STATA.

Figure 3.13: Coefficient Plot of Economic Hardship Across Specific Welfare Policy Attitudes



Note: The coefficients are for all models shown to be consistent while including the prejudice scale. Coefficients show the effect of change across across the entire range of the prejudice scale for each dependent variable, which are all scaled range from zero to one. Estimates are from random effects models generated with xtreg in STATA.

being unable to pay one's bills or rent, not having access to health insurance, and being harassed by debt collectors all during the same time frame has a similar affects on attitudes is equally perplexing.

There are a few possibilities for this pattern of results. First, it could be an issue with the sample. The sample spans a time period of economic turmoil and the whole sample on average leans left in regards to social welfare policy. Perhaps personal economic experience could be more discerning in a healthier economy. It could also be due to an under-sampling of individuals who are downwardly mobile or experiencing economic hardship. Figure 3.1 shows that there is a slight tendency in the sample toward upward mobility, especially over the whole panel. In future work, it would be worthwhile to oversample individuals in economic distress, as difficult as it may be to reach those people. It would also be helpful to collect a wider range of economic experiences, both positive and negative, to more fully assess the effects.

Despite these conjectures, the analyses in Chapter 2 provide convergent evidence from a completely different sample and time period. It could therefore be more likely that there are some parts of the socialization theory of mobility as proposed are not valid. There are two potential alternatives that seem the most likely. First, it could be that individuals who are downwardly mobile disengage from politics and thus do not express a consistent attitude toward government help. Indeed, previous research has well-established the disengagement of the poor from American politics (Newman, Johnson and Lown 2014; Brady, Verba and Schlozman 1995). Second, instead it could be that the poor place the blame upon themselves, as tends to be the cultural tendency of American belief in meritocracy. Instead of diverting the blame to an unjust economic system, the downwardly mobile may instead place the blame on themselves. In any case, the story here seems to be much more complex than attitudes shifting with social station.

Chapter 4 will examine the latter assertion, American culture diffuses the effects of social mobility, by casting the effects in a comparative context. If this is the case, the results of the final empirical chapter should indicate that the effects of social mobility are much more pronounced in other nations where the cultural ethos does not place as heavy an emphasis on hard work and personal responsibility.

<sup>&</sup>lt;sup>8</sup>Although, Newman, Johnston and Lown (2013) do find that the poor are much more likely to reject these beliefs when local economic hierarchies are more obvious and they are aware of their place in them.

# Chapter 4

# Perceived Mobility, Economic Beliefs, and Social Welfare Attitudes Across 41 Countries

The goal of the two preceding chapters has been to examine the influence of income and social mobility on political attitudes from an over-time perspective not before been applied. The results reveal that while overtime changes in income do have some effect on political attitudes and beliefs, it is one that is quite modest. Furthermore, while the effects of economic context found in Chapter 2 are preliminary at best, there is a persistent influence of parental political identification over time. However, this effect fades as the child moves further into adulthood.

The results of Chapters 2 and 3 raise further questions about the relationship between income and political attitudes. First, the small effects of income lend new support to the old puzzle of why American's political opinions do not seem to align with their economic interests (Gelman 2009; Frank 2005), especially in the case of redistributionary policies (Meltzer and Richard 1981). Are the small effects of income and mobility here identified an isolated American phenomenon? Researchers and political scholars have long considered the case of "American exceptionalism" to be an outlier in political culture and welfare state development, relative to other modern democratic nations (Lipset 1996; Jantti et al. 2006). This often centers around Americans pronounced beliefs in a meritocratic system and that hard work has a high probability of yielding success in the form of financial wealth and elevated social status. Other political cultures do not hold such beliefs as centrally which seems to go hand-in-hand with a more developed welfare state (Alesina and Angeletos 2005; Alesina, Glaeser and Sacerdote 2001). Indeed, individuals who are socialized into different political cultures will view the world very differently. Specifically, one possibility is that the strength of meritocratic belief within a political culture acts as a suppressing force on the effects of social mobility. Relative to countries like the U.S., in countries where such beliefs are less prevalence, we might expect to find that mobility has a stronger effect on political attitudes.

Additionally, it is yet unclear whether the effects of mobility may be influenced by the structure of the economic system in which they are mobile. Does the relative ease of social mobility make a difference to the mobile? Does it matter if class divides are made more pronounced by inequality? At the local level, inequality has been found to raise awareness of one's position in the socio-economic hierarchy and polarize economic beliefs along class lines (Newman, Johnston and Lown 2013). While inequality as measured at

the national level cannot be expected to have the same immediacy of impact, it should still raise some awareness of social class within political culture. Thus inequality should in theory heighten the effects of social mobility by entrenching a stronger social hierarchy thereby creating a strong pressure to change many aspects of one's life to reflect new social class. Consider how an individual might experience mobility in different contexts. In contexts with lower levels of inequality, the transition between social classes should be much smoother as the "economic distances" between them should be smaller. Given relatively similar levels of income, it should be more likely for higher and lower class individuals to engage in similar activities, purchases similar goods, and generally have more similar lifestyle. By contrast, higher levels of inequality accentuate these differences in experiences between classes and makes "travel" between them much more pronounced. Far more social and lifestyle changes will result. Additionally, higher inequality is associated with lower rates of mobility, thus the class structure is likely to be more rigid and the differences between classes become further entrenched.

In keeping with previous research, as well as the results of prior chapters, I first expect that upward mobility or the perception thereof should be associated with more conservative economic beliefs and preferences.<sup>1</sup> This chapter has two main goals. First, it aims to explore generally whether the relationship between social mobility and political attitudes varies across country context. As a general hypothesis, I expect that:

**Hypothesis 5** The effect of mobility on political attitudes relevant to social policy will vary by country.

The next question, given such a broad starting place, is whether such variation is systematic and if so what is at its source? First, I expect that meritocratic culture should be an important moderator of the effects of social mobility. The more meritocratic the country, the higher the pressure to see oneself as getting ahead.

**Hypothesis 6** Social mobility is much more influential on political attitudes in countries with less meritocratic cultures and muted where meritocratic culture is stronger.

Finally, inequality within a country creates more apparent social hierarchies with lower rates of mobility between levels, intensifying the social and lifestyle changes that result from mobility:

**Hypothesis 7** Social mobility is much more influential on political attitudes in countries where inequality is higher, and muted where it is lower.

The next section proceeds with detailing a cross-national sample utilized to test these hypotheses.

#### Data and Methods

The analyses in this chapter aim to broaden the understanding of mobility from only an American context. The previous chapters have relied on panel data as a way to capture the effects of changing income at various points during an individuals life cycle on

<sup>&</sup>lt;sup>1</sup>Here, as throughout the rest of this dissertation, I use conservative with the American connotation of being supportive of the free market and tolerant of inequality (Jost et al. 2003; Thorisdottir et al. 2007), rather than using the term 'liberal' which might be more appropriate in a comparative context for signaling the same meaning.

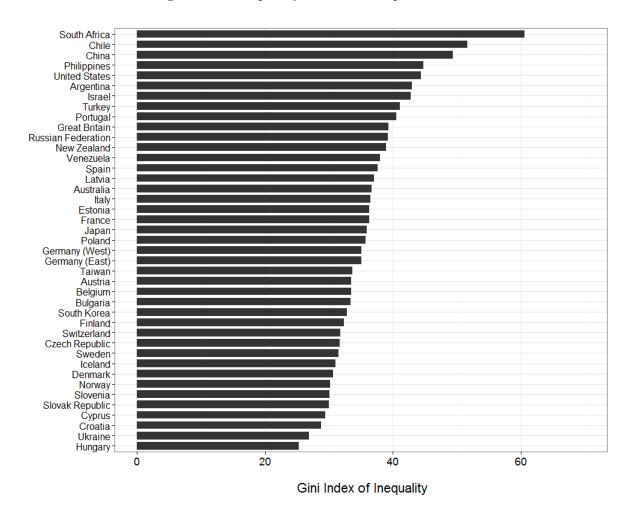


Figure 4.1: Inequality in ISSP Sample Countries

their political beliefs and attitudes. This chapter will move in a different direction and instead utilize cross-sectional data not only to examine the American case in context, but to examine whether the same dynamic of mobility extends to other economic and political environments. In addition, it also allows a limited comparison between mobility as measured by objective factors, as measured by concrete change in income, education, occupational status, etc., and subjective mobility, as measured by how upwardly or downwardly mobile people believe themselves to be.

## Overview: International Social Survey Programme Inequality IV Module

The data for the subsequent analyses in this chapter comes from the International Social Survey's (ISSP) Inequality IV module that was collected between February of 2008 and January of 2012, depending on the country in question. Surveys were carried out in forty-one different countries, most which are Eastern and Western European countries but also includes China, South Korea, South African, Venezuela, and others that are not part of the European continent. In each country, at least 850 respondents completed the full ISSP survey, for a total of N=55,193 individuals in the sample.<sup>2</sup> Additionally, the

<sup>&</sup>lt;sup>2</sup>The analyses include at maximum 41,464 respondents, based on missing values of data.

countries are varied in terms of economic development, health, employment, and inequality and thus in many ways constitute a diverse sample of the overall world population of nations. Data from the World Bank including GDP per capita, national internet use, infant mortality, and unemployment were merged by country for use in the below analyses. These variables broken down by country can be found in Table B.2 in the Appendix for this chapter.<sup>3</sup>

Inequality is assessed through use of the standard GINI index, the most widely available and used measure of inequality. It ranges from 0 signifying perfect equality to 1 as perfect inequality (i.e. one person maintains all income or wealth). Gini estimates are calculated at many different geographic levels and are available for nearly every country, including all those in the sample, through the World Bank as well as other international economic data sources. The sample provides a diverse range of countries both low and high in inequality. In these analyses, inequality serves as a measure of the distance between social classes and how apparent the class structure of a society is. Additionally, it is also strongly correlated with lower levels of social mobility, a phenomenon sometimes referred to colloquially as "The Great Gatsby Curve" (Krueger 2012).

For the purposes demonstrating this fact within the sample, I have included a measures of societal mobility. Generational income elasticity represents the economic advantages passed from parent to child (Corak 2006). In practical terms, this is the proportion of income of an adult child that is accounted for by that of their parents. Fortunately, while they are not available for the entire sample, income elasticities have been calculated for a subset of countries in the sample including the United States, Great Britain, France, Germany, Sweden, Finland, Norway, and Denmark (Corak, Curtis and Phipps 2010), as well as Australia (Leigh 2007), Italy (Piraino 2006), and Spain (Cervini 2009). As a proportion, these elasticities range from 0 to 1, and there is a good range among these 11 countries in the sub-sample, as can be seen in Figure 4.2. Income elasticity is higher correlated with inequality (r = .832), though it is important to keep in mind the small number and perhaps unrepresentative of the countries used to calculate this correlation. Even so, it still provides some indication that higher inequality is associated with a more socially rigid society.

Finally, the sample also offers a diverse range of countries in terms of political cultures as well. Figure 4.3 presents the average of the meritocracy scale used in the analyses, the creation of which is explained below, by country. The figure illustrates that the sample contains both countries that have very meritocratic cultures, the prime example of which is the United States, and those who do not, such as Japan and the Scandinavian countries. As an interesting aside, while there are relative differences in meritocratic culture, the averages for all countries are still above the midpoint of the scale. Indeed, Figure 4.4 shows the distributions of the scale by country. A belief in hardwork and ambition to obtain success appears to be near universal. Even in countries were the relative strength in belief is low, there are still few detractors.

An overview of the country-level variables shows that the sample is made up of a diverse set of countries that vary on keep factors such as inequality and mobility rates. At an individual level, while the exact demographic representativeness varies from country to country, the makeup of the sample is equally diverse. Overall, the sample is 54.8% female. On average, individuals have 10.5 years of education and attend church at least once a month. Additionally, 18% are union members. Summaries of all individual-level

<sup>&</sup>lt;sup>3</sup>Infant mortality appears in the summary statistics found in the Appendix, but is not included in the analyses due to high levels of multicollinearity with other variables.

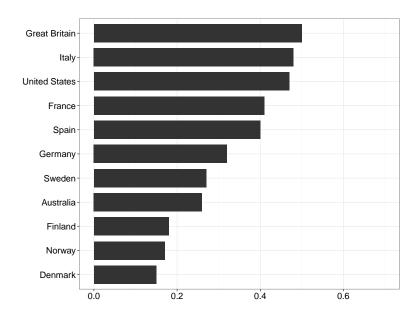


Figure 4.2: Income Elasticity in Subset of ISSP Sample Countries

variables can be found in Table B.1.

#### Measures of Mobility

The module includes a wide variety of questions that pertain to inequality, economic opportunity, and social welfare attitudes over a diverse variety of countries, which makes it an excellent source for the present project. However, the downside of using cross-sectional data is that it is not possible to rely on actual over-time change in income, education, etc. to create a measure of mobility. In fact, the ISSP module even unfortunately lacks information about the socio-economic status or years of education of parents that are typically used to construct measures of inter-generational mobility Alesina and Angeletos (2005).<sup>4</sup> Instead, survey respondents were asked for their first job and current job, which were collected as a series of categories that I reclassified into a four-category scale. I then differenced them to create a measure of intragenerational occupational mobility:

- 1. Manual occupational group: Semi-skilled, unskilled, farm labor
- 2. Working class occupational group: Sales, service, skilled workers, farm proprietor, military
- 3. White collar occupational group: Clerical
- 4. Professional occupational group: Professional/technical, higher administration

After differencing the two variables, this measure of occupational mobility has an effective range of -3 to 3. The measure notably has some drawbacks, foremost of which is that it is only available for those in less than half of the countries and overall less than 50% of respondents in the sample. Additionally, as a broad taxonomy of occupation it is not

<sup>&</sup>lt;sup>4</sup>This is likely the result of an international sampling design. The Duncan scores that appear annually in the General Social Survey and other major American surveys are calculated from American occupational data and not every country in an international sample likely has something that is comparable.

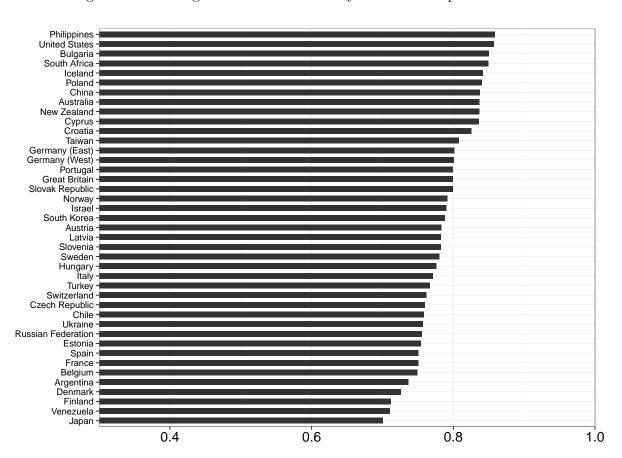


Figure 4.3: Average Belief in Meritocracy in ISSP Sample Countries

Average Meritocracy Scale Rating

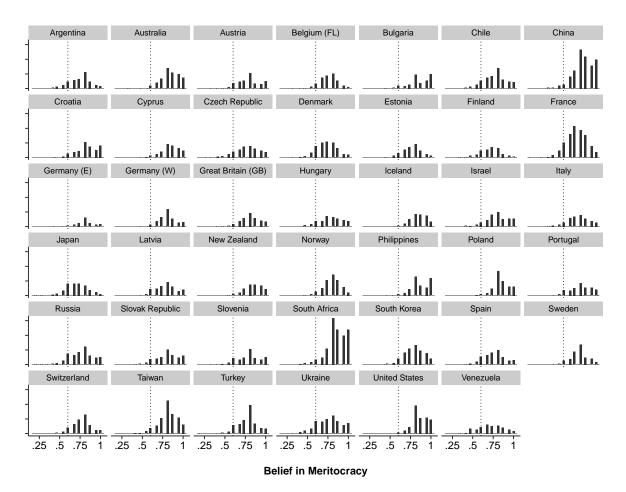
as fine-grained as one would like for measuring economic status and therefore constitutes a very noisy measure of mobility. However, while this measure is far from perfect, it provides some limited ability to assess the effects of mobility cross-nationally. The first panel of Figure 4.5 shows the distributions of this measure by country.

Given the measurements issues of the measure of objective mobility just described, the subsequent analyses largely revolve instead around a measure of perceptions of mobility, or *subjective mobility*. While the ISSP module does not contain effective measures of objective mobility, it does present an innovative way to measure one's perceptions of mobility through use of a set of "ladder" questions. Respondents were shown an illustration of a ladder that was number 1 to 10, available in Figure B.1 in the Appendix, and asked the following two questions:

- 1. In our society there are groups which tend to be towards the top and groups which tend to be towards the bottom. Below is a scale that runs from top to bottom. Where would you put yourself now on this scale?
- 2. And if you think about the family that you grew up in, where did they fit in then?

To create a measure of perceived mobility, I simply differenced the second from the first. This item is intuitive, and allows the respondent to indicate a general impression of their own mobility without necessarily providing financial information. The second panel of Figure 4.5 shows the distributions of this measure by country. It is of course, not as

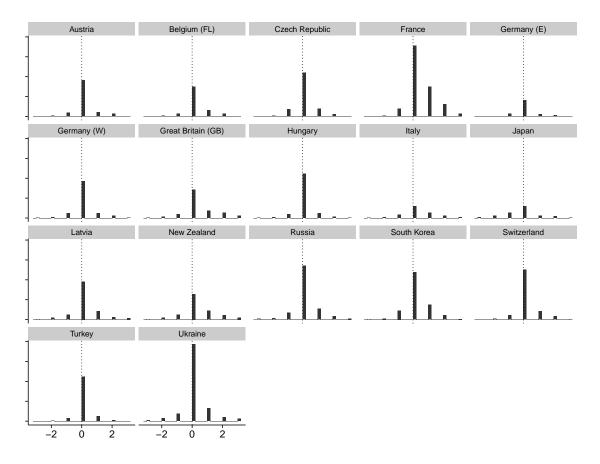
Figure 4.4: Distribution of Belief in Meritocracy in ISSP Sample Countries



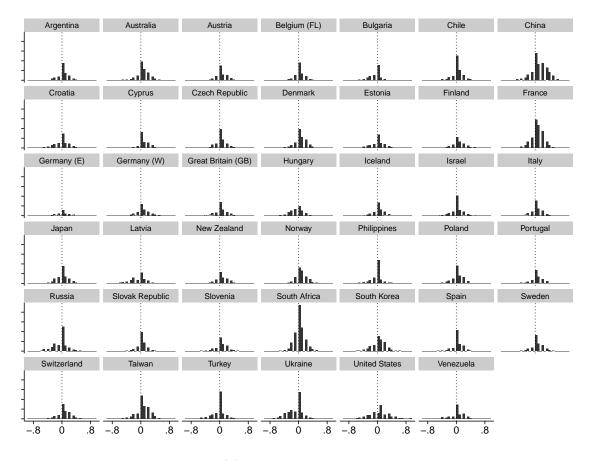
objective of a measure as having financial or occupational information of the respondent or their parents.<sup>5</sup> I rely on comparisons between this subjective measure of mobility and the more objective measure of occupational mobility when assessing the effects of mobility in the data.

<sup>&</sup>lt;sup>5</sup>However, it should also be noted that in almost all cases, even this financial information, such as income, property values, etc. may not always be objectively reported during survey interviews due to social desirability, poor memory, or a host of other related concerns.

Figure 4.5: Bayesian Estimates of Effects of Objective and Subjective Mobility



#### (a) Occupational Mobility



(b) Subjective Mobility

#### Dependent Measures

The ISSP Inequality IV models focuses, as the name suggests, on collecting information related to societal inequality, beliefs about fairness and success, and attitudes toward redistribution and the provision of government social welfare programs. It is therefore ripe with dependent measures for examining the effect of mobility, which I break into three broad categories as seen below for a total of eight dependent measures that are common to the analyses of both objective and subjective mobility. The analysis of objective mobility also includes both the subjective measure of mobility described above as well as perceptions the status differential between one's job and that of one's father. The original questions that these variables are based on can be found in the Appendix for this chapter. Unless otherwise mentioned, all of the dependent variables were rescaled to range from zero to one for ease of analysis.

Perceptions of Inequality. One important set of beliefs relevant to social welfare attitudes that was not available to examine in either of the first two chapters are beliefs about the prevalence of inequality in one's society. The current analyses deploys two measures of this. First, an item that simply asks as a five-point agree/disagree item whether the respondent thinks that income differences in their country are too large. Second, respondents were shown a set of five diagrams that represented potential shapes of societies (e.g. 'A pyramid except that just a few people are at the bottom') and asked to suggest which diagram represented the way their country looked currently.<sup>6</sup>

Economic Beliefs. Economic beliefs were measured in two ways. First, as a proxy for egalitarianism (Feldman and Steenbergen 2001), respondents were also asked of the aforementioned society shape diagrams what they thought their country "ought to look like." Second, respondents were asked a series of questions regarding their beliefs about success. Previous research indicates the importance of meritocratic beliefs for the provision of social welfare goods, and meritocratic culture represents a key hypothesis in this chapter. The core of this set of beliefs regards the importance of hard work in determining success. An exploratory factor analysis of all fifteen items found that the question regarding hard work loads well with two other items - the belief that education and ambition are also important for success. Each of the items was collected with a five-point scale ranging from "Not at all important" to "Essential." The measure for belief in meritocracy used in the analyses is a simple additive scale of these three items, re-scaled to range from zero to one. As mentioned previously, this item is also the basis of the "cultural meritocracy" country-level variable, which is entered as the average value of the meritocracy measure for all of the respondents from that country, as depicted in Figure 4.3.

Social Welfare Attitudes. Attitudes related to the role of the government in providing social assistance and redistribution were assessed by four different items. Respondents were asked whether it was the responsibility of the government to reduce income differences between those with high and low incomes, whether it should provide a decent standard of living for the unemployed, and whether it should spend less on benefits for the poor (reverse-coded). All three were collected as five-point agree/disagree scales, coded in the pro-assistance direction. The fourth item asked whether those with high incomes should pay a larger, the same, or smaller share of their income in taxes (i.e. progressive taxation), also collected as a five-point scale.

<sup>&</sup>lt;sup>6</sup>These diagrams have been reproduced in Figure B.2 in the Appendix for this chapter.

#### Control Variables

The analyses also included a variety of standard controls, both at the individual and country level. At the individual level, the models included controls for Age in tens of years, a dummy for being Female, Education in years re-scaled from zero to one, a dummy for  $Union\ Membership$ , and a five-point measure of  $Church\ Attendance$  re-scaled from zero to one. I also included a measure of income which was generated on a per-country basis. As the survey collected information in a variety of countries, many with different currencies, there was no common income variable included in the data-set. I generated one by standardizing income on a country-by-country basis, then combining all of these individual measures. Thus a one unit increase in the final variable increase represents a one-standard deviation increase in income, relative to the mean in that country. This is an important distinction, as income here measures relative rather than absolute wealth. At the country level, controls were included from the World Bank data center for the year the data was collected for GDP per capita (in thousands of dollars), internet usage per 100 citizens, and unemployment rate.

#### Model Specification

The data structure of the ISSP Inequality IV data involves individuals nested within countries and is thus modeled best by a hierarchical modeling approach. This approach also allows the separate modeling of factors of interest at both the individual level (e.g. mobility) and at the country level (e.g. inequality, meritocracy culture). Two forms of estimation are employed, maximum likelihood estimation (MLE) and Bayesian hierarchical modeling.

#### Hierarchical Linear Models

Many of the models in the subsequent analyses were estimated using maximum likelihood estimation. When appropriate, this approach yields estimates that are more efficient than simply using ordinary least squares (OLS) by clustering individual observations by a second level unit (in this case by country) and explicitly modeling the variance between this grouping unit as well as between individuals. Most of the models presented are the result of a random intercept model where the intercept in the linear regression equation is allowed to vary by country:

$$DV_i = \alpha_{j[i]} + \beta_1 Mobility_i + \beta Individual Controls_i + \gamma Country Controls_j + \epsilon_i$$
 (4.1)

The benefit of allowing the intercept to vary is that you can account for the amount of variance attributable to that grouping unit itself. A few of the models presented in the analyses also allow the slope of the mobility coefficient to vary by country, which is estimated as follows:

$$DV_i = \alpha_{j[i]} + \beta_{1j[i]} Mobility_i + \beta Individual Controls_i + \gamma Country Controls_j + \epsilon_i \quad (4.2)$$

This allows the examination of whether the relationship between mobility and the respective dependent variables differs by country and helps to address the question of whether mobility has the same effect on political attitudes across different political and economic cultures.

#### **Bayesian Estimation**

The analyses in this chapter also employs at several points Bayesian hierarchical modeling, which is necessary here in two circumstances. First, all of the models for occupational mobility are estimated with a Bayesian approach due to the fact that there are only 17 observations at the second (country) level. While this is problematic for the MLE approach, a Bayesian approach can still be effective. Second, the Bayesian approach allows the estimation of Bayesian credible intervals for all models parameters, even those such as country fixed effects where confidence intervals would normally be unavailable with MLE. All of the Bayesian models were estimated using the MCMCpack package in R, which relies on the Gibbs sampler. All models were run for 10,000 iterations with a burn-in of 1,000 and a final posterior distribution of 1,000 simulated parameter observations.

#### Results

The results will be presented as follows. I will begin by first examining the effects of both occupational and subjective mobility in models that do not account for the proposed effects of inequality or culture. Next, using varying slope models, I explore the amount of variation in the effects of both types of mobility across the countries in the sample. Finally, I test whether or not meaningful sources of this variation between countries can be found in the differences in cultural meritocracy and economic inequality.

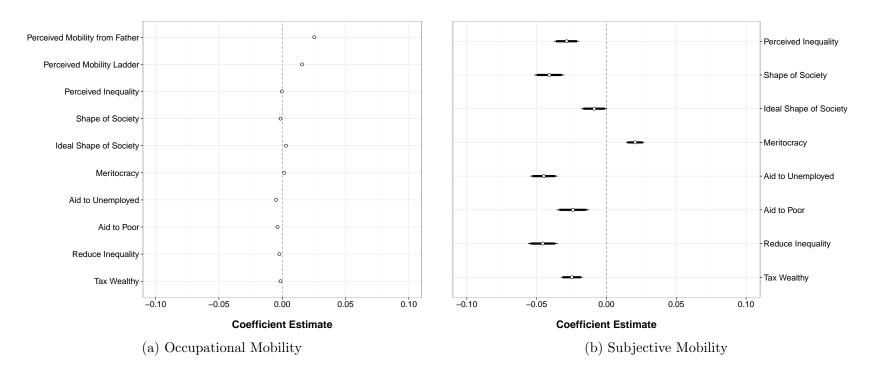
#### The Effects of Objective and Subjective Mobility in a Crossnational Sample

The first step to understanding social mobility in a comparative context is to try and establish whether or not it functions in the same fashion in all countries. A useful tool in this regard are varying intercept and varying slope hierarchical models as they allow the intercept and slope to be calculated separately for each country. This allows a look at both how individuals tend to differ between countries on dependent measures, as well as how the effects of the regressor of interest (i.e. mobility) varies across country contexts.

Figure 4.6 presents the effects of mobility from varying intercept models for each of the eight dependent variables. The full models can be found in the Appendix for this chapter. In addition, Panel A also presents the coefficients for the effects of occupational mobility on the ladder item measure of subjective mobility. First considering the results of occupational mobility, it is evident that while the effects are significant (due to the very small Bayesian credible intervals), the effects are quite small.<sup>7</sup> The largest effect is for subjective mobility, which is still quite small. This is remarkable in itself as it essentially suggests that individuals who move up one occupational category only place themselves on average 4% or less than half a step higher on the subjective mobility ladders. On one hand this suggests that perhaps individuals are very unaware of their own mobility, but on the other it may be that the measure of occupational mobility is simply too coarse. I will return to this below. Regarding the other effects, a one-category shift upward in occupation results in about a 1% shift. For economic beliefs, this is a 1% shift positive in

<sup>&</sup>lt;sup>7</sup>The Bayesian credible intervals in Panel A are in fact present, but so small as to not show up on the figure. Each model from which these effects are take appears in a table in the Appendix for further examination.

Figure 4.6: Bayesian Estimates of Effects of Objective and Subjective Mobility



belief in meritocracy or in preferences for a less egalitarian societal distribution. In terms of social welfare policy, this is a 1% decrease in support for inequality reduction, aid to the unemployed, aid to the poor, or increased taxes on the wealthy. Thus, the analyses do yield evidence for cross-national effects of occupational mobility, but they are so small to be questionable in terms of substantive meaningfulness.

Turning to Panel B of 4.6, the results are stronger and also generally in the predicted direction. Perceiving oneself as upwardly mobile is negatively associated with perceptions of inequality, both as measured by the direct response and shape diagram questions. It is also positively associated with the belief in meritocracy, though negatively associated with preferences for a less equal society. Finally, subjective mobility is negatively associated with all four social welfare items. While statistically significant, the effect size of subjective mobility remains relatively small across the board. Each coefficient can be interpreted as resulting change in the dependent variable of a one-unit increase in perceived mobility, or perceiving oneself to have moved up or down the entire scale. Thus, such a perception is associated with a less than 5% shift in the dependent measures, which is a quite small change given the magnitude of the perceived economic change.

While these results are perhaps not terribly exciting in substantive terms, they do align with the results of the previous two chapters suggesting that while mobility is in some cases associated with effects on political attitudes, those effects are small.

#### Cross-nationally Varying Effects of Mobility

The first set of analyses illustrates that once again the effects of mobility seem to be small. However, these effects may be larger in some countries than others. The next step is therefore to examine how mobility varies by country through the use of a random slope, random intercept model.<sup>8</sup> Tables 4.1 and 4.2 present a summary of the varying intercept and varying slope effects by country for occupational and subjective mobility respectively. These summaries are based off of the full models which can be found in the tables and figures in the Appendix for this chapter.

Beginning with Table 4.1, we see almost no evidence for systematic variation in the effects of occupational mobility across countries. The only effect is for Latvia in one model, at there is a good chance that this is statistical noise given the number of models and parameters estimated. There are slight trends in the varying intercepts which suggest that relative to the intercept for the full sample, citizens in France and Germany are consistently more likely to perceive inequality and to support social welfare efforts to curve it. Latvia and Hungary show the opposite effects, whereas their citizens perceive less inequality and are less supportive of social welfare measures.

The results for subjective mobility presented in Table 4.2 display more cross-country differences in levels of the dependent variable. They also identify some variation in the effect of subjective mobility across countries, though it is unclear whether this effect is systematic. For some of the dependent measures, reduction of inequality for example, the effect of subjective mobility varies across a noticeable number of countries, while for others it varies not at all (e.g. aid to the unemployed). There is, however, a striking amount of similarity in the effects across country, though this may be due at least in part to the already small effect of mobility in the first place.

<sup>&</sup>lt;sup>8</sup>These models are the result of Bayesian estimation. See the related section above for more details.

Table 4.1: Summary of Varying Intercept and Slope Effects of Occupational Mobility

	Inequality		Shape	of Society	Ideal S	Ideal Shape of Society Belief in Meritocracy		Reduce Inequality		Unemployment		Aid to Poor		Tax Wealthy		
	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
Austria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belgium (FL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
France	-	(+)	-	(+)	-	(+)	-	-	-	(+)	-	(+)	-	-	-	-
Germany (E)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany (W)	-	-	-	-	-	-	-	-	-	(+)	-	(+)	-	(+)	-	(+)
Great Britain (GB)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	-	(-)	-	(-)	-	(-)	-	-	-	(-)	-	(-)	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-	(+)	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	-	(+)	-	-	-	-
Latvia	-	(-)	-	-	-	-	-	-	-	(-)	(+)	(-)	-	(-)	-	-
New Zealand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Korea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Models were estimated using the MCMCpack package in R, which relies on the Gibbs sampler for Bayesian estimation.

The model results as well as plots of the intercept and slope coefficients with their Bayesian credible intervals may be found in the Appendix.

<sup>(+)</sup> A significant positive effect.

<sup>(-)</sup> A significant negative effect.

Table 4.2: Summary of Varying Intercept and Slope Effects of Subjective Mobility

	Inequality			of Society		hape of Society	Belief i	n Meritocracy	Reduce Inequality		ployment		to Poor	Tax Wealthy		
	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept
Argentina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Austria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belgium (FL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	_	_	-	-	_	-	_	-	_	-	_	-	-	_
Chile	_	_	-	-	_	-	-	-	-	-	_	-	_	-	-	-
China	_	_	-	-	_	-	-	-	-	-	_	-	_	-	-	-
Croatia	_	(-)	_	(-)	_	_	_	(-)	(-)	(-)	_	(+)	_	(+)	(-)	_
Cyprus	_	-	(+)	(+)	(+)	-	_	(-)	(-)	-	_	(+)	_	(+)	-	_
Czech Republic	_	_	-	(+)	-	(+)	_	(-)	(-)	(+)	_	(+)	_	(-)	_	(+)
Denmark	_	(+)	_	(+)	_	(+)	_	(-)	(-)	(+)	_	-	_	(-)	_	(+)
Estonia	(+)	(+)	_	(+)	(+)	(+)	_	-	(+)	(-)	_	(-)	_	-	_	-
Finland	-	(+)	(+)	(+)	-	(-)	(-)	_	-	(+)	_	(+)	_	(-)	_	_
France	_	(+)	(+)	-	_	-	(-)	_	_	(+)	_	-	_	(+)	(+)	_
Germany (E)	_	(+)	(-)	(+)		(-)	(-)	_	_	(1)	_	(+)	_	(+)	-	(+)
Germany (W)	_	(+)	(-)	(+)	-	(-)	-	(-)	(-)	-	-	(+)	-	(+)	_	(+)
Great Britain (GB)	_	-	-	-	-	-	-	(-)	(-)	-	-	-	_	(+)	-	(+)
Hungary	_	(+)	(+)	(-)	-	(-)	-	-	-	(+)	-	(+)	_	-	-	(-)
Iceland	-	(-)	(+)	(-)	-	(-)	-	(+)	(+)	( )	-	(+)	( )	()	-	
Israel	-	( )	()	( )	-	-	-		(+)	(-)	-		(-)	(-)	-	(-)
Italy	- ( + )	(-)	(-)	(-)	-	-	-	(+)		(-)	-	- ( )	-	(-)	- ( + )	(-)
	(+)	(-)	-	-	-	-	-	(+)	(+)	(-)	-	(-)	-	(-)	(+)	(-)
Japan	-	-	-	(+)	-	-	-	(+)	(+)	(+)	-	-	-	- ( )	-	-
Latvia New Zealand	-	(+)	-	(+)	(-)	-	-	-	( , )	(+)	-	(-)	-	(-)	-	(+)
	-	(+)	-	(-)	-	-	-	-	(+)	(+)	-	(+)	-	-	-	(-)
Norway	-	-	-	(-)	-	-	-	(+)	(+)	-	-	-	-	(-)	-	-
Philippines	-	- ()	-	(-)	-	-	-	-	-	(-)	-	-	-	-	-	-
Poland	-	(-)	-	(-)	-	(-)	-	-	-	(-)	-	(+)	-	-	-	-
Portugal	-	(+)	-	(+)	-	(-)	-	-	-	(+)	-	(+)	-	(+)	-	(+)
Russia	-	(+)	-	-	-	(+)	-	-	(-)	(+)	-	(+)	-	(+)	-	-
Slovak Republic	-	(-)	-	(+)	-	(+)	-	(+)	(+)	(-)	-	(-)	-	(-)	-	(-)
Slovenia	-	(-)	-	(-)	-	-	-	-	(+)	(-)	-	(-)	-	-	-	(-)
South Africa	-	(-)	-	-	-	-	-	(-)	(-)	(-)	-	(-)	-	(+)	-	-
South Korea	-	(+)	-	(+)	-	(+)	-	-	-	(+)	-	(+)	-	(+)	-	(+)
Spain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
United States	-	_	_	-	-	-	-	-	-	-	-	-	_	-	-	-
Venezuela	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Models were estimated using the MCMCpack package in R, which relies on the Gibbs sampler for Bayesian estimation.

The model results as well as plots of the intercept and slope coefficients with their Bayesian credible intervals may be found in the Appendix.

<sup>(+)</sup> A significant positive effect.

<sup>(-)</sup> A significant negative effect.

#### Subjective Mobility and Cultures of Meritocracy

The varying slope, varying intercept models provide some insight into cross-country variation both in terms of political attitudes but also in terms of the effect of mobility on those attitudes. This variation is however much less than expected, especially in terms of the varying effect of mobility, a topic to which I will return below. The next section of the analyses nonetheless continue to explore this variation in terms of the moderating effects of aspects of a countries ideological culture and economic structure.

First, let's consider whether meritocratic culture conditions the effects of mobility. For the sake of being concise, models based on occupational mobility are not presented given the apparent weakness of the measure, but can be found in the Appendix. In order to test whether meritocratic ideological culture acts as a suppressing force on the effects of mobility, I interact the two variables. The results can be found in Table 4.3. After including standard statistical controls for both individual characteristics and country-level influences, the interaction between subjective mobility and cultural meritocracy is significant for only two of eight dependent variables: shape of society and aid to the poor.

Figure 4.7 presents predicted value plots of the interactions. Starting with panel A, in highly meritocratic countries perceiving oneself as downwardly mobile is associated with greater perceptions of inequality than perceptions of upward mobility. By contrast, in the least meritocratic cultures, perceived downward mobility is associated with less perception of inequality than perceived upward mobility, though these two groups are not significantly different. This may be a result of fewer countries at the low end of the meritocratic spectrum. This finding is also the opposite of what was expected in the hypotheses above. It seems that meritocratic culture accentuates the differences between upwardly and downwardly mobile rather than suppresses it.

Indeed, turning to panel B of Figure 4.7, we see a similar pattern for support for the government providing aid to the poor. In the most meritocratic countries, perceived downward mobility is associated with more support for aid to the poor than those who perceive themselves as upwardly mobile. In the least meritocratic countries, the results show the opposite pattern: perceptions of downward mobility are associated with less support for government aid than perceived upward mobility.

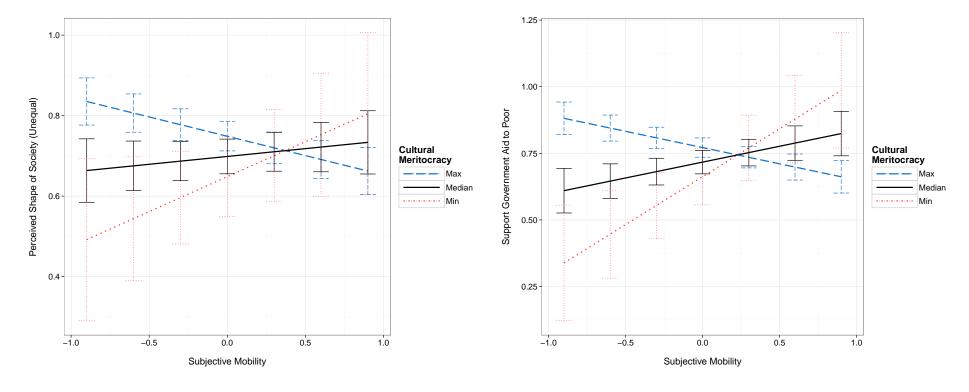
Table 4.3: Moderating Effects of Meritocratic Culture on Economic Perceptions and Beliefs and Social Welfare Attitudes

	Inequality	Shape of Society	Ideal Shape of Society	Meritocracy	Reduce Inequality	Aid to Unemployed	Aid to	Tax Wealthy
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Subjective Mobility	.058	.174*	052	.001	.005	.005	.360***	.034
	(.082)	(.099)	(.086)	(.060)	(.098)	(.091)	(.107)	(.073)
Income (std.)	011***	006***	.001	.003***	022***	$015^{***}$	006***	009***
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Education	034***	055***	$019^{***}$	.045***	083***	$038^{***}$	.013*	006
	(.005)	(.006)	(.006)	(.004)	(.006)	(.006)	(.007)	(.005)
Female	.010***	.001	013***	.003**	.011***	.001	.005**	004**
	(.002)	(.002)	(.002)	(.001)	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.004***	.004***	.008***	002***	.003***	.004***	.003***	.009***
	(.001)	(.001)	(.001)	(.0004)	(.001)	(.001)	(.001)	(.0005)
Union Member	.012***	.006**	0002	.001	.009***	.0004	.015***	.010***
	(.002)	(.003)	(.002)	(.002)	(.003)	(.003)	(.003)	(.002)
Attend Church	021***	$016^{***}$	.009**	.002	018***	$007^*$	006	$015^{***}$
	(.004)	(.004)	(.004)	(.003)	(.004)	(.004)	(.005)	(.003)
GINI	.047	.182	.037	.035	064	017	258**	006
	(.113)	(.137)	(.060)	(.076)	(.126)	(.110)	(.123)	(.072)
GDP per Capita	002***	004***	00004	0002	003***	001	.001	0002
	(.001)	(.001)	(.0005)	(.001)	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.002	.003	001	0001	.0004	.002	.006*	0005
	(.003)	(.004)	(.002)	(.002)	(.003)	(.003)	(.003)	(.002)
Internet Usership	.171**	.088	.013	011	.110	.007	.043	012
	(.074)	(.090)	(.039)	(.050)	(.083)	(.072)	(.081)	(.047)
Meritocracy	196***	.086	126***	.067**	002	015	.094	054
	(.044)	(.053)	(.044)	(.032)	(.053)	(.049)	(.058)	(.039)
Subj. Mob. X Merit.	093	232**	.046	.021	054	053	414***	064
	(.089)	(.107)	(.092)	(.064)	(.106)	(.097)	(.115)	(.078)
Constant	.930***	.586***	.485***	.701***	.848***	.819***	.700***	.842***
	(.094)	(.114)	(.059)	(.064)	(.106)	(.093)	(.106)	(.064)
N	41743	40328	39868	41407	41464	41650	41372	40774
Log Likelihood	14705.580	7694.541	13745.790	27746.350	7506.275	10767.020	3794.116	19766.410
AIC	-29379.170	-15357.080	-27459.570	-55460.700	-14980.550	-21502.040	-7556.233	-39500.820
BIC	-29240.940	-15219.400	-27322.080	-55322.600	-14842.430	-21363.850	-7418.147	-39362.970

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Models are hierarchical linear models estimated using the lme4 package in R, which relies on maximum likelihood estimation. Tables generated using the R package stargazer (Hlavac 2015).

Figure 4.7: Predicted Values for Moderating Effects of Cultural Meritocracy on Shape of Society and Aid to the Poor



#### Subjective Mobility and Economic Inequality

As the previous analyses show, there is some evidence that a country's ideological culture can moderate the effects of subjective mobility on both perceptions of inequality, as measured by perceived shape of society, and support for government aid to the poor. It does not, however, extend to any of the other areas of social welfare policy and furthermore the effects are in the opposite direction of prediction. In addition to the culture, the economic structure could also affect how subjective mobility influences political attitudes. As inequality grows and the social hierarchy becomes clearer, mobility should have more impact. As individuals move, or perceive themselves to move, change to a new social class produces with it larger changes in lifestyle and social network.

Table 4.4 presents the models estimating the moderating effects of country inequality (Gini) through its interaction with subjective mobility. The results show that Gini has a significant moderating effect on subjective mobility for both models predicting inequality perceptions as well as for those predicting aid to the unemployed and poor. Figure 4.8 plots the effects of the interaction between subjective mobility and inequality for perceptions of inequality. Panel A shows the effects for perceiving income differences as being too large. For the most unequal countries, upward mobility is associated with higher perception of inequality while downward mobility is associated with perceiving less inequality. This relationship reverses itself for countries with the lowest levels of inequality, such that those who perceive themselves to be downwardly mobile are more likely to say the income differences are too large than those who perceive themselves as being upwardly mobile. Panel B shows a similar relationship for the effects of the interaction on perceived shape of society, however now there is essentially no effect of subjective mobility in highly unequal contexts. Additionally, it should be noted that while these groups do not appear to differ significantly in terms of the dependent variable, the difference in the slope of the lines is still significant.

Figure 4.9 presents the effects of the effects of subjective mobility moderated by inequality on two of the social welfare items, preferences for government aid to the unemployed and the poor. The pattern of results here is similar to those found for perceptions of inequality in Figure 4.8. In panel A, the support for unemployment aid always decreases with increased perceptions of mobility, but the relationship is much stronger in more equal countries than in countries where inequality is high. In panel B, support for government aid to the poor is highest for those in more equal countries who perceive themselves as downwardly mobile while support decreases as perceived mobility increases. In more unequal countries, this relationship is reversed, with perceptions of mobility increasing support for aid. This relationship is much more modest, however.

Table 4.4: Moderating Effects of Inequality on Economic Perceptions and Beliefs and Social Welfare Attitudes

	Inequality (1)	Shape of Society (2)	Ideal Shape of Society (3)	Meritocracy (4)	Reduce Inequality (5)	Aid to Unemployed (6)	Aid to Poor (7)	Tax Wealthy (8)
~	( )		. ,	` '		( )	` '	• • • • • • • • • • • • • • • • • • • •
Subjective Mobility	125***	097***	.025	.023	043	091***	097***	013
	(.023)	(.028)	(.024)	(.017)	(.028)	(.026)	(.030)	(.021)
Income (std.)	011***	005***	.0005	.003***	022***	015***	006***	009***
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Education	033****	055****	$019^{***}$	.045***	083***	038***	.013*	006
	(.005)	(.006)	(.006)	(.004)	(.006)	(.006)	(.007)	(.005)
Female	.010***	.001	$012^{***}$	.003**	.011***	.001	.005**	004**
	(.002)	(.002)	(.002)	(.001)	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.004***	.004***	.008***	002***	.003***	.004***	.003***	.009***
	(.001)	(.001)	(.001)	(.0004)	(.001)	(.001)	(.001)	(.0005)
Union Member	.012***	.006*	0002	.001	.009***	.0004	.014***	.010***
	(.002)	(.003)	(.002)	(.002)	(.003)	(.003)	(.003)	(.002)
Attend Church	021***	016***	.009**	.002	018***	$007^{*}$	006	015***
	(.004)	(.004)	(.004)	(.003)	(.004)	(.004)	(.005)	(.003)
GINI	.042	.178	.039	.035	064	020	263**	005
	(.113)	(.137)	(.060)	(.076)	(.126)	(.110)	(.124)	(.072)
GDP per Capita	002***	004***	00005	0002	003***	001	.001	0002
	(.001)	(.001)	(.0005)	(.001)	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.002	.003	001	0001	.0004	.002	.006*	0005
1 0	(.003)	(.004)	(.002)	(.002)	(.003)	(.003)	(.003)	(.002)
Internet Usership	.170**	.088	.013	011	.110	.006	.042	012
1	(.074)	(.090)	(.039)	(.050)	(.083)	(.072)	(.081)	(.047)
Meritocracy	195***	.086	126***	.067**	002	015	.094	055
V	(.044)	(.053)	(.044)	(.032)	(.053)	(.049)	(.058)	(.039)
Subj. Mob. X GINI	.152***	.088**	054	004	004	.072*	.114**	019
J	(.036)	(.043)	(.037)	(.026)	(.043)	(.040)	(.047)	(.032)
Constant	.932***	.588***	.484***	.701***	.848***	.820***	.702***	.842***
	(.094)	(.114)	(.059)	(.064)	(.106)	(.093)	(.106)	(.064)
N	41743	40328	39868	41407	41464	41650	41372	40774
Log Likelihood	14712.920	7693.384	13745.790	27745.410	7505.248	10767.630	3789.718	19765.360
AIC	-29393.850	-15354.770	-27459.580	-55458.820	-14978.500	-21503.250	-7547.437	-39498.720
BIC	-29255.620	-15217.090	-27322.090	-55320.720	-14840.380	-21365.060	-7409.351	-39360.860

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Models are hierarchical linear models estimated using the lme4 package in R, which relies on maximum likelihood estimation.

Tables generated using the R package stargazer (Hlavac 2015).

Figure 4.8: Predicted Values for Moderating Effects of Inequality on Perceptions of Inequality and the Shape of Society

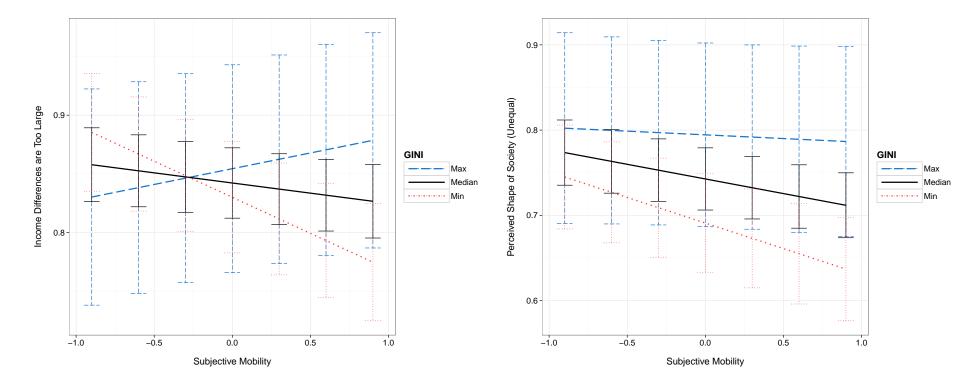
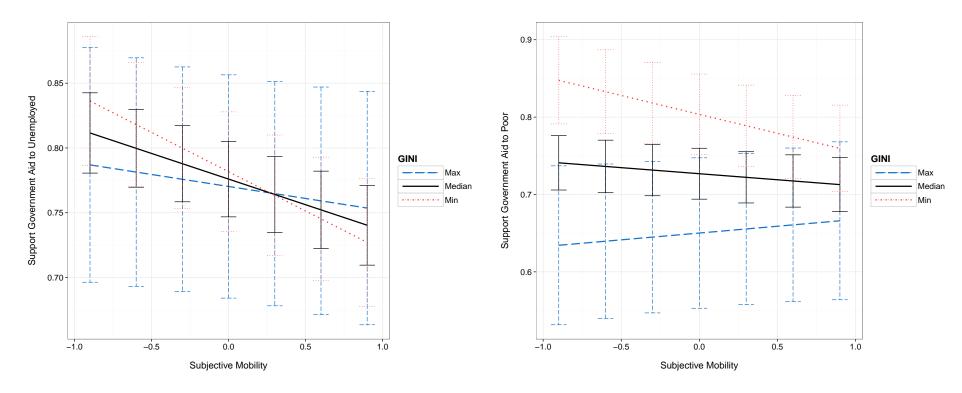


Figure 4.9: Predicted Values for Moderating Effects of Inequality on Support for Aid to the Unemployed and Poor



#### Discussion

The previous two chapters of this dissertation examined the effects of mobility over time and largely find that they are either small or non-existent, particularly in substantive terms. The analyses in this chapter yield much the same pattern of results. While there are effects present for both objective and subjective mobility on economic perceptions, economic beliefs, and social welfare attitudes, these remain quite small substantively. On one hand this is disheartening to the general thrust of the dissertation project to uncover the relationship between changing economic status and changing political attitudes. On the other, it does present an interesting puzzle in that it seems mobility functions much the same way in most countries, with some nuance of difference, and that is with very little effect.

Indeed, these nuances include the moderating effects of both meritocratic political culture and economic inequality. In the case of perceptions of inequality and attitudes toward the government providing aid (to the unemployed and poor), I find limited results that suggest that meritocratic culture heightens the effects of perceived downward mobility and that inequality suppresses it, which is counter to what was expected.

Regarding the effects of meritocratic culture, it may be that these effects manifest because the extremes of beliefs are more pronounced in these countries. Relative to countries where a belief in meritocratic is not a central tenet of most citizens' belief systems, it is the general rule in more meritocratic countries. However, those who experience downward mobility may reject these beliefs at higher rates, thus creating a contrast with their more upwardly mobile peers. In less meritocratic countries, there are no beliefs to reject, thus no contrast results from downward mobility.

Regarding the effects of inequality, it could be that members of higher social classes are driving the finding that country inequality is associated with less support for social welfare programs among those who perceive themselves as downwardly mobile. Those in higher social classes who perceive their status as slipping may react negatively to efforts to levy taxes upon them to provide social assistance, particularly if it social assistance for which they will not qualify. This theory does however conflict with the findings of Philip Rehm and colleagues (Rehm 2010) who find that even wealthier individuals display more support for financial social safety net programs when pressured by the risk of job-loss. Additionally, the time period during which this data was collected was at the height of the 2008-9 financial crisis and may have produced abnormal levels of support for social assistance that is quite different from normal patterns of public opinion.

To be fair to the proposed thesis of this chapter, the data do present a number of methodological challenges. First, it is very likely that the largely muted or null results from the analyses of objective mobility are the result of a very coarse measure. As you can see from Figure 4.5, the modal category of occupational mobility is zero. Very few individuals shift either up or down in terms of status from their first job. Using occupation to examine intragenerational mobility presents additional difficulties as one can maintain the same occupation during their entire life but still be upwardly or downwardly mobile. Imagine a lawyer who begins their career as a public defender but makes their way to becoming a partner in a well-paying private firm over time. Using this measure of mobility, this individual would not register as mobile. Alternatively, imagine a prosperous business man whose company's fortunes turn sour and he is forced to declare bankruptcy and start again. He is downwardly mobile, but remains in the same occupation. Ultimately, while it is itself not the best measure, change in income as used in previous chapters provides

much more information about the financial course of an individual's life than does change in occupation.

Additional problems arise in the analyses from the availability of certain variables by country, including occupational mobility. Indeed, the availability of data is one of the key challenges of studying social mobility, which benefits greatly from the use of panel data. Very few studies exist that collect quality financial information over time (e.g. the Panel of Income Dynamics) as well as political public opinion data. Additionally, for the purposes of studying the effects of inequality, it is much more plausible theoretically to approach inequality as a local level phenomenon given that individuals are much more likely to perceive it in their immediate environments (Newman, Johnston and Lown 2013), although the media can also provide a conduit for perceptions of inequality (McCall 2013). Of course, the world of data is never ideal.

The final chapter will revisit both the findings of the present chapter, in context of the larger dissertation project, as well as many of the methodical concerns of studying social mobility.

## Chapter 5

# Concluding Remarks: Do Income and Mobility Matter?

Economics is perhaps the cornerstone of politics. Much of what is debated in the chambers of legislatures and other high institutions of government regards the ways in which the wealth of the country should be divided and spent. How much should be kept by individual citizens and how much should be reallocated in the interest of the common welfare of society? These questions form the basis of the tension between opponents and advocates of the welfare state. Economic turmoil further invigorates these debates and casts into stark relief those who have against those who do not. At the level of the individual, economic hardship and poverty impact both physical and psychological health (Aber et al. 1997; Brooks-Gunn and Duncan 1997; Mani et al. 2013), political engagement (Newman, Johnson and Lown 2014; Brady, Verba and Schlozman 1995), and have a host of other consequences that are detrimental to participation in a free and democratic society. It has thus long been and should continue to be a priority of social scientists and thinkers to understand the relationship between individual citizens and their economic circumstances.

Indeed, the trend of steadily increasing inequality in the last few decades within the U.S. as well as other nations (Atkinson 2003) makes it even more imperative to understand how individuals reason about the economic world. Free societies revolve around the belief that success is in large part earned, which is very much at odds with recent revelations that mobility is significantly more restricted than often discussed or believed, especially in the United States (Urahn et al. 2012). What are the consequences of this ossification of the socio-economic hierarchy? What is the resulting effect on public opinion and what citizens demand of their government? How do citizens react to working to get ahead but experiencing no upward mobility as a result? These are central questions that are born of recent and significant changes in the economic landscape.

The classic expectation of restricted opportunity has most often been populist revolt. It is the basis of Marxist theory, that persistent economic exploitation will lead to eventual class upheaval. Even as far back as ancient Greece, Aristotle observed that "Poverty is the parent of revolution" <sup>1</sup>. On a world scale, there is public resistance that is an evident result of the economic crisis and the associated austerity measures in countries like Greece, Italy, and Spain, but also in countries that have fared better like France. However, in the U.S., the political consequences have been much more muted. Differences in national

<sup>&</sup>lt;sup>1</sup>Aristotle, 350 BCE, *Politics*, Book VI: Part II. Accessible Online at http://classics.mit.edu/Aristotle/politics.2.two.html

political culture are an important part of this story, but at its heart it is a micro-level story, a story about how individuals place themselves in their economic and political worlds.

This dissertation project has explored several facets of the relationship between individuals and their economic circumstances, experiences, and environment. Unlike prior work, I rely on panel data to estimate the effects of income and its change over time. The most consistent finding across all three empirical chapters has been the surprisingly weak relationship between political attitudes and income or income change. Using panel models to estimate consistent effects of income, I find that OLS models seem to slightly underestimate its effects in the long term while over-estimating it in the short term. The effects are even more underwhelming for income change over time, despite whether income change is examined in the short- or long-term. Over decades following respondents entry into the workforce, substantively large shifts in over-time income produce no discernible change in political attitudes. In the short-term, a 10% shift or less on a number of dependent measures relevant to economic beliefs and attitudes toward government social welfare aid. Indeed, the strongest effects are consistently for perceptions of one's own mobility, and even these are surprisingly weak.<sup>2</sup> Finally, operationalizing mobility as change in occupation between labor market entry and time of survey produces effects that are equally small.

## Economic Environment and Political Culture as Potential Moderating Factors

Another novel component of this dissertation is the exploration of the role of economic environment in conditioning the effects of economic mobility. From our earliest inductions into the political and economic world, we constantly receive information from those around us. This may begin with relatively simple issues of what your parents can afford to buy you and why the parents of other children cannot. Or it may be "why that man is homeless". Over time, these issues become more complex, but in general certain economic environment should be more likely to create certain types of experiences. Economic inequality in particular, as explored in Chapter 2, was hypothesized to create more situations differences in economic status are more apparent, and thus must be justified. Similarly, poverty should present more opportunities to come into contact with economic want. Indeed, recent research indicates that local levels of inequality raise awareness of socio-economic position (Newman, Johnston and Lown 2013). However, it appears that relatively little of this information is absorbed by children during primary socialization, or at least that it has little effect that carries into adulthood.

In addition to the local level of inequality, the economic environment of the nation in which one resides should also shape economic beliefs and attitudes regarding the role of government. Chapter 4 presents some preliminary but counter-intuitive findings that inequality at the country level moderates the effects of perceived mobility, such that in in more equal countries both perceptions of inequality and support for social welfare pro-

<sup>&</sup>lt;sup>2</sup>This may be a measurement issue. Income change in each of the three studies is conceptualized as intra-generational mobility, or change in income between an individual entering the job market and the current point of survey, rather than inter-generational mobility, or difference between an individual's current status and that of their parents. This is an issue of theoretical clarity that will be revisited below.

grams decrease with perceived upward mobility while in more unequal countries support increases with perceived mobility. One possibility is that this effect may be restricted to members of higher social strata who view the welfare state and taxation as a personal burden that is an additional hindrance in their financial success. As illustrated in both Chapters 3 and 4, perceptions of mobility do not necessarily seem to be strongly associated with objective mobility.

In addition to economic environment, political culture, in terms of the prevalence of beliefs in meritocracy within a country, also conditions the effects of an individual's perceived mobility, but also in a direction counter to the presented hypotheses of this dissertation. In the least meritocratic countries, both perceptions of inequality and support for social welfare increase with subjective mobility while in the least meritocratic countries support decreases with mobility. One possibility is that perceived downward mobility leads individuals to reject meritocratic beliefs at an increased rate, relative to individuals who perceive no change or upward mobility. In countries with lower presence of such beliefs, there are no beliefs to reject in the first place and thus no contrast appears as a result. It remains odd however that in these countries support should increase with perceived mobility.

## Toward a Methodologically Sound and Theoretically Clear Concept of Mobility

This dissertation presents a more nuanced examination of the effects of income than has been attempted previously. No matter the angle at which it is viewed, income seems to have very small effects substantively. Furthermore, mobility as measured in terms of change in income seems to have equally small effects in the short-term which largely dissipate over the course of one's life. This is of course at odds with previous findings in the literature that upward intergenerational mobility (or mobility from one's parents) is associated with lower levels up support for social welfare (Alesina and Angeletos 2005) and for left of center parties (Piketty 1995). This formulation is perhaps the broadest possible operationalization of mobility, capturing numerous decades in a single measure, but it also represents multiple facets of economic background simultaneously. Thus, it may be that measuring income (or change in income) does not effectively capture the important contributors responsible for attitude changes resulting from mobility.

While it serves as the standard in measuring financial status, and is found as a control variable in nearly every regression model in public opinion research, income is in effect only a proxy measure. Indeed, this issue has been recognized by the U.S. Census Bureau, which has recently begun releasing the Supplemental Poverty Measure (Short 2012). The SPM accounts for many nuances of personal finance that the official poverty measure, developed in the 1960s, over-simplifies. For example, it accounts for variation in the value of the dollar by geographic region as well as better accounts for the individual dependent members of households.<sup>3</sup> Even so, some economists argue that the measure does not go far enough. Meyer and Sullivan (2012) suggest that income-based measures of poverty do not account for important aspects of family wealth such as houses or cars or relative balances of savings. A better alternative, they argue, would be a consumption-based

<sup>&</sup>lt;sup>3</sup>For more information, see the U.S. Census Bureau's description of the measure online at http://www.census.gov/hhes/povmeas/methodology/supplemental/overview.html

measure of poverty which takes into account such things as access to credit and the value of ownership over durable goods.

While no measure is perfect, the debate within economics over how best to measure poverty has important implications for understanding social mobility and the effects of income on political attitudes. It is an illustration of what income does and does not effectively capture. In this dissertation, I theorize social mobility as a process of economic and social change, and as an accumulation of economic experiences. While these are not necessarily important for the measurement of poverty vis-a-vis the debate in economics, they are important aspects of understanding the relationship between economic status and political attitudes. In Chapter 3, I begin to scratch the surface by examining the effects of economic hardship on political attitudes, but find relatively little effect. In regards to the effects of social networks, Newman (2014) finds that individuals who have economically distressed friends increases perceptions of inequality as well as support for government efforts to reduce it, conditional on engagement in political discussion with each other. While he does not examine the change in such networks over time, a natural extension of these findings is to expect changes in social networks as a result of mobility to result in more or less contact with individuals in economic distress. In other words, those who are upwardly mobile and replace many social network members belonging to their former social class with those of their current social class will have less contact with those experiencing economic hardship, and as a result be less swayed toward government efforts to provide aid.

Reliance on better measures of economic status in future research will most certainly help provide a higher resolution image of how social mobility impact political attitudes. And it may be that this picture will look very much the same as what is presented in this dissertation – a largely muted effect of income change. However, there are important established effects of income which includes the finding that it can polarize political participation (Newman, Johnson and Lown 2014; Brady, Verba and Schlozman 1995) or economic beliefs (Newman, Johnston and Lown 2013), particularly in the presence of certain economic or social structures such as high inequality or commuter strain. Therefore, before ruling out social mobility as a determinant of political attitudes, I must first join economists such as Meyer and Sullivan (2012) in calling for the further development of better measures of poverty and economic status as well as political scientists such as Hacker, Rehm and Schlesinger (2013) in urging for better sources of panel data that wed detailed personal financial information (such as the University of Michigan's Panel Study of Income Dynamics) to public opinion measures of political attitudes. Finally, it is also important for future research to continue to explore all avenues of economic experiences and changes in personal circumstance that result from changes in personal fortune. These changes may represent the proximate cause of attitude change set in motion by positive or negative changes in economic status.

With inequality at an all-time high and social mobility on the decline (Piketty and Saez 2003; Urahn et al. 2012), understanding the relationship between individuals' economic status and their political beliefs is imperative. Solutions that employ government redistribution to steer nations away from extreme levels of inequality back toward more innocuous levels require explanations that help solve the seeming disconnect between personal wealth and support for such programs. A better picture of social mobility can help fill these gaps in knowledge.

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## Appendix A

# Chapter 3: Supplemental Information

### Original General Social Survey Panel Questionnaire Items

#### Dependent Variables

- 1. "Compared with American families in general, would you say your family income is far below average, below average, average, above average, or far above average?"
- 2. "Compared to your parents when they were the age you are now, do you think your own standard of living now is much better, somewhat better, about the same, somewhat worse, or much worse than theirs was?"
- 3. "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?"
- 4. "We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal—point 1—to extremely conservative—point 7. Where would you place yourself on this scale?"
- 5. "Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?"
- 6. "The way things are in America, people like me and my family have a good chance of improving our standard of living do you agree or disagree?"
- 7. "Some people think that the government in Washington is trying to do too many things that should be left to individuals and private businesses. Others disagree and think that the government should do even more to solve our country's problems. Still others have opinions somewhere in between. Where would you place yourself on this scale, or haven't you made up your mind on this?"
- 8. "Some people think that the government in Washington should do everything possible to improve the standard of living of all poor Americans; they are at Point 1

on this card. Other people think it is not the government's responsibility, and that each person should take care of himself; they are at Point 5. Where would you place yourself on this scale, or haven't you have up your mind on this?"

- 9. "In general, some people think that it is the responsibility of the government in Washington to see to it that people have help in paying for doctors and hospital bills. Others think that these matters are not the responsibility of the federal government and that people should take care of these things themselves. Where would you place yourself on this scale, or haven't you made up your mind on this?"
- 10. "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. What score between 1 and 7 comes closest to the way you feel?"
- 11. "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount."
  - Assistance for childcare
  - Welfare
  - Health/Improving and protecting the nation's health
  - Social Security

#### Income, Hardships, and Demographics

Now I'm going to ask about specific hardships. Did any of the following happen to you since [current month, previous year]?

- Fell behind in paying your rent or mortgage.
- Lacked health insurance coverage (e.g. Medicare, Medicaid, Blue Cross, an HMO, etc.)

Did any of the following financial matters happen to you during the last year . . . Pressured to pay bills by stores, creditors, or bill collectors.

## Analysis Results

Table A.1: Linear Model Estimates for Effects of Income on Perceived Relative Financial Status

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed	Random	OLS	OLS	OLS	Lagged Difference	Lagged Difference	Lagged Difference
	Effects	Effects	(2006)	(2008)	(2010)	(2006-8)	(2008-10)	(2006-10)
Income								
Household Income	0.014**	0.027**	0.030**	0.029**	0.028**			
Mobility	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	0.008**	0.012**	0.011**
Wideling						(0.002)	(0.003)	(0.003)
Demographics								
Female		-0.004	-0.003	-0.010	0.006	-0.017*	0.004	0.001
Nonwhite		(0.005) $-0.004$	(0.007) $-0.001$	(0.008) $-0.010$	(0.009) $-0.001$	(0.008) -0.016	(0.010) -0.016	(0.010) -0.013
Nonwnite		-0.004 $(0.006)$	(0.001)	(0.010)	(0.012)	(0.016)	(0.016)	(0.013)
Age		0.004**	0.004+	0.007**	0.005	0.003	0.001	0.003
Ü		(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Education		0.128**	0.112**	0.129**	0.125**	0.235**	0.194**	0.218**
		(0.018)	(0.024)	(0.033)	(0.035)	(0.034)	(0.039)	(0.038)
Church Attendance		0.007	0.007	-0.002	0.023+	0.000	0.023	0.023+
		(0.007)	(0.010)	(0.012)	(0.014)	(0.013)	(0.014)	(0.014)
Lags								
Lagged DV '06						0.455**		0.472**
						(0.034)		(0.036)
Lagged DV '08							0.466**	
Q	0 = 0.144	0.000**	0 00 144	0.040**	0 00 544	o a <b>≃</b> a₩₩	(0.038)	0 4 0 4 4 4
Constant	0.504**	0.333**	0.334**	0.319**	0.305**	0.151**	0.152**	0.121**
	(0.008)	(0.015)	(0.020)	(0.024)	(0.029)	(0.027)	(0.032)	(0.032)
N	1,878	1,872	1,699	1,382	1,134	1,229	1,086	1,018
Τ	3	3	1	1	1	1	1	
Total Observations	4,253	4,215	1,699	1,382	1,134	1,229	1,086	1,018
R-squared	0.029		0.334	0.348	0.285	0.335	0.283	0.318
Hausman Test		82.84**						

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.2: Linear Model Estimates for Effects of Income on Perceived Status Relative to Parents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	0.006** (0.002)	0.012** (0.002)	0.015** (0.002)	0.014** (0.003)	0.017** (0.003)			
Mobility	(0.002)	(0.002)	(0.002)	(0.000)	(0.000)	0.002 $(0.003)$	0.007+ (0.004)	0.009* (0.004)
Demographics								
Female		0.013 (0.010)	0.021 (0.013)	0.017 (0.014)	0.019 (0.016)	-0.002 (0.013)	-0.000 (0.014)	0.006 (0.015)
Non-white		0.049** (0.012)	0.045** (0.016)	0.050** (0.017)	0.047* $(0.021)$	0.031+ $(0.018)$	0.008 $(0.019)$	0.013 (0.022)
Age		0.008** (0.003)	0.008* (0.004)	0.017) 0.013** (0.004)	0.014** $(0.005)$	0.009* (0.004)	0.005 $(0.004)$	0.0022) 0.009* (0.005)
Church Attendance		0.048** (0.013)	0.045* $(0.019)$	0.079** (0.020)	0.043+ $(0.024)$	0.075** $(0.019)$	0.004) 0.005 (0.021)	0.027 $(0.022)$
Education		-0.070* $(0.033)$	-0.101* $(0.045)$	-0.051 $(0.052)$	-0.065 $(0.062)$	0.039 $(0.046)$	0.021) $0.020$ $(0.048)$	0.041 $(0.056)$
Lags								
Lagged DV '06						0.482**		0.495**
Lagged DV '08						(0.036)	0.557** (0.036)	(0.039)
Constant	0.734** (0.012)	0.675** (0.029)	0.690** (0.036)	0.618** (0.042)	0.602** (0.047)	0.285** (0.046)	0.283** $(0.049)$	0.273** (0.052)
N T	1,253	1,248	1,129	920	745	817	713	668
Total Observations	3 2,824	2,794	$1 \\ 1,129$	1 920	1 745	1 817	1 713	668
R-squared Hausman Test	0.004	10.09**	0.052	0.073	0.065	0.285	0.322	0.268

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.3: Linear Model Estimates for Effects of Income on Perceived Social Class

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	0.006**	0.015**	0.019**	0.017**	0.018**			
Mobility	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	0.004* (0.002)	0.005* (0.002)	0.006** (0.002)
Demographics								
Female		0.005	0.006	0.011	-0.003	0.001	-0.013	-0.014
Nonwhite		(0.006) -0.009 (0.007)	(0.007) $-0.011$ $(0.009)$	(0.008) $-0.019+$ $(0.011)$	(0.009) -0.014 (0.013)	(0.008) -0.012 (0.011)	(0.008) -0.018 (0.012)	(0.008) -0.018 (0.012)
Age		0.015**	0.012** (0.002)	0.018**	0.021**	0.009**	0.012**	0.013**
Education		(0.002) 0.203**	0.179**	(0.002) $0.217**$	(0.003) $0.255**$	(0.002) 0.199**	(0.003) $0.275**$	(0.003) 0.253**
Church Attendance		(0.019) $0.013+$ $(0.007)$	(0.027) $0.015$ $(0.010)$	(0.032) $0.021+$ $(0.011)$	(0.034) $0.024+$ $(0.012)$	(0.032) $0.013$ $(0.011)$	$   \begin{array}{c}     (0.032) \\     0.019 \\     (0.012)   \end{array} $	(0.034) $(0.012)$
Lags								
Lagged DV '06						0.492** (0.030)		0.483** (0.034)
Lagged DV '08							0.477** (0.035)	
Constant	0.577** (0.008)	0.316** (0.016)	0.336** (0.021)	0.268** (0.024)	0.229** (0.027)	0.123** (0.025)	0.066** (0.025)	0.073** (0.025)
N	1,878	1,872	1,700	1,389	1,133	1,237	1,088	1,018
Total Observations	$\frac{3}{4,260}$	$\frac{3}{4,222}$	$\frac{1}{1,700}$	$\frac{1}{1,389}$	$\frac{1}{1,133}$	$\frac{1}{1,237}$	1 1,088	$\frac{1}{1,018}$
R-squared Hausman Test	0.008	59.24**	0.223	0.236	0.258	0.356	0.378	0.379

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table A.4: Linear Model Estimates for Effects of Income on Perceived Opportunity in U.S.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed	Random	OLS	OLS	OLS	Lagged	Lagged	Lagged
	Effects	Effects	(2006)	(2008)	(2010)	Difference	Difference	Difference
			(====)	(====)	(====)	(2006-8)	(2008-10)	(2006-10)
Income								
Household Income	0.000 (0.003)	0.005** (0.002)	0.007** (0.002)	0.006* (0.003)	0.004 (0.003)			
Mobility	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	-0.001	0.002	0.003
Wiodiney						(0.003)	(0.002)	(0.004)
						( )	,	( )
Demographics								
Female		-0.008	0.006	-0.022	-0.017	-0.023	-0.005	-0.017
		(0.010)	(0.012)	(0.014)	(0.016)	(0.014)	(0.015)	(0.016)
Nonwhite		0.030**	0.008	0.025	0.085**	0.026	0.083**	0.080**
Age		(0.012) -0.017**	(0.015) -0.015**	(0.019) -0.017**	(0.020) $-0.011*$	(0.019) -0.013**	(0.019) $-0.001$	(0.020) -0.006
Age		(0.003)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)
Education		0.001	-0.009	0.040	-0.029	0.097*	-0.020	-0.002
		(0.033)	(0.044)	(0.055)	(0.064)	(0.048)	(0.053)	(0.057)
Church Attendence		0.024+	0.050**	0.042*	-0.030	0.024	-0.048*	-0.033
		(0.013)	(0.018)	(0.021)	(0.024)	(0.020)	(0.022)	(0.023)
Lags								
Lagged DV '06						0.405**		0.335**
Lagged DV 00						(0.036)		(0.042)
Lagged DV '08						(0.000)	0.404**	(0.012)
							(0.038)	
Constant	0.701**	0.750**	0.754**	0.699**	0.723**	0.376**	0.418**	0.455**
	(0.014)	(0.028)	(0.035)	(0.043)	(0.051)	(0.052)	(0.056)	(0.063)
N	1.054	1.050	1 105	925	746	828	715	672
T	1,254 3	$\frac{1,250}{3}$	$1{,}135$ $1$	925 1	140	828 1	110	1
Observations	2,835	2,806	1,135	925	746	828	715	672
	-,	-,	-,					~·-
R-squared	0.000		0.033	0.037	0.037	0.180	0.187	0.126
Hausman Test		3.406						

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.5: Linear Model Estimates for Effects of Income on Importance of Hard Work for Success

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	0.095* (0.043)	0.060** (0.022)	0.019 $(0.023)$	0.053* (0.025)	0.080** (0.028)			
Mobility	(0.010)	(0.022)	(0.020)	(0.020)	(0.020)	0.039 $(0.036)$	0.098* (0.044)	0.031 $(0.039)$
Demographics								
Female		0.347* (0.137)	0.263* (0.130)	0.094 $(0.145)$	0.384* (0.162)	-0.031 (0.159)	0.393* (0.176)	0.282 $(0.173)$
Nonwhite		-0.387* (0.157)	-0.409** (0.148)	-0.086 (0.179)	-0.102 $(0.197)$	0.049 $(0.207)$	-0.235 (0.212)	0.191 (0.236)
Age		-0.088* (0.041)	-0.066+ $(0.039)$	-0.037 (0.043)	-0.076 (0.051)	0.006 (0.048)	-0.077 $(0.057)$	-0.072 $(0.057)$
Education		-2.582** (0.483)	-1.297** (0.495)	-2.215** (0.571)	-2.893** (0.618)	-1.699** (0.551)	-1.959** (0.607)	-2.169** (0.602)
Church Attendence		0.483) 0.679** (0.186)	$0.383^*$ $(0.184)$	0.596** $(0.203)$	0.551* $(0.231)$	0.624** $(0.223)$	0.569* $(0.260)$	0.418 $(0.255)$
Lags								
Lagged DV'06						1.058** (0.158)		1.257** (0.174)
Lagged DV'08						(0.190)	1.668** (0.175)	(0.114)
Constant		2.503** (0.404)	1.603** (0.398)	1.874** (0.450)	2.236** (0.492)	0.992* (0.486)	0.984+ $(0.549)$	1.410* (0.559)
N	395	1,275	1,152	951	779	842	747	696
T Total Observations	$\frac{3}{1,109}$	$^{3}_{2,882}$	$\begin{array}{c} 1\\1,152\end{array}$	1 951	$\frac{1}{779}$	1 842	$\frac{1}{747}$	1 696
R-squared Hausman Test		0.949	0.020	0.026	0.044	0.078	0.165	0.112

Notes: N may include respondents who are missing from some waves;

T signifies the time period spanned by the model, not necessarily the time periods per respondent. Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.6: Linear Model Estimates for Effects of Income on Ideology

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	0.002	0.004**	0.004*	0.006**	0.004+			
nousenoid meome	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)			
Mobility	, ,	, ,	, ,	, ,	,	0.003 $(0.002)$	-0.003 (0.002)	0.000 $(0.002)$
D 1.						()	( )	( )
Demographics								
Female		-0.006	-0.017+	-0.021*	-0.019	-0.009	-0.007	-0.006
		(0.008)	(0.010)	(0.011)	(0.012)	(0.009)	(0.010)	(0.011)
Nonwhite		-0.031**	-0.049**	-0.042**	-0.072**	-0.014	-0.045**	-0.037*
A		(0.009)	(0.011)	(0.013)	(0.014)	(0.013)	(0.014)	(0.015)
Age		0.007** (0.002)	0.004 $(0.003)$	0.006* (0.003)	0.005 $(0.004)$	0.005+ $(0.003)$	0.001 $(0.003)$	-0.000 (0.003)
Education		-0.107**	-0.141**	-0.135**	-0.193**	-0.005	-0.113**	-0.094*
Eddourion		(0.025)	(0.037)	(0.041)	(0.047)	(0.033)	(0.038)	(0.043)
Church Attendence		0.087**	0.120**	0.142**	0.150**	0.058**	0.069**	0.074**
		(0.010)	(0.014)	(0.015)	(0.018)	(0.014)	(0.015)	(0.016)
Lags								
Lagged DV '06						0.558**		0.529**
00*** = 1						(0.027)		(0.032)
Lagged DV '08						,	0.599**	,
							(0.029)	
Constant	0.572**	0.575**	0.614**	0.562**	0.632**	0.209**	0.293**	0.316**
	(0.009)	(0.022)	(0.029)	(0.032)	(0.038)	(0.033)	(0.036)	(0.043)
N	1,879	1,873	1,706	1,392	1,136	1,244	1,093	1,025
T	3	3	1	1	1	1	1	1
Total observations	4,272	4,234	1,706	1,392	1,136	1,244	1,093	1,025
R-squared	0.001		0.062	0.082	0.091	0.369	0.404	0.336
Hausman Test		1.754						

T signifies the time period spanned by the model, not necessarily the time periods per respondent. Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.7: Linear Model Estimates for Effects of Income on Party Identification

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed	Random	OLS	OLS	OLS	Lagged	Lagged	Lagged
	Effects	Effects	(2006)	(2008)	(2010)	Difference	Difference	Difference
			()	()		(2006-8)	(2008-10)	(2006-10)
Income								
111001110								
Household Income	-0.003*	0.001	0.004+	0.006*	0.003			
	(0.002)	(0.001)	(0.002)	(0.003)	(0.003)			
Mobility						-0.001	-0.001	-0.005*
						(0.002)	(0.002)	(0.003)
D								
Demographics								
Female		-0.033**	-0.040**	-0.054**	-0.046**	-0.020*	0.004	-0.013
1 ciliate		(0.011)	(0.013)	(0.015)	(0.016)	(0.009)	(0.010)	(0.011)
Nonwhite		-0.112**	-0.188**	-0.246**	-0.239**	-0.069**	-0.062**	-0.086**
		(0.011)	(0.014)	(0.017)	(0.018)	(0.013)	(0.013)	(0.016)
Age		-0.005	-0.011**	-0.004	-0.001	0.001	0.004	0.002
		(0.003)	(0.004)	(0.005)	(0.005)	(0.003)	(0.003)	(0.004)
Education		-0.052+	-0.129**	-0.136*	-0.114+	-0.019	0.000	-0.003
		(0.031)	(0.043)	(0.054)	(0.065)	(0.031)	(0.034)	(0.043)
Church Attendence		0.061**	0.133**	0.181**	0.152**	0.034*	0.022	0.031+
		(0.012)	(0.019)	(0.021)	(0.024)	(0.013)	(0.014)	(0.017)
Lags								
Lags								
Lagged DV '06						0.833**		0.747**
200800 2 7 00						(0.017)		(0.021)
Lagged DV '08						( )	0.791**	( )
							(0.018)	
Constant	0.550**	0.606**	0.671**	0.600**	0.608**	0.085**	0.099**	0.128**
	(0.008)	(0.029)	(0.035)	(0.042)	(0.051)	(0.030)	(0.033)	(0.041)
N	1,875	1,869	1,703	1,390	1,132	1,243	1,089	1,020
T	3	3	1	1	1	1	1	1
Total Observations	4,262	4,225	1,703	1,390	1,132	1,243	1,089	1,020
D I	0.000		0.100	0.155	0.107	0.710	0.711	0.600
R-squared Hausman Test	0.002	20.00**	0.108	0.157	0.137	0.713	0.711	0.632
mausman rest		∠0.00						

T signifies the time period spanned by the model, not necessarily the time periods per respondent. Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.8: Linear Model Estimates for Effects of Income on Belief Government Should Do More to Solve Country's Problems

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	-0.003	-0.008**	-0.008**	-0.005+	-0.014**			
Mobility	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	-0.003 (0.004)	-0.007+ (0.004)	0.002 (0.004)
Demographics								
Female		-0.005	0.001	0.001	0.003	-0.000	0.010	-0.000
Nonwhite		(0.011) 0.120** (0.013)	(0.014) 0.118** (0.018)	(0.016) $-0.005+$ $(.002)$	(0.018) 0.168** (0.022)	(0.016) $-0.007+$ $(0.004)$	(0.018) 0.134** (0.022)	(0.018) 0.161** (0.023)
Age		-0.006+	-0.006	-0.002	-0.006	0.004	-0.004	0.002
Education		(0.003) -0.073*	(0.004) $-0.053$	(0.005) -0.132*	(0.006) -0.031	(0.005) -0.133*	(0.005) $-0.081$	(0.006) -0.128*
Church Attendence		(0.036) -0.042** (0.015)	(0.050) $-0.044*$ $(0.021)$	(0.059) -0.059** (0.023)	(0.070) -0.071** (0.026)	(0.054) $-0.044+$ $(0.023)$	(0.060) $-0.057*$ $(0.026)$	(0.065) -0.057* (0.026)
Lags								
Lagged DV '06						0.281**		0.314**
Lagged DV '08						(0.038)	0.413**	(0.044)
Constant	0.615** (0.016)	0.716** (0.030)	0.701** (0.040)	0.736** (0.045)	0.695** (0.054)	0.515** (0.053)	(0.040) $0.399**$ $(0.064)$	0.457** (0.065)
N	1,244	1,240	1,115	898	724	788	683	645
T Total Observations	$\frac{3}{2,765}$	$\frac{3}{2,737}$	$\frac{1}{1,115}$	1 898	$\frac{1}{724}$	1 788	1 683	$\frac{1}{645}$
R-squared Hausman Test	0.001	3.751	0.080	0.067	0.129	0.132	0.240	0.201

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table A.9: Linear Model Estimates for Effects of Income on Belief Government Should Help Poor

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	0.001 (0.003)	-0.009** (0.002)	-0.011** (0.002)	-0.013** (0.003)	-0.016** (0.003)			
Mobility	(0.000)	(0.002)	(0.002)	(0.003)	(0.003)	0.002 $(0.003)$	-0.004 (0.004)	0.007+ (0.004)
Demographics								
Female		0.015 (0.011)	0.015 $(0.014)$	0.024 (0.015)	0.005 $(0.018)$	0.024 $(0.015)$	-0.000 (0.016)	-0.013 (0.018)
Nonwhite		0.089**	0.075**	0.112** (0.019)	0.120** (0.023)	0.081** (0.020)	0.081** (0.023)	0.095** (0.025)
Age		-0.005 (0.003)	-0.004 (0.004)	-0.003 $(0.005)$	-0.001 (0.006)	0.003 (0.004)	0.004 $(0.005)$	0.002 (0.006)
Education		-0.043 (0.036)	-0.025 (0.048)	-0.035 $(0.059)$	0.026 (0.070)	-0.135* (0.053)	-0.013 (0.054)	-0.061 (0.063)
Church Attendence		-0.033* (0.014)	-0.038+ $(0.020)$	-0.052* $(0.021)$	-0.066* (0.026)	-0.041* (0.020)	-0.041+ $(0.023)$	-0.047+ $(0.026)$
Lags								
Lagged DV '06						0.403** (0.035)		0.374** (0.044)
Lagged DV '08						(0.000)	0.508** (0.040)	(0.044)
Constant	0.619** (0.015)	0.708** (0.031)	0.704** (0.040)	0.726** (0.045)	0.666** (0.056)	0.444** (0.053)	0.269** (0.058)	0.406** (0.063)
N T	1,250	1,245	1,121	913	726 1	803	691 1	645
Total Observations	2,790	2,760	1,121	913	726	803	691	645
R-squared Hausman Test	0.000	19.09**	0.061	0.101	0.093	0.229	0.275	0.179

 $<sup>{\</sup>mathcal T}$  signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.10: Linear Model Estimates for Effects of Income on Belief Government Should Help Sick

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	-0.003	-0.008**	-0.008**	-0.008**	-0.015**			
Mobility	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	0.004 $(0.004)$	-0.010* (0.004)	-0.004 (0.004)
Demographics								
Female		0.001 (0.011)	-0.011 (0.014)	0.015 (0.016)	0.025 (0.019)	0.018 (0.015)	0.022 (0.017)	0.038* (0.019)
Nonwhite		0.063** (0.013)	0.044* (0.017)	0.084** (0.019)	0.143** (0.022)	0.068** (0.020)	0.128** (0.022)	0.136** (0.023)
Age		-0.015**	-0.011*	-0.015**	,	-0.008	-0.005	-0.005
Education		(0.003) $-0.052$	(0.004) $-0.028$	(0.005) $-0.074$	$(0.006) \\ 0.101$	(0.005) -0.129**	(0.006) $0.044$	(0.006) $0.030$
Church Attendence		(0.038) $-0.043**$ $(0.015)$	(0.054) $-0.028$ $(0.021)$	(0.058) $-0.060**$ $(0.023)$	(0.074) $-0.101**$ $(0.027)$	(0.049) $-0.041+$ $(0.022)$	(0.059) $-0.088**$ $(0.025)$	(0.065) $-0.106**$ $(0.027)$
Lags								
Lagged DV '06						0.365** (0.035)		0.364** (0.039)
Lagged DV '08						(0.000)	0.449** (0.038)	(0.000)
Constant	0.726*** (0.016)	0.865** (0.032)	0.845** (0.043)	0.890** (0.045)	0.727** (0.058)	0.581** (0.055)	0.035** $(0.062)$	0.403** (0.066)
N	1,252	1,248	1,130	914	723	812	689	649
T Total Observations	$\frac{3}{2,795}$	3 2,767	1 1,130	$\begin{array}{c} 1\\914\end{array}$	1 723	1 812	1 689	1 649
R-squared Hausman Test	0.001	4.032	0.035	0.066	0.112	0.188	0.266	0.203

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.11: Linear Model Estimates for Effects of Income on Belief Government Should Equalize Wealth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed	Random	OLS	OLS	OLS	Lagged Difference	Lagged Difference	Lagged Difference
	Effects	Effects	(2006)	(2008)	(2010)	(2006-8)	(2008-10)	(2006-10)
						(2000-0)	(2000-10)	(2000-10)
Income								
Household Income	-0.007*	-0.014**	-0.016**	-0.012**	-0.019**			
M-1:1:4	(0.003)	(0.002)	(0.003)	(0.003)	(0.004)	0.001	0.000	0.005
Mobility						-0.001 $(0.004)$	-0.008 $(0.005)$	-0.005 $(0.004)$
						(0.004)	(0.003)	(0.004)
Demographics								
5 1								
Female		0.031*	0.019	0.037*	0.047*	0.030+	0.033 +	0.039+
		(0.013)	(0.016)	(0.018)	(0.021)	(0.017)	(0.019)	(0.021)
Nonwhite		0.067**	0.059**	0.089**	0.098**	0.068**	0.058*	0.071**
Λ		(0.015) -0.014**	(0.019)	(0.022) -0.012*	(0.026)	(0.022)	(0.026)	(0.027)
Age		(0.004)	-0.008 $(0.005)$	(0.005)	-0.010 $(0.007)$	-0.009+ $(0.005)$	-0.004 (0.006)	-0.008 (0.007)
Education		-0.019	-0.005	-0.071	0.138+	-0.106*	0.067	0.007)
Education		(0.043)	(0.056)	(0.065)	(0.080)	(0.054)	(0.066)	(0.071)
Church Attendence		-0.033*	-0.041+	-0.046+	-0.085**	-0.042+	-0.068*	-0.079**
		(0.017)	(0.024)	(0.026)	(0.031)	(0.025)	(0.028)	(0.030)
		,	,	,	,	,	,	, ,
Lags								
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						o two wh		0. 10.0%%
Lagged DV '06						0.459**		0.428**
Lagged DV '08						(0.031)	0.526**	(0.039)
Lagged DV 00							(0.037)	
Constant	0.647**	0.742**	0.741**	0.778**	0.609**	0.443**	0.212**	0.333**
	(0.017)	(0.036)	(0.047)	(0.052)	(0.064)	(0.056)	(0.064)	(0.070)
	,	,	,	,	,	,	,	,
N	1,251	1,247	1,128	920	745	818	711	668
T	3	3	1,120	1	1	1	1	1
Total Observations	2,822	2,793	1,128	920	745	818	711	668
	,	•	•					
R-squared	0.002		0.060	0.067	0.080	0.267	0.284	0.207
Hausman Test		7.431**						

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.12: Linear Model Estimates for Effects of Income on Belief of Too Little Spending on Healthcare

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	-0.002	0.001	0.002	-0.004	0.008*			
Mobility	(0.004)	(0.002)	(0.002)	(0.002)	(0.004)	-0.010** (0.004)	0.008 (0.005)	0.002 $(0.005)$
Demographics								
Female		-0.046** (0.011)	-0.018 (0.013)	-0.047** (0.014)	-0.089** (0.024)	-0.035* (0.014)	-0.080** (0.024)	-0.075** (0.025)
Nonwhite		-0.058** (0.013)	-0.023+	-0.020 (0.016)	-0.187** (0.022)	-0.015 (0.015)	-0.173** (0.023)	-0.180** (0.024)
Age		0.007*	(0.013) $-0.002$	0.009*	0.003	0.007	0.023) $0.000$	-0.000
Education		(0.003) $0.096**$	(0.004) $0.002$	(0.004) 0.115*	(0.007) 0.245**	$(0.004) \\ 0.082$	(0.007) 0.279**	(0.008) $0.306**$
Church Attendence		(0.037) $0.034*$ $(0.015)$	(0.045) -0.004 (0.020)	(0.057) $0.018$ $(0.023)$	(0.089) 0.129** (0.036)	(0.053) $0.012$ $(0.022)$	(0.078) $0.125**$ $(0.035)$	(0.083) 0.134** (0.037)
Lags								
Lagged DV '06						0.221** (0.049)		0.360** (0.057)
Lagged DV '08						(0.010)	0.408**	(0.001)
Constant	0.113** (0.019)	0.022 $(0.030)$	0.087* (0.036)	-0.012 (0.040)	0.001 (0.069)	-0.022 (0.040)	(0.056) -0.001 (0.067)	-0.022 (0.073)
N	1,855	1,849	1,676	1,367	1,110	1,215	1,060	995
T Total Observations	$\frac{3}{4,191}$	$\frac{3}{4,153}$	$\frac{1}{1,676}$	$\frac{1}{1,367}$	$\frac{1}{1,110}$	$1\\1,215$	$\frac{1}{1,060}$	$\frac{1}{995}$
R-squared Hausman Test	0.000	0.895	0.004	0.017	0.082	0.073	0.147	0.133

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.13: Linear Model Estimates for Effects of Belief of Too Little Spending on Social Security

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	-0.007	-0.009*	-0.009+	-0.004	-0.016*			
26.200	(0.006)	(0.004)	(0.005)	(0.006)	(0.007)	0.004		
Mobility						-0.004 $(0.007)$	-0.009 (0.008)	-0.000 (0.008)
D 1						()	()	()
Demographics								
Female		0.088**	0.091**	0.097**	0.123**	0.071*	0.087*	0.092*
NT 1:4		(0.023)	(0.029)	(0.033)	(0.038) $0.123**$	(0.032)	(0.035)	(0.037)
Nonwhite		0.076** $(0.026)$	0.080* $(0.032)$	0.061 $(0.042)$	(0.046)	0.026 $(0.040)$	0.124** (0.041)	0.089+ $(0.045)$
Age		-0.006	0.003	-0.013	0.009	-0.015	0.012	0.001
77.1		(0.007)	(0.009)	(0.010)	(0.012)	(0.010)	(0.011)	(0.011)
Education		-0.318** (0.075)	-0.323** (0.095)	-0.395** (0.129)	-0.501** (0.154)	-0.241* (0.116)	-0.456** (0.124)	-0.359** (0.129)
Church Attendence		-0.067*	-0.067*	-0.041	-0.113*	-0.034	-0.086+	-0.098+
		(0.030)	(0.030)	(0.047)	(0.054)	(0.046)	(0.049)	(0.053)
Lags								
Lagged DV '06						0.423**		0.446**
I I DIVINO						(0.033)	0.45044	(0.037)
Lagged DV '08							0.456** (0.033)	
Constant	2.602**	2.824**	2.810**	2.889**	2.845**	1.698**	1.549**	1.567**
	(0.031)	(0.064)	(0.082)	(0.101)	(0.119)	(0.146)	(0.154)	(0.167)
N	1,858	1,850	1,649	1,351	1,112	1,171	1,047	979
T	3	3	3	3	3	3	3	3
Total Observations	4,146	4,112	1,649	1,351	1,112	1,171	1,047	979
R-squared	0.001		0.030	0.025	0.054	0.195	0.239	0.220
Hausman Test		0.156						-

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses  $\,$ 

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.14: Linear Model Estimates for Effects of Income on Belief of Too Little Spending on Childcare

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
						, ,	,	
Income								
Household Income	-0.001 (0.007)	-0.008* (0.004)	-0.008 (0.006)	-0.007 (0.006)	-0.016* (0.007)			
Mobility	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	-0.002 (0.008)	-0.008 (0.009)	0.011 $(0.008)$
Demographics								
Female		0.092** (0.024)	0.059+ $(0.032)$	0.112** (0.034)	0.147** (0.039)	0.094** (0.035)	0.103** (0.036)	0.151** (0.040)
Nonwhite		0.126** $(0.027)$	0.098** (0.036)	0.187** $(0.039)$	0.215** (0.045)	0.160** (0.040)	0.163** (0.042)	0.139** (0.046)
Age		-0.019** (0.007)	-0.018+ $(0.010)$	-0.013 (0.011)	-0.010 (0.012)	-0.004 (0.011)	0.002 (0.011)	-0.008 (0.013)
Education		-0.119 (0.080)	0.009 (0.109)	-0.171 $(0.127)$	-0.094 (0.147)	-0.222+ $(0.119)$	-0.148 (0.123)	-0.370** (0.131)
Church Attendence		-0.039 (0.032)	-0.036 (0.046)	-0.119* (0.049)	-0.068 (0.057)	-0.115* (0.049)	-0.005 (0.052)	-0.054 (0.057)
Lags								
Lagged DV '06						0.337** (0.031)		0.347** (0.034)
Lagged DV '08						(0.051)	0.456** (0.030)	(0.034)
Constant	2.453** (0.035)	2.596** (0.067)	2.548** (0.089)	2.623** (0.099)	2.492** (0.121)	1.762** (0.130)	1.283** (0.141)	1.747** (0.144)
N	1,822	1,589	1,319	1,066	1,115	991	912	
T Observations	$\frac{3}{4,007}$	$3 \\ 3,974$	$1 \\ 1,589$	$1 \\ 1,319$	$\frac{1}{1,066}$	$1\\1,115$	1 991	1 912
R-squared Hausman Test	0.000	1.476	0.014	0.037	0.051	0.159	0.248	0.172

Standard errors in parentheses  $\,$ 

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.15: Linear Model Estimates for Effects of Income on Belief of Too Little Spending on Welfare

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fixed Effects	Random Effects	OLS (2006)	OLS (2008)	OLS (2010)	Lagged Difference (2006-8)	Lagged Difference (2008-10)	Lagged Difference (2006-10)
Income								
Household Income	-0.00495 (0.00353)	-0.009** (0.002)	-0.012** (0.003)	-0.008* (0.004)	-0.018** (0.004)			
Mobility	(0.00303)	(0.002)	(0.003)	(0.004)	(0.004)	-0.002 $(0.005)$	-0.000 (0.005)	-0.009* (0.005)
Demographics								
Female		0.012	0.035+	0.005	-0.014	-0.011	0.003	-0.016
Non-white		(0.015) 0.066**	(0.018) 0.048*	(0.020) 0.093**	(0.022) 0.058*	(0.018) 0.067**	(0.018) $0.019$	(0.020) 0.056+
Age		(0.017) $0.004$	(0.022) $0.001$	(0.025) $0.008$	(0.029) $0.009$	(0.023) $0.007$	(0.025) $0.005$	(0.029) $0.013+$
Education		(0.004) 0.040	(0.006) $0.083$	(0.006) $0.068$	(0.007) $0.155+$	(0.006) $0.038$	(0.006) $0.038$	(0.007) $0.023$
Church Attendance		(0.048) $-0.044*$ $(0.019)$	(0.068) -0.082** (0.027)	(0.076) $-0.035$ $(0.028)$	(0.085) $-0.039$ $(0.032)$	(0.064) $-0.000$ $(0.026)$	(0.067) $-0.030$ $(0.027)$	(0.080) $-0.020$ $(0.030)$
Lags								
Lagged DV '06						0.163**		0.149**
Lagged DV '08						(0.012)	0.191** (0.013)	(0.013)
Constant	0.643*** (0.0182)	0.619** (0.042)	0.633** (0.054)	0.567** (0.058)	0.551** (0.072)	0.247** (0.059)	0.197** (0.061)	0.240** (0.075)
N	926	924	833	672	554	591	520	496
T Observations	3 2,076	3 2,059	1 833	$\begin{array}{c} 1 \\ 672 \end{array}$	1 554	1 591	$1\\520$	1 496
R-squared Hausman Test	0.002	1.988	0.042	0.034	0.053	0.276	0.336	0.231

T signifies the time period spanned by the model, not necessarily the time periods per respondent.

Standard errors in parentheses

<sup>\*\*</sup> p<0.01, \* p<0.05, + p<0.1

Table A.16: First Difference Estimates for Effects of Economic Hardship on Economic Perceptions and Beliefs

-	(1)	(2)	(3)	(4)	(5)
	Finances Relative	Better Off	Social	Perceived	Hard Work
	to Americans '97	than Parent '97	Class '97	Oppor '97	'97
Financial Hardship	-0.087** (0.024)	-0.078* (0.034)	-0.032 (0.021)	-0.058+ $(0.031)$	-0.142+ $(0.075)$
Observations	1,248	816	1,254	822	860
R-squared	0.014	0.009	0.002	0.003	0.004

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

Table A.17: Linear Model Estimates for Effects of Economic Hardship on Political Identity and Beliefs About the Role of Government

	(1)	(2)	(3)	(4)	(5)	(6)
	Ideology '10	Party ID '10	Gov't Do More '10	Gov't Help Poor '10	Gov't Help Sick '10	Gov't Equalize Wealth '10
Financial Hardship	0.044*	-0.034	-0.000	0.026	-0.045	-0.064
	(0.022)	(0.021)	(0.039)	(0.042)	(0.040)	(0.041)
N	1,264	1,252 $0.002$	778	788	785	815
R-squared	0.004		0.000	0.001	0.002	0.003

Robust standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

 ${\bf Table\ A.18:\ First\ Difference\ Estimates\ for\ Effects\ of\ Economic\ Hardship\ on\ Social\ Welfare\ Policies}$ 

	(1)	(2)	(3)	(4)
	Healthcare	Social Security	Childcare	Welfare
	'10	'10	'10	'10
Financial Hardship	-0.033	0.010	0.054	-0.012
	(0.045)	(0.083)	(0.078)	(0.039)
Observations	1,221	1,198	1,133	595
R-squared	0.000	0.000	0.000	0.000

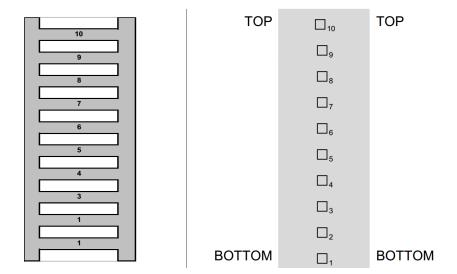
Robust standard errors in parentheses \*\* p<0.01, \* p<0.05, + p<0.1

## Appendix B

# Chapter 4: Supplemental Information

## Original International Social Survey Program Inequality IV Items

Figure B.1: Ladder of Subjective Economic Standing



#### Measures of Mobility

Occupational Mobility: Here is a list of different types of jobs. Which type of job did you have in your first job – after leaving full-time education – and which type of job do you have now in your current job? If you are not working now, please tell us about your last job.

- 1. Farm proprietor, farm manager
- 2. Farm worker (for example: farm labourer, tractor driver)
- 3. Unskilled worker (for example: labourer, porter, unskilled factory worker, cleaner)

- 4. Semi-skilled worker (for example: bricklayer, bus driver, cannery worker, carpenter, sheet metal worker, baker)
- 5. Skilled worker (for example: foreman, motor mechanic, printer, seamstress, tool and die maker, electrician)
- 6. Service (for example: restaurant owner, police officer, waitress, barber, caretaker)
- 7. Sales (for example: sales manager, shop owner, shop assistant, insurance agent, buyer)
- 8. Clerical (for example: secretary, clerk, office manager, civil servant, bookkeeper)
- 9. Higher administrative (for example: banker, executive in big business, high government official, union official)
- 10. Professional and technical (for example: doctor, teacher, engineer, artist, accountant, nurse)

#### Subjective Mobility:

- in our society there are groups which tend to be towards the top and groups which tend to be towards the bottom. Below is a scale (Figure B.1) that runs from top to bottom. Where would you put yourself now on this scale?
- And if you think about the family that you grew up in, where did they fit in then?

#### Dependent Variables

Q14. These five diagrams show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes <country> .. Type A Type B Type C Type D Type E A small elite at the A pyramid except A society with A society like a Many people top, very few people near the top, and pyramid with a small that just a few most people in in the middle and the elite at the top, more people are at the only a few near people in the middle, great mass of people bottom the bottom at the bottom. and most at the bottom

Figure B.2: Shapes of Society

#### **Economic Perceptions**

Perceived Inequality: Differences in income in ¡country¿ are too large. (Agree/disagree) Perceived Social Class: Most people see themselves as belonging to a particular class. Please tell me which social class you would say you belong to?

Perceived Shape of Society: These five diagrams (Figure B.2) show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes ¡country¿: First, what type of society is ¡country¿ today – which diagram comes closest?

#### **Economic Beliefs**

Preferred Shape of Society: These five diagrams (Figure B.2) show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes ¡country¿: What do you think ¡country¿ ought to be like – which would you prefer?

Meritocratic Beliefs: Please tick one box for each of these to show how important you think it is for getting ahead in life...

- How important is having a good education yourself?
- How important is having ambition?
- How important is hard work?

#### Role of Government

Aid to Unemployed: The government should provide a decent standard of living for the unemployed.

Aid to Poor: The government should spend less on benefits for the poor. Government Reduce Inequality: It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes. Tax Rich:Do you think people with high incomes should pay a larger share of their income in taxes than those with low incomes, the same share, or a smaller share?

#### Country-Level Variables

 ${\bf Table~B.1:~Summary~Statistics~for~Individual-level~Variables}$ 

	N	mean	$\operatorname{sd}$	min	max
Occupational Mobility	16,974	0.166	0.839	-3	3
Perceived Mobility	54,127	0.0196	0.190	-0.900	0.900
Income	47,149	0	1.000	-2.050	31.57
Education	52,368	0.543	0.183	0.0500	1
Union	55,238	0.182	0.385	0	1
Church Attendance	52,471	0.437	0.286	0.125	1
Class	49,409	0.518	0.192	0.167	1
Perceived Inequality	54,059	0.846	0.182	0.200	1
Perceived Structure	51,811	0.732	0.228	0.200	1
Rich/Poor Conflict	52,196	0.622	0.228	0.250	1
Education Injustice	53,475	0.700	0.264	0.200	1
Tax Rich	49,331	0.666	0.218	0.200	1
Gov't Reduce Poverty	53,507	0.742	0.238	0.200	1
Gov't Reduce Ineq.	53,633	0.773	0.219	0.200	1
Gov't Reduce Unemp.	53,929	0.782	0.198	0.200	1
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### **Analysis Results**

Table B.2: Country Level Variables

Country	N	GDP per	Gini	Internet Users
		Capita		per 100 persons
Argentina	1133	9457	43.00	34
Australia	1525	42702	36.73	74
Austria	1019	47526	33.51	73
Belgium	1115	44996	33.49	70
Bulgaria	1000	6738	33.40	45
Chile	1505	10142	51.63	42
China	3010	3749	49.37	29
Croatia	1201	14142	28.83	51
Cyprus	1000	29428	29.43	50
Czech Republic	1205	19698	31.68	64
Denmark	1518	57896	30.70	87
Estonia	1005	14717	36.33	73
Finland	880	47104	32.32	82
France	2817	41631	36.28	72
Germany (East)	439	41669	35.12	79
Germany (West)	956	41669	35.12	79
Great Britain	958	37076	39.28	84
Hungary	1010	12907	25.30	62
Iceland	947	40263	31.03	93
Israel	1193	27583	42.81	63
Italy	1084	36993	36.53	49
Japan	1296	39473	35.93	78
Latvia	1069	12082	37.07	67
New Zealand	935	27562	38.90	80
Norway	1456	78457	30.24	92
Philippines	1200	1832	44.80	9
Poland	1263	11441	35.74	59
Portugal	1000	23063	40.50	48
Russian Federation	1603	8616	39.27	29
Slovak Republic	1159	16455	30.00	70
Slovenia	1065	24634	30.06	64
South Africa	3305	5658	60.63	10
South Korea	1599	18339	32.80	82
Spain	1215	32332	37.59	62
Sweden	1137	46207	31.52	91
Switzerland	1229	69669	31.76	81
Taiwan	2026	3749	33.65	29
Turkey	1569	8626	41.10	36
Ukraine	2012	2545	26.95	18
United States	1581	47001	44.38	71
Venezuela	999	11525	38.00	33

Table B.2: Country Level Variables (Continued)

Country	Infant Mortality Rate	Unemployment Rate	Income Elasticity	Educational Correlation	Average Meritocracy Rating
Argentina	13.4	8.6	_	_	0.737
Australia	4.2	5.6	0.26	_	0.837
Austria	3.7	4.8	-	_	0.783
Belgium	3.7	7.9	_	0.4	0.749
Bulgaria	11.5	6.8	_	_	0.850
Chile	7.5	9.7	_	0.6	0.759
China	14.7	4.3	_	0.2	0.837
Croatia	4.8	11.8	_	_	0.825
Cyprus	3.2	5.4	_	_	0.836
Czech Republic	3.6	6.7	_	0.37	0.760
Denmark	3.5	6	0.15	0.3	0.726
Estonia	4	13.8	-	0.4	0.754
Finland	2.6	8.2	0.18	-	0.712
France	3.5	9.1	0.41	_	0.750
Germany (East)	3.6	7.7	0.32	_	0.802
Germany (West)	3.6	7.7	0.32	_	0.800
Great Britain	4.6	7.7	0.5	0.31	0.799
Hungary	5.9	10	-	0.49	0.776
Iceland	1.9	7.2	_	0.20	0.842
Israel	3.8	7.5	_		0.790
Italy	3.5	7.8	0.48	0.54	0.771
Japan	2.4	5	-	-	0.700
Latvia	8.6	17.1	_	_	0.782
New Zealand	5.3	6.1	_	0.33	0.836
Norway	2.7	3.2	0.17	0.35	0.792
Philippines	25.5	7.5	_	0.4	0.859
Poland	5.3	8.2	_	0.43	0.840
Portugal	3.2	9.5	_	_	0.799
Russian Federation	10.8	8.3	_	_	0.755
Slovak Republic	7.1	12.1	-	0.37	0.799
Slovenia	2.8	5.9	_	0.52	0.782
South Africa	40	23.7	_	0.44	0.849
South Korea	3.7	3.6	-	_	0.788
Spain	4.1	18	0.4	_	0.750
Sweden	2.5	8.3	0.27	0.39	0.780
Switzerland	3.9	4.1	_	0.46	0.762
Taiwan	14.7	4.3	_	-	0.808
Turkey	20.6	14	_	-	0.766
Ukraine	10.6	8.8	-	0.39	0.757
United States	6.4	9.3	0.47	0.46	0.857
Venezuela	14	7.8	-	_	0.710

Table B.3: Reduced Sample for Occupational Mobility Analyses

Country	$\mathbf{N}$
Austria	829
Belgium (FL)	732
Czech Republic	1063
France	2121
Germany (E)	397
Germany (W)	849
Great Britain (GB)	830
Hungary	939
Italy	415
Japan	418
Latvia	979
New Zealand	826
Russia	1336
South Korea	1321
Switzerland	1146
Turkey	936
Ukraine	1837

Table B.4: Effects of Occupational Mobility on Subjective Mobility (Ladder Questions)

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	0.025	0.025	0.043	0.005
Income (Standardized)	(0.025, 0.026) $0.035$ $(0.034, 0.035)$	(0.024, 0.026) <b>0.035</b> (0.034, 0.035)	(0.026, 0.06) <b>0.035</b> (0.034, 0.035)	(-0.001, 0.012) <b>0.033</b> (0.033, 0.034)
Education	0.105	0.107	0.105	0.036
Female	(0.099, 0.11) <b>-0.012</b> (-0.014, -0.011)	(0.102, 0.112) <b>-0.012</b> (-0.014, -0.011)	(0.1, 0.11) <b>-0.012</b> (-0.014, -0.011)	(0.031, 0.04) <b>0.004</b> (0.002, 0.005)
Age	0.019 (0.019, 0.02)	0.019 (0.019, 0.02)	0.019 (0.019, 0.02)	0.002, 0.003) 0.011 (0.011, 0.012)
Union Membership	0.005	0.005	0.005	-0.013
Attend Church	(0.004, 0.007) $0.019$	(0.004, 0.007) $0.02$ $(0.017, 0.023)$	(0.004, 0.007) <b>0.019</b>	(-0.014, -0.011) <b>0.011</b>
GINI	(0.017, 0.022) - <b>0.05</b>	-0.026	(0.017, 0.022) - <b>0.05</b>	(0.008, 0.013) -0.449
GDP	(-0.067, -0.034) - <b>0.001</b>	(-0.043, -0.009) - <b>0.001</b>	(-0.066, -0.033) - <b>0.001</b>	(-0.464, -0.433) <b>0.001</b>
Unemployment Rate	(-0.001, -0.001) -0.001	(-0.001, -0.001) - <b>0.001</b>	(-0.001, -0.001) -0.001	(0.001, 0.001) -0.006
Internet Usage	(-0.001, 0) <b>0.12</b>	(-0.002, -0.001) <b>0.117</b>	(-0.001, 0) <b>0.12</b>	(-0.006, -0.005) <b>0.043</b>
Meritocracy	(0.111, 0.13) - <b>0.05</b>	(0.107, 0.126) $-0.073$	(0.111, 0.129) - <b>0.047</b>	(0.035, 0.051) $-0.285$
Occ. Mob. X Meritocracy	(-0.075, -0.026)	(-0.1, -0.048)	(-0.071, -0.021) - <b>0.019</b>	(-0.304, -0.264)
Occ. Mob. X GINI			(-0.038, -0.001)	<b>0.018</b> (0.007, 0.029)
Constant	<b>0.502</b> (0.453, 0.549)	<b>0.51</b> (0.442, 0.578)	<b>0.499</b> (0.45, 0.548)	<b>0.429</b> (0.389, 0.469)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.111	0.272	0.112	0.101
$VCV.job\_mob.(Intercept)$	(0.046, 0.269)	(0.107, 0.656) $-0.048$	(0.048, 0.261)	(0.045, 0.228)
VCV.job_mob.job_mob		(-0.342, 0.147) $0.276$		
sigma2	0.041	(0.103, 0.706) $0.041$	0.041	0.034
Deviance	(0.04, 0.042) $-4331.406$	(0.04, 0.042) $-4343.61$	(0.04, 0.042) $ -4331.198$	(0.033, 0.035) $-7075.372$

Table B.5: Effects of Occupational Mobility on Subjective Mobility from Father

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	0.025	0.025	0.043	0.005
Income (Standardized)	(0.025, 0.026) $0.035$ $(0.034, 0.035)$	(0.024, 0.026) <b>0.035</b> (0.034, 0.035)	(0.026, 0.06) <b>0.035</b> (0.034, 0.035)	(-0.001, 0.012) <b>0.033</b> (0.033, 0.034)
Education	0.105	0.107	0.105	0.036
Female	(0.099, 0.11) -0.012	(0.102, 0.112) -0.012	(0.1, 0.11) -0.012	(0.031, 0.04) <b>0.004</b>
Age	(-0.014, -0.011) <b>0.019</b> (0.019, 0.02)	(-0.014, -0.011) <b>0.019</b> (0.019, 0.02)	(-0.014, -0.011) <b>0.019</b> (0.019, 0.02)	(0.002, 0.005) <b>0.011</b> (0.011, 0.012)
Union Membership	0.005	0.005	0.005	-0.013
Attend Church	(0.004, 0.007) <b>0.019</b> (0.017, 0.022)	(0.004, 0.007) $0.02$ $(0.017, 0.023)$	(0.004, 0.007) <b>0.019</b> (0.017, 0.022)	(-0.014, -0.011) <b>0.011</b>
GINI	-0.05	-0.026	(0.017, 0.022) - <b>0.05</b>	(0.008, 0.013) -0.449
GDP	(-0.067, -0.034) - <b>0.001</b>	(-0.043, -0.009) <b>-0.001</b>	(-0.066, -0.033) - <b>0.001</b>	(-0.464, -0.433) <b>0.001</b>
Unemployment Rate	(-0.001, -0.001) -0.001	(-0.001, -0.001) - <b>0.001</b>	(-0.001, -0.001) -0.001	(0.001, 0.001) -0.006
Internate Usage	(-0.001, 0) <b>0.12</b>	(-0.002, -0.001) <b>0.117</b>	(-0.001, 0) <b>0.12</b>	(-0.006, -0.005) <b>0.043</b>
Meritocracy	(0.111, 0.13) - <b>0.05</b>	(0.107, 0.126) - <b>0.073</b>	(0.111, 0.129) -0.047	(0.035, 0.051) - <b>0.285</b>
Occ. Mob. X Meritocracy	(-0.075, -0.026)	(-0.1, -0.048)	(-0.071, -0.021) - <b>0.019</b>	(-0.304, -0.264)
Occ. Mob. X GINI			(-0.038, -0.001)	<b>0.018</b> (0.007, 0.029)
Constant	<b>0.502</b> (0.453, 0.549)	<b>0.51</b> (0.442, 0.578)	<b>0.499</b> (0.45, 0.548)	<b>0.429</b> (0.389, 0.469)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.111	0.272	0.112	0.101
$VCV.job\_mob.(Intercept)$	(0.046, 0.269)	(0.107, 0.656) $-0.048$	(0.048, 0.261)	(0.045, 0.228)
VCV.job_mob.job_mob		(-0.342, 0.147) $0.276$		
sigma2	$0.041 \\ (0.04, 0.042)$	$ \begin{array}{c} (0.103, 0.706) \\ 0.041 \\ (0.04, 0.042) \end{array} $	$0.041 \\ (0.04, 0.042)$	0.034 (0.033, 0.035)
Deviance	-4331.406	-4343.61	-4331.198	-7075.372

Table B.6: Effects of Occupational Mobility on Perceptions of Inequality

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	0	0	-0.049	-0.016
Income (Standardized)	(-0.001, 0) - <b>0.017</b>	(-0.001, 0) - <b>0.017</b>	(-0.059, -0.04) - <b>0.017</b>	(-0.021, -0.012) - <b>0.017</b>
Education	(-0.017, -0.017) <b>-0.096</b> (-0.099, -0.094)	(-0.018, -0.017) <b>-0.096</b> (-0.099, -0.094)	(-0.018, -0.017) <b>-0.096</b> (-0.099, -0.094)	(-0.017, -0.017) <b>-0.096</b> (-0.099, -0.094)
Female	0.003 (0.002, 0.004)	0.003 (0.002, 0.004)	0.003 (0.002, 0.004)	0.003 (0.002, 0.004)
Age	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)
Union Membership	<b>0.011</b> (0.01, 0.012)	<b>0.011</b> (0.01, 0.012)	<b>0.011</b> (0.01, 0.012)	<b>0.011</b> (0.01, 0.012)
Attend Church	-0.025 (-0.027, -0.024)	-0.025 (-0.027, -0.024)	-0.025 (-0.027, -0.024)	-0.025 (-0.027, -0.024)
GINI	0.597 (0.586, 0.607)	0.599 (0.588, 0.61)	0.598 (0.588, 0.609)	0.59 (0.58, 0.601)
GDP per Capita	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)
Unemployment Rate	0.002 (0.002, 0.002)	0.002 (0.002, 0.002)	0.002 (0.002, 0.002)	0.002 (0.002, 0.002)
Internet Usage	0.036 (0.031, 0.042)	0.037 (0.031, 0.042)	0.036 (0.031, 0.042)	0.036 (0.03, 0.041)
Meritocracy	0.092 (0.077, 0.106)	0.09 (0.075, 0.104)	0.081 0.081 (0.068, 0.096)	0.03, 0.041) 0.094 (0.08, 0.108)
Occ. Mob. X Meritocracy	0.054 (0.043, 0.064)	(0.075, 0.104)	(0.008, 0.090)	(0.06, 0.106)
Occ. Mob. X GINI	(0.049, 0.004)		<b>0.027</b> (0.019, 0.034)	
Intercept	<b>0.504</b> (0.472, 0.536)	<b>0.497</b> (0.451, 0.544)	<b>0.512</b> (0.48, 0.544)	<b>0.506</b> (0.474, 0.537)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	$0.102 \\ (0.044, 0.228)$	$0.24 \\ (0.098, 0.547)$	$0.103 \\ (0.045, 0.232)$	$0.103 \\ (0.045, 0.232)$
$VCV.job\_mob.(Intercept)$		-0.037 (-0.257, 0.139)	,	,
$VCV. (Intercept). job\_mob$	$0.102 \\ (0.044, 0.228)$	-0.037 (-0.257, 0.139)	$0.103 \\ (0.045, 0.232)$	$0.103 \\ (0.232, 0.045)$
VCV.job_mob.job_mob	, , ,	0.243 (0.097, 0.596)	, , ,	, ,
sigma2	$0.023 \\ (0.023, 0.024)$	0.023 $(0.023, 0.024)$	$0.023 \\ (0.023, 0.024)$	$0.023 \\ (0.023, 0.024)$
Deviance	-11974.6	-11968.3	-11976.9	-11975.6

Table B.7: Effects of Occupational Mobility on Perceived Shape of Society

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	-0.001	-0.001	-0.031	-0.025
Income (Standardized)	(-0.002, -0.001) <b>-0.009</b> (-0.01, -0.009)	(-0.002, -0.001) <b>-0.009</b> (-0.01, -0.009)	(-0.047, -0.014) <b>-0.009</b> (-0.01, -0.009)	(-0.033, -0.017) <b>-0.009</b> (-0.01, -0.009)
Education	-0.084	-0.084	-0.084	-0.085
Female	(-0.09, -0.08)	(-0.089, -0.079)	(-0.089, -0.08)	(-0.09, -0.08)
Age	(-0.001, 0.001) - <b>0.003</b>	(-0.001, 0.001) - <b>0.003</b>	(-0.001, 0.002) - <b>0.003</b>	(-0.001, 0.002) <b>-0.003</b>
Union Membership	(-0.003, -0.002) <b>0.013</b> (0.011, 0.015)	(-0.003, -0.002) <b>0.013</b> (0.011, 0.015)	(-0.003, -0.002) <b>0.013</b> (0.011, 0.015)	(-0.003, -0.002) <b>0.013</b> (0.011, 0.015)
Attend Church	-0.04 (-0.042, -0.037)	-0.04 (-0.043, -0.037)	-0.04 (-0.042, -0.037)	-0.04 (-0.042, -0.037)
GINI	0.903	0.905	0.903 (0.888, 0.918)	0.894 (0.879, 0.909)
GDP	(0.887, 0.917) <b>-0.005</b> (-0.006, -0.005)	(0.888, 0.921) - <b>0.005</b>	-0.005 (-0.006, -0.005)	-0.005
Unemployment Rate	0.004	(-0.006, -0.005) <b>0.004</b>	0.004	(-0.006, -0.005) <b>0.004</b>
Internate Usage	(0.004, 0.005) <b>0.08</b>	(0.004, 0.005) $0.081$	(0.004, 0.005) <b>0.08</b>	(0.004, 0.005) $0.079$
Meritocracy	(0.071, 0.089) <b>0.327</b> (0.304, 0.351)	(0.072, 0.09) <b>0.329</b> (0.303, 0.353)	(0.071, 0.089) <b>0.321</b>	(0.07, 0.088) <b>0.331</b> (0.308, 0.355)
Occ. Mob. X Meritocracy	(0.304, 0.331)	(0.505, 0.555)	(0.297, 0.345) <b>0.032</b> (0.014, 0.049)	(0.506, 0.555)
Occ. Mob. X GINI			(0.014, 0.043)	<b>0.039</b> (0.026, 0.053)
Intercept	0.041 (-0.008, 0.089)	0.026 (-0.042, 0.096)	0.048 (-0.001, 0.096)	0.044 (-0.004, 0.093)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.115	0.275	0.116	0.116
$VCV. (Intercept). job\_mob$	(0.048, 0.28)	(0.108, 0.661) $-0.048$	(0.049, 0.271)	(0.049, 0.271)
$VCV.job\_mob.job\_mob$		$ \begin{array}{c} (-0.342, 0.149) \\ 0.277 \\ (0.102, 0.719) \end{array} $		
sigma2	0.04 (0.039, 0.041)	$ \begin{array}{c} (0.102, 0.719) \\ 0.04 \\ (0.039, 0.041) \end{array} $	0.04 (0.039, 0.041)	0.04 (0.039, 0.041)
Deviance	-4676.591	-4671.338	-4676.703	-4677.575

Figure B.3: Bayesian Estimates of Effects of Occupational Mobility on Perceptions of Inequality

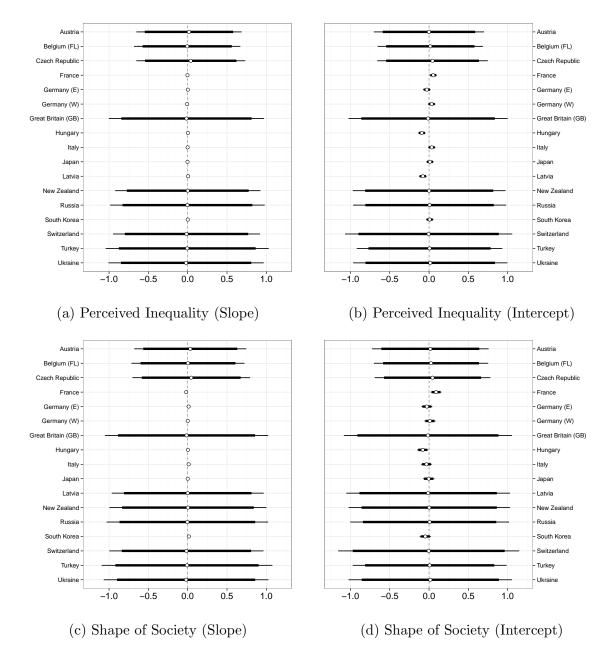


Table B.8: Effects of Occupational Mobility on Preferred Shape of Society

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	0.003	0.003	0.007	0.009
Income (Standardized)	(0.002, 0.004) <b>0.004</b> (0.004, 0.005)	(0.002, 0.003) <b>0.004</b> (0.004, 0.005)	(-0.003, 0.018) <b>0.004</b> (0.004, 0.005)	(0.003, 0.014) <b>0.004</b> (0.004, 0.005)
Education	-0.048	<b>-0.047</b>	-0.048	-0.048
Female	(-0.052, -0.045) - <b>0.014</b>	(-0.05, -0.044) - <b>0.014</b>	(-0.052, -0.045) - <b>0.014</b>	(-0.052, -0.045) - <b>0.014</b>
Age	(-0.015, -0.013) <b>0.008</b>	(-0.015, -0.013) <b>0.008</b>	(-0.015, -0.013) <b>0.008</b>	(-0.015, -0.013) <b>0.008</b>
Union Membership	(0.008, 0.008) <b>-0.003</b> (-0.004, -0.001)	(0.008, 0.008) <b>-0.003</b> (-0.004, -0.002)	(0.008, 0.008) <b>-0.003</b> (-0.004, -0.001)	(0.008, 0.008) <b>-0.003</b> (-0.004, -0.001)
Attend Church	0.008 (0.006, 0.01)	0.008 (0.007, 0.01)	0.008 (0.006, 0.01)	0.004, -0.001) 0.008 (0.006, 0.01)
GINI	-0.318 (-0.328, -0.308)	-0.3 (-0.311, -0.29)	-0.318 (-0.328, -0.308)	-0.315 (-0.326, -0.305)
GDP	0.001	0.001	0.001	0.001
Unemployment Rate	(0.001, 0.001) $0.002$	(0.001, 0.001) $0.002$	(0.001, 0.001) $0.002$	(0.001, 0.001) $0.002$
Internate Usage	(0.002, 0.002) - <b>0.02</b>	(0.001, 0.002) - <b>0.016</b>	(0.002, 0.002) - <b>0.02</b>	(0.002, 0.002) - <b>0.019</b>
Meritocracy	(-0.026, -0.013) - <b>0.097</b>	(-0.022, -0.01) - <b>0.093</b>	(-0.026, -0.014) - <b>0.097</b>	(-0.026, -0.014) - <b>0.098</b>
Occ. Mob. X Meritocracy	(-0.113, -0.081)	(-0.11, -0.077)	(-0.112, -0.08) -0.005	(-0.113, -0.082)
Occ. Mob. X GINI			(-0.016, 0.007)	<b>-0.01</b> (-0.018, -0.001)
Intercept	<b>0.641</b> (0.602, 0.677)	<b>0.625</b> (0.573, 0.678)	<b>0.64</b> (0.603, 0.677)	0.641 (0.604, 0.677)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.111	0.271	0.112	0.112
$VCV.job\_mob.(Intercept)$	(0.046, 0.269)	(0.107, 0.656) -0.048 (-0.341, 0.147)	(0.048, 0.262)	(0.048, 0.262)
$VCV.job\_mob.job\_mob$		$ \begin{array}{c} (-0.341, 0.147) \\ 0.276 \\ (0.103, 0.704) \end{array} $		
sigma2	0.026 (0.026, 0.027)	$ \begin{array}{c} 0.026 \\ (0.026, 0.027) \end{array} $	0.026 (0.026, 0.027)	0.026 $(0.026, 0.027)$
Deviance	-9790.43	-9807.376	-9790.079	-9790.188

Table B.9: Effects of Occupational Mobility on Belief in Meritocracy

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	0.002	0.002	0.009	0.03
Income (Standardized)	(0.001, 0.002) <b>0.006</b> (0.006, 0.007)	(0.001, 0.002) <b>0.006</b> (0.006, 0.007)	(0.002, 0.016) <b>0.006</b> (0.006, 0.007)	(0.027, 0.033) <b>0.006</b>
Education	0.034	0.034	0.034	(0.006, 0.007) $0.034$
Female	(0.032, 0.036) <b>0.004</b> (0.003, 0.004)	(0.032, 0.036) <b>0.004</b> (0.003, 0.004)	(0.032, 0.036) <b>0.004</b> (0.003, 0.004)	(0.032, 0.036) <b>0.004</b> (0.003, 0.004)
Age	0.003, 0.004) 0.002 (0.002, 0.002)	0.002 (0.002, 0.002)	0.003, 0.004) 0.002 (0.002, 0.002)	0.003, 0.004 0.002 (0.002, 0.002)
Union Membership	-0.001 (-0.001, 0)	0 (-0.001, 0.001)	-0.001 (-0.001, 0)	-0.001 (-0.001, 0)
Attend Church	0.001 $(0, 0.003)$	0.001 $(0, 0.002)$	0.001 $(0, 0.002)$	0.001 $(0, 0.003)$
GINI	- <b>0.097</b> (-0.105, -0.091)	<b>-0.089</b> (-0.096, -0.082)	<b>-0.097</b> (-0.104, -0.091)	<b>-0.086</b> (-0.093, -0.08)
GDP per Capita	<b>-0.002</b> (-0.002, -0.002)	<b>-0.002</b> (-0.002, -0.002)	<b>-0.002</b> (-0.002, -0.002)	<b>-0.002</b> (-0.002, -0.002)
Unemployment Rate	<b>-0.005</b> (-0.005, -0.004)	<b>-0.005</b> (-0.005, -0.005)	<b>-0.005</b> (-0.005, -0.004)	<b>-0.005</b> (-0.005, -0.005)
Internate Usage	<b>0.134</b> (0.13, 0.138)	<b>0.136</b> (0.132, 0.14)	<b>0.134</b> (0.13, 0.138)	<b>0.135</b> (0.131, 0.139)
Meritocracy	<b>0.075</b> (0.065, 0.085)	<b>0.079</b> (0.069, 0.089)	<b>0.076</b> (0.066, 0.087)	<b>0.071</b> (0.061, 0.081)
Occ. Mob. X Meritocracy	, , ,	, ,	<b>-0.008</b> (-0.016, -0.001)	, , ,
Occ. Mob. X GINI			,	<b>-0.048</b> (-0.053, -0.042)
Intercept	<b>0.728</b> (0.702, 0.754)	<b>0.721</b> (0.683, 0.759)	$egin{array}{c} 0.727 \\ (0.7, \ 0.753) \end{array}$	<b>0.725</b> (0.698, 0.751)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.1	0.238	0.101	0.101
VCV.job_mob.(Intercept)	(0.043, 0.224)	(0.097, 0.55) $-0.037$	(0.044, 0.227)	(0.044, 0.227)
VCV.job_mob.job_mob		(-0.257, 0.138) $0.243$		
sigma2	0.017 (0.017, 0.017)	$ \begin{array}{c} (0.098,  0.593) \\ 0.017 \\ (0.017,  0.017) \end{array} $	0.017 (0.017, 0.017)	0.017 (0.017, 0.017)
Deviance	-15644.011	-15647.824	-15643.91	-15648.726

Figure B.4: Bayesian Estimates of Effects of Occupational Mobility on Economic Beliefs

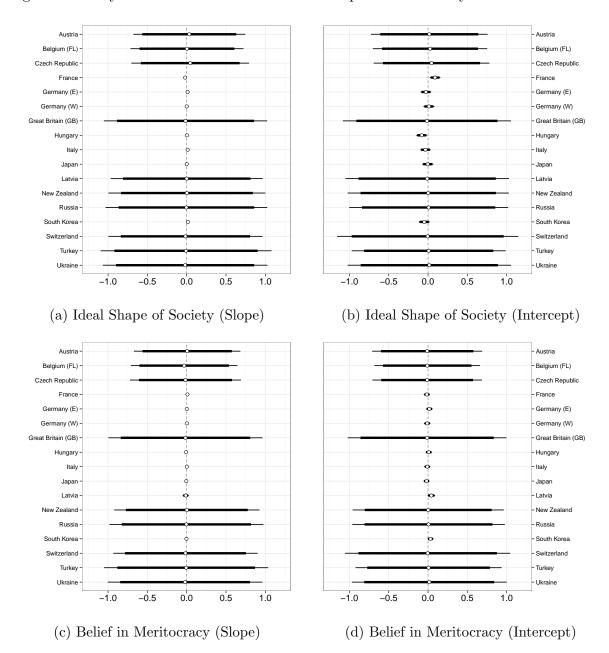


Table B.10: Effects of Occupational Mobility on Preferences for Government Inequality Reduction

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	-0.002	-0.002	0.02	-0.046
Income (Standardized)	(-0.003, -0.002) <b>-0.03</b> (-0.03, -0.029)	(-0.003, -0.002) <b>-0.03</b> (-0.03, -0.029)	(0.005, 0.035) <b>-0.03</b> (-0.03, -0.029)	(-0.053, -0.038) <b>-0.029</b> (-0.03, -0.029)
Education	-0.133	-0.134	-0.133	-0.134
Female	(-0.138, -0.129) -0.001 (-0.002, 0)	(-0.138, -0.129) -0.001 (-0.002, 0)	(-0.138, -0.129) -0.001 (-0.002, 0)	(-0.138, -0.129) -0.001 (-0.002, 0)
Age	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)	-0.001 (-0.002, -0.001)
Union Membership	<b>0.012</b> (0.011, 0.014)	<b>0.012</b> (0.011, 0.014)	<b>0.012</b> (0.011, 0.014)	<b>0.012</b> (0.011, 0.014)
Attend Church	-0.033 (-0.036, -0.03)	-0.033 (-0.035, -0.03)	-0.033 (-0.035, -0.03)	-0.033 (-0.036, -0.031)
GINI	<b>0.921</b> (0.904, 0.936)	<b>0.919</b> (0.903, 0.935)	<b>0.921</b> (0.905, 0.937)	<b>0.905</b> (0.889, 0.921)
GDP per Capita	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)	-0.002 (-0.002, -0.001)
Unemployment Rate	0.003 (0.002, 0.003)	0.003 (0.002, 0.003)	0.003 (0.002, 0.003)	0.003 (0.002, 0.003)
Internate Usage	-0.084 (-0.092, -0.075)	-0.084 (-0.093, -0.075)	-0.084 (-0.093, -0.075)	-0.085 (-0.095, -0.077)
Meritocracy	0.1	0.102	0.105	0.106
Occ. Mob. X Meritocracy	(0.077, 0.124)	(0.077, 0.124)	(0.083, 0.128) <b>-0.024</b> (-0.041, -0.008)	(0.084, 0.13)
Occ. Mob. X GINI			(-0.041, -0.008)	<b>0.073</b> (0.061, 0.085)
Intercept	<b>0.331</b> (0.289, 0.374)	<b>0.319</b> (0.258, 0.381)	<b>0.327</b> (0.283, 0.37)	<b>0.336</b> (0.292, 0.379)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	$0.104 \\ (0.045, 0.232)$	$0.242 \\ (0.098, 0.551)$	$0.105 \\ (0.046, 0.236)$	$0.105 \\ (0.046, 0.236)$
$VCV.job\_mob.(Intercept)$	, , ,	-0.037 (-0.257, 0.14)	, , ,	, , ,
$VCV. (Intercept). job\_mob$		-0.037 (-0.257, 0.14)		
$VCV.job\_mob.job\_mob$		$ \begin{array}{c} 0.244 \\ (0.098, 0.599) \end{array} $		
sigma2	$0.038 \\ (0.037, 0.039)$	$ \begin{array}{c} (0.038, 0.039) \\ 0.038 \\ (0.037, 0.039) \end{array} $	$0.038 \\ (0.037, 0.039)$	$0.038 \\ (0.037, 0.039)$
Deviance	-5603.246	-5607.321	-5603.359	-5608.155

Table B.11: Effects of Occupational Mobility on Preferences for Government Aid to Unemployed

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	-0.005	-0.005	-0.038	-0.052
Occupational Monthly	(-0.006, -0.004)	(-0.006, -0.004)	(-0.053, -0.022)	(-0.06, -0.045)
Income (Standardized)	-0.018	-0.018	-0.018	-0.018
	(-0.019, -0.017)	(-0.019, -0.017)	(-0.019, -0.017)	(-0.019, -0.017)
Education	-0.031	-0.032	-0.031	-0.031
	(-0.036, -0.027)	(-0.036, -0.027)	(-0.036, -0.027)	(-0.036, -0.027)
Female	-0.012	-0.012	-0.012	-0.012
	(-0.013, -0.01)	(-0.013, -0.011)	(-0.013, -0.01)	(-0.013, -0.01)
Age	0.005	0.005	0.005	0.005
	(0.004, 0.005)	(0.004, 0.005)	(0.004, 0.005)	(0.004, 0.005)
Union Membership	-0.001	-0.001	0	-0.001
	(-0.002, 0.001)	(-0.003, 0)	(-0.002, 0.001)	(-0.002, 0.001)
Attend Church	-0.001	-0.001	-0.002	-0.002
	(-0.004, 0.001)	(-0.004, 0.002)	(-0.004, 0.001)	(-0.004, 0.001)
GINI	0.718	0.704	0.719	0.699
	(0.701, 0.734)	(0.687, 0.72)	(0.703, 0.735)	(0.683, 0.715)
GDP	-0.002	-0.002	-0.002	-0.002
	(-0.002, -0.002)	(-0.002, -0.002)	(-0.002, -0.002)	(-0.002, -0.002)
Unemployment Rate	0.001	0.001	0.001	0.001
1 0	(0.001, 0.001)	(0.001, 0.002)	(0.001, 0.001)	(0.001, 0.001)
Internate Usage	-0.025	-0.025	-0.025	-0.027
	(-0.034, -0.016)	(-0.034, -0.016)	(-0.034, -0.017)	(-0.036, -0.019)
Meritocracy	0.238	$\boldsymbol{0.242}$	0.231	$\boldsymbol{0.245}$
	(0.215, 0.262)	(0.217, 0.264)	(0.209, 0.255)	(0.222, 0.268)
Occ. Mob. X Meritocracy	(0.210, 0.202)	(0.211, 0.201)	0.036	(0.222, 0.200)
			(0.019, 0.052)	
Occ. Mob. X GINI			(0.010, 0.002)	0.079
000. 11100. 11 011.1				(0.067, 0.092)
Intercept	0.193	0.192	0.199	0.199
illoor copt	(0.15, 0.236)	(0.133, 0.252)	(0.155, 0.242)	(0.156, 0.243)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.103	0.242	0.104	0.104
v C v .(Intercept).(Intercept)	(0.044, 0.23)	(0.099, 0.556)	(0.046, 0.234)	(0.046, 0.234)
VCV.job_mob.(Intercept)	(0.011, 0.20)	-0.038	(0.010, 0.201)	(0.010, 0.201)
v C v .job_mob.(intercept)		(-0.259, 0.139)		
VCV.job_mob.job_mob		0.243		
v 🔾 v .job_mob.job_mob		(0.098, 0.594)		
sigma2	0.038	0.038	0.038	0.038
51511142	(0.037, 0.039)	(0.037, 0.039)	(0.037, 0.039)	(0.037, 0.039)
Deviance	, ,	-5454.506	, ,	, ,
Deviance	-5444.264	-9494.900	-5444.718	-5450.073

Table B.12: Effects of Occupational Mobility on Preferences for Government Aid to the Poor

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	-0.004	-0.004	-0.045	-0.05
Occupational Mobility	(-0.005, -0.003)	(-0.005, -0.003)	(-0.065, -0.024)	(-0.059, -0.04)
Income (Standardized)	- <b>0.007</b>	<b>-0.003</b> , -0.003)	-0.008	-0.007
income (Standardisca)	(-0.008, -0.007)	(-0.008, -0.006)	(-0.008, -0.007)	(-0.008, -0.006)
Education	0.023	0.022	0.023	0.022
	(0.016, 0.029)	(0.016, 0.028)	(0.016, 0.029)	(0.016, 0.028)
Female	0.001	0.001	0.001	0.001
	(-0.001, 0.003)	(-0.001, 0.003)	(-0.001, 0.003)	(-0.001, 0.003)
Age	0	0	0	-0.001
S	(-0.001, 0)	(-0.001, 0)	(-0.001, 0)	(-0.001, 0)
Union Membership	0.028	0.027	0.028	0.028
	(0.025, 0.03)	(0.025, 0.03)	(0.026, 0.03)	(0.026, 0.03)
Attend Church	0.012	0.012	0.012	0.012
	(0.008, 0.016)	(0.009, 0.016)	(0.008, 0.015)	(0.008, 0.015)
GINI	0.369	0.356	0.37	$\boldsymbol{0.352}$
	(0.347, 0.389)	(0.335, 0.377)	(0.35, 0.39)	(0.332, 0.373)
GDP	0.001	0.001	0.001	0.001
	(0.001, 0.001)	(0.001, 0.001)	(0.001, 0.001)	(0.001, 0.001)
Unemployment Rate	0.001	0.001	0.001	0.001
	(0, 0.001)	(0, 0.001)	(0, 0.001)	(0, 0.001)
Internate Usage	-0.034	-0.036	-0.034	-0.036
	(-0.045, -0.023)	(-0.048, -0.024)	(-0.046, -0.023)	(-0.048, -0.026)
Meritocracy	-0.414	-0.411	-0.423	-0.407
	(-0.444, -0.383)	(-0.444, -0.382)	(-0.451, -0.392)	(-0.436, -0.377)
Occ. Mob. X Meritocracy			0.045	
			(0.022, 0.066)	
Occ. Mob. X GINI				0.077
<b>T</b>	0.000	0.004	0.000	(0.061, 0.093)
Intercept	0.896	0.904	0.903	0.9
N (OL)	(0.844, 0.947)	(0.833, 0.972)	(0.851, 0.955)	(0.849, 0.952)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.103	0.24	0.104	0.104
VCV:-h h (I-++)	(0.044, 0.23)	(0.098, 0.559)	(0.046, 0.234)	(0.046, 0.234)
$VCV.job\_mob.(Intercept)$		-0.036		
VCV job mob job mob		(-0.263, 0.14) 0.244		
VCV.job_mob.job_mob		(0.099, 0.592)		
sigm 2	0.05	(0.099, 0.392) 0.05	0.05	0.05
sigma2	(0.049, 0.051)	(0.049, 0.051)	(0.049, 0.051)	(0.049, 0.051)
Deviance	-2008.472	-2007.561	-2009.028	-2012.535
Deviance	-2000.412	-2007.301	-2009.020	-2012.000

Table B.13: Effects of Occupational Mobility on Preferences for Raised Taxes on Wealthy

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Occupational Mobility	-0.001	-0.001	-0.068	-0.024
Income (Standardized)	(-0.002, -0.001) -0.012	(-0.002, -0.001) - <b>0.012</b>	(-0.077, -0.059) - <b>0.012</b>	(-0.028, -0.02) - <b>0.012</b>
Education	(-0.012, -0.011) - <b>0.036</b>	(-0.012, -0.011) - <b>0.036</b>	(-0.012, -0.011) - <b>0.036</b>	(-0.012, -0.011) - <b>0.036</b>
Female	(-0.038, -0.033) - <b>0.004</b>	(-0.038, -0.033) - <b>0.004</b>	(-0.039, -0.033) - <b>0.004</b>	(-0.039, -0.033) - <b>0.004</b>
Age	(-0.005, -0.004) <b>0.005</b> (0.005, 0.005)	(-0.005, -0.004) <b>0.005</b> (0.005, 0.005)	(-0.005, -0.004) <b>0.005</b> (0.005, 0.005)	(-0.005, -0.004) <b>0.005</b> (0.005, 0.005)
Union Membership	<b>0.013</b> (0.012, 0.014)	<b>0.013</b> (0.012, 0.014)	<b>0.013</b> (0.012, 0.014)	<b>0.013</b> (0.012, 0.014)
Attend Church	-0.008 (-0.009, -0.006)	-0.008 (-0.01, -0.006)	-0.008 (-0.009, -0.006)	-0.008 (-0.009, -0.006)
GINI	<b>0.456</b> (0.446, 0.464)	<b>0.456</b> (0.447, 0.464)	<b>0.457</b> (0.448, 0.465)	0.447 (0.439, 0.456)
GDP per Capita	<b>0.003</b> (0.003, 0.003)	<b>0.003</b> (0.003, 0.003)	<b>0.003</b> (0.003, 0.003)	<b>0.003</b> (0.003, 0.003)
Unemployment Rate	-0.001 (-0.001, -0.001)	-0.001 (-0.001, -0.001)	-0.001 (-0.001, -0.001)	-0.001 (-0.001, -0.001)
Internet Usage	-0.172 (-0.177, -0.167)	-0.172 (-0.177, -0.167)	-0.172 (-0.177, -0.167)	-0.173 (-0.178, -0.169)
Meritocracy	-0.177, -0.107) -0.155 (-0.168, -0.142)	-0.177, -0.107) -0.155 (-0.169, -0.142)	-0.17 -0.17 (-0.182, -0.156)	-0.178, -0.109) -0.152 (-0.164, -0.139)
Occ. Mob. X Meritocracy	(0.100, 0.112)	(0.100, 0.112)	0.073 (0.063, 0.082)	(0.101, 0.100)
Occ. Mob. X GINI			(0.000, 0.002)	<b>0.038</b> (0.031, 0.045)
Intercept	<b>0.75</b> (0.72, 0.78)	<b>0.752</b> (0.708, 0.795)	<b>0.762</b> (0.732, 0.792)	<b>0.752</b> (0.721, 0.782)
N (Obs)	21915	21915	21915	21915
N (Country)	17	17	17	17
VCV.(Intercept).(Intercept)	0.101	0.239	0.102	0.102
$VCV. (Intercept). job\_mob$	(0.044, 0.226)	(0.098, 0.556) -0.037 (-0.259, 0.139)	(0.045, 0.229)	(0.045, 0.229)
$VCV.job\_mob.job\_mob$		(-0.239, 0.139) 0.243 (0.098, 0.591)		
sigma2	$0.021 \\ (0.021, 0.022)$	$ \begin{array}{c} (0.098, 0.391) \\ 0.021 \\ (0.021, 0.022) \end{array} $	0.021 (0.021, 0.022)	0.021 (0.021, 0.022)
Deviance	-12626.985	-12620.993	-12631.545	-12629.32

Figure B.5: Bayesian Estimates of Effects of Occupational Mobility on Social Welfare Attitudes

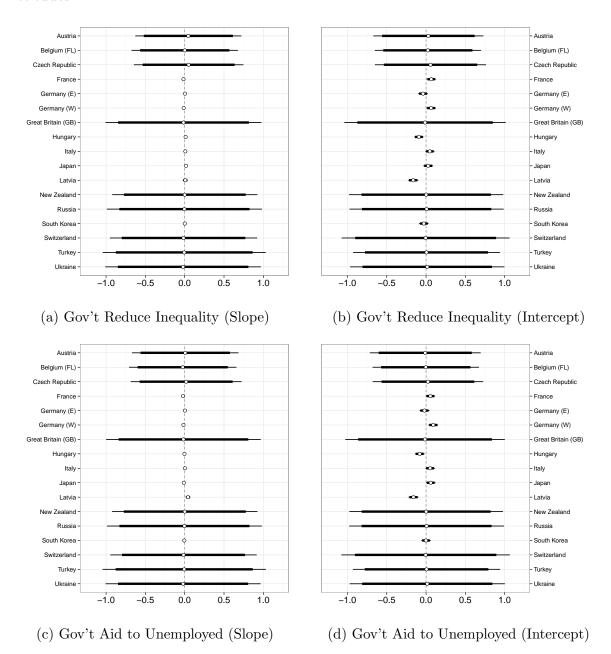


Figure B.8: Bayesian Estimates of Effects of Occupational Mobility on Social Welfare Attitudes (continued)

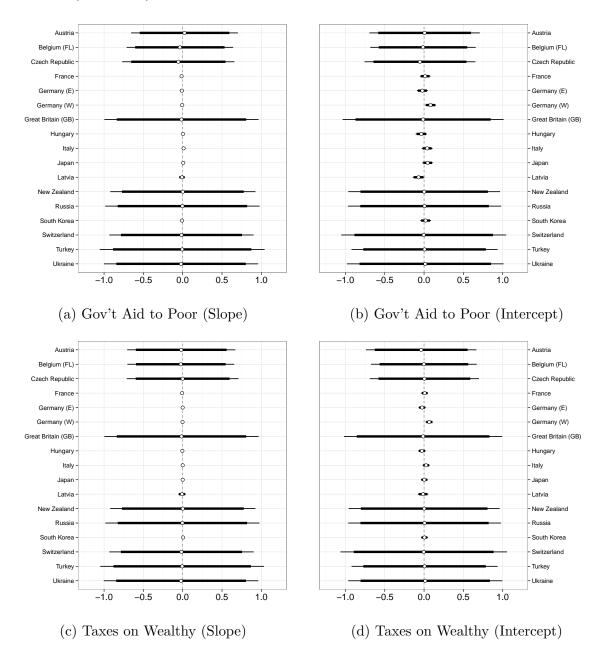


Table B.14: Effects of Subjective Mobility on Perceptions of Inequality

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	029***	031***	.058	125***
	(.005)	(.008)	(.082)	(.023)
Income (std.)	011***	011***	011***	011***
	(.001)	(.001)	(.001)	(.001)
Education	034***	032***	034***	033***
	(.005)	(.005)	(.005)	(.005)
Female	.010***	.008***	.010***	.010***
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.004***	.004***	.004***	.004***
	(.001)	(.001)	(.001)	(.001)
Union Member	.012***	.013***	.012***	.012***
	(.002)	(.002)	(.002)	(.002)
Attend Church	021***		021***	021***
	(.004)		(.004)	(.004)
GINI	.046	004	.047	.042
	(.113)	(.109)	(.113)	(.113)
GDP per Capita	002***	002**	002***	002***
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.002	.003	.002	.002
	(.003)	(.003)	(.003)	(.003)
Internet Usership	.171**	.163**	.171**	.170**
	(.074)	(.072)	(.074)	(.074)
Meritocracy	196***	206***	196***	195***
	(.044)	(.043)	(.044)	(.044)
Subj. Mob. X Merit.			093	
			(.089)	
Subj. Mob. X GINI				.152***
				(.036)
Constant	.930***	.949***	.930***	.932***
	(.094)	(.091)	(.094)	(.094)
N(Obs)	41743	43557	41743	41743
N(Country)	41	41	41	41
Log Likelihood	14706.530	15484.940	14705.580	14712.920
AIC	-29383.060	-30937.880	-29379.170	-29393.850
BIC	-29253.470	-30798.970	-29240.940	-29255.620

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.9: Bayesian Estimates of Effects of Subjective Mobility on Perceived Inequality

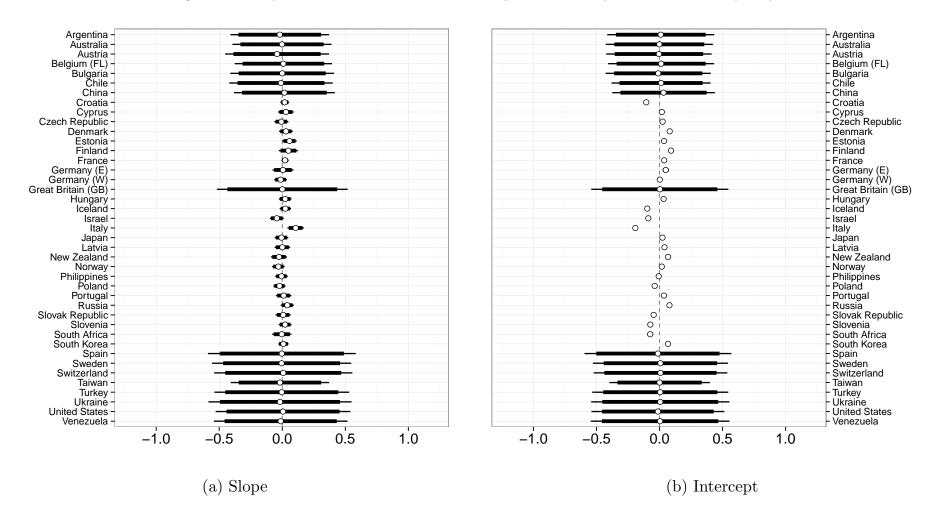


Table B.15: Effects of Subjective Mobility on Perceived Shape of Society

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	041***	039***	.174*	097***
	(.005)	(.012)	(.099)	(.028)
Income (std.)	006***	005***	006***	005***
	(.001)	(.001)	(.001)	(.001)
Education	055***	055***	055***	055***
	(.006)	(.006)	(.006)	(.006)
Female	.001	.001	.001	.001
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.004***	.004***	.004***	.004***
	(.001)	(.001)	(.001)	(.001)
Union Member	.006**	.006**	.006**	.006*
	(.003)	(.003)	(.003)	(.003)
Attend Church	016***	016***	016***	$016^{***}$
	(.004)	(.004)	(.004)	(.004)
GINI	.180	.180	.182	.178
	(.137)	(.137)	(.137)	(.137)
GDP per Capita	004***	004***	004***	004***
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.003	.003	.003	.003
	(.004)	(.004)	(.004)	(.004)
Internet Usership	.088	.096	.088	.088
	(.090)	(.090)	(.090)	(.090)
Meritocracy	.086	.088*	.086	.086
	(.053)	(.053)	(.053)	(.053)
Subj. Mob. X Merit.			232**	
			(.107)	
Subj. Mob. X GINI				.088**
				(.043)
Constant	.587***	.582***	.586***	.588***
	(.114)	(.113)	(.114)	(.114)
$\overline{\text{N(Obs)}}$	40328	40328	40328	40328
N(Country)	41	41	41	41
Log Likelihood	7693.517	7718.334	7694.541	7693.384
AIC	-15357.030	-15402.670	-15357.080	-15354.770
BIC	-15227.960	-15256.390	-15219.400	-15217.090

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.10: Bayesian Estimates of Effects of Subjective Mobility on Perceived Shape of Society

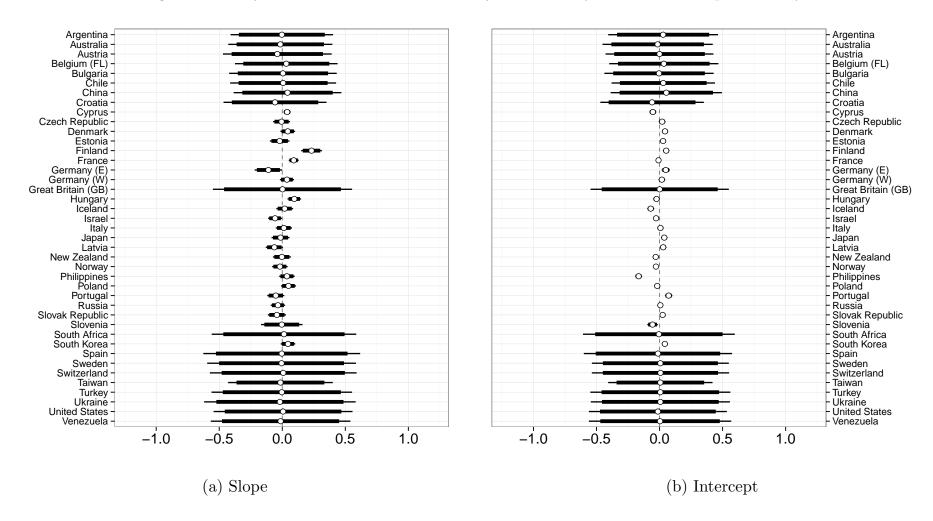


Table B.16: Effects of Subjective Mobility on Preferred Shape of Society

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	009*	009	052	.025
	(.005)	(.007)	(.086)	(.024)
Income (std.)	.001	.0005	.001	.0005
	(.001)	(.001)	(.001)	(.001)
Education	$019^{***}$	$019^{***}$	$019^{***}$	019***
	(.006)	(.006)	(.006)	(.006)
Female	013***	$013^{***}$	$013^{***}$	$012^{***}$
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.008***	.008***	.008***	.008***
	(.001)	(.001)	(.001)	(.001)
Union Member	0002	0001	0002	0002
	(.002)	(.002)	(.002)	(.002)
Attend Church	.009**	.009**	.009**	.009**
	(.004)	(.004)	(.004)	(.004)
GINI	.038	.024	.037	.039
	(.060)	(.059)	(.060)	(.060)
GDP per Capita	00004	00004	00004	00005
	(.0005)	(.0005)	(.0005)	(.0005)
Unemployment Rate	001	001	001	001
	(.002)	(.002)	(.002)	(.002)
Internet Usership	.013	.011	.013	.013
	(.039)	(.039)	(.039)	(.039)
Meritocracy	126***	123***	126***	126***
	(.044)	(.043)	(.044)	(.044)
Subj. Mob. X Merit.			.046	
			(.092)	
Subj. Mob. X GINI				054
				(.037)
Constant	.485***	.489***	.485***	.484***
	(.059)	(.058)	(.059)	(.059)
N(Obs)	39868	39868	39868	39868
N(Country	41	41	41	41
Log Likelihood	13747.120	13751.790	13745.790	13745.790
AIC	-27464.250	-27469.580	-27459.570	-27459.580
BIC	-27335.350	-27323.490	-27322.080	-27322.090

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.11: Bayesian Estimates of Effects of Subjective Mobility on Ideal Shape of Society

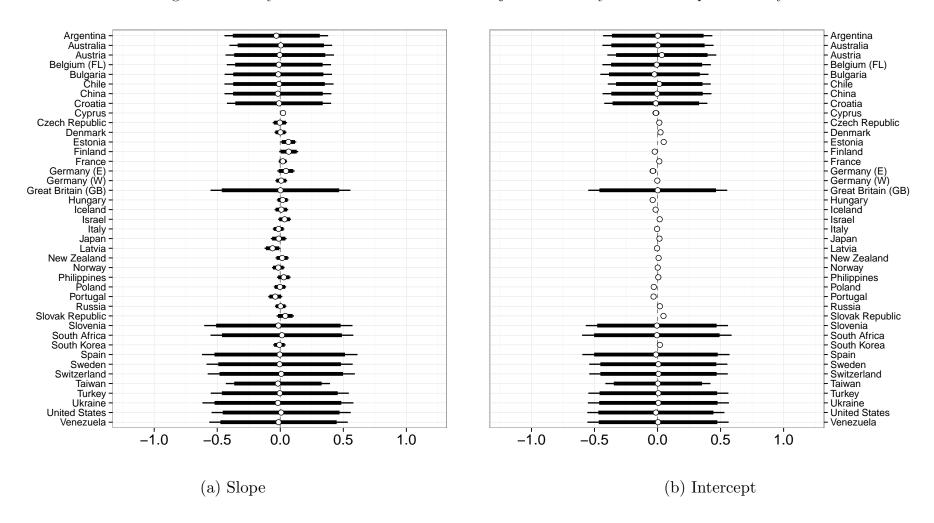


Table B.17: Effects of Subjective Mobility on Belief in Meritocracy

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	.021***	.023***	.001	.023
	(.003)	(.005)	(.060)	(.017)
Income (std.)	.003***	.003***	.003***	.003***
, ,	(.001)	(.001)	(.001)	(.001)
Education	.045***	.045***	.045***	.045***
	(.004)	(.004)	(.004)	(.004)
Female	.003**	.003**	.003**	.003**
	(.001)	(.001)	(.001)	(.001)
Age (10yr)	002***	002***	002***	002***
	(.0004)	(.0004)	(.0004)	(.0004)
Union Member	.001	.001	.001	.001
	(.002)	(.002)	(.002)	(.002)
Attend Church	.002	.002	.002	.002
	(.003)	(.003)	(.003)	(.003)
GINI	.035	.029	.035	.035
	(.076)	(.074)	(.076)	(.076)
GDP per Capita	0002	0002	0002	0002
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	0001	.0003	0001	0001
	(.002)	(.002)	(.002)	(.002)
Internet Usership	011	013	011	011
	(.050)	(.049)	(.050)	(.050)
Meritocracy	.067**	.068**	.067**	.067**
	(.032)	(.032)	(.032)	(.032)
Subj. Mob. X Merit.			.021	
			(.064)	
Subj. Mob. X GINI				004
				(.026)
Constant	.701***	.699***	.701***	.701***
	(.064)	(.063)	(.064)	(.064)
N(Obs)	41407	41407	41407	41407
N(Country)	41	41	41	41
Log Likelihood	27748.120	27758.190	27746.350	27745.410
AIC	-55466.240	-55482.390	-55460.700	-55458.820
BIC	-55336.770	-55335.660	-55322.600	-55320.720

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.12: Bayesian Estimates of Effects of Subjective Mobility on Belief in Meritocracy

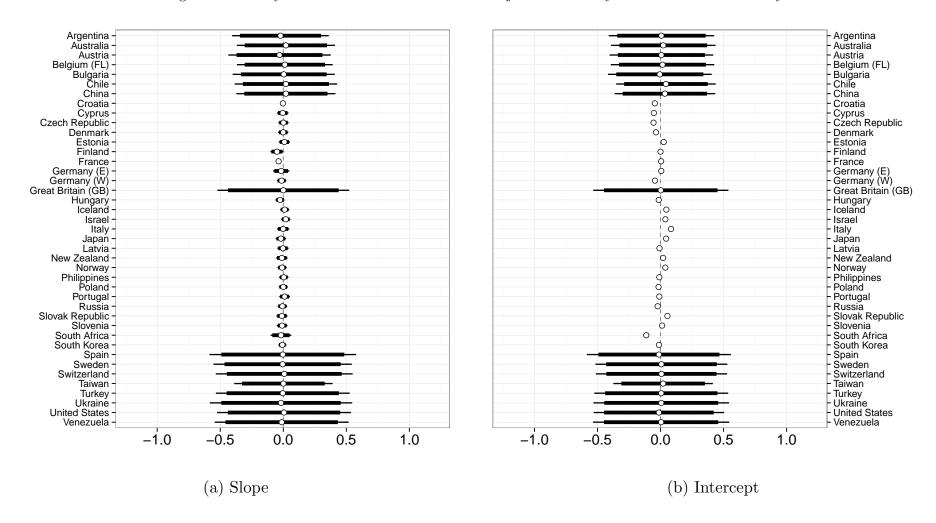


Table B.18: Effects of Subjective Mobility on Attiude Toward Government Reduction of Inequality

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	046***	047***	.005	043
	(.005)	(.010)	(.098)	(.028)
Income (std.)	$022^{***}$	$022^{***}$	$022^{***}$	$022^{***}$
	(.001)	(.001)	(.001)	(.001)
Education	$083^{***}$	082***	083***	083***
	(.006)	(.006)	(.006)	(.006)
Female	.011***	.011***	.011***	.011***
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.003***	.003***	.003***	.003***
	(.001)	(.001)	(.001)	(.001)
Union Member	.009***	.009***	.009***	.009***
	(.003)	(.003)	(.003)	(.003)
Attend Church	018***	$019^{***}$	018***	018***
	(.004)	(.004)	(.004)	(.004)
GINI	064	086	064	064
	(.126)	(.121)	(.126)	(.126)
GDP per Capita	003***	003***	003***	003***
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.0004	.002	.0004	.0004
	(.003)	(.003)	(.003)	(.003)
Internet Usership	.110	.110	.110	.110
	(.083)	(.080)	(.083)	(.083)
Meritocracy	002	002	002	002
	(.053)	(.053)	(.053)	(.053)
Subj. Mob. X Merit.			054	
			(.106)	
Subj. Mob. X GINI				004
				(.043)
Constant	.848***	.837***	.848***	.848***
	(.106)	(.102)	(.106)	(.106)
$\overline{\text{N(Obs)}}$	41464	41464	41464	41464
N(Country)	41	41	41	41
Log Likelihood	7507.471	7526.024	7506.275	7505.248
AIC	-14984.940	-15018.050	-14980.550	-14978.500
BIC	-14855.450	-14871.290	-14842.430	-14840.380

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.13: Bayesian Estimates of Effects of Subjective Mobility on Preferences for Government Reduction of Inequality

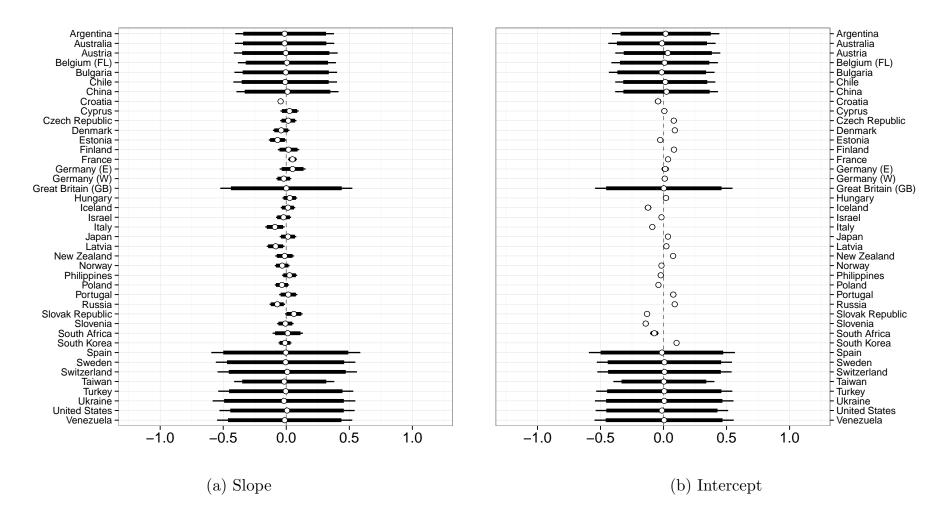


Table B.19: Effects of Subjective Mobility on Attitude Toward Government Aid to Poor

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	024***	022**	.360***	097***
•	(.006)	(.011)	(.107)	(.030)
Income (std.)	006***	$007^{***}$	$006^{***}$	$006^{***}$
	(.001)	(.001)	(.001)	(.001)
Education	.013*	.014*	.013*	.013*
	(.007)	(.007)	(.007)	(.007)
Female	.005**	.005**	.005**	.005**
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.003***	.003***	.003***	.003***
	(.001)	(.001)	(.001)	(.001)
Union Member	.015***	.015***	.015***	.014***
	(.003)	(.003)	(.003)	(.003)
Attend Church	006	007	006	006
	(.005)	(.005)	(.005)	(.005)
GINI	260**	275**	258**	263**
	(.124)	(.121)	(.123)	(.124)
GDP per Capita	.001	.001	.001	.001
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	$.006^{*}$	.004	$.006^{*}$	$.006^{*}$
	(.003)	(.003)	(.003)	(.003)
Internet Usership	.043	.054	.043	.042
	(.081)	(.080)	(.081)	(.081)
Meritocracy	.093	.098*	.094	.094
	(.058)	(.057)	(.058)	(.058)
Subj. Mob. X Merit.			$414^{***}$	
			(.115)	
Subj. Mob. X GINI				.114**
				(.047)
Constant	.702***	.719***	.700***	.702***
-	(.106)	(.104)	(.106)	(.106)
N(Obs)	41372	41372	41372	41372
N(Country)	41	41	41	41
Log Likelihood	3788.913	3811.300	3794.116	3789.718
AIC	-7547.827	-7588.600	-7556.233	-7547.437
BIC	-7418.371	-7441.884	-7418.147	-7409.351

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.14: Bayesian Estimates of Effects of Subjective Mobility on Preferences for Government Aid to Poor

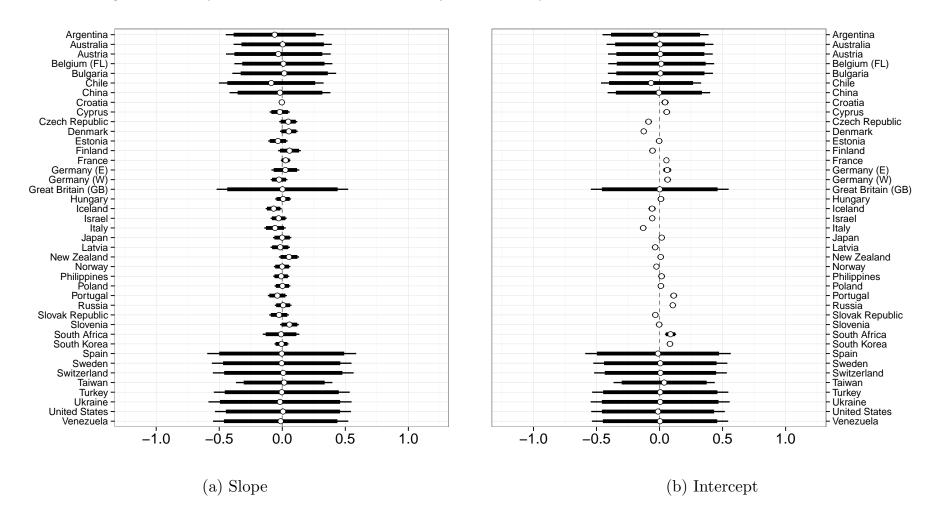


Table B.20: Effects of Subjective Mobility on Attiude Toward Government Aid to Unemployed

	(1)Random Intercept	(2) Random Slope	(3) Random Intercept	(4)Random Intercept
Subjective Mobility	045***	049***	.005	091***
· ·	(.005)	(.007)	(.091)	(.026)
Income (std.)	$015^{***}$	$015^{***}$	$015^{***}$	$015^{***}$
	(.001)	(.001)	(.001)	(.001)
Education	038***	$037^{***}$	038***	038***
	(.006)	(.006)	(.006)	(.006)
Female	.001	.001	.001	.001
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.004***	.004***	.004***	.004***
	(.001)	(.001)	(.001)	(.001)
Union Member	.0004	.001	.0004	.0004
	(.003)	(.003)	(.003)	(.003)
Attend Church	$007^*$	$007^{*}$	$007^*$	$007^{*}$
	(.004)	(.004)	(.004)	(.004)
GINI	017	047	017	020
	(.110)	(.108)	(.110)	(.110)
GDP per Capita	001	001	001	001
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	.002	.002	.002	.002
	(.003)	(.003)	(.003)	(.003)
Internet Usership	.007	011	.007	.006
	(.072)	(.071)	(.072)	(.072)
Meritocracy	015	014	015	015
	(.049)	(.049)	(.049)	(.049)
Subj. Mob. X Merit.			053	
			(.097)	
Subj. Mob. X GINI				.072*
				(.040)
Constant	.819***	.838***	.819***	.820***
	(.093)	(.092)	(.093)	(.093)
$\overline{\mathrm{N}(\mathrm{Obs})}$	41650	41650	41650	41650
N(Country)	41	41	41	41
Log Likelihood	10768.280	10773.980	10767.020	10767.630
AIC	-21506.560	-21513.970	-21502.040	-21503.250
BIC	-21377.000	-21367.140	-21363.850	-21365.060

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.15: Bayesian Estimates of Effects of Subjective Mobility on Preferences for Government Aid to Unemployed

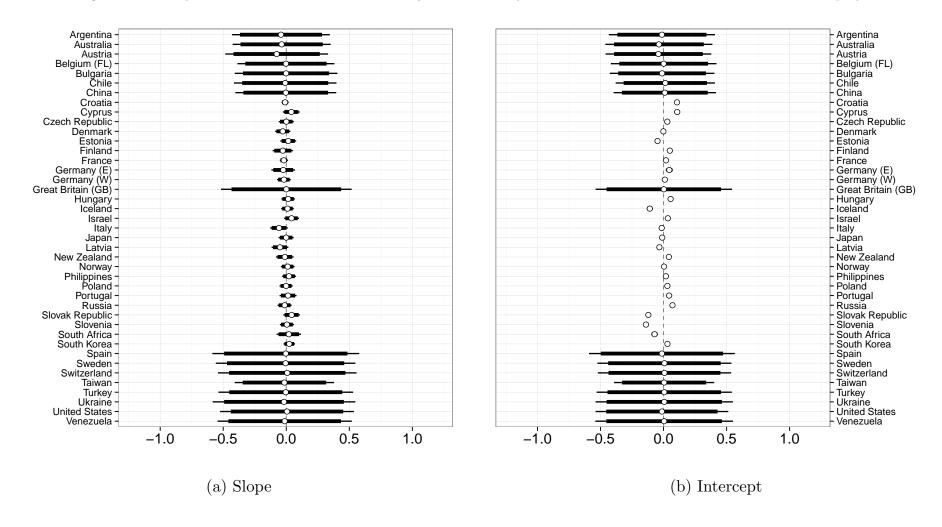


Table B.21: Effects of Subjective Mobility on Preferences for Higher Taxes on Wealthy

	(1) Random Intercept	(2) Random Slope	(3) Random Intercept	(4) Random Intercept
Subjective Mobility	025***	026***	.034	013
· ·	(.004)	(.007)	(.073)	(.021)
Income (std.)	009***	009***	009***	009***
	(.001)	(.001)	(.001)	(.001)
Education	006	006	006	006
	(.005)	(.005)	(.005)	(.005)
Female	004**	004**	004**	004**
	(.002)	(.002)	(.002)	(.002)
Age (10yr)	.009***	.009***	.009***	.009***
	(.0005)	(.0005)	(.0005)	(.0005)
Union Member	.010***	.010***	.010***	.010***
	(.002)	(.002)	(.002)	(.002)
Attend Church	$015^{***}$	$015^{***}$	015***	015***
	(.003)	(.003)	(.003)	(.003)
GINI	006	009	006	005
	(.072)	(.071)	(.072)	(.072)
GDP per Capita	0002	0001	0002	0002
	(.001)	(.001)	(.001)	(.001)
Unemployment Rate	0004	0004	0005	0005
	(.002)	(.002)	(.002)	(.002)
Internet Usership	012	014	012	012
	(.047)	(.047)	(.047)	(.047)
Meritocracy	055	055	054	055
	(.039)	(.039)	(.039)	(.039)
Subj. Mob. X Merit.			064	
			(.078)	
Subj. Mob. X GINI				019
				(.032)
Constant	.842***	.845***	.842***	.842***
	(.064)	(.063)	(.064)	(.064)
$\overline{\mathrm{N}(\mathrm{Obs})}$	40774	40774	40774	40774
N(Country)	41	41	41	41
Log Likelihood	19767.710	19777.280	19766.410	19765.360
AIC	-39505.420	-39520.570	-39500.820	-39498.720
BIC	-39376.180	-39374.100	-39362.970	-39360.860

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .1

Figure B.16: Bayesian Estimates of Effects of Subjective Mobility on Preferences for Taxes on Wealthy

