

Ida Ørjansen Heggem

**Welfare Attitudes: The Challenge of Globalization**

A Multilevel Analysis of the effects of Economic Globalization  
on Welfare Attitudes

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Norwegian University of Science and Technology (NTNU),  
Faculty of Social Sciences and Technology Management,  
Department of Sociology and Political Science



## **Abstract**

Public opinion is important for advanced and aspiring democracies because it is the people that are the ultimate source of power in these societies. Peoples' attitudes towards economic questions are thus important for a country's economic policy. In this thesis, it is peoples' attitudes towards welfare that are in question. Welfare attitudes are affected by both individual and contextual factors, as for instance globalization. In this thesis I seek to answer the overall research question: "*How does economic globalization affect welfare attitudes?*" By using multilevel modelling to analyse data from over 70 countries, I find that economic globalization does affect welfare attitudes, and the results indicate a rightist shift in attitudes. However, the effect is different for globalization winners and losers – in both individual and country sense. Increased economic globalization seem to lead to more leftist attitudes in developing countries, while the effect is reversed for developed countries. The findings also suggest that individuals with high skill-levels have more rightist attitudes than individuals with low skill-levels. The difference between these groups is larger in countries with high degrees of economic globalization.



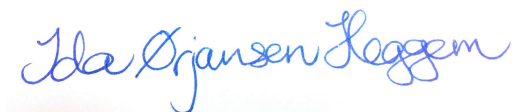
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# 1 Introduction

Public opinion on economic questions is important for advanced and aspiring democracies because it is the people that are the ultimate source of power here. When governments decide on what economic policy they should pursue, it is therefore important that they take public opinion into account. Public opinion is affected by several different factors. Amongst these factors we find *globalization*. Globalization as an overall phenomenon is a complex set of changes that affects nearly all aspects of society in every country of the world, including questions regarding the role of governments. Thus, research on the effects of globalization is relevant as it influences people's welfare attitudes. This has inspired the overall research question of this thesis, which is: "*How does economic globalization affect welfare attitudes?*"

In this thesis I seek to measure a general level of welfare attitudes by employing a measure of whether the state should have more responsibility, or if individuals should provide for themselves. Kumlin (2007) argues that the concept of welfare attitudes is linked to the left-right dimension in politics. Here, leftist attitudes are synonymous with support for state intervention, high levels of social equality, a large public sector, a redistributive tax system and welfare benefits. Rightist attitudes are on the other hand more correlated with support for less state intervention, private ownership of business, individualism and a market-driven economy.

In explaining what influences welfare attitudes, Finseraas and Ringdal (2012) argue that there are some stable patterns to be observed. These are self-interest and the objective risk of income loss. In other words, the present income situation of the individual and an assessment of how the future income situation might be are important factors in determining attitudes towards welfare. If the present and future income situation is good, individuals might be more likely to develop rightist attitudes, but if the present and future outlook of income is bad, this might lead to more leftist attitudes, because of the possible need for welfare benefits.

Contextual factors can strengthen and influence people's welfare attitudes. The contextual factor in question in this thesis is globalization, or more specifically, economic globalization. With growing cross-boarder relations and interdependence between countries, in addition to the removal of trade barriers, foreign exchange rates

and capital control, there is no doubt that economic globalization has affected the global economy, and thus the people that are a part of it. However, there exists a disagreement of whether these effects are positive or negative (Scholte 2005). Neoliberals are pro-globalization and argue that globalization leads to economic growth and prosperity. On the other side are the anti-globalizers, known as traditionalists, who sees globalization as a harmful phenomenon and a source of global inequality.

The purpose of this thesis is to investigate the relationship between economic globalization and welfare attitudes. Because economic globalization tries to lead the way towards an open and borderless world economy, the consequences might be higher risks of outsourcing of jobs and import of goods produced in low-wage countries. For individuals with low skill-levels, the consequences of economic globalization can lead to an increase in the individual level of economic insecurity. This will according, to *the compensation hypothesis*, create demands for an expanded welfare state that can protect against the external shocks and volatility caused by economic globalization (Walter 2010). The opposing view states that economic globalization will lead to more rightist attitudes and demands for a more open economy, because as a country becomes more economically globalized it will experience economic growth and prosperity (Scholte 2005). This will thus affect the public, who in turn will, in accordance with rational choice theory (Downs 1957), demand *more individual responsibility* and a less extensive welfare state because they do not need the state to act as a caregiver.

As much of the research on welfare attitudes is done on samples of industrialized Western countries (e.g. Dallinger 2010; Finseraas 2008; van Oorschot 2006; Jæger 2006; Blekesaune and Quadagno 2003) there has been little focus on developing nations. With this thesis I attempt to contribute in filling this gap. The data used in the analyses of this thesis consists of over 70 countries from different parts of the world. This gives me the opportunity to investigate possible differences in the effects of globalization on public opinion between developed and developing countries.

In this thesis I attempt to test the two opposing views presented above, in addition to testing if there is a difference in the effect of economic globalization on globalization winners and losers, both in individual and country sense. To do this I

perform a multilevel analysis, using individual data from four waves of the World Values Survey, supplemented by contextual data from the KOF Index of Globalization (Dreher, Gaston and Martens 2008), the World Bank (2012) and the Standardized World Income Inequality Database (SWIID) (Solte 2009).

The result of the multilevel analysis indicates that increased economic globalization leads to a rightist shift in welfare attitudes among the public. But this rightist shift seems to happen only after a certain level of economic globalization. However, the results show that the effects of economic globalization are more complex than a simple leftist or rightist shift in attitudes. There seems to be a difference between the effects of economic globalization in developed and developing countries, where citizens in developed countries develop more rightist welfare attitudes, while citizens of developing countries become more left oriented. The results also indicate that there is a slight difference between globalization winners and losers at the individual level, where globalization winners have more rightist attitudes than globalization losers.

The findings presented above are discussed more thoroughly in chapter 4. The rest of the thesis is organized as follows. In chapter 2 I define the concepts of welfare attitudes and economic globalization before I present and discuss the theory that constitute the two opposing views on the effects of economic globalization on welfare attitudes. In chapter 3 I elaborate on the research design and data used in the analyses of this paper. Here I also discuss the method of analysis; multilevel modelling, and present the limitations connected to this analysis. In chapter 5 I will summarise the findings of this thesis, and attempt to draw the lines to further research.



## **2 Theory on Economic Globalization and Welfare Attitudes**

Does economic globalization influence the public's attitudes towards welfare? And if so, in what way does it affect people's welfare attitudes? These are central questions that I attempt to investigate further in this thesis. However, some important features need to be clarified.

First, the concepts of welfare attitudes and economic globalization need to be defined and explained in detail. Secondly, these concepts have to be placed in their scientific context by discussing the most relevant theory and previous research revolving around them. In this chapter I will elaborate on the theories behind the two competing theories I test in this thesis.

The two first hypotheses assume a rightist shift in attitudes because of increased economic globalization, based on the neoliberal argument, which states that economic globalization leads to economic growth and prosperity. According to rational choice theory, individuals will act in their own self-interest and therefore support more individualistic values when they do not need the safety net of the welfare state. The third hypothesis challenges the two first with basis in the compensation argument; a hypothesis which states that higher degrees of globalization leads to more leftist attitudes in the public because of the economic insecurity that follows globalization. With the four last hypotheses I attempt to investigate the possible differences in welfare attitudes between developed and developing nations, and globalization losers and winners.

### ***2.1 Public Opinion***

The basis of all research on public opinion is based on the assumption that public opinion affects policy outcomes. This principle of popular sovereignty is fundamental for all democratic countries that strive to uphold the most sincere idea of democracy since its emergence in ancient Greece. Scholars from Plato to Hobbes and Mill have all underlined the importance of public participation. Rousseau argued that the role of the citizen is the highest to which an individual can aspire, because "the considered exercise of power by citizens is the only legitimate way in which liberty can be sustained" (Held 2006: 46). Scholars from the camp of competitive elitism, like Schumpeter, have argued that the essence of democracy is the ability of the citizens to

use their right to vote to replace one government with another (Held 2006). Supporters of the deliberative democracy see democracy as a means to “...protect the liberty of citizens and to maintain the minimum public goods necessary for citizens to go about their self-chosen ways” (Held 2006: 231). As we can see, public opinion and participation is discussed in different ways, but the importance of these factors are emphasized in different camps of democratic theory.

Since governments in democratic countries to a large degree are at the mercy of its people, it is crucial that they take public opinion into consideration when deciding what kind of policy to pursue. According to Wleizen and Soroka (2007) a fundamental principle of democratic government is that policy is a function of opinion. This can be expressed formally, as follows:

$$P = f\{O\}$$

Here,  $P$  represents policy and  $O$  represents opinion. Wleizen and Soroka (2007) emphasizes that they expect a positive relationship between opinion and policy – that the public get the amount and the right kind of policy they demand. The truth of this function is of course varying in different kinds of countries. A lot of research done on political representation is done on the political system in the United States. This part of the research field, focusing on dyadic representation, argues that there is a “representation relationship” between the individual representatives and the individual constituencies (Wleizen and Soroka 2007).

In many ways the political system in the United States is not always compatible for comparison with other countries’ political system of representation. Therefore, it may be more useful to look closer into collective representation rather than dyadic representation. When discussing the former, representation is located in the overall functioning of the entire representative policy-making system – not in the behaviour of individuals. Compared to dyadic representation, where the outcome could be the US members of congress’ votes, the outcome of collective representation is policy, as in the policy-making system.

Here, Wleizen and Soroka (2007) distinguish between three different approaches in the literature. The first approach, known as *consistency*, tries to explain to what degree policy change is consistent with a public preference for policy change.

Drawing on Monroe's (1979; 1998) work on representation in the United States, consistency refers to the relationship between public preferences for changes in policy, and the actual changes. This approach is known for using survey questions, which asks about changes in policy, and then examining the relationship between those respondents who favour change and the actual changes in policy (Wleizen and Soroka 2007: 802). These analyses result in a consistency score for either separate policy domains or different time periods. In Monroe's study of 556 cases in the time period between 1981 and 1993, he finds a consistency score of 55 percent, indicating that policy and public opinion are "on the same page". But this kind of studies cannot establish a clear causal link between public opinion and policy change. This requires data over time, which can show that public preference precedes policy change.

An alternative approach, which has a higher chance of being able to establish the causal link between opinion and policy change is the study of *policy covariation*. This approach measures the relationship between policy and opinion across time and/or space by using a survey question that is asked at different time points, and comparing this to the proximate policy change (Wleizen and Soroka 2007). Page and Shapiro (1983) studied over 300 federal US policy issues from the mid-1930s to the late-1970s, and found that policy change often precedes measured opinion change. However, this approach is limited by the short period over which preferences and policies are measured, and this still makes it difficult to assess the causal link between opinion and policy change. The last approach revolves around *policy congruence*. To investigate how policy development is congruent with changes in public preferences for policy, one needs dynamic data.

As the studies mentioned above emphasizes, the opinion of the public are without a doubt important determination factor for policy outcomes. When it comes to welfare attitudes, public opinion on economic question like these is important for how governments carry out their politics through policy on for instance how much responsibility the state should have and the degree of redistribution.

### **2.1.1 Public Opinion on Economic Questions: Welfare Attitudes**

A country's economic policy is affected by its people's attitudes towards welfare, that is, their opinions on how the goods in a society should be distributed. These attitudes were often explained by individual factors such as income, gender, age and class (see for example Campell et al. 1960; Valen and Katz 1964), and a well-known conclusion of these types of analyses is that people with high socioeconomic status have been known to be more sceptical towards redistribution and regulation of the market than people with lower socioeconomic status. However, since the emergence of comparative surveys and multilevel analysis as a statistical method there has been more focus on how attitudes vary between countries and how macro factors can affect public opinion (Jakobsen, Aalberg and Heggem 2012: 342).

According to Kumlin (2007) we can identify three levels of welfare attitudes. The first level consists of general welfare state support. Here we find people's orientations toward symbolic concepts like equality, redistribution, taxation and privatization. The second level is made up by people's specific policy preferences towards various aspects of the welfare state, for instance policies aiming at redistribution or basic pensions and unemployment benefits. Level three consists of even more specific evaluations of welfare state related "performance", as for example how satisfied the people are with public health services or education.

The general support towards the welfare state is according to Kumlin (2007) both conceptually and empirically linked to the left–right dimension in politics. A person's attitudes towards the welfare state will reveal his or hers stand in the traditional conflict of how much the state should intervene in the market economy and its outcomes. Support for state intervention in the market economy, in addition to high levels of social equality, a large public sector and a highly redistributive tax system is often related to leftist attitudes, while the opposite often is true for rightist attitudes.

However, Kumlin (2007) emphasizes the importance of distinguishing between the input and output side of the welfare state. The attitudes towards the output side of the welfare state include the appeal and function of the different transfers and services the state provides for the individual. The input side deals with the financing of the output side, with means such as taxation. If a person experience that his or her payments to the government are unrelated to the actual benefits he or she receives, the person will most likely feel that he or she are not getting their money's worth and may develop a more rightist attitude towards the welfare state, as



for instance by supporting less taxation. This hypothesis may be true, but there are also studies that reveal that citizens in fact underestimate the costs of an active welfare state. If the citizens are informed about the cost, their support for public spending tends to be reduced (Winter and Mouritzen 2001).

Other studies suggest that people sometimes want “something for nothing”. This attitude manifests itself when people have a general positive attitude towards public spending, without thinking about the need for input. Confalonieri and Newton (1995) find that even when respondents are asked survey questions where they are reminded of the link between public spending and taxation, they still show preferences that resemble “unpriced” priorities (Kumlin 2007).

Kumlin (2007) suggest that time and context, social class, self-interest and social justice affect people’s welfare attitudes. In this thesis, the time and especially the contextual explanation is regarded as important, seeing as the topic revolves around how a contextual factor like globalization can influence people’s attitudes towards welfare. An individual with low skill level in a developed country may feel less affected by the risks of economic globalization than an individual with low skill level in a developing country, because the effect of losing your job may be more severe in poorer countries.

Even though the contextual factors are important, it is vital not to overlook the individual factors. There are often interactions between a person’s individual attributes and the context of the society in which the person live, which together have an effect on his or her attitudes towards welfare. With regards to social class, we can say that the working class usually is more left-oriented than the middle class (Kumlin 2007). This can manifest itself in education levels and sectors of employment. While an unskilled worker in a sector vulnerable to offshoring may be more positive towards redistribution, a skilled worker might not have the same preferences since he or she are more likely to earn more money and have higher levels of job security. This causal relationship essentially builds on another important individual factor, namely self-interest.

The hypothesis of self-interest holds that people define their attitudes towards welfare on the basis of personal benefits and risk-reducing consequences of policy to insure that they gain from their policy preferences. According to Kumlin (2007) self-interest seems to matter more when analyzing specific policy preferences, but only

moderately for general support. This is because the personal risks associated with different alternatives are easier to assess because when choices are concrete (Sears and Funk 1991; Huseby 1995). It is easier for people to assess if one benefits from government spending on unemployment benefits or public child care than it is to estimate their individual benefits from a more general and symbolic concept like “equality” or “redistribution”.

While all three levels of welfare attitudes are important, this thesis will focus on individuals’ general welfare attitudes. This is done by employing a dependent variable that measures how much responsibility the government should have. Even though this thesis focuses on general welfare attitudes, it is important to point out that attitudes towards welfare are complex and measuring it can be somewhat problematic. By using one dependent variable, which focuses on government responsibility, I reduce the concept of welfare attitudes to this question. This is unfortunate, but assessed as the most practical alternative to using a scale.

Finseraas and Ringdal (2012) argue that there are some stable patterns to be observed when investigating people’s attitudes towards welfare. They emphasize self-interest as an important factor, and find that these attitudes often are affected by whether a person generally benefits or contribute to public welfare. This argument indicates that a person with low income and low skill level should be very supportive of a expansive welfare state, because he or she might benefit from this in terms of social services and unemployment benefits. This argument is supported by Cusack et al. (2006) who demonstrate how risks affect preferences for redistribution. Another important factor in determining people’s welfare attitudes are the objective risk of income loss. In other words, an individual’s support for public welfare is dependent on an assessment of whether or not he or she expects their income situation to be in the future. For instance, one could picture that some students, with low income level in these years for education, can develop rightist views on government responsibility because they assess that in a few years their income level and skill level are higher, and they regard themselves as future contributors to public welfare. Thus, supporting an extensive welfare state is not in their best self-interest, from a rational-actor perspective.

All of these factors have one thing in common: they proxy levels of risk in one-way or another. Economic situation, employment status, level of education and

even family situation are all factors that influence a person's risk assessment (Finseraas and Ringdal 2012; Cusack et al. 2006). The important assumption here is that higher risk of income loss will create higher support for welfare. However, the effects of individual factors like these can be strengthened by contextual factors.

### **2.1.2 The Importance of Macro Factors**

When studying public opinion it is important to be aware of the relationship between macro-factors and the opinion of the individual. Public opinion is often rooted in a value structure, and this in turn is influenced by national contexts like a country's institutional organization, policy, level of unemployment and economic development. These macro variables can influence public opinion in several ways; for instance through education, the media, or more directly if an individual becomes unemployed (Jakobsen et al. 2012; Jakobsen 2011).

However, in this paper the main focus is not on public opinion in general, but more specific on the public's opinion towards welfare. In other words, their attitudes towards how much responsibility the state should have in their society. Jakobsen et al. (2012) distinguish between two main categories of macro factors that influence public opinion's attitudes toward economic questions like these. The first one is related to the political system, with regime effects and size of the public sector as the most important factors, while the other one is related to the economy, with social inequality, unemployment and economic development as the most important macro factors.

There have been a number of studies on how different macro factors like these affect public opinion on economic left-right attitudes (e.g. Finseraas 2008; Blekesaune and Quadagno 2003). These studies have usually been limited to European countries, or members of the OECD. The research on the different macro factors has shown that only some of them have a strong effect on public opinion. There has for example not been found much support for regime effects on people's attitudes towards economic policy (Jæger 2006; Svallfors 2003; Aalberg 2003). On the other hand, several studies have found a positive relationship between the size of the public sector and the public's demand for redistribution (Dallinger 2010; Finseraas 2008; Jæger 2006).

In general, the field of research focusing on the economic macro factors has uncovered a negative relationship between a high standard of living and demands for redistribution (Dallinger 2010; Finseraas 2008; Jakobsen 2011). This seems to be true for both economic growth within different countries and for economic development across different countries. On the same note, other studies have revealed a positive relationship between unemployment and citizens' support for welfare (Rehm 2009; Blekesaune 2007; van Oorschot 2006; Blekesaune and Quadagno 2003). These studies are important in regard to the theme of this paper, since we can assume that it is people's fear of unemployment and a decrease in standard of living that is influenced by globalization.

## ***2.2 Economic Globalization***

To be able to investigate the influence globalization has on public opinion towards economic welfare it is important to know more about this phenomenon. In this paper I will sometimes employ the term *globalization* to the phenomenon that more specifically can be named *economic globalization*. Globalization as an overall phenomenon is a complex set of changes that affects nearly all aspects of society in every country of the world, and the relationship between these countries. Dreher et al. (2008) argue that globalization needs to be defined as broadly as possible, and sort globalization into three sub-categories: economic-, political-, and social globalization. They define economic globalization as the long distance flows of goods, capital, services, and the information and perceptions that follow these market exchanges (Dreher et al. 2008). However, this is a broad definition, and to be able to understand the phenomenon of economic globalization it is vital to look closer at this concept.

First, we can identify two important features of economic globalization both derived from Scholte (2005). The first one is *internationalization*, which means the development of cross-border relations between countries, growth of international exchange and interdependence. The other one is called *liberalization*, and it indicates the removal of government-imposed restrictions on movements between countries in order to create an open and borderless world economy, and the reduction of trade barriers, foreign-exchange restrictions, capital controls and visas. These features are intertwined. Cross-border relations between countries have more or less developed because of the growth in international exchange and interdependence. The reduction of trade barriers, foreign-exchange restriction and capital controls has made it easier

to develop the international exchange and interdependence further. Both *internationalization* and *liberalization* have developed over time, and together they characterize the global economy in a striking manner.

### **2.2.1 History**

Economic globalization traces its roots back to when Ancient Rome started trading goods with China. Since then the world economy has developed via the mechanization of production in Europe during the Renaissance, through the mercantilism of the 1600s, and further into the industrial revolution in Europe during the mid-1800s. One of the most striking effects of the industrial revolution was the quadrupling of international trade in the time period between 1850 and 1880 (Claes, Hveem and Tranøy 2012: 93). The same period in time is also characterized by the development of free trade politics in the United Kingdom, which later spread to the rest of the European states, and the gold standard system.

The world economy suffered setbacks because of the two world wars. However, after World War II, the international economic system was on the agenda under the famous Bretton Woods conference of 1944. Here, some of the most important international economic organizations that we know today emerged: the World Bank and the International Monetary Fund (IMF). Even though the Bretton Woods system eventually ended in 1971, these organizations still live on, in the company of other important organizations as the World Trade Organization (WTO), the Organization for Economic Co-operation and Development (OECD) and the emergence of the European Union (EU).

Organizations like the World Bank, IMF, WTO, OECD and the EU are all implementing the earlier mentioned central features of economic globalization. All these organizations are promoting liberalization and internationalization to a more or less strong degree, but it is perhaps the IMF, WTO and the World Bank that are the champions of liberalization with their focus on reducing trade barriers and implementing liberal economic policies. Organizations like the World Bank, IMF and WTO have helped earlier developing nations like India and China in becoming some of the largest economies in the world. For instance, China's growth rate has more than doubled since the early 1980s – from 1.5 per cent per capita to 3.7 per cent (Rodrik 1997).

### **2.2.2 The Effects of Globalization: Rich versus Poor**

Rodrik (2011) argues that it is far better to be poor in a rich country, than rich in a poor country (without taking relative deprivation into account), because the top decile with highest income in a poor country make much less than what poor people in rich countries earn. In other words, he argues that inequality across different nations is large. This causes quite a conundrum, seeing as globalization would minimize these disparities by giving people access to markets, capital and technology. Over the last two centuries the world has experienced increased globalization, but also, according to Rodrik (2011), a massive economic divergence on a global scale.

This growing global inequality has led to a complex debate between different economists, policy makers and other scholars. In order to present this debate in a perspicuous way it has to be simplified. It is important to be aware of that there are several different positions in this debate (Held and McGrew 2002: 99). To the purpose of this thesis I will focus on the views of the more extreme groups within the pro-globalization and anti-globalization camps, namely neoliberals and traditionalists (Held and McGrew 2002).

Neoliberals see globalization as a solution to the growing challenge of inequality (Rodrik 2011). They argue that globalization should be led by the market forces, and that governments and organizations should not create barriers that will hinder prosperity (Scholte 2005). To increase economic growth states should open up to the global economy, not seek to protect itself from it.

The opposing view of anti-globalizers is often named traditionalists (Scholte 2005) or just radicals (Held and McGrew 2002). The traditionalists want to “de-globalize” the world society because of the destruction globalization has caused over the last centuries. They see globalization as harmful, and argue that the so-called “de-globalization” will help the world society recover from the growing inequality (Scholte 2005).

Despite that the traditionalists are the radicals of the anti-globalization position there is some hold to their arguments. There is evidence that globalization does not work the way that the neoliberals argues that it does. The well-known and much-discussed North-South divide has been enhanced by the effect of globalization (Scholte 2005). Citizens of countries that are members of organizations as OECD and NATO have several structural advantages over citizens that are not in these exclusive clubs (Scholte 2005). However, there are of course poor people in the rich developed

countries, and rich élites in the poor, developing nations. The main problem here is that contemporary globalization has intensified these hierarchies as well as those between countries. Skilled individuals, who are characterized as people with education, knowledge and skills, have better chances at participating in the prosperity caused by globalization. Less skilled individuals have to a larger degree suffered from this. And because class-based inequalities in educational opportunities have tended to increase (Scholte 2005), this becomes a vicious circle. On the other hand, globalization increases prosperity – for those who already prosper from it. The world is witnessing a globalization of prosperity for the countries and individuals that are globalization winners, but a globalization of poverty for the countries and individuals that are globalization losers.

Anti-globalization protesters have managed to change the terms of the globalization debate from revolving around the rich countries in the West's prosperity, to revolve around the world's developing countries, poverty alleviation and sustainable development (Rodrik 2007). Because the perhaps most important feature of globalization is that it does not affect countries in the same way - and the differences between the effects of globalization in rich and poor countries are large. Buckman (2004) argues that the difference in income per head between a rich industrial nation, as for instance Switzerland, and a poor non-industrial country, as for instance Mozambique, is about 400 to one. He also notes that in 2004 around 1.2 billion people live on US\$ 1 or less per day, and that about 2.8 billion people live on US\$ 2 or less per day (Buckman 2004: 71).

Globalization proponents argue that since the number of people living on US\$ 1 or less per day has been relatively stable over the last few years, there has been a reduction of poverty, if we take the world's population growth into account (Buckman 2004). But within developing countries the benefits they gain from economic globalization is often spread unevenly between the citizens. Buckman (2004: 70) highlights among others China, where only a quarter of its population has gained something from the big export boom, Mexico, where half of the population still lives in poverty despite an enormous increase in the country's export since 1994, and Nigeria, which has exported oil worth US\$ 300 billion over the last two decades, yet two-thirds of the citizens live on less than US\$ 1 per day. This seems to give support to the anti-globalization movement's reformulation of the boat-argument of their

opponents – economic globalization is not a rising tide that lifts all boats, it only lifts all yachts.

Over the past two centuries the world has experienced a large concentration of the global manufacturing activity and the global flows of trade and capital in the rich countries of Western Europe, East Asia and North America. In 2000 the high-income countries of the world exported 73 per cent of the world's exports and imported 75 per cent of the world's imports (Buckman 2004). When we know that these high-income countries only account for 16 per cent of the world's population, the effects of economic globalization seems unjust.

The transnational companies (TNCs) of the world are vital proponents of economic globalization. These co-operations control most of the investment, trade, and employment decisions in the global economy. TNCs operate across borders and are often situated in several countries at once. With the new reduced trade- and investment barriers they have gained new markets and possibilities for what seems like limitless expansion. In 1970 there were only 7000 TNCs, but by 1997 the number had grown to 53 000 companies with overseas investments valued up to US\$ 3500 billion (Buckman 2004). By 2004 500 TNCs controlled around 80 per cent of the foreign investment in the world, and 30 per cent of the global output (Buckman 2004).

The numbers presented above would have caused less concern if we did not know that these companies are a creation of the rich parts of the world. Their workforce is global, but the owners and managers of most TNCs are situated in high-income countries. Out of the 100 largest TNCs in 2004, 38 of them had headquarters in Western Europe, 29 in the US and 16 in Japan. Only 29 of them had headquarters in poor countries. Because of their wealth and power, TNCs have a dominant influence over economic globalization politics and the global trade. They also have a large influence over trade in the world's raw materials, which often is situated in developing nations (Buckman 2004). When we add that there is little regulation of TNCs at the international level, these numbers show that the developing countries of the world seem to have little or nothing to gain from these companies and their income other than low salaries and exploitation.



### ***2.3 Globalization and Welfare Attitudes***

There are several studies that focus on globalization as a macro factor when studying effects on welfare attitudes. The relationship between increasing internationalization of production and provision of social security has been debated in the literature. Much of the research on this topic focuses on how globalization influences for instance government spending, as a measure of social security. On the other hand, few studies focus on the influence of globalization on the individual level. Another distinguishing feature is that much of the literature revolves around either European or OECD-countries, or just one country as a sample. This leads to a gap in the research field, where countries outside the rich and powerful West are excluded. As mentioned earlier I attempt to contribute in filling this gap with this thesis.

Rational choice theory emphasize the individuals' own interests as an important factor in determining their political choice. Downs (1957) argues that a voter will compare the advantages of having one political party (or alliance) in government against the other alternatives. The voter will vote for the alternative that maximizes his or hers utility. In other words, rational choice theory argues that self-interest is central in forming people's attitudes.

Neoliberals argue that globalization leads to prosperity and economic growth (Scholte 2005). By taking this argument into account, economic globalization may cause an increase in the citizens' standard of living. When citizens experience this economic prosperity they may change their attitudes from being proponents of an extensive welfare state, to want less government responsibility and redistribution, because they now have become contributors to the welfare state rather than beneficiaries. Thus, the first hypothesis of this thesis appears:

*H1: Increased economic globalization leads to rightist welfare attitudes among citizens*

#### **2.3.1 Comparative Advantages: Ricardo and Heckscher-Ohlin**

As discussed above, there are striking differences between the effect of economic globalization in developed and developing nations. It seems as though the rich, developed countries, which are integrated in the world economy, reap the harvest from economic globalization, while the developing nations gain much less.

According to Rodrik (2011: 252), the restrictions that governments impose on international trade today have been reduced to the lowest levels the world has ever seen, and he argues that “protectionism” now has become a dirty word. Protectionism is a concept that describe governments’ actions towards protection its own production. These trade barriers can be related to tariffs, or related to restricting quotas, strong technical standards, anti-dumping initiatives, or subsidizing local firms and companies (NUPI 2013).

Developing nations often suffer from lacking sufficient funding, institutions and placement in the global economy to be able to create economic growth. With most of them being labour-intensive countries it is hard for them to gain a place in the global economy long enough to build themselves up from the post-colonial ashes. Therefore, the more moderate school of the anti-globalization movement, which Buckman (2004) calls the *Fair Trade School*, argues that the rules have to be bent in favour of the developing nations, which can include the use of tariffs and protectionism to protect their local agricultural industries (Buckman 2004). With the use of a certain amount of protectionism it is easier to imagine that a developing country can experience economic growth, and in time be able to compete in the global economy.

Economic models of voting argue that voters assess the economy of their country, by looking at different economic indices, such as GDP growth rate and their personal economy. Their attitudes towards the nation’s or their own economy will affect the way they vote (Lewis-Beck and Stegmaier 2007). Thus, it is also plausible that the state of the economy affects people’s attitudes towards welfare. Assuming the neoliberal argument that an increase in economic globalization in a country will create some higher level of economic development and growth (Scholte 2005), it is likely that citizens (who experience increased standards of living) will be less supportive of redistribution and a large degree of government responsibility because they do not benefit from it, according to the self-interest based rational-choice theory (Downs 1957).

The theory of comparative advantage originated with from the British economist David Ricardo (1772–1823). The assumptions of this theory are that the factors of production are immovable between countries, while the products they produce are mobile. If every country specializes its production and use some of it for

export – which in turn finances the import of goods from other countries – these countries are able to utilize their advantages in the international trade system (Sandmo 2006: 75). The comparative advantage theory essentially demonstrates that all countries could benefit economically from specializing in producing the items in which they have a relative cost advantage, and then trading with another country with those items (Stilwell 2006).

A frequently used example of Ricardo’s theory is Great Britain and Portugal’s production of wine and clothing. The assumed number of man-labour years used to produce the wine and clothing are as follows:

	<b>Great Britain</b>	<b>Portugal</b>
Wine	120	80
Clothing	100	90

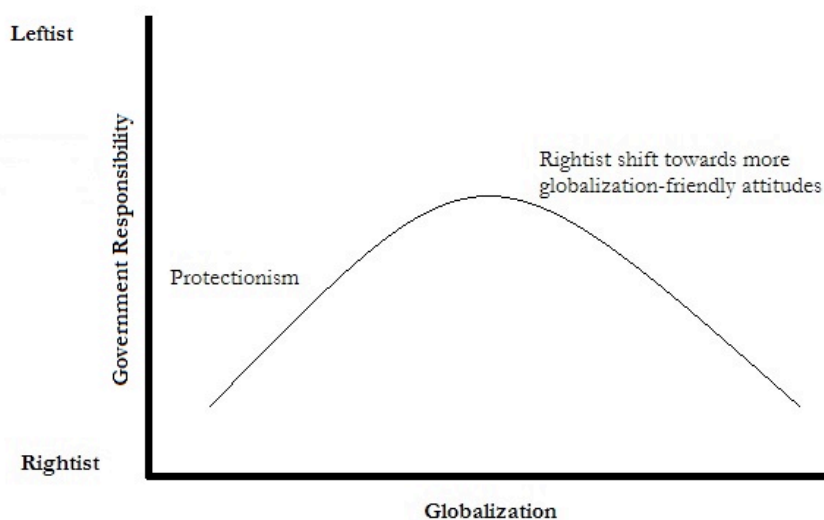
As we can see, Portugal is producing both goods more effectively than Great Britain. However, for Portugal it would be rewarding to specialize in wine production and let Great Britain produce clothes, since trade with wine for clothing would give more clothing than if the country had produced it on its own (Sandmo 2006: 76).

Building on Ricardo’s theory the Swedish economists Eli Heckscher and Bertil Ohlin created the Heckscher-Ohlin (H–O) model, which is a general equilibrium model of international trade. The baseline of the H–O model is that countries will export products that are easy and cheap for them to produce, and import the products that would have been harder and more expensive to produce, because of for instance scarce factors (Ohlin 2004 [1924]).

Drawing on Ricardo’s theory of comparative advantage, the H–O model and rational choice theory, I assume that there might be a shift in attitudes after a certain degree of economic globalization, towards a more rightist view. In other words, when a country achieves a certain level of economic globalization the citizens will no longer see the need for an extensive welfare state, and they will develop attitudes that correspond with more individualistic attitudes, based on self-interest as they realize that their country is successful in the global market competition. This shift in attitudes is described graphically in Figure 2.1 below, and creates the basis of the second hypothesis of this thesis:

H2: After a country reaches a certain level of competitiveness, the effect of economic globalization on welfare attitudes will shift from leftist to rightist

Figure 2.1 – Rightist Shift in Welfare Attitudes



### 2.3.2 The Compensation Hypothesis

In the midst of the literature on globalization's effect on public opinion we find the *compensation hypothesis*. This states that globalization leads to welfare state expansion, because governments will try to compensate the citizens that are vulnerable to the risks associated with increased international competition and volatility (Walter 2010: 403). The compensation hypothesis has both a demand- and supply side component. On the demand side are the public in different countries demanding either more welfare benefits or not, depending on their welfare attitudes. On the supply side are the governments of the respective countries, who may or may not be able to meet the demands of the public. The different studies analyzing the compensation hypothesis usually focus on just one of these components (Walter 2010).

Supporting the compensation hypothesis, Cameron (1978) studied 18 OECD countries in the time frame of 1960–1975 and found that more open economies have features that cause higher demands for government transfers like social security, pensions, unemployment benefits, and so on. Ruggie (1982) presented the

“compromise of embedded liberalism” that, in short, explains how the international economic liberalism after World War II gave the welfare state a central role.

Three years later, Katzenstein (1985) found that governments in small European states like Sweden and Austria have responded to insecurities from increased globalization with higher government involvement. A more recent contribution is Rodrik (1998), who found proof for the compensation hypothesis when investigating degree of openness and size of public sector in over 100 countries from all over the world. He found that when risks caused by international trade is highest, the relationship between openness and government size is at its strongest (Rodrik 1998).

Cameron (1978), Ruggie (1982), Katzenstein (1985) and Rodrik (1998) have found the compensation hypothesis to be valid, but other scholars have doubted the effect of globalization on welfare state expansion. These sceptics can be separated by the demand and supply components of the compensation hypothesis. Rodrik (1997), for instance, focuses on the supply-side and argues that countries with high levels of terms-of-trade volatility experience expanded spending, while countries with low levels of terms-of-trade volatility experience, like the OECD-countries, experience reduced spending because the economic risks are not as high here as in countries that are less integrated and plays a smaller role in the world economy.

Other sceptics challenge the demand side, like Iversen and Cusack (2000). While investigating the causes of welfare state expansion they argue that it is actually the changes in the *national labour market* in different countries that creates the biggest economic risks – not globalization. Rehm (2009) investigates the effects of globalization at the individual level, and finds that risks at the occupational level of the labour market are more important than the risks at the industry level. In other words, both Rehm (2009) and Iversen and Cusack (2000) challenge the compensation hypothesis on a fundamental level, arguing that it is the local factors – not the global ones – that create the biggest economic risks that public opinion take into account.

Several authors find support for the hypothesis empirically. As mentioned earlier Rodrik (1998) found that the public sector is largest in countries that are highly integrated in the world economy. Hicks and Swank (1992) found that economic openness correlates with higher degrees of welfare spending in their analysis of 18 capitalist democracies during the 1960–82 period. Bernauer and Achini (2000: 254)

argue that openness to international trade "...goes hand in hand with a larger size of public sector". Garrett and Mitchell (2001) find that countries with greater shares of foreign direct investment is associated with more progressive taxation, despite their doubts regarding the compensation hypothesis.

Yet other scholars have challenged the proponents of the compensation hypothesis mentioned above. In his study of OECD-countries Down (2007) finds that the level of insecurity in developed countries have been driven by economic globalization, but that the international trade integration may have *eased* the domestic economic volatility. Kim (2007) questions the causal mechanisms behind the openness-volatility link in the compensation hypothesis. In his panel analysis of 175 countries in the period between 1950–2002 he finds an effect of external risk on volatility of the major economic aggregates, but also an insignificant effect of openness (Kim 2007).

Garrett (2001) finds no proof for that capital mobility, or rapid growth of capital mobility, has an impact on government spending in his analysis of countries from all over the world in the periods between 1970–1984 and 1985–1995. However, there is evidence that indicate that high levels of trade can be associated with high levels of government spending, but that countries with a higher growth rate of trade experienced slower growth of government spending (Garrett 2001).

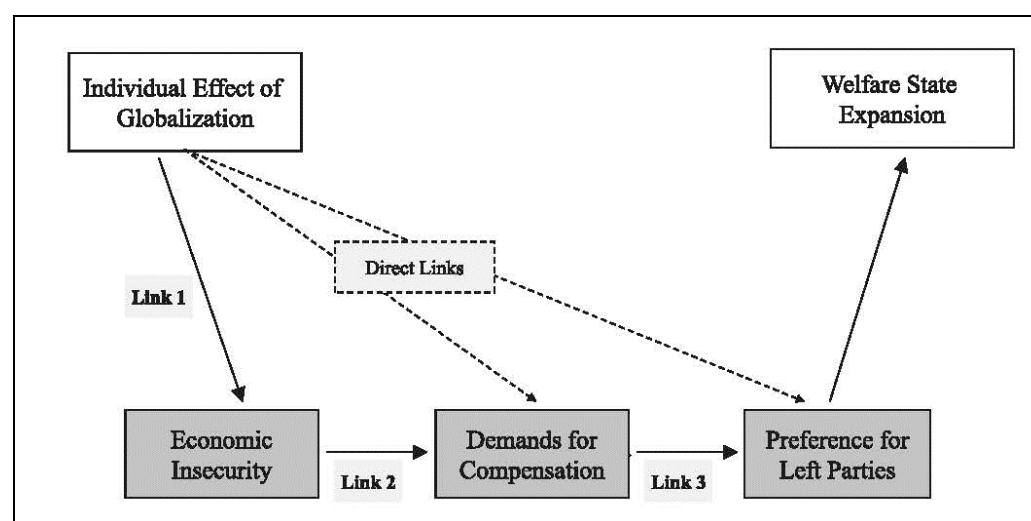
Genschel (2001) finds that tax constraints prevent governments from raising their taxes in response to the economic insecurity caused by economic globalization, and argue that openness have a negative impact on public spending. Another study that supports this claim is that of Busemeyer (2009), who finds that economic openness has a negative impact on public spending in OECD countries. He argues that this has not been found before, because earlier studies have focused on a "...time period in which globalization effects have not played out yet", or because they have "...emphasized the cross-sectional rather than the over-time dimension" (Busemeyer 2009: 456).

Some authors have taken a more neutral position in this debate, arguing for a more nuanced understanding of the relationship between economic openness and government spending. Adserà and Boix (2002) found that much of the literature on this topic neglects political effects on different tariff regimes in their analyses, and in turn the growth of the public sector is regarded as a functional response to the

requirements of trade. In his analysis of 18 OECD-countries Burgoon (2001) find that it is the import competition from developing countries, rather than the general trade openness that creates demands for welfare compensation. He also notes that groups that are more vulnerable to these risks will not demand more general welfare goods, but demand public spending in terms of active and passive labour market policies. Swank and Steinmo (2002) argues that capital mobility and trade are associated with lower tax rates, but not with reductions in effective average tax rates on capital income. They also find that domestic structural unemployment causes reductions in labour and capital taxes, while public sector debt raise taxes (Swank and Steinmo 2002). As we can see, Adserà and Boix (2002), Burgoon (2001) and Swank and Steinmo (2002) argue that there are other factors to consider while analyzing openness and government spending.

Walter (2010) criticizes the authors mentioned above for only focusing on certain parts of the causal chain from openness to government spending. She presents a test of the compensation hypothesis' micro-foundations, and uses different indicators for measuring individuals' positions as globalization "winners" or "losers". Further, she tests the causal mechanism of the compensation hypothesis, and argues that it consists of several links between the individuals' position in the global economy, perceptions of risk and policy preferences.

Figure 2.2 - Globalization and Welfare State Expansion: The Causal Chain (Walter 2010)



The first causal link is between the individual's position in the globalized economy and its feelings of economic insecurity. For example if a citizen in a highly globalized

country is worried about losing his job because of his employer's outsourcing. The second link is between the individual's feelings of economic insecurity and policy preferences for more social protection. An example here is that the citizen's insecurity leads him to want more social protection in form of social welfare. The third link is between the individual's preference for social protection, and a preference for leftist political parties in government. An example here is if the citizen decides to vote for a political party at the left end of the scale to achieve his wish for more social protection. The preference for more leftist political parties might in turn lead to an expansion of the welfare state. These three links show a causal relationship between public opinion and the expansion of the welfare state.

Walter (2010) uses Switzerland as a sample to see if the compensation hypothesis can be observed empirically. She finds support for the causal logic of the compensation argument, and strong evidence for the direct links, which she argues that implies that a country's exposure to globalization increases individual job security, which in turn enhances preferences for welfare state expansion, and these preferences are positively related to partisan preferences for the Left. Thus, the third hypothesis of this thesis appears:

*H3: Increased economic globalization leads to leftist welfare attitudes among citizens*

This hypothesis is not the same as the compensation hypothesis. In my thesis I only test one of the causal links that Walter (2010) presents as the causal chain of the compensation argument; the link between the individual effect of globalization and demands for compensation. Implicit in this hypothesis is the fact that economic globalization can create economic insecurity, especially for the individuals characterized as globalization losers. The demand for compensation is assumed to be higher for this group than for globalization winners, who benefit from the effects of a more global economy.



### 2.3.3 Differences in Welfare Attitudes

As noted earlier, the main argument of the compensation hypothesis is that globalization will lead to expansion of the welfare state because of the risks associated with integration in the global economy. The idea behind this argument is that the welfare state will function as a safety net against external risk. Following Walter's (2010) causal chain the fourth hypothesis of this thesis is:

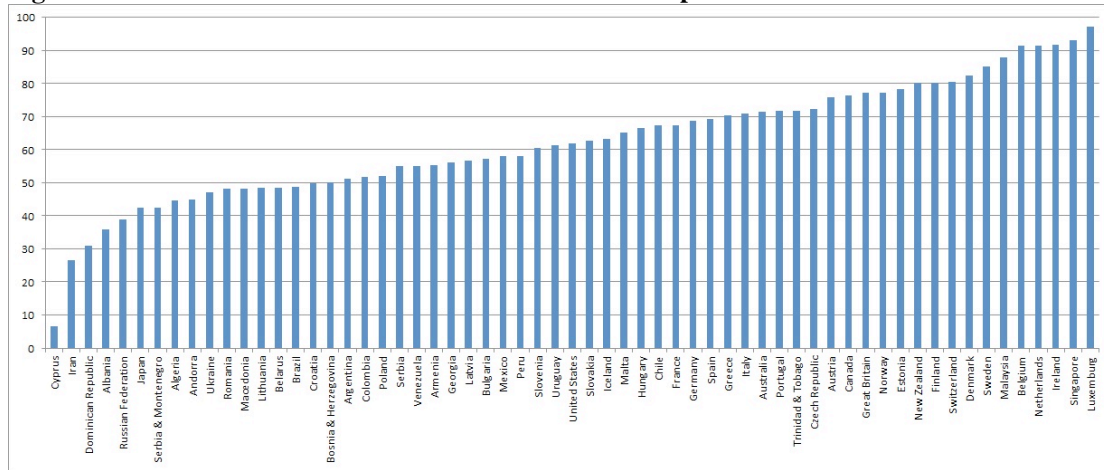
*H4: Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries*

This hypothesis is based on the assumption that because citizens in developing nations in general have less education and job security than citizens in developed countries, and often tend to be typical *globalization losers*, they will want more support and welfare benefits from the state to protect them from the external risks that come with increased economic globalization. As mentioned earlier, anti-globalizers argue that economic globalization has different effects in developing and developed countries. Their argument is based on the fact that globalization creates prosperity for those countries that already prosper from it, while developing countries do not gain as much.

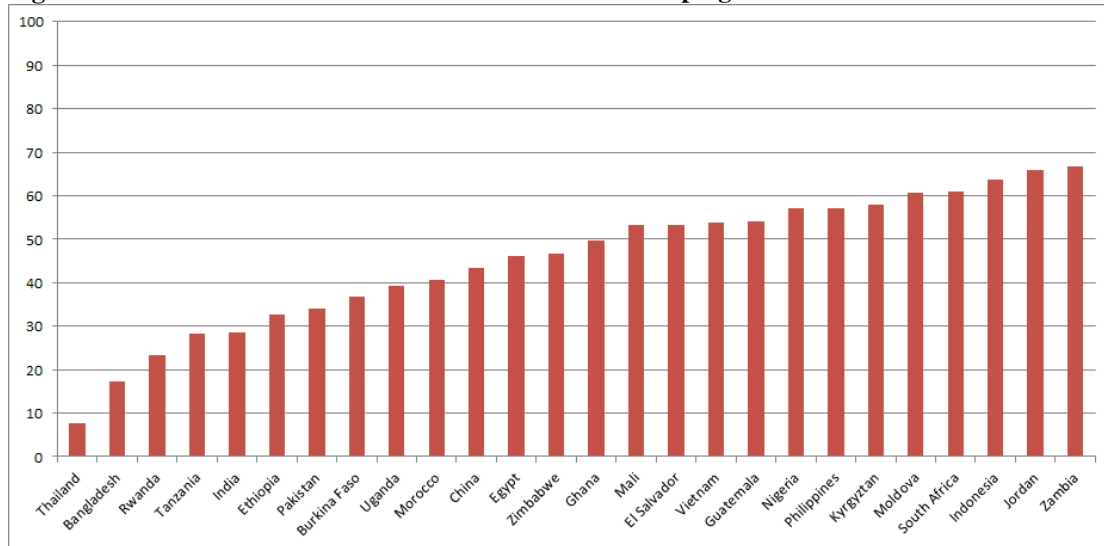
By comparing the mean of ECONOMIC GLOBALIZATION for developed and developing countries we are able to see an indication of how economic globalization might affect welfare attitudes differently in the different countries. Figure 2.3 and 2.4 demonstrate that the developed nations have typically higher levels of economic globalization than the developing nations, which indicate that these developing countries are not fully integrated in the global market. In Figure 2.3 the mean value of ECONOMIC GLOBALIZATION is presented, and it shows us that countries like Luxemburg, Belgium and Netherlands have high levels of economic globalization, at a mean score of round 90 on the scale ranging from 0–100. Almost all of the developed countries in this sample have a mean score of over 40 on the same scale.

Figure 2.4 indicates that this is not the case for the developing countries of this sample. Only four of these states have a mean score of 60 or above. Most of them have a mean score of over 30, but there are exceptions like Rwanda, Bangladesh and Tanzania that score under 30 on this scale.

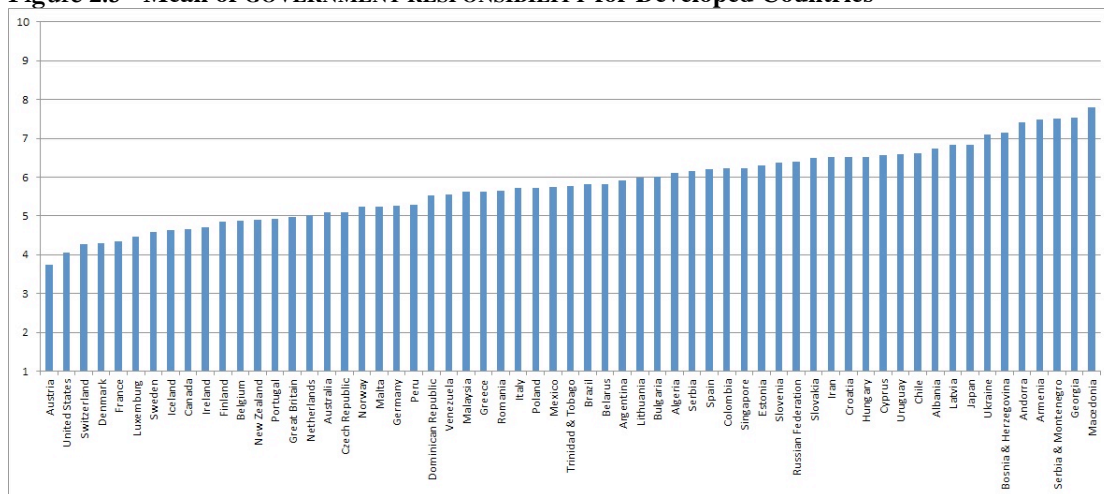
**Figure 2.3 - Mean of ECONOMIC GLOBALIZATION for Developed Countries**



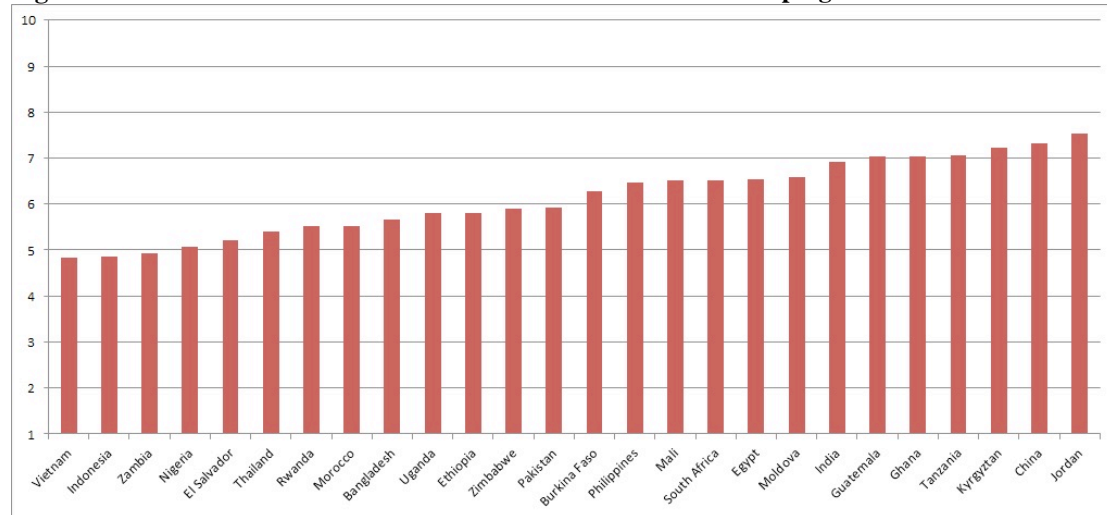
**Figure 2.4 - Mean of ECONOMIC GLOBALIZATION for Developing Countries**



**Figure 2.5 - Mean of GOVERNMENT RESPONSIBILITY for Developed Countries**



**Figure 2.6 - Mean score of GOVERNMENT RESPONSIBILITY for Developing Countries**



At the same time, we can see from Figures 2.5 and 2.6 that there is also a difference in attitudes between developing and developed nations. Figure 2.5 shows that there seems to be lower mean scores for developed countries, than the mean scores for developing countries, as shown in Figure 2.6. Developed nations like Luxemburg, Belgium and Netherlands, who also had high levels of economic globalization, have low mean scores on GOVERNMENT RESPONSIBILITY, indicating that citizens in these countries prefer a less extensive welfare state where the government takes less responsibility for individuals.

For the developing countries, presented in Figure 2.6, only three countries have mean scores below 5. Developing nations, as for instance Jordan, Kyrgyzstan and South Africa, who had high levels of economic globalization, have high mean scores on GOVERNMENT RESPONSIBILITY, indicating that citizens in these countries have a preference for a bigger welfare state where the government have more responsibility for social services.

These mean scores do not show how, or even if, economic globalization affects the public attitudes towards how much responsibility the state should have, but indicates that there is a difference in the effect of economic globalization on welfare attitudes between developed and developing countries. This argument is tested by the fifth hypothesis in this thesis:

*H5: Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations*

### **2.3.4 Globalization winners and globalization losers**

The terms *globalization winners* and *globalization losers* are inspired by Walter's (2010) distinction using economic terms. She argues that this is a central concept of the compensation argument, and draws on both sectoral and factoral approaches to classify the winners and losers of globalization. Sectoral models emphasize how globalization can pose an existential threat to individuals' jobs and wages, while factoral models stresses the importance of education and skills.

She argues that high-skilled individuals working in exposed sectors in developed countries can be identified as globalization winners, because they are in a position to sell their skills to global markets. Low-skilled individuals in a developed country on the other hand, are more exposed to risk since the goods they produce can easily be replaced with imported goods from low-wage countries. In other words, globalization has a more negative effect on low-skilled individuals and a more positive effect on high-skilled individuals (Walter 2010). This can also be true for individuals in developing nations, but in these countries the strength of the effect will perhaps not be the same as for high-income countries.

Walter (2010) notes that *globalization losers* feel more insecure than *globalization winners*, and that they demand more social protection, and they are more likely to vote for the left-oriented parties. In countries with high degrees of economic globalization the levels of insecurity will be higher. Globalization winners might gain from this economic globalization, because their skills are saleable on the global market. Globalization losers however, will suffer because they can easily be replaced with labour from countries where wages are lower. Following the argument of globalization winners and losers, the two last hypothesis of this paper is:

*H6: Globalization losers have more leftist welfare attitudes than globalization winners*

*H7: The difference between globalization winners and losers will be largest in countries with a high degree of economic globalization*

In this paper I identify globalization winners and losers by using education as a measure of skill-level. Thus, I am using a factoral approach to this identification. A

better measure could be created of both sectoral and factorial approaches, but for the purpose of this paper and the data I am using this has proven to be a difficult task.

Walter (2010) used an Offshore Ability Index to compare the different sectors of employment in her data from Switzerland. An attempt to do this in this case would provide an inaccurate measure, since the Offshore Ability Index and the employment sector-variable in the WVS are not 100 per cent compatible. It also proved to be difficult because of time limitations. A factorial measure of education is therefore considered as the best possible alternative. A more lengthy discussion of this measure will be presented in chapter 3. The hypotheses regarding globalization winners and losers will be investigated using a cross-level interaction of education at the individual level and economic globalization at the country-year level.

To sum up, I will repeat the seven hypotheses presented in this chapter. These are presented in the Table 1:

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**Table 2.1 - Summary of the Hypotheses**

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*H1:* Increased economic globalization leads to rightist welfare attitudes among citizens

*H2:* After a country reaches a certain level of competitiveness, the effect of economic globalization on welfare attitudes will shift from leftist to rightist

*H3:* Increased economic globalization leads to leftist welfare attitudes among citizens

*H4:* Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries

*H5:* Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations

*H6:* Globalization losers have more leftist welfare attitudes than globalization winners

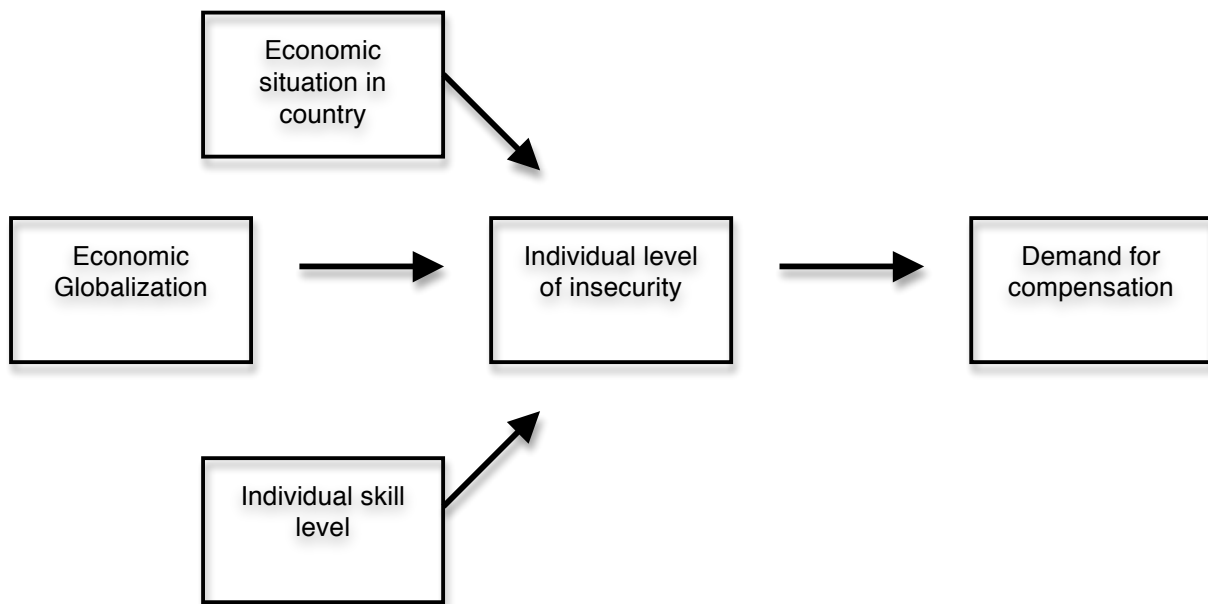
*H7:* The difference between globalization winners and losers will be largest in countries with a high degree of economic globalization

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To test for these hypotheses I will use multilevel analysis. By using this method of analysis I am able to test for both individual and contextual factors. As earlier noted, economic globalization is the most important contextual variable in this analysis. As Walter (2010) and Finseraas and Ringdal (2012) have found evidence for, economic globalization creates certain levels of insecurity for individuals. However, I argue that

this depends on both individual and contextual factors that affect the individual, such as skill level, measured by HIGH EDUCATION, and the economic situation in the individual's country of residence, measured by GDP PC. The level of insecurity that the individual experiences will thus affect his or her demand for compensation in terms of attitudes towards welfare, here measured by GOVERNMENT RESPONSIBILITY. These assumptions are presented as a theoretical model in Figure 7 below<sup>1</sup>.

**Figure 2.7 - Theoretical Model**



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<sup>1</sup> The individual level of insecurity is added in this model although I do not test for this specifically in my analysis. I rely on Walter's (2010) test of the causal mechanism embedded in the compensation argument, which assumes that economic globalization creates insecurity for individuals, and that it is this that affect the individuals degree of demand for compensation.

### 3 Research Design and Data

I employ multilevel modelling to get a global assessment of how economic globalization affects the public's attitudes towards welfare. To achieve this I use data from more than 350.000 respondents from over 90 countries in different parts of the world. In this chapter I will first briefly discuss the methodological basis for the statistical method. After this follows a presentation of the data used in this thesis and an elaboration of the multilevel method of analysis and its assumptions. I will also discuss the limitations to the analysis used in this thesis, before lastly, I present the dependent and independent variables.

#### 3.1 Methodology

Scientists have always disagreed on some fundamental issues, as for instance how we understand the nature of the world we study. Moses and Knutsen (2007) argue that this ultimately has to do with different ways of knowing, or in other words, methodological differences. They introduce the three musketeers of metaphysics as ontology, epistemology and methodology. *Ontology* can be identified as the study of being, with the central question here being “what is the world made of?” *Epistemology* on the other hand, is characterized as the philosophical study of knowledge; while *methodology* represents the different ways we acquire this knowledge (Moses and Knutsen 2007; Hay 2002). All three terms are quite abstract, but nevertheless important for social scientists as they help us understand the different ways in which we do research.

Moses and Knutsen (2007) argue that no method of research is self-validating – its status as a research instrument is dependent on epistemological justifications, and they group most work in social science into two broad methodological categories that are radically different: positivism<sup>2</sup> and constructivism. My thesis places itself in the positivist category due to the belief in a measurable world that exists independent of our perceptions of it. An important assumption in the positivist tradition is that there exists a real world out there, which we are able to gain access to by thinking,

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<sup>2</sup> Moses and Knutsen (2007) employ the term naturalism to describe this methodological tradition. However, I chose the more common term of positivism, which refers to the philosophical positions that emphasize empirical data and scientific methods.

observing and recording our experiences carefully. These methods help us reveal patterns that exist in nature, independent of our experience of it.

### **3.1.1 The Statistical Method**

Positivistic social scientists agree that their task is to identify patterns and regularities in nature. The most ideal method to do this is by experimental design. However, in social science it is not always easy to conduct experiments. Therefore, many social scientists have adopted what has proven to be the next best choice: *statistical analysis*. According to Moses and Knutsen (2007) there are two main ways in which statistical methods can be used in the positivistic tradition: descriptive and inferential. This paper uses the method of inferential statistics to investigate the relationship between globalization and public opinion in different parts of the world. In the spirit of King, Keohane and Verba (1994: 8) this paper will use multilevel analysis to try to make inferences that go beyond the particular observations that can be collected.

### **3.2 Sample**

The data used in this paper on the individual level (level-1) comes from four waves<sup>3</sup> of the World Values Survey (WVS) (World Values Survey 2012). The four surveys use the same questionnaire and methodology. The data I have used consists in total of over 350 000 respondents from over 90 countries. The WVS is a non-profit organization, which gathers information concerning changes that are taking place in the beliefs, values and motivations of people throughout the world. The data used in this paper is made available through the WVS website<sup>4</sup>. At the country year level (level-2) I have four continuous variables: ECONOMIC GLOBALIZATION, GINI and GDP, from the KOF Index of Globalization (Dreher et al. 2008), SWIID (Solte 2009) and the World Bank (2012) respectively. Neither the WVS nor any of the other data sources are responsible for the analysis and interpretation I make in this paper.

The multilevel analysis in this thesis has three levels: individual level, country-year level and country level. The individual level data consists of samples of the population from different countries, while the country-year and country level data

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<sup>3</sup> Wave 2 = 1989–1993, Wave 3= 1994–1999, Wave 4 =1999–2004, Wave 5 = 2005–2007

<sup>4</sup> [www.worldvaluessurvey.com](http://www.worldvaluessurvey.com)



consists of data from different states and from several different time points. Thus, the country-year and country level data consists of data that borders on the population as a whole. Here, stochastic model theory is useful. Within this theory, we are able to generalize from the observations we find, to the mechanism that generates the data (Aaberge and Laake 1984: 185). At the individual level I use samples of the population within different countries. Sample theory allows me to generalize from the sample at the individual level to the population the sample is selected from.

### ***3.3 Multilevel Analysis***

As mentioned earlier, my choice of method is multilevel analysis to investigate how globalization influences the public opinion's attitudes towards welfare. The data used in this analysis is hierarchically structured in three levels, which means that the units at the individual level are regarded as nested within units at the country-year level, and the units at this level are nested in units at the country-level. When using multilevel analysis I am able to account for the variance in the dependent variable measured at the lowest level by taking the higher levels into consideration (Steenbergen and Jones 2002: 219). This means that the observations at the lowest level are influenced by the higher levels. In other words, there is no statistical independency in the observations.

The most important reason for using multilevel analysis is a substantial one. I am mainly interested in the effects of variables at the second level of my analysis, more specifically the effect of globalization. By using another method of analysis I would not be able to measure these effects in a satisfactory way. Another important reason for choosing this method of analysis is that the data I am using is hierarchically structured. Ignoring this structure in the data is characterized as naïve pooling. By using for example Ordinary Least Squares regression on this type of data, I would violate the assumption of statistical independency, which would lead to inaccurate estimation of the regression coefficients and underestimated standard errors (Strabac 2007: 174). This would most likely cause me to commit type I-errors, which means to incorrectly dismiss the null hypothesis (Ringdal 2012).

There are two different types of multilevel analysis: *random intercept* models and *random slope* models. In this paper I employ a random intercept model. This method assumes that the effects of the different variables are the same in each unit of

analysis, but that the intercept for the different level-2 and level-3 units will vary. In this case I assume that the effect of economic globalization is the same in all countries, but that their baseline is different. There is reason to believe that the effect of economic globalization is *different* in different countries, as I already have hypothesized. Random slope modelling opens up possibilities for different effects of variables, in addition to different intercepts. However, this is a more complicated method that is harder to interpret, especially since I have 151 units at level 2. Because of this I argue that random intercept modelling is a more preferable method of analysis in this case.

### 3.3.1 Assumptions of Multilevel Analysis

Multilevel analysis has some assumptions that need to be fulfilled to ensure that the modelling is correct. First of all, according to Ringdal (no date) the *Intra Class Correlation Coefficient* (ICC)<sup>5</sup> of the baseline model is supposed to be above 5 per cent to justify the use of multilevel analysis. However, it is important to emphasize that this is not a substantial rule; it functions more as a guideline. The hierarchical structure of the data is more important in justifying the use of multilevel analysis. Since the data of this analysis is hierarchically structured, this justifies the use of multilevel analysis. In addition to this, the ICC of both the country-year and country level in the baseline model of this analysis is above 5 per cent.

Hox (2010) argues that there should be at least 30 units at level-2 to ensure satisfactory results in multilevel analysis. If one is to employ cross level interactions the number of units should be somewhat higher, around 50 units. The demand for a certain number of units is important, as higher sample sizes makes estimates and their standard errors more accurate (Hox 2010). In this analysis there are 151 units at level the second level of analysis, in which all contextual variables are admitted. This ensures that the results of the analysis are not biased due to a small sample.

The dependent variable should be normally distributed. If this is not the case, one should consider using robust standard errors. This requires 100 or more units at the highest level of analysis. On the other hand, if one already has a large sample like

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<sup>5</sup> The ICC is calculated from the variance of the residuals at the different levels of analysis, and show us how much variance is to be found at the different levels. It can be calculated in the following way for the level-2 variance:  $ICC = s_u^2 / (s_e^2 + s_u^2 + s_v^2)$ . And for the level-3 variance:  $ICC = s_v^2 / (s_e^2 + s_u^2 + s_v^2)$ .

this, normal distribution is not a significant issue, due to the central limit theorem that states that as our sample size becomes larger, the sampling distribution of the mean becomes approximately normal regardless of the shape of the variable's frequency distribution (Hamilton 1992: 27).

Multicollinearity can be a problem in multilevel modelling (Hox 2010). If two or more variables correlate too much, the standard errors of these will increase, and thus affect their statistical significance. However, I have tested for multicollinearity, and the value of tolerance demonstrates that this is not a problem (see Table A2 in appendix).

The most important assumption in multilevel analysis, and probably the most difficult to fulfil, is the assumption that all relevant variables should be included in the analysis, and that all irrelevant variables should be excluded. This is a hard assumption to fulfil with all types of regression, but especially with multilevel analysis due to the few units at the higher levels of analysis that prevent us from controlling for an infinite number of variables here. Yet nonetheless, I have included the variables that I find most relevant with basis in theory and previous research on this topic.

### ***3.4 Limitations to the Analysis***

A problem when doing quantitative research is causality. A regression analysis can only tell us if different variables are correlated, not how they are causally linked. Because of this, it is important to base quantitative research on a solid theoretical framework (Elster 1989; Bay 2000). In this case I rely in general on the theories and previous research that is discussed above, but especially on Walter (2010), who has tested the causal chain of the effect of globalization on individuals' attitudes, and found that the individual is influenced by the consequences of globalization – not the other way around.

Another limitation that is relevant for this paper is the question of whether we are comparing the same in all of the countries in the survey. In other words, this concerns the validity of the measures that are used in this analysis. A problem with validity can be triggered by, for instance, that words or concepts have different meanings in different countries. Yet, I have confidence in that the WVS, with its

experience in cross-cultural data collection, has solved this challenge in the best possible way.

A more relevant issue to this thesis is that of cross-cultural comparability. The data used in this analysis consists of countries from all over the world, which makes it likely that the problem of cross-cultural comparability is present. An example of this is the individual level variable education, which I have coded into a dummy, where a high level of education gets the value 1, while a low level of education gets the value 0. It is likely that what is considered as high and low education in different countries will vary, especially between developing and developed countries. In addition to this, there are differences in educational systems in different countries. This issue could have been addressed by using country-specific measures for education. However, with 78 different countries in the sample of the analysis, this would take up too many degrees of freedom. I have therefore chosen to employ an education variable that is not country-specific, but I am aware of this issue when interpreting the results.

The sample used in this analysis consists of more developed countries than developing countries. It can be hard to collect data from developing countries, because of factors ranging from lack of interests in survey data and lack of resources and funding, to more serious factors as for instance that respondents fear that honest answers could lead to unfortunate consequences. No matter the reason, having an uneven sample can cause biased results on behalf of the developing countries. This issue is unfortunately very difficult to address, but is something that is important to be aware of when interpreting the results.

The last limitations I will address are regarding the cross-sectional feature of the data used in this analysis. Individual attitudes are highly context-dependent, and when using cross-sectional data from over 90 countries the analysis may suffer from removing the data from its context. Especially since the sample includes both developing and developed countries. This challenge could be limited by analyzing respondents from only one or several similar countries, as much of the research on this topic have done (e.g. Ringdal and Finseraas 2012; Dallinger 2010; Walter 2010; Blekesaune and Quandagno 2003). This, on the other hand, would prevent me from investigating the differences in globalization exposure effects on individual policy preferences in different countries, which is one of the things that makes this analysis stand out from the previous research on this topic.

I acknowledge that including countries that are so different in the same sample can be problematic, seeing as there might be differences in what actually affects attitudes in these countries. This is an argument for analyzing developing and developed countries separately. But as the sample consists of more developed than developing countries, I am not able to control for the same number of variables in the analysis, because of fewer units at the highest level of analysis for developing countries. However, I distinguish between developing and developed countries by controlling for GDP PC and a standardized measure of the GINI Index, in addition to an interaction between GDP PC and ECONOMIC GLOBALIZATION.

### ***3.5 Dependent and Independent Variables***

#### **3.5.1 The Dependent Variable**

The dependent variable in this analysis is GOVERNMENT RESPONSIBILITY. For descriptive statistics, see Table 3.1. Originally I wanted to create a scale out of three variables (INCOME INEQUALITY, PRIVATE VS STATE OWNERSHIP OF BUSINESS and GOVERNMENT RESPONSIBILITY) I assumed would measure welfare attitudes. A Principal Component Analysis (PCA) confirmed that these variables loaded on the same component (see Table A1 in appendix), but the results from the Cronbach's Alpha test showed low internal reliability (.282).

The results from these tests indicate that the variables do not measure the same underlying phenomenon. Instead of constructing a scale I therefore chose to use one of the variables: GOVERNMENT RESPONSIBILITY. A compromise like this may have unfortunate effects on the results of the analysis concerning validity. If a variable is **valid** it means that it is measuring exactly what we think it measures. In this case this would mean that GOVERNMENT RESPOSIBILITY is a measure of welfare attitudes.

In the case of the dependent variable in this thesis, there is reason to believe that attitudes towards government responsibility only measure a part of the concept of welfare attitudes. By using GOVERNMENT RESPONSIBILITY as a dependent variable I measure people's more general perception of what role the state should take, which is an important dimension of welfare attitudes, rather than measuring a specific aspect of social policy, like income redistribution or ownership of business.

This could prove to have unfortunate results, as Kumlin (2007) argues that it is more difficult for people to assess their attitudes towards such a general concept,

rather than to reflect on their attitudes towards concrete questions as for instance what their attitudes regarding unemployment benefits. However, using a more specific measure like INCOME INEQUALITY or PRIVATE VS STATE OWNERSHIP OF BUSINESS would not be a more preferable alternative because this would reduce the concept of welfare state preferences to one specific issue. This has led me to the conclusion that even though using GOVERNMENT RESPONSIBILITY as a measure of welfare attitudes is unfortunate, it is assessed as the most practical alternative to using a scale.

This variable captures the left-right dimension of welfare attitudes by making the respondents range from 1–10 if they think that the individual should take more responsibility to provide for themselves (1), or if the state should take more responsibility to provide for its inhabitants (10). Thus, low values on this variable indicate favourability towards a less extensive welfare state, while high values indicate that the respondent favour a more developed welfare state.

The dependent variable is not perfectly normally distributed (see Figure A1 in appendix). This could have prevented me from using this variable in this analysis since it violates the assumption of normal distribution for multilevel analysis (Strabac 2007). But because of the large sample of over 184 000 units in the analysis at the individual level it is not likely that this will have an effect on the results. The reason is that in a large sample size the sampling distribution of the mean will become approximately normal (Hamilton 1992: 27). Therefore I employ the dependent variable without making any changes to it.

**Table 3.1 - Descriptive Statistics for Dependent Variable**

	<i>N</i>	Mean	Std. dev.	Minimum	Maximum
Government Responsibility	184 779	6.072	3.014	1	10

### **3.5.2 Independent Variables at the Individual Level**

At the individual level I use several control variables: WOMEN (0–1), AGE (14–97), HIGH EDUCATION (0–1), INCOME (1–10), SOCIAL TRUST (0–1), MARRIED (0–1) and EMPLOYED (0–1). For descriptive statistics on these variables, see Table 3.2.

**Table 3.2 - Descriptive Statistics for Independent Variables at the Individual Level**

	<b>N</b>	<b>Mean</b>	<b>Std. dev.</b>	<b>Minimum</b>	<b>Maximum</b>
Woman	184 779	0.511	0.499	0	1
Age	184 779	41.133	15.978	15	99
High Education	184 779	0.219	0.413	0	1
Income	184 779	4.577	2.436	1	10
Married	184 779	0.643	0.479	0	1
Employed	184 779	0.545	0.498	0	1
Social Trust	184 779	0.266	0.442	0	1

The variable for gender, WOMAN, is recoded into a dummy where women have the value 1, and men are the reference category. The two variables MARRIED and EMPLOYED are also dummy variables, with people being married and having a job has the value 1, while the rest are codes as the reference category 0. These variables are all tended to proxy some level of risk, as I assume that individuals with a job experience less economic risk than individuals that are unemployed. I also assume that individuals that are married and living with their partner experience less economic risk than individuals in single person households. When it comes to gender differences, this can be related to family obligations, where women are known to take more responsibility for the extended family and more prone to develop attitudes that also favour others than themselves (Finseraas and Ringdal 2012).

The continuous variable AGE is measured in years, and varies from 14 to 97. The variable SOCIAL TRUST is a dummy created from the original dichotomous variable based on the question “*Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?*” The value 0 represents “Need to be very careful”, while the value 1 represents “Most people can be trusted”. SOCIAL TRUST is added to the analysis because of the assumption that individuals with more trust in other people will be more positive towards more redistribution of income and an extended welfare state, because they trust other people not to cheat.

The variable HIGH EDUCATION is a dummy variable based on the original variable that measures highest education level attained, which ranges from 1–8, where 1 represents those who have not completed elementary school and 8 represent those

who have achieved a university degree. This is a categorical variable that I chose to recode into a dummy for high education, where those who have attended university is coded as the value 1, while completing elementary and secondary school is the reference category. In this paper I use education as a proxy for individual skill-level, in the process of identifying globalization winners and losers. I assume that individuals with high education are more likely to gain from globalization, while individuals with lower levels of education are more likely to become globalization losers.

As mentioned earlier, measuring education is problematic because of cross-cultural comparability – i.e. a low education in Sweden may be regarded as a high education in Ghana. This makes it hard to identify which education group represents globalization losers and winners, especially when the variable is coded as a dummy for high education. It is possible that globalization winners in Ghana also include those individuals that have completed secondary school, not only those who have attended university. However, a dummy set for education would create problems with the interaction between economic globalization and education since I cannot have more than 7 variables at the country-year level due to the number of units at this level.

The WVS does not supply a variable for individual income. The variable INCOME used in this analysis measures household income before taxes on a scale from 1 to 10, where 1 represent the lowest income, and 10 represent the highest income. This measure is subjective, which means that it is the respondent that places himself in the different categories. This income variable is measured in deciles, which means that a respondent in the first decile thinks he is among the 10 per cent with lowest income in his or hers country. Consequently, a respondent in the tenth decile thinks he is among the 10 per cent with highest income in his or her country.

Originally, I wanted to control for union membership, because members of unions often have more positive towards the welfare state than non-members, because of for instance employment in a sector with interests in a extensive welfare state, mobilization by the unions to support policy that strengthens the welfare state, or that individuals that are positive towards the welfare state often join unions (Finseraas and Ringdal 2012: 76).

I also wanted to include a variable that measured the respondents' levels of job security, since this is the aspect of economic insecurity individuals are most likely to



fear in the context of economic globalization, according to Walter (2010: 414). However, the variable measuring union membership was omitted from wave 3, while the variable measuring job safety was omitted from wave 2. Both variables therefore have high missing values, and are excluded from the main analysis. To see if adding these variables to the analysis at the individual level will change the results substantially I have done so in an alternative analysis (see Table A5 in appendix). The results demonstrated some differences, but because the sample is severely reduced the results are not regarded as comparable to the main analysis.

As already mentioned, Walter (2010) used the Offshore Ability Index developed by Blinder (2007) and Mulh (2007) for measuring a job's potential to be moved abroad. She compared this index to the respondents sector of employment information from the WVS and assigned each respondent a value of offshore ability. This would function as a good measure of globalization exposure on the occupational level in this thesis as well, but due to time limitation this has not been accomplished. This would be an interesting measure to test for further research.

### 3.5.3 Independent Variables at the Country-Year Level

The main independent variable in this analysis is ECONOMIC GLOBALIZATION. I also control for two other measures at the country-year level: GDP per capita and a standardized version of the GINI Index. These variables are included to see the differences between developed and developing countries. For descriptive statistics, see Table 3.3. All country-year level variables are lagged one year to control for time dependence, thereby reducing the chances of reversed causality.

**Table 3.3 - Descriptive Statistics for Independent Variables at the Country-year Level**

	N	Mean	Std. dev.	Minimum	Maximum
Economic Globalization	184 779	57.484	17.523	6.597	97.228
GDP per capita	184 779	8.976	1.035	6.635	10.884
GINI	184 779	37.284	9.624	21.700	64.618

#### **Economic Globalization**

The KOF index of globalization provides several variables that measure the different aspects of globalization. Three main dimensions are included in the overall index:

economic-, political-, and social globalization. The main independent variable in this analysis is ECONOMIC GLOBALIZATION, and is measured by the economic dimension of the KOF index. ECONOMIC GLOBALIZATION is a continuous variable, ranged from 1–100. The sub-indexes for this variable are presented below. For information about weighting, see Table 3.4.

The economic dimension of the KOF Index consists of two sub-indexes that is meant to proxy economic globalisation: (1) *actual flows*, including trade, flows of foreign direct investments (FDI), FDI in stocks, portfolio investments and income payments to foreign nationals – all measured as a percentage of GDP, and (2) *restrictions*, including hidden import barriers, mean tariff rate, taxes on international trade (percentages of current revenue), and capital account restrictions. Actual economic flows are, according to Dreher et al. (2008: 43), the usual measures of economic globalisation. However, restrictions on trade and capital are also added to proxy globalisation. This makes the economic dimension of the KOF index a robust measure for economic globalisation.

**Table 3.4 - Weighting of Economic Globalization in KOF Index (Dreher et al. 2008)**

Indices and variables	Weights (%)
Economic globalization	
(i) Actual flows	(50)
Trade (percentage of GDP)	(16)
Foreign direct investment, flows (percentage of GDP)	(21)
Foreign direct investment, stocks (percentage of GDP)	(23)
Portfolio investment (percentage of GDP)	(19)
Income payments to foreign nationals (percentage of GDP)	(22)
(ii) Restrictions	(50)
Hidden import barriers	(24)
Mean tariff rate	(28)
Taxes on international trade (percentage of current revenue)	(28)
Capital account restrictions	(20)

Trade is defined by Dreher et al. (2008: 43), as the sum of a country’s exports and imports, while portfolio investment is defined as the sum of a country’s assets and liabilities. Income payments to foreign nationals and capital are also included in this

measure to proxy the extent of a country's employment of foreign people and capital in its production processes. A country with higher revenues from tariffs is less globalised, given a certain level of trade (Dreher et al. 2008: 43).

To proxy restrictions on the capital account, an index constructed by Gwartney and Lawson (2002), based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions, is used (Dreher et al. 2008: 44). The original source for hidden import barriers is various issues of the World Economic Forum's Global Competitiveness Report (Dreher et al. 2008: 44).

### **GDP PC**

GDP PC is estimated from the World Development Indicators from the World Bank (2012), and is the gross domestic product in a country, divided by midyear population (World Bank 2013a). GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the product. The data is constant in 2000 USD. This variable is log transformed using the natural logarithm (ln), because it is likely that the effect is logarithmic rather than linear. This is due to the law of diminishing marginal returns, which, used in the context of this thesis, says that for instance the effect of an increase in GDP per capita will matter more in countries with low GDP per capita than in countries with already high GDP per capita.

### **GINI**

The Gini Index is a measure of inequality within an economy. More specifically it measures how much the distribution of income or consumption expenditure among individuals/households within an economy deviates from a perfectly equal distribution (World Bank 2013b). The variable GINI is a standardized measure of the Gini Index for income inequality, made available through SWIID (Solt 2009). Because the unstandardized Gini Index lacks values for many cases in different years, it reduces comparability across observations. The standardized measure is therefore preferable. The measure ranges from 0–100, where a value of 0 represents perfect economic equality, while a value of 100 implies perfect economic inequality.

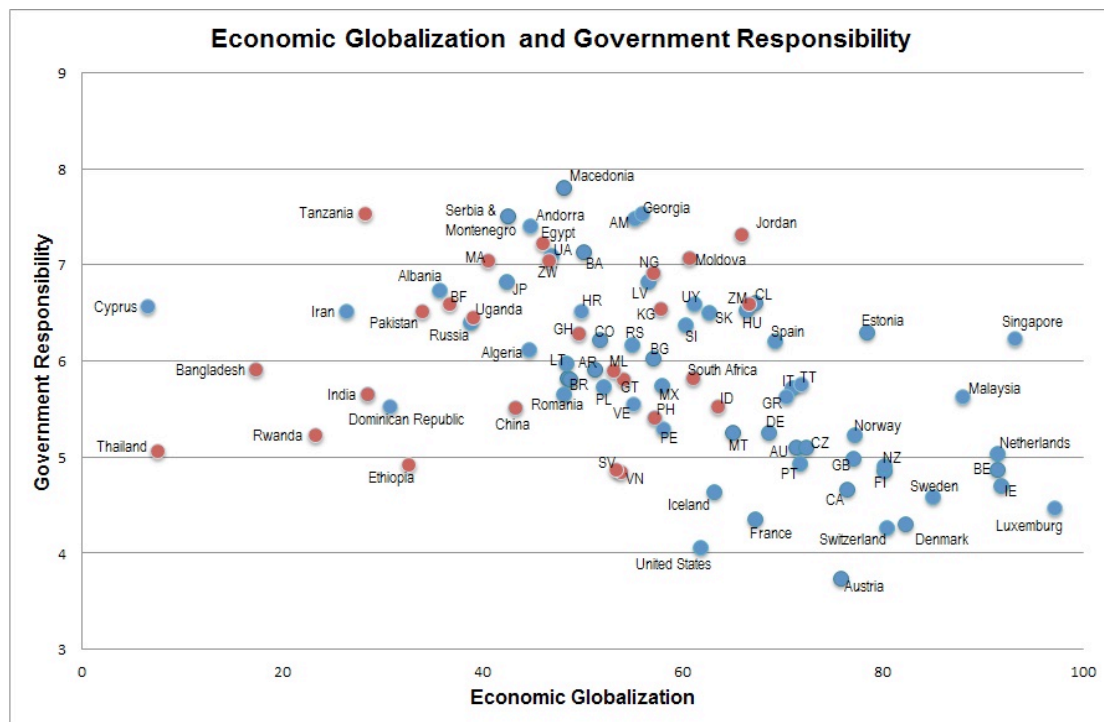


## 4 Analysis and Discussion

In this chapter I present the results from the main empirical analysis. In this analysis I have 184 779 units at level-1, 151 units at level-2 and 78 units at level-3. I will first explain how I have developed the models, before I interpret the results to see how economic globalization affects welfare attitudes. Furthermore, I will discuss my findings with basis in the theory and previous research presented in chapter 2. Lastly, I compare my main analysis with four alternative analyses, to see if the results I have found are robust.

### 4.1 Economic Globalisation and Government Responsibility

Figure 4.1 - Mean Values of ECONOMIC GLOBALIZATION and GOVERNMENT RESPONSIBILITY<sup>6</sup>



Note: red colour shows developing countries, while blue shows developed countries. The grouping is based on HDI from Human Development Reports<sup>7</sup>

<sup>6</sup> Two-letter country codes: AR = Argentina, AU = Australia, MA = Morocco, BA = Bosnia and Herzegovina, BE = Belgium, BF = Burkina Faso, BG = Bulgaria, BR = Brazil, CA = Canada, CL = Chile, CO = Colombia, CZ = Czech Republic, FI = Finland, GB = Great Britain, GH = Ghana, GR = Greece, GT = Guatemala, HR = Croatia, HU = Hungary, ID = Indonesia, IE = Ireland, IT = Italy, JP = Japan, KG = Kyrgyzstan, LI = Lithuania, LV = Latvia, ML = Moldova, MT = Malta, MX = Mexico, NG = Nigeria, NZ = New Zealand, PE = Peru, PH = Philippines, PL = Poland, PT = Portugal, RS = Russian Federation, SV = El Salvador, SI = Slovenia, SK = Slovakia, TT = Trinidad and Tobago, UA = Ukraine, UY = Uruguay, VN = Vietnam, VE = Venezuela, ZM = Zambia, ZW = Zimbabwe

<sup>7</sup> <http://hdr.undp.org/en/statistics/hdi/>

Figure 4.1 shows the mean of ECONOMIC GLOBALIZATION and GOVERNMENT RESPONSIBILITY for the countries included in my sample. The colour red shows developing countries, while the colour blue shows developed countries.

As we can see from Figure 4.1, the developed nations dominate the high end of the economic globalization scale, while the developing nations dominate the low end. Figure 4.1 also show that the more globalized countries have generally lower mean scores on the GOVERNMENT RESPONSIBILITY scale, indicating more rightist attitudes. This indicates the same relationship as hypothesis *H1*, that economic globalisation lead to more rightist attitudes in the public. However, it is necessary to investigate this matter further before drawing any conclusions.

#### ***4.2 Development of the models***

In this analysis I follow the bottom-up strategy of starting with a simple model and adding complexities (Hox 2010). According to Hox (2010: 55–56) this is a more useful method in multilevel modelling compared to the top-down approach, since this may lead to convergence problems due to starting with a large, complicated model. Since the sample size is largest at the lowest level (the individual level), I will build the model from there. By doing this I avoid Hauser’s contextual fallacy (Hauser 1970), and find how much of the level-2 and level-3 variations is explained by compositional effects.

From the individual model I proceed by adding the main independent variable ECONOMIC GLOBALIZATION at level-2. This is done to see the effect this variable alone has on the dependent variable. In the third model I add the quadratic term of globalization:  $ECONOMIC\ GLOBALIZATION^2$  at level-2 to test for any curvilinear effects. In the fourth model I control for two other level-2 variables: GDP PC and GINI. In model 5 I add an interaction term consisting of ECONOMIC GLOBALIZATION and GDP. In model 6 I add yet another interaction term, consisting of  $ECONOMIC\ GLOBALIZATION^2$  and GDP PC to test for non-linear interaction effects between GDP PC and ECONOMIC GLOBALIZATION on GOVERNMENT RESPONSIBILITY, since economic globalization already has proven to have a curvilinear effect on its own. This does not seem to be the case for the relationship between ECONOMIC GLOBALIZATION and GDP PC on the dependent variable, with no statistically significant improvement from

model 4 (see Table A3 in appendix). I also tested for a quadratic term of GDP PC, and an interaction between GDP PC<sup>2</sup> and ECONOMIC GLOBALIZATION – a relationship indicated by Figure 4.3 (see Table A4 in appendix). There were no significant improvements from Model 4, so Model 5 is therefore viewed as the best model.

Model 8 is built from model 4, and contains two cross-level interaction terms, consisting of HIGH EDUCATION and ECONOMIC GLOBALIZATION, and HIGH EDUCATION and ECONOMIC GLOBALIZATION<sup>2</sup>. The quadratic interaction term is added by the same logic as with the interaction between GDP PC and ECONOMIC GLOBALIZATION<sup>2</sup>.

In this analysis I will focus my discussion mainly on the two interaction models – model 5 and model 8 – and compare them to the previous models. Model 5 and 8 is argued to be the best models mainly because of the important and significant interaction effects included here. The addition to this, none of the interactions affect the statistical significance of other variables, and they are therefore both an improvement from model 4. This is confirmed by the -2LL change.

### **4.3 Results**

In this part of the chapter I will first present and interpret the results from the multilevel analysis with basis in model 5. From this model I attempt to see how economic globalization affects welfare attitudes in general. Model 5 includes the interaction between ECONOMIC GLOBALIZATION and GDP PC, which is added to see if there are differences between the effects of economic globalization in developing and developed countries. Lastly, I will present and interpret the results with basis in model 8, which includes the interaction between ECONOMIC GLOBALIZATION and HIGH EDUCATION, added to see if there are differences in how economic globalization affects globalization winners and losers.

#### **4.3.1 Model with Interaction of GDP PC and Economic Globalization**

Model 0–5 is presented in Table 1 below, and model 5 can be formally defined as:

$$Y_i = \beta_0 + \beta_1 X_{ijk1} + \beta_2 X_{ijk2} + \beta_3 X_{ijk3} + \beta_4 X_{ijk4} + \beta_5 X_{ijk5} + \beta_6 X_{ijk6} + \beta_7 X_{ijk7} + \gamma_8 Z_{jk8} + \gamma_9 Z_{jk9} + \gamma_{10} Z_{jk10} + \gamma_{11} Z_{jk11} + \gamma_{12} Z_{jk10} Z_{jk8} + \gamma_{13} Z_{jk10} Z_{jk9} + e_{ijk} + u_{0jk} + v_{0k}$$

**Table 4.1 - Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	<b>Model 0</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
Constant	5.967*** (.101)	6.479*** (.102)	7.586*** (.282)	6.200*** (.580)	7.352*** (1.125)	2.194 (2.043)
<b>Individual level</b>						
Woman		.143*** (.014)	.143*** (.014)	.143*** (.014)	.143*** (.014)	.143*** (.014)
Age		.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)
High Education		-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.198*** (.017)
Income		-.113*** (.003)	-.113*** (.003)	-.112*** (.003)	-.112*** (.003)	-.113*** (.003)
Social Trust		-.041*** (.016)	-.041** (.016)	-.040** (.016)	-.040** (.016)	-.040** (.016)
Married		-.027* (.015)	-.027* (.015)	-.027* (.015)	-.027* (.015)	-.027* (.015)
Employed		-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.106*** (.015)
<b>Country-year level</b>						
Economic Globalization			-.019*** (.001)	.036* (.020)	.038* (.021)	.127*** (.036)
Economic Globalization <sup>2</sup>				-.001*** (.000)	-.001*** (.000)	-.000 (.000)
GDP					-.123 (.109)	.589** (.261)
GINI					-.007 (.010)	-.011 (.010)
GDP*Economic Globalization						-.015*** (.005)
GDP*Economic Globalization <sup>2</sup>						
<b>Random Effects</b>						
$s_e^2$	8.108	8.002	8.002	8.002	8.002	8.002
$s_{u_0}^2$	0.511	0.497	0.506	0.490	0.492	0.488
$s_{v_0}^2$	0.492	0.457	0.309	0.282	0.269	0.218
-2LL	-455 911	-454 697	-454 689	-454 686	-454 685	-454 681
-2LL change		2427.61***	15.14***	7.22**	1.39	8.42***

Note: \*\*\* = p<0.01, \*\* = p<0.05, \* = p<0.1.  $s_e^2$  = variance of level-1 residual,  $s_{u_0}^2$  = variance of level-2 residual,  $s_{v_0}^2$  = variance of level-3 residual.



In the equation,  $Y_i$  is the value of the dependent variable for individual  $I$ , and  $\beta_0$  is the intercept.  $\beta_{ijk}X_{ijk}$  represents the regression coefficients at the individual level  $i$ , within country-year  $j$ , in country  $k$ , while  $\gamma_{jk}Z_{jk}$  represents the regression coefficients at the country-year level, within country-year  $j$ , in country  $k$ .  $e_{ijk}$ ,  $u_{0jk}$  and  $v_{0k}$  each represent the residual for the individual level, country-year level and country level.

In model 5 the variables at the individual level are all statistically significant at the 0.01-level, except for MARRIED and SOCIAL TRUST, which are statistically significant at the 0.05-level and 0.1-level respectively. None of the variables at the individual level have altered substantially after adding variables at the country-year level.

The results in model 5 shows that women have more leftist attitudes, and are thus more supportive towards increased government responsibility than men. This is in accordance with previous research, which finds that women are more prone to leftist attitudes than men (Finseraas and Ringdal 2012). The variable AGE indicates that people develop more leftist attitudes the older they get.

The variables INCOME and HIGH EDUCATION show that the higher income and education an individual has, the more rightist attitudes he or she has towards government responsibility. This is as expected, as individuals with high income and education levels are able to take care of themselves, and do not have the need the amount of social services that people with lower income levels might have.

The results from model 5 indicate that people with high levels of social trust are more negative towards government responsibility. In other words, high levels of social trust seem to correlate with rightist attitudes. This is surprising, as I had thought that the relationship between these variable would be the other way around. However, high levels of social trust might be an indicator for believing in the individual, thus having faith in that people are able to take care of themselves.

The variable MARRIED indicates that individuals living with a husband, wife or partner have more rightist attitudes than those who do not. This is in accordance with the previous research, seeing as people that are a part of a two-income household are less vulnerable to economic insecurity than people that have to manage on one income only. The results from the variable EMPLOYED in model 5 indicate that individuals that have a job are more prone to rightist attitudes than those individuals

that are unemployed. This result is also as expected, as people without a job/income are more exposed to economic insecurity than people that are employed.

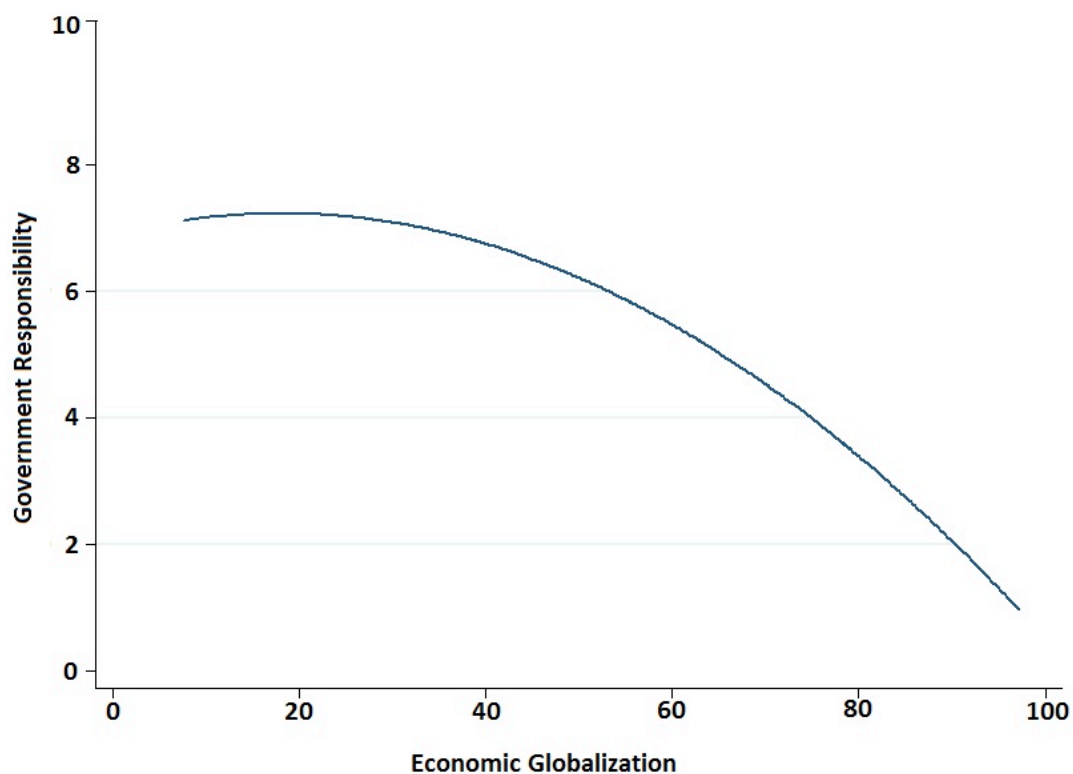
At the country-year level I control for GDP PC and GINI in addition to the main independent variable ECONOMIC GLOBALIZATION. GDP PC and GINI are added to see if there are any differences between developing and developed countries, given the assumption that developed countries have higher levels of GDP per capita and lower levels of economic inequality. Since my main interest is in the variables that measure economic globalization, I add the level-2 controls in one step to examine how they affect the main independent variable GOVERNMENT RESPONSIBILITY.

The results from model 4 shows that both GDP PC and GINI have a negative effect on the dependent variable. The negative coefficient of GINI implies that citizens living in countries with higher levels of inequality are less supportive towards government responsibility. This is surprising, since it is natural to believe that higher levels of inequality would cause citizens to support more redistribution. However, this variable is not statistically significant and cannot be used to generalize to the population. The negative coefficient of GDP PC indicates that citizens in countries with higher GDP per capita are less supportive towards government responsibility than citizens in countries with lower GDP per capita. This again, indicates that individuals living in typical developed countries, where GDP per capita is high, have more rightist attitudes than those living in typical developing countries, with lower levels of GDP per capita. This indicates that hypothesis H4: *Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries*, could be confirmed. But unfortunately, this variable is not statistically significant in model 4, and the effect cannot be generalized to the population. GDP PC is however statistically significant in the final model, which will be discussed below in relation to the interaction term between GDP PC and ECONOMIC GLOBALIZATION.

As mentioned previously, the main independent variable in this analysis is ECONOMIC GLOBALIZATION. Adding this to the analysis does not alter the results of the variables on the individual level to a large degree. When first added in model 2, the coefficient for ECONOMIC GLOBALIZATION is statistically significant at the 0.01-level, and indicates that economic globalization leads to less support for government responsibility – in other words, more rightist attitudes towards welfare.

To test for hypothesis *H2*, a quadratic term of ECONOMIC GLOBALIZATION is added – ECONOMIC GLOBALIZATION<sup>2</sup>. When adding this quadratic term, the original economic globalization variable alters. It becomes negative and shows a slightly larger effect. It is still statistically significant, but only at the 0.1-level. However, ECONOMIC GLOBALIZATION<sup>2</sup> is statistically significant at the 0.01-level, and shows a negative effect. This indicates that there is a curvilinear effect here. To investigate this effect, I used the graph presented in Figure 4.1 below.

**Figure 4.2 - Curvilinearity of ECONOMIC GLOBALIZATION**



Note: Predicted probabilities for curvilinearity of ECONOMIC GLOBALIZATION from the data material. All other variables are set at their mean.

As we can see from Figure 4.1, the effect of economic globalization on government responsibility is only slightly curvilinear. The effect of economic globalization increases up to a point (24.62) and then decreases. In other words, economic globalization has a positive effect on government responsibility up until a country reaches 24.62 on the economic globalization scale. After this point the effect is negative, and indicates that citizens are more positive towards privatization, individualism and a less extensive welfare state.

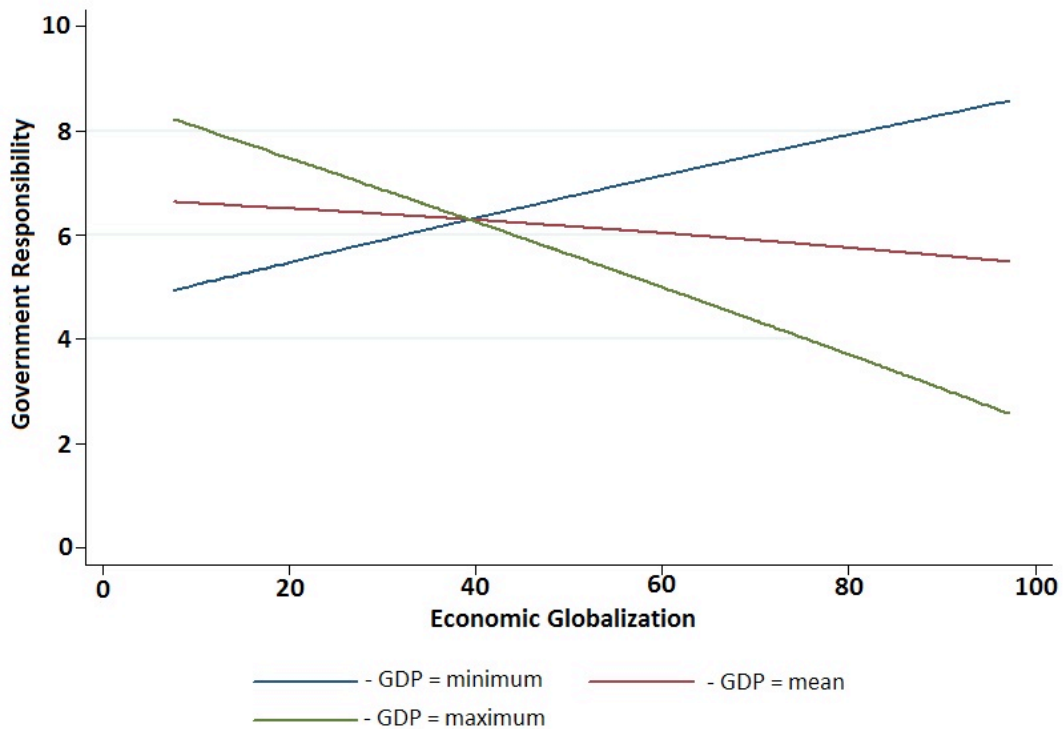
The results from the final model confirm the hypotheses H1: *Increased economic globalization leads to rightist welfare attitudes among citizens* and H2: *After a country reaches a certain level of competitiveness, the effect of economic globalization on welfare attitudes will shift from leftist to rightist*. As we can see from Figure 4.1, the more economic globalized a country is, the more rightist view the public opinion has on economic welfare, after the country reaches 24.62 on the KOF scale of ECONOMIC GLOBALIZATION.

The argument of the rational choice model and neoliberal proponents of globalization, presented above, supports this finding. Neoliberalism states that globalization will lead to prosperity and economic growth for countries that opens up to it (Scholte 2005). Assuming this point of view, and the view of rational choice theory, which argues that people will act in their *own* best interest, individuals that experience higher levels of economic globalization will develop attitudes that are more supportive of individual responsibility and less welfare oriented. Consequently, this result invalidates the hypothesis H3: *Increased economic globalization leads to leftist welfare attitudes among citizens*. Increased globalization *does* a leftist view on economic welfare among citizens up to a certain point (24.62), but after this point, the citizens become more rightist in their views on this topic.

In model 5 an interaction term between GDP PC and ECONOMIC GLOBALIZATION is added to see if economic globalization affects developing and developed countries differently, as hypothesised in H5: *Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations*. Adding the interaction does not alter the results of the independent variables at the individual level, but of course affects the variables at the country-year level that are a part of the interaction.

In model 5 GDP PC is statistically significant and shows that increasing levels of GDP per capita in a country leads to more leftist welfare attitudes among citizens. This is a change from model 4 where GDP PC demonstrates that higher levels of GDP per capita lead to more rightist welfare attitudes. However, in model 5 GDP PC is a part of an interaction with ECONOMIC GLOBALIZATION, and therefore it is important to interpret the interaction before drawing any conclusions. Since the interaction is constructed with two continuous variables, it is easier to interpret it graphically, as in Figure 4.3.

Figure 4.3 - Interaction Effects of GDP PER CAPITA and ECONOMIC GLOBALIZATION on GOVERNMENT RESPONSIBILITY



Note: Predicted probabilities for minimum, mean and maximum values of ECONOMIC GLOBALIZATION and GDP PER CAPITA from the data material. All other variables are set at their mean.

As we can see from Figure 4.3, the most striking differences in attitudes towards economic welfare manifests themselves when economic globalization is at its highest. With high levels of economic globalization, citizens that live in countries with low levels of GDP per capita have leftist attitudes towards government responsibility. In other words, they support an extensive welfare state and think that the state should take responsibility for its citizens. For citizens who live in countries with higher levels of GDP per capita the effect of economic globalization creates more rightist attitudes towards welfare. This indicates that these citizens lean towards more individualism and less government responsibility.

For countries that experience lower levels of economic globalization the difference between levels of GDP per capita is not as substantial. Still, Figure 4.3 shows that citizens in countries with low levels of economic globalization and low levels of GDP per capita have more leftist attitudes towards government responsibility than citizens in countries with high levels of GDP per capita. When GDP PC is set at its

mean value, we can see that the attitudes of the citizens do not change substantially with increasing degrees of economic globalization.

In other words, the results demonstrate that there seem to be a difference in the effect of economic globalization on welfare attitudes in developing and developed countries. Citizens in developed countries develop more rightist attitudes as the degree of economic globalization increases, while citizens in developing countries on the other hand, develop more leftist attitudes as the degree of economic globalization increases. This indicates that hypothesis *H5* can be confirmed.

Since economic globalization has a curvilinear effect on its own, I have also tested an interaction between GDP PC and ECONOMIC GLOBALIZATION<sup>2</sup> (see Table A3 in appendix). The results indicated a curvilinear relationship, but the effect was very small and not statistically significant. The likelihood ratio test shows that adding this interaction term has not improved the model from model 5, and therefore I conclude that model 5 is more preferable than model 6.

Furthermore, it could also seem that GDP PC has a curvilinear effect on GOVERNMENT RESPONSIBILITY. However, when controlling for an interaction between ECONOMIC GLOBALIZATION and GDP PC<sup>2</sup> (see Table A4 in appendix), the results demonstrates that there is not a curvilinear effect here. The likelihood ratio test shows that adding the interaction term to the analysis has not improved the model from model 5, and therefore I conclude that model 5 is preferable from model 7.

#### **4.3.2 Model with Interaction of Education and Economic Globalization**

To test for hypothesis H6: *Globalization losers have more leftist attitudes than globalization winners* and H7: *the difference between globalization winners and losers will be largest in countries with a high degree of economic globalization*; two cross-level interaction terms are included in Model 8. By examining interactions between education and economic globalization I am able to investigate if economic globalization affects the welfare attitudes of individuals with different degrees of education in different ways. Model 8 is presented in Table 4.2 below.

**Table 4.2. Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	<b>Model 4</b>	<b>Model 8</b>
Constant	7.352*** (1.125)	7.364*** (1.128)
<b>Individual level</b>		
Woman	.143*** (.014)	.141*** (.014)
Age	.002*** (.001)	.002*** (.001)
High Education	-.198*** (.017)	-.386*** (.123)
Income	-.112*** (.003)	-.113*** (.003)
Social Trust	-.040** (.016)	-.048*** (.016)
Married	-.027* (.015)	-.030** (.015)
Employed	-.106*** (.015)	-.105*** (.015)
<b>Country-year level</b>		
Economic Globalization	.038* (.021)	.038* (.021)
Economic Globalization <sup>2</sup>	-.001*** (.000)	-.001*** (.000)
GDP PC	-.123 (.109)	-.120 (.110)
GINI	-.007 (.010)	-.007 (.010)
High Education*Economic Globalization		-.002 (.004)
High Education*Economic Globalization <sup>2</sup>		.000** (.000)
<b>Random Effects</b>		
$s_e^2$	8.002	8.000
$s_u^2_0$	0.492	0.489
$s_v^2_0$	0.269	0.273
-2LL	-454 685	-454 653
-2LL change	1.39	63.48***

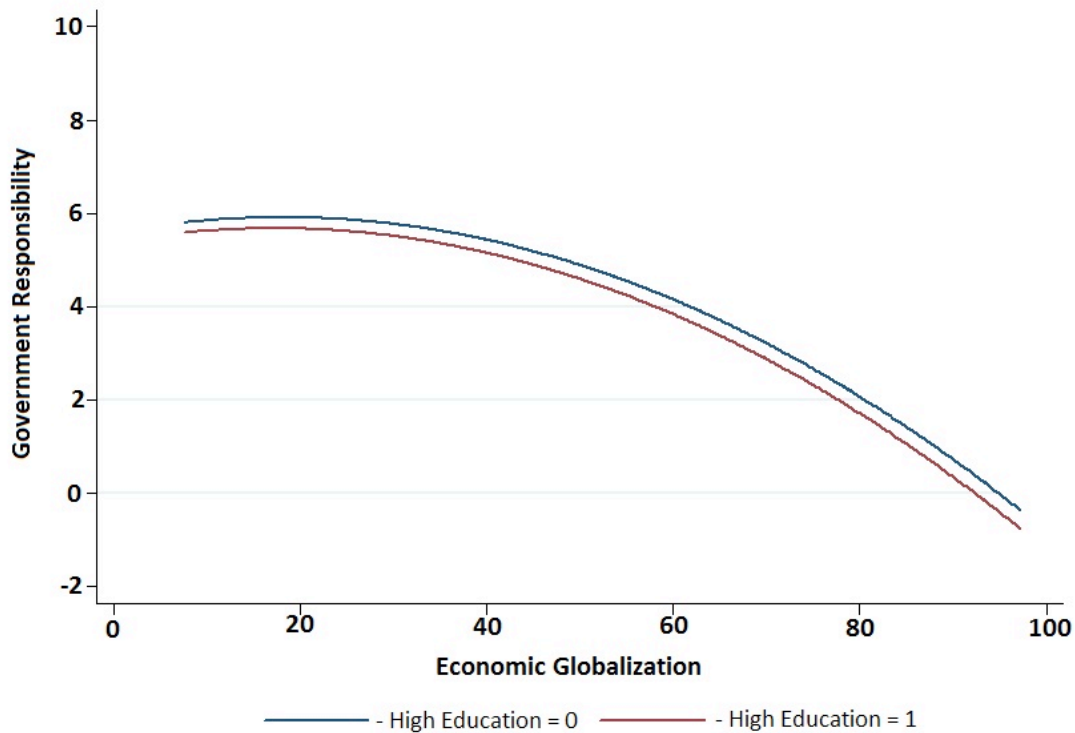
Note: \*\*\* =  $p < 0.01$ , \*\* =  $p < 0.05$ , \* =  $p < 0.1$ .  $s_e^2$  = variance of level-1 residual,  $s_u^2_0$  = variance of level-2 residual,  $s_v^2_0$  = variance of level-3 residual.

The variables at the individual level do not alter much in effect and statistical significance when the two interactions are added. The exception from this is of course the variable that is a part of the interactions, namely HIGH EDUCATION. However, this variable now shows that when the value of ECONOMIC GLOBALIZATION is 0, individuals with high education are more negative towards government responsibility than those with lower education. With HIGH EDUCATION being a proxy for skill level, which is entered to separate globalization winners from globalization losers, this indicates that globalization losers have more leftist attitudes than globalization winners. This evidence leads me to confirm hypothesis H6: *Globalization losers have more leftist welfare attitudes than globalization winners.*

As mentioned above, the interactions between economic globalization and education are added to test for hypothesis H7: *the difference between globalization winners and losers will be largest in countries with a high degree of economic globalization.* The first interaction between ECONOMIC GLOBALIZATION and HIGH EDUCATION assumes a linear effect, while the second interaction is made up of HIGH EDUCATION and ECONOMIC GLOBALIZATION<sup>2</sup>, and tests for curvilinear effects. The two interactions are added in one step, and their coefficients indicate that there is some degree of curvilinearity present here. The interaction effect of education and economic globalization is presented in Figure 4.4.



Figure 4.4 - Interaction Effects of HIGH EDUCATION and ECONOMIC GLOBALIZATION<sup>2</sup> on GOVERNMENT RESPONSIBILITY



Note: calculated from model 5, using predicted probabilities. All variables are set to their mean.

Figure 4.4 demonstrates the effects of the interaction between ECONOMIC GLOBALIZATION<sup>2</sup> and HIGH EDUCATION on the dependent variable, GOVERNMENT RESPONSIBILITY. The effect is curvilinear, indicating that there is a rightist shift in attitudes, for both high- and low-skilled individuals, after a country reaches a certain degree of economic globalization. Figure 4.4 also shows that the effect of education matters *slightly* more in determining individuals' attitudes towards economic welfare in highly economically globalized countries. In less economically globalized countries the difference between those with high education and those with less education is smaller, but still present. From model 8 we can conclude that globalization losers have more leftist attitudes towards economic welfare than globalization winners, and this effect is slightly greater in highly globalized countries, thus confirming *H7*.

To summarize the findings, the statistical evidence suggests that at first glance an increase in level of economic globalization seems to create a rightist shift in welfare attitudes. However, this seems to be mostly true for citizens of developed countries. The results show that individuals that live in developing countries

experience a leftist shift in attitudes with increasing degree of economic globalization, in accordance with the compensation hypothesis. The evidence also suggests that high-skilled individuals have more rightist attitudes towards economic welfare, than low-skilled individuals. In other words, globalization winners, in both individual and country sense, tend to be less supportive of an extensive welfare state and government responsibility than globalization losers.

#### ***4.4 Discussion***

In this analysis I have tested how economic globalization affects the publics' attitudes towards welfare. By testing different individual measures of risk at individual level, and GDP PC and GINI together with economic globalization at the country-year level, I have attempted to answer six hypotheses regarding the effects of these on the dependent variable GOVERNMENT RESPONSIBILITY.

##### **4.4.1 Rightist or Leftist Shift?**

The first hypothesis of this paper is H1: *Increased economic globalization leads to rightist welfare attitudes among citizens.* This hypothesis has its basis in the argument from rational choice theory that individuals will make rational choices, based on the information they have. In other words, they will act in their own self-interest (Downs 1957). Neoliberals argue that countries that open up their economy to global market forces will experience economic growth and prosperity. These assumptions combined lead me to believe that citizens in countries that experience high levels of economic globalization will develop more rightist attitudes, because of rising standards of living. When people make more money and the economy goes well, they are able to take care of themselves, and no longer have the need for extended social services. Economic prosperity can in other words make people feel that they are contributors to, rather than users of, the welfare state. If people start to feel that they do not gain as much from the welfare state as they get in return, they are prone to develop attitudes that correspond with individualism and less government responsibility.

This hypothesis is tested by adding the measure of ECONOMIC GLOBALIZATION in model 4. From model 4 we can see that this variable has a statistically significant negative effect, indicating that H1 is validated. However, when testing for hypothesis H2: *After a country reaches a certain level of competitiveness, the effect of economic*

*globalization on welfare attitudes will shift from leftist to rightist*, the quadratic term of ECONOMIC GLOBALIZATION is added in model 5, namely ECONOMIC GLOBALIZATION<sup>2</sup>. This is statistically significant and leads to changes in the effect of ECONOMIC GLOBALIZATION: this becomes positive, while the quadratic term becomes negative, indicating a curvilinear relationship here. This indicates that *H1* cannot be validated.

Hypothesis *H2* bases itself on the theories of comparative advantages and rational choice theory, and assumes a shift in welfare attitudes from leftist to rightist. Before a country becomes competitive on the global market, it will not profit much from the *internationalization* and *liberalization* that comes with economic globalization. As the citizens realize this, they may want to protect themselves against external shocks and offshoring of firms by supporting increased government responsibility, state intervention and a well-developed welfare state. Thus, this leads to leftist welfare attitudes. After a country have reached a certain level of competitiveness it will start to gain more from economic globalization, and as the citizens realize that their country is successful in the global market, they will develop more rightist attitudes that correspond with more individual responsibility, less state intervention and privatization of business.

The result from the ECONOMIC GLOBALIZATION-measures of model 5 shows that *H2* can be validated, as there is indeed a curvilinear relationship here. However, when examining this relationship in Figure 4.2, we are able to see that this is curvilinear relationship is not that strong. But the effect is still there, and it is statistically significant, and therefore I argue that *H2* can be validated.

Finding a rightist shift in welfare attitudes consequently invalidates hypothesis *H3: Increased economic globalization leads to leftist welfare attitudes among citizens*. This hypothesis had its basis in the compensation hypothesis, which, in short, states that globalization will lead to more support for welfare mechanisms because of the economic insecurity and volatility it brings. Walter (2010) found the compensation hypothesis to be valid in her analysis of Switzerland. On the other hand, previous research on the compensation hypothesis shows that this argument is controversial (e.g. Rehm 2009; Down 2007; Kim 2007; Iversen and Cusack 2000).

#### **4.4.2 Differences between winners and losers**

*H4: Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries;* was tested by adding GDP PC at country-year level in the analysis. The argument behind this hypothesis was that citizens of developing countries have less education and job security than citizens of developed countries. Because of this, citizens in developing countries might demand more welfare benefits from the government to protect them from the external risks of globalization. When added in model 4 GDP PC had a negative effect, indicating that the argument behind *H4* could be validated. However, this measure proved not to be statistically significant, and hypothesis *H4* can therefore not be validated.

By adding the interaction term between GDP PC and ECONOMIC GLOBALIZATION I was able to test whether the effect of economic globalization is different in countries with different degrees of GDP per capita. I used this measure as an indication of the difference in effect of globalization in developing and developed countries, given the assumption that developed countries have higher GDP per capita than developing countries.

The descriptive statistics presented in Figures 2.3–2.6 in chapter 2, indicated that there is indeed a difference in effect of economic globalization between developed and developing countries. The mean values of the dependent variable government responsibility were lower for developing countries, than for developed countries, indicating more leftist attitudes in developing countries, and more rightist attitudes in developed countries. The mean values of economic globalization indicated that developed countries are more integrated in the global market than developing countries.

The results from Model 5 confirm that the degree of economic globalization have different effects on developing and developed countries, which indicates that the effects of economic globalization on welfare attitudes might be more complex than a clean leftist or rightist shift in attitudes. The citizens of developed countries develop more rightist attitudes as the degree of economic globalization increases. For citizens of developing countries, the effect is reversed. Here, the public develops more leftist attitudes with higher levels of economic globalization. This result suggest that hypothesis *H5: Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations,* can be confirmed.

This indicates that the two first hypothesis of this thesis that argue for a rightist shift in attitudes with higher degrees of economic globalization is valid for developed countries, while the hypothesis *H3* with basis in the compensation hypothesis might be valid for developing countries. By this logic, the results might have been different if there were more developing countries included in the sample used in this analysis.

The two last hypotheses, *H6: Globalization losers have more leftist attitudes than globalization winners*, and *H7: The difference between globalization winners and losers will be largest in countries with a high degree of economic globalization*, is tested in model 8. To be able to identify globalization winners and losers, I used the measure of education as a proxy for skill-level. Walter (2010) argues that globalization losers will feel more insecure than globalization winners, and that they therefore demand more social protection.

With higher levels of economic globalization come higher levels of risks. I therefore hypothesise that the difference between winners and losers will be highest here. Globalization winners are high skilled, and are more prone to gain from globalization because they are in a position where they can sell their skills to the global market. Globalization losers, on the other hand, are more exposed to insecurity with higher levels of economic globalization, because the goods they produce can easily be replaced with imported goods from low-wage countries.

The results from model 8 show that both hypothesis *H6* and *H7* can be confirmed. The interaction term indicated that individuals with low skill-levels have more leftist attitudes than individuals with high skill-levels. However, as shown in Figure 4.4, the difference between these two groups is small. Despite this weak effect, *H7* can be confirmed since the effect is statistically significant.

### 4.4.3 Summary

Here I will briefly sum up the main findings presented in this thesis. The results from this multilevel analysis show that economic globalization has an effect on the public's welfare attitudes. There seem to be a rightist shift in attitudes towards welfare because of increased economic globalization, but this might be the case for developed countries only. For developing countries, there seem to be a leftist shift in attitudes with increased economic globalization. In general, globalization losers are more supportive towards government responsibility than globalization winners, and the difference between these two groups are largest in countries with high degrees of economic globalization.

**Table 4.3 - Summary of the Hypotheses II**

	<b>Supported</b>	<b>Not Supported</b>
<i>H1: Increased economic globalization leads to rightist welfare attitudes among citizens</i>		<b>X</b>
<i>H2: After a country reaches a certain level of competitiveness, the effect of economic globalization on welfare attitudes will shift from leftist to rightist</i>	<b>X</b>	
<i>H3: Increased economic globalization leads to leftist welfare attitudes among citizens</i>		<b>X</b>
<i>H4: Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries</i>		<b>X</b>
<i>H5: Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations</i>	<b>X</b>	
<i>H6: Globalization losers have more leftist welfare attitudes than globalization winners</i>	<b>X</b>	
<i>H7: The difference between globalization winners and losers will be largest in countries with a high degree of economic globalization</i>	<b>X</b>	

## ***4.5 Alternative Models***

In this part of the chapter I will discuss the sensitivity models I have performed to test the robustness of the results presented in the previous sections. I present four alternative models to ensure that minor changes of the variables or observations in the analysis does not change the results substantially: adding DEMOCRACY at country-year level, controlling for UNION MEMBERSHIP and JOB SECURITY at the individual level and two alternative measures (PRIVATE VS STATE OWNERSHIP OF BUSINESS and INCOME EQUALITY) of welfare attitudes as dependent variable. These sensitivity models deal with some of the limitations of the main analyses, and are performed to ensure that these limitations have not altered the results.

### **4.5.1 Controlling for Level of Democracy at Country-Year Level**

By adding the measures of GDP PC and GINI I attempt to separate developed countries from developing countries. GDP per capita was added to demonstrate the difference in welfare attitudes for countries with different levels of gross domestic product, while the standardized GINI Index was added to show the difference in welfare attitudes for countries with different levels of economic inequality. However, the difference between developed and developing countries constitute more than these to measures. In this alternative analysis I have added DEMOCRACY at the country-year level to investigate if the results change when controlling for level of democracy. The assumption behind this is that higher levels of democracy are a feature of developed nations, while developing nations have generally lower levels of democracy.

The variable DEMOCRACY ranges from 0–20, where 0 represents least democratic, and 20 represents most democratic. The measure is constructed by Hadenius and Teorell (2005), who have combined two democracy indexes – one from Freedom House and one from Polity. The variable DEMOCRACY is based on the scale from the Quality of Government Dataset (Teorell, Samanni, Holmberg and Rothstein 2011). The Freedom House index measures democracy along two dimensions: political rights and civil liberties. The two dimensions include different sub-dimensions. The sub-dimensions for political rights include various electoral aspects: the right of opposition parties to take part, the fairness of the electoral process, the real power attached to elective organs, and so on. The sub-dimensions for civil liberties embraces freedom for media and organizations, including political parties,

the right of assembly, the absence of political prisoners and of political control over the judiciary, and so on. Hadenius and Teorell (2005) argue that the components of the Freedom House index cover the entire range of basic democracy criteria, but that there are components that are dubious and irrelevant and do not belong among the basic procedural criteria of democracy. They conclude that the index performs poorly in the methodological area, but much better concerning validity.

The Polity index has two indicators: one for democracy and one for autocracy. Hadenius and Teorell (2005) present the index' strength in the methodological area, because of its disaggregated components. On the other hand, they criticize the index for the weak connection between operative measurements and basic democratic criteria. Despite critical notes on both indexes, Hadenius and Teorell (2005) conclude that these two indexes together construct are the best measure of democracy. They show that the two indices deviate in different ways, and therefore even out each other when they are combined. The combined index has a better fit than both of its individual components in terms of mean difference and spread (Hadenius and Teorell 2005).

As we can see from Table A5 in the appendix, controlling for level of democracy at the country-year level does not change the results of the analysis substantially. The coefficient of democracy shows that citizens in countries with higher levels of democracy are more negative towards government responsibility than citizens in countries with lower levels of democracy. However, this variable is not statistically significant, and this finding cannot be generalized to the population. Because of these results I conclude that the original analysis presented in this thesis did not suffer from omitting level of democracy at the country-year level.

#### **4.5.2 Controlling for Union Membership and Job Security at Individual Level**

As mentioned previously in chapter 3, I originally wanted to include a measure of union membership and job security at the individual level of this analysis. The reason for including this measure is that union members often tend to be more positive towards the welfare state than non-members. The measure of job security was thought to proxy the aspect of economic insecurity individuals are most likely to fear in the context of economic globalization, in accordance with Walter (2010: 414). Those who



emphasize job security as important in a job, are assumed to fear the economic insecurity that economic globalization brings, and are more prone to be globalization losers. The reason these variables are not included in my main analysis is that they were omitted from wave 2 and 3 of the WVS, drastically reducing my *N* at all three levels. However, I have included them in the sensitivity analysis presented here.

The measures of union membership and job security are two dummy variables. For UNION MEMBERSHIP the respondents with membership represent the value 1, while non-members are the reference category 0. For JOB SECURITY the respondents who emphasize the importance of job security have the value 1, while those respondents who did not mention job security as important are set as the reference category.

Adding UNION MEMBERSHIP and JOB SECURITY to the analysis reduces the sample from 184 779 cases to 30 742 cases at the individual level. When these two variables are included there is only 27 units at level 3, compared to 78 in the main analysis. Adding the variables does change the results (see Table A6 in the appendix), but because of the reduction in sample size, the results are not comparable to the main analysis.

#### **4.5.3 Different Measures of Welfare Attitudes**

One of the limitations of this thesis, that also Finseraas and Ringdal (2012) find problematic, is the issue of reducing the concept of welfare attitudes to one specific measure. In this thesis this specific measure is GOVERNMENT RESPONSIBILITY. I argue, in the same way as Walter (2010), that it is preferable to use a more general measure of welfare attitudes. My assumption is that a variable that measures attitudes towards government responsibility is able to cover more of the different aspects of welfare attitudes to a larger degree than for instance a variable measuring attitudes towards private versus state ownership of business. However, Kumlin (2007) states that it is difficult for people to assess their attitudes towards these general measures. This can turn into an issue of validity – are we really measuring what we want to measure? I have therefore done the analysis with two other measures as dependent variable that can be said to cover parts of the aspects of welfare attitudes: PRIVATE VS. STATE OWNERSHIP OF BUSINESS and INCOME EQUALITY.

I originally used PCA and the Cronbach's Alpha test to assess if PRIVATE VS. STATE OWNERSHIP OF BUSINESS, INCOME EQUALITY and GOVERNMENT RESPONSIBILITY

could be used as a scale. The PCA showed that they loaded on the same component (see Table A1 in appendix), but the Cronbach's Alpha test indicated low internal reliability (.282). This is logical, as the three variables in question each measure a different concept of welfare attitudes. The results from the sensitivity analyses also confirm that this might be the case.

The variable PRIVATE VS STATE OWNERSHIP OF BUSINESS ranges on a scale from 1–10, where the value 1 represents support for private ownership of business, while the value 10 represents support for state ownership. In other words, low values indicate favourability towards privatization, while high values indicate that the individual favours government ownership and/or control. The results from the analysis with PRIVATE VS STATE OWNERSHIP OF BUSINESS as the dependent variable are presented in Table A7 in the appendix. Here we can see that the results in general are the same, except for two variables. MARRIED now indicates that individuals that are a part of a two-income household have more leftist attitudes, supporting state ownership of business. Both GDP PC and GINI are now statistically significant, and the coefficient for GINI is now positive. This indicates that citizens of countries with high levels of inequality have more leftist attitudes.

The variable INCOME EQUALITY ranges on a scale from 1–10, where the value 1 represents support for larger income differences as incentives, while the value 10 represents support towards more income redistribution. The results from the analysis with income equality as the dependent variable are presented in Table A8 in the appendix. From this we can see that the results at the individual level are similar to the results from the main analysis. However, at the country-year level there are not many statistically significant results. ECONOMIC GLOBALIZATION is only significant in model 2, while GDP PC is significant model 4 and 7. The interactions between HIGH EDUCATION and the ECONOMIC GLOBALIZATION-measures are also significant in model 7.

As mentioned previously, the results from the analyses with different dependent variables indicate that the variables GOVERNMENT RESPONSIBILITY, OWNERSHIP OF BUSINESS and INCOME EQUALITY does not capture the same aspects of welfare attitudes. I therefore stand by the argument for using GOVERNMENT RESPONSIBILITY as a more general measure of welfare attitudes.

## 5 Conclusion

The overall research question of this thesis is *how does economic globalization affect welfare attitudes?* By using individual level data from the WVS and contextual data from the KOF Index of Globalization (Dreher et al. 2008), World Bank (2012) and SWIID (Solte 2009), I have been able to investigate the relationship between economic globalization and the public's economic left right attitudes with the use of multilevel modelling. This has led me to conclude that economic globalization does indeed affect welfare attitudes. In this section I will sum up how a contextual factor like globalization affects peoples' welfare attitudes.

### 5.1 Findings

Theory and previous research presented two opposing views on the effects of economic globalization. The compensation hypothesis argued for a leftist shift in attitudes, because the citizens demand protection against the external risks that come with increasing economic globalization (Walter 2010). Neoliberal thoughts on the relationship between economic globalization and growth, as well as rational choice theory constituted the basis of the opposing view. This argument was that because economic globalization leads to prosperity and economic growth, the citizens of economically globalized countries will become richer, and thus not needing the safety net of the welfare state (to the same degree as in less economically globalized societies). The evidence suggests that increased economic globalization leads to more rightist attitudes in the public, but also that the situation is more complex than that. Economic globalization seems to create a shift in attitudes from leftist to rightist, after a country reaches a certain level of competitiveness. Also, the effects of economic globalization on welfare attitudes seem to be different in developing and developed countries.

The theoretical basis of my first hypothesis: *Increased economic globalization leads to rightist welfare attitudes among citizens*, is the neoliberal argument that globalization leads to economic growth and prosperity (Scholte 2005). By the self-interest based logic of rational choice theory, individuals with high income level and/or future prospects of high levels will have more rightist welfare attitudes, rather than support more government responsibility and state intervention. This hypothesis

was invalidated as there was discovered a curvilinear effect of economic globalization on government responsibility.

The curvilinear effect of economic globalization confirmed my second hypothesis: *After a country reaches a certain level of competitiveness, the effect of economic globalization on welfare attitudes will shift from leftist to rightist.* This hypothesis assumed a shift from leftist to rightist attitudes, based on theories of comparative advantages and rational choice theory. Before a country becomes competitive on the world market, it does not gain from economic globalization. However, after a country reaches a certain level of competitiveness, it starts to gain from economic globalization and the citizens develop attitudes more rightist attitudes, as they realize that their country is successful in the global market competition.

The third hypothesis: *Increased economic globalization leads to leftist welfare attitudes among citizens,* argued for more leftist attitudes because of economic globalization with basis in the compensation hypothesis. This hypothesis states that increased economic globalization will lead to demands for an expanded welfare state to protect citizens from the risk of external shocks and volatility that might follow (Walter 2010). This hypothesis was not confirmed, as the evidence suggested that increased economic globalization leads to more rightist attitudes towards welfare.

The results from the analysis showed that the fourth hypothesis: *Individuals in developing countries will have more leftist welfare attitudes than individuals living in developed countries,* could not be confirmed. This was because the variable GDP PER CAPITA proved not to be statistically significant, and the results could therefore not be generalized to the population.

Furthermore, the hypothesis: *Economic globalization leads to leftist welfare attitudes for citizens in developing nations, and rightist welfare attitudes for citizens in developed nations,* was confirmed. It seems that even though both developing and developed nations might gain from economic globalization; it is the developing countries that get the rough end of the stick (Buckman 2004). With this in mind, it is possible that the compensation hypothesis might hold more ground with regards to developing countries.

The results proved that my sixth hypothesis: *Globalization losers have more leftist welfare attitudes than globalization winners* could be confirmed. In accordance with theory that emphasizes how globalization winners have lower risk levels than

globalization losers (Walter 2010), the results show that high-skilled individuals are more supportive towards individualism and less state intervention, while low-skilled individuals are more supportive towards government responsibility and an extensive welfare state.

As mentioned previously, the effect of individual factors can be strengthened by contextual factors, and this seems to be the case with the relationship between economic globalization and globalization winners and losers. In countries with high levels of economic globalization, the risks for globalization losers and the gains for globalization winners would be greater. Hypothesis seven: *The difference between globalization winners and losers will be largest in countries with a high degree of economic globalization* is therefore confirmed, although the difference in effect at higher levels of economic globalization was only slightly present.

Summing up, the evidence seems to point to some general conclusions: increased economic globalization has an effect on the public's welfare attitudes. There seems to be a rightist shift in attitudes towards welfare due to increased economic globalization. However, the results indicate that this is true for developed nations only. Citizens in developing countries seem to develop more leftist attitudes as the level of economic globalization increases. This might be because the public in developing countries in general are poorer than those of developed countries, and thus have stronger needs for the security that the welfare state can provide. In general, the evidence suggests that globalization losers are more supportive towards government responsibility and welfare benefits than globalization winners, and the difference between these two groups are slightly larger in highly economically globalized countries.

## ***5.2 Limitations and Further Research***

The findings presented in this thesis are based on data from several developing and developed countries. The sample consists of more developed than developing countries, and this have most likely affected the results. Therefore I am cautious about generalizing the findings of this thesis to the population. Another limitation I want to address is the classification of individuals as globalization winners or losers. I have used education as proxy for skill-level, thus emphasizing the factorial approach to this classification.

Walter (2010) argues that it is also important to draw on the sectoral approach to classify globalization winners and losers. The sectoral approach emphasizes how globalization can pose as a threat to individuals' jobs and wages. As mentioned previously, I wanted to use the Offshore Ability Index of Blinder (2007) to identify sectors of employment that are particularly vulnerable to offshoring. However, due to time limitations I was not able to create a measure of offshore ability based on this index. Further research would be well advised to implement both sectoral and factorial approaches to identify globalization winners and losers, to see if the differences indicated by this analysis are robust.

## References

- Adserá, Alicia and Charles Boix (2002) "Trade, Democracy, and the Size of the Public Sector: The Political Underpinnings of Openness" *International Organization*, 56 (2): 229–262.
- Bay, Ann-Helén (2000) "Teoretiske tilnærminger til studiet av den politiske opinionen" [Theoretical Approaches to the Study of Political Opinion] *Norsk statsvitenskapelig tidsskrift*, 16 (2): 134–150.
- Bernauer, Thomas and Christoph Achini (2000) "From 'Real' to 'Virtual' States?: Integration of the World Economy and its Effects on Government Activity" *European Journal of International Relations*, 6 (2): 223–276.
- Blekesaune, Morten and Jill Quadagno (2003) "Public Attitudes toward Welfare State Policies: A Comparative Analysis of 24 Nations" *European Sociological Review*, 19 (5): 415–427.
- Blinder, Alan (2007) "How Many U.S. Jobs Might be Offshoreable". CEPS Working Paper No. 142. Princeton, NJ: Center for Economic Policy Studies, Princeton University.
- Buckman, Greg (2004). *Globalization: Tame It or Scrap It?* London: Zed Books Ltd.
- Burgoon, Brian (2001) "Globalization and Welfare Compensation: Disentangling the Ties that Bind" *International Organization*, 55 (3): 509–551.
- Busemeyer, Marius R. (2009) "From myth to reality: Globalisation and public spending in OECD countries revisited" *European Journal of Political Research*, 48 (4): 455–482.
- Cafalonieri, Maria A and Kenneth Newton (1995) "Taxing and Spending: Tax Revolt or Tax Protest", in Ole Borre and Elinor Scarbrough (eds.) *The Scope of Government*. Oxford: Oxford University Press: 121–148.
- Cameron, David R. (1978) "The Expansion of the Public Economy: A Comparative Analysis" *The American Political Science Review*, 72 (4): 1243–1261.
- Campbell, Angus, Philip E Converse, Warren E. Miller and Donald E Stokes (1960) *The American Voter*. Chicago: University of Chicago Press.
- Claes, Dag Harald, Helge Hveem and Bent Sofus Tranøy (2012) *Global økonomi, krise og politisk styring*. Oslo: Universitetsforlaget.
- Cusack Thomas R., Torben Iversen and Philip Rehm (2006) "Risks at Work: The Demand and Supply Side of Government Redistribution" *Oxford Review of Economic Policy*, 22 (3): 365–389.
- Dallinger, Ursula (2010) "Public Support for Redistribution: What Explains Cross National Differences?" *Journal of European Social Policy*, 20 (4): 333–349.
- Down, Ian (2007) "Trade Openness, Country Size and Economic Volatility: The Compensation Hypothesis Revisited" *Business and Politics*, 9 (2): 1–17.
- Downs, Anthony (1957) *An Economic Theory of Democracy*. New York: Harper & Row.
- Dreher, Axel, Noel Gaston and Pim Martens (2008) *Measuring Globalisation Gauging Its Consequences*. New York: Springer.
- Elster, John (1989) *Nuts and Bolts for the Social Sciences*. Cambridge: Cambridge University Press.
- Finseraas, Henning (2008) "Income Inequality and Demand for Redistribution: A Multilevel Analysis of European Public Opinion" *Scandinavian Political Studies*, 32 (1): 94–119.
- Finseraas, Henning and Kristen Ringdal (2012) "Economic globalisation, personal risks and the demand for a comprehensive welfare state" in Heikki Ervasti,

- Jørgen Goul Andersen, Torben Friedberg and Kristen Ringdal (eds.) *The Future of the Welfare State – Social Policy Attitudes and Social Capital in Europe*. Cheltenham: Edward Elgar Publishing Limited: 68–87.
- Garrett, Geoffrey (2001) “Globalization and Government Spending around the World” *Studies in Comparative International Development*, 35 (4): 3–29.
- Garrett, Geoffrey and Deborah Mitchell (2001) “Globalization, government spending and taxation in the OECD” *European Journal of Political Research* 39 (2): 145–177.
- Hadenius, Axel and Jan Teorell (2005) “Assessing Alternative Indices of Democracy”, C&M Working Papers 6, IPSA, August 2005. Collected 01.03.13 from: <http://www.conceptsmethods.org/Files/WorkingPaper/PC%206%20Hadenius%20Teorell.pdf>
- Hamilton, Lawrence C. (1992) *Regression with Graphics*. Belmont, California: Duxbury.
- Hay, Colin (2002) *Political Analysis: A Critical Introduction*. Basingstoke: Palgrave.
- Hauser, Robert (1970) “Context and Consequence: A Cautionary Tale” *American Journal of Sociology*, 75 (4): 645–664.
- Held, David (2006) *Models of Democracy*. Cambridge: Polity Press.
- Held, David and Anthony McGrew (2002) *Globalization/Anti-Globalization*. Cambridge: Polity Press.
- Hicks, Alexander M. and Duane H. Swank (1992) “Politics, Institutions, and Welfare Spending in Industrialized Democracies, 1960–82” *The American Political Science Review*, 86 (6): 658–674.
- Hox, Joop J. (2010) *Multilevel Analysis*. New York: Routledge.
- Huseby, Beate M. (1995) “Attitudes towards the Size of Government” in Ole Borre and Elinor Scarbrough (eds.) *The Scope of Government*. Oxford: Oxford University Press: 87–118.
- Iversen, Torben and Thomas R. Cusack (2000) “The Causes of Welfare State Expansion: Deindustrialization or Globalization?” *World Politics*, 52 (3): 313–349.
- Jakobsen, Tor Georg (2011) “Education and the Zeitgeist: Government Positions and Public Opinion on Income Distribution” *European Political Science Review*, 3 (1): 103–124.
- Jakobsen, Tor Georg, Toril Aalberg og Ida Ørjansen Heggem (2012) “Makrofaktorer og offentlig opinion: En gjennomgang av forskning på økonomiske venstre høyre holdninger” [Macro Factors and Public Opinion: A Review of Research on Economic Left–Right Attitudes] *Sosiologisk tidsskrift*, 20 (4): 341–361.
- Jæger, Mats Meier (2006) “Welfare State Regimes and Attitudes towards Redistribution: The Regime Hypothesis Revisited” *European Sociological Review*, 22 (2): 157–170.
- Katzenstein, Peter (1985) *Small States in World Markets: Industrial Policy in Europe*. Ithaca, New York: Cornell University Press.
- Kim, So Young (2007) “Openness, External Risk, and Volatility: Implications for the Compensation Hypothesis” *International Organization*, 61 (1): 181–216.
- Kumlin, Staffan (2007) “The Welfare State: Values, Policy Preferences, a Performance Evaluations” in Russel J. Dalton and Hans-Dieter Klingemann (eds.) *The Oxford Handbook of Political Behavior*. Oxford: Oxford University Press: 362–382.
- Lewis-Beck, Michael and Mary Stegmaier (2007) “Economic Models of Voting” in Russel J. Dalton and Hans-Dieter Klingemann (eds.) *The Oxford Handbook of Political Behavior*. Oxford: Oxford University Press: 518–537.



- Monroe, Alan (1979) "Consistency between constituency preferences and national policy decisions" *American Politics Quarterly*, 12 (1): 3–19.
- Monroe, Alan (1998) "Public Opinion and public policy 1980–1993" *Public Opinion Quarterly*, 62 (1): 6–28.
- Moses, Jonathon and Torbjørn Knutsen (2007) *Ways of Knowing: Comparing Social a Political Research*. London: Palgrave.
- Muhl, Patrick (2007) *Swiss Issues Konjunktur: Lohnrunde 2008: Was Ist Zu Erwarten? [Swiss Issues Konjunktur: Wage Round 2008: What To Expect]* Zürich: Credit Suisse Economic Research.
- NUPI (2013) "Proteksjonisme" [Protectionism]. Collected 10.02.13 from: <http://hvorhenderdet.nupi.no/Ordforklaringer/Proteksjonisme>
- Ohlin, Bertil (2004 [1924]) "The Theory of Trade" in Robert W. Dimand (ed.) *The Origins of International Economics - Volume VI*. London: Routledge: 72–222 (Originally Published as *Handelns Teori*, Stockholm: Centraltryckeriet, 1924).
- Page, Benjamin I. and Robert Y. Shapiro (1983) "Effects of public opinion on policy" *American Political Science Review*, 77 (1): 175–190.
- Rehm, Philipp (2009) "Risks and Redistribution: An Individual-Level Analysis" *Comparative Political Studies*, 42 (7): 855–881.
- Ringdal, Kristen (2012) *Enhhet og Mangfold [Unity and Diversity]*. Bergen: Fagbokforlaget.
- Ringdal, Kristen (no date) Learning Multilevel Analysis. Collected 15.10.12 from: <http://essedunet.nsd.uib.no/cms/topics/multilevel/>
- Rodrik, Dani (1997) *Has Globalization Gone Too Far?* Washington DC: Institute for International Economics.
- Rodrik, Dani (1998) "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy*, 106 (5): 997–1032.
- Rodrik, Dani (2007). *One Economics, Many Recipes*. New Jersey: Princeton University Press.
- Rodrik, Dani (2011). *The Globalization Paradox*. New York: W.W. Norton & Company.
- Ruggie, John G. (1982) "International regimes, transactions, and change: embedded liberalism in the postwar economic order" *International Organization*, 36 (2): 379–415 .
- Sandmo, Agnar (2006) *Samfunnsøkonomi – en idéhistorie*. Oslo: Universitetsforlaget.
- Scholte, Jan Aart (2005) *Globalization – a critical introduction*. London: Palgrave Macmillan.
- Sears, David O. and Carolyn L. Funk (1991) "The role of self-interest in social and political attitudes" *Advances in Experimental Social Psychology*, 24 (1): 1–91.
- Solt, Frederick (2009) "Standardizing the World Income Inequality Database" *Social Science Quarterly*, 90 (2): 231–242.
- Steenbergen, Marci R. and Bradford S. Jones (2002) "Modeling Multilevel Data Structures" *American Journal of Political Science*, 46 (1): 218 – 237.
- Strabac, Zan (2007). "Flernivåanalyse" [Multilevel Analysis] i Andreas Eikemo og Tommy Høyvarde Clausen (eds.) *Kvantitativ analyse med SPSS*. Trondheim: Tapir akademisk forlag: 172–201.
- Svallfors, Stefan (2003) "Welfare Regimes and Welfare Opinions: A Comparison of Eight Western Countries" *Social Indicators Research*, 64 (3): 495–520.
- Swank, Duane and Sven Steinmo (2002) "The New Political Economy of Taxation in Advanced Capitalist Democracies", *American Journal of Political Science*, 46 (3): 642–655.

- Teorell, Jan, Marcus Samanni, Sören Holmberg and Bo Rothstein (2011) *The Quality of Government Dataset, version 6Apr11*. University of Gothenburg: The Quality of Government Institute.
- Valen, Henry and Daniel Katz (1964) *Political parties in Norway*. Oslo: Universitetsforlaget.
- van Oorschot, Wim (2006) "Making the Difference in Social Europe: Deservingness Perceptions among Citizens of European Welfare States" *Journal of European Social Policy*, 16 (1): 23–42.
- Walter, Stephanie (2010) "Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis" *International Studies Quarterly* 54 (2): 403–426.
- Winter, Søren and Poul Erik Mouritzen (2001) "Why people want something for nothing: the role of asymmetrical illusions" *European Journal of Political Research*, 39 (1): 109–143.
- Wlezien, Christopher and Stuart N. Soroka (2007) "The Relationship between Public Opinion and Policy" in Russel J. Dalton and Hans-Dieter Klingemann (eds.) *The Oxford Handbook of Political Behavior*. Oxford: Oxford University Press: 799–817.
- World Bank (2012) "World Development Indicators". Collected 08.09.12 from: <http://www.worldbank.org/indicator>
- World Bank (2013a) "GDP". Collected 04.05.13 from: <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>
- World Bank (2013b). "GINI Index". Collected 27.02.13 from: <http://data.worldbank.org/indicator/SI.POV.GINI>
- World Values Survey (2012) "European and World Values Surveys Four Wave Integrated Data File, 1981-2004, v.20060423, 2006. The European Values Study Foundation ([www.europeanvalues.nl](http://www.europeanvalues.nl)) and World Values Survey Association ([www.worldvaluessurvey.org](http://www.worldvaluessurvey.org)).
- Aalberg, Torill (2003) *Achieving Justice: Comparative Public Opinion on Income Distribution*. Leiden: Brill.
- Aaberge, Rolf and Petter Laake (1984) "Om statistiske teorier for tolkning av data" [On Theories for Statistical Interpretation of Data], *Tidsskrift for Samfunnsforskning*, 25: 165–186.

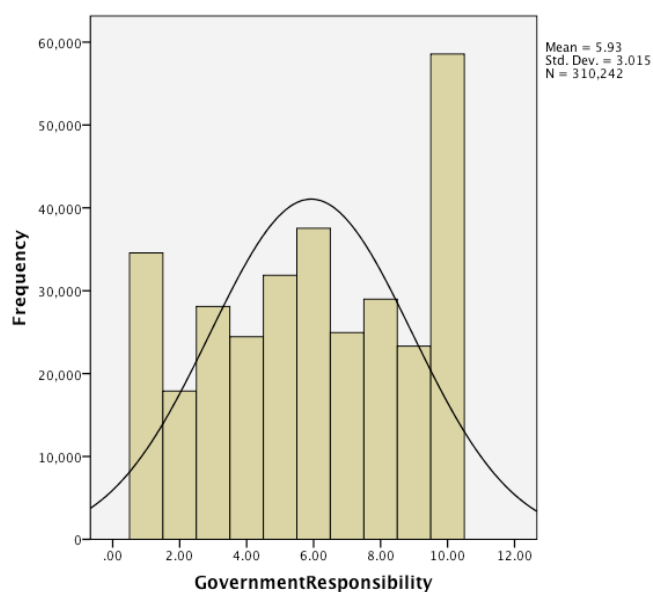
## Appendix

**Table A1 – Component Matrix for PCA of Scale of Welfare Attitudes**

Variables	
Income Equality	.541
Ownership of Business	.586
Government Responsibility	.779

Note: Since only one component was extracted the components could not be rotated. I therefore present the component matrix as an alternative measure.

**Figure A1 – Frequency Distribution of GOVERNMENT RESPONSIBILITY**



**Table A2 – Tolerance Values**

Variables	
Woman	.940
Age	.851
High Education	.899
Income	.858
Social Trust	.952
Married	.909
Employed	.856
Economic Globalization	.538
GDP PC	.452
GINI	.775

Note: The tolerance value of each X-variable is the proportion of its variance that is not shared with other X-variables. If tolerance values are lower than 0.2 or 0.1, the result of the analysis becomes less stable (Hamilton 1992: 134). The inclusion of interaction terms in a model is often a cause of multicollinearity (Hamilton 1992: 107). Since the interactions in the final models are a significant improvement of the former models, I accept the increased multicollinearity they cause, and therefore I have not reported their tolerance values.

**Table A3 – Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	<b>Model 6</b>
Constant	2.178 (3.448)
<b>Individual level</b>	
Woman	.143*** (.014)
Age	.002*** (.001)
High Education	-.198*** (.017)
Income	-.113*** (.003)
Social Trust	-.040** (.016)
Married	-.027* (.015)
Employed	-.106*** (.015)
<b>Country-year level</b>	
Economic Globalization	.128 (.144)
Economic Globalization <sup>2</sup>	-.000 (.000)
GDP PC	.591 (.391)
GINI	-.011 (.010)
GDP PC*Economic Globalization	-.015 (.015)
GDP PC*Economic Globalization <sup>2</sup>	.000 (.000)
<b>Random Effects</b>	
$s_c^2$	8.002
$s_u^2_0$	.488
$s_v^2_0$	.218
-2LL	-454 681
-2LL change	.000

Note: \*\*\* = p<0.01, \*\* = p<0.05, \* = p<0.1.  $s_c^2$  = variance of level-1 residual,  $s_u^2_0$  = variance of level-2 residual,  $s_v^2_0$  = variance of level-3 residual.

**Table A4 – Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	<b>Model 7</b>
Constant	1.860 (14.30)
<b>Individual level</b>	
Woman	.143*** (.014)
Age	.002*** (.001)
High Education	-.198*** (.017)
Income	-.113*** (.003)
Social Trust	-.040** (.016)
Married	-.027* (.015)
Employed	-.106*** (.015)
<b>Country-year level</b>	
Economic Globalization	.064 (.251)
Economic Globalization <sup>2</sup>	-.000 (.000)
GDP PC	.768 (3.436)
GDP <sup>2</sup>	-.015 (.203)
GINI	-.012 (.010)
GDP PC*Economic Globalization	-.002 (.058)
GDP PC <sup>2</sup> *Economic Globalization	-.001 (.003)
<b>Random Effects</b>	
$s_c^2$	8.002
$s_u^2$	.490
$s_v^2$	.213
-2LL	-454681
-2LL change	.320

Note: \*\*\* =  $p < 0.01$ , \*\* =  $p < 0.05$ , \* =  $p < 0.1$ .  $s_c^2$  = variance of level-1 residual,  $s_u^2$  = variance of level-2 residual,  $s_v^2$  = variance of level-3 residual.

**Table A5 – Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	5.967*** (.101)	6.479*** (.102)	7.586*** (.282)	6.200*** (.580)	7.122*** (1.126)	1.968 (2.032)	3.121 (3.474)	7.133*** (1.128)
<b>Individual level</b>								
Woman		.143*** (.014)	.143*** (.014)	.143*** (.014)	.143*** (.014)	.143*** (.014)	.143*** (.014)	.141*** (.014)
Age		.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)	.002*** (.001)
High Education		-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.198*** (.017)	-.385*** (.123)
Income		-.113*** (.003)	-.113*** (.003)	-.112*** (.003)	-.112*** (.003)	-.113*** (.003)	-.113*** (.003)	-.113*** (.003)
Social Trust		-.041*** (.016)	-.041** (.016)	-.040** (.016)	-.040** (.016)	-.040** (.016)	-.040** (.016)	-.048*** (.016)
Married		-.027* (.015)	-.027* (.015)	-.027* (.015)	-.027* (.015)	-.027* (.015)	-.027* (.015)	-.030** (.015)
Employed		-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.106*** (.015)	-.105*** (.015)
<b>Country-year level</b>								
Economic Globalization			-.019*** (.001)	.036* (.020)	.039* (.020)	.127*** (.036)	.069 (.148)	.039* (.021)
Economic Globalization <sup>2</sup>				-.001*** (.000)	-.000** (.000)	-.000 (.000)	.000 (.000)	-.001*** (.000)
Democracy					-.048 (.035)	-.049 (.034)	-.052 (.035)	-.048 (.035)
GDP PC					-.057 (.118)	.654** (.263)	.537 (.389)	-.054 (.119)
GINI					-.008 (.010)	-.013 (.010)	-.013 (.010)	-.008 (.010)
GDP PC*Economic Globalization						-.015*** (.005)	-.008 (.045)	
GDP PC*Economic Globalization <sup>2</sup>							-.000 (.000)	
High Education*Economic Globalization								-.002 (.004)
High Education*Economic Globalization <sup>2</sup>								.000** (.000)
<b>Random Effects</b>								
$s_e^2$	8.108	8.002	8.002	8.002	8.002	8.002	8.002	8.000
$s_u^2_0$	.511	.497	.506	.490	.491	.485	.487	.358
$s_v^2_0$	.492	.457	.309	.282	.257	.210	.207	.132
-2LL	-455911	-454697	-454689	-454686	-454684	-454680	-454680	-454652
-2LL change		2427.61***	15.14***	7.22**	3.25	8.57 ***	0.17	63.49***

Note: \*\*\* = p<0.01, \*\* = p<0.05, \* = p<0.1.  $s_e^2$  = variance of level-1 residual,  $s_u^2_0$  = variance of level-2 residual,  $s_v^2_0$  = variance of level-3 residual.

**Table A6 – Random Intercept Model with GOVERNMENT RESPONSIBILITY as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	6.240*** (.185)	6.771*** (.193)	7.237*** (.635)	7.272*** (1.643)	7.336*** (2.171)	.027 (5.886)	9.852 (13.30)	7.528*** (2.184)
<b>Individual level</b>								
Woman		.119*** (.035)	.120*** (.035)	.120*** (.035)	.119*** (.035)	.119*** (.035)	.119*** (.035)	.114*** (.035)
Age		.002 (.001)	.002 (.001)	.002 (.001)	.002 (.001)	.002 (.001)	.002 (.001)	.002 (.001)
High Education		-.239*** (.046)	-.239*** (.046)	-.239*** (.046)	-.239*** (.046)	-.239*** (.046)	-.240*** (.046)	-1.094*** (.390)
Income		-.110*** (.008)	-.110*** (.008)	-.110*** (.008)	-.110*** (.008)	-.110*** (.008)	-.110*** (.008)	-.112*** (.008)
Social Trust		-.001 (.042)	-.002 (.042)	-.003 (.042)	-.002 (.042)	-.002 (.042)	-.002 (.042)	-.012 (.042)
Married		.013 (.039)	.012 (.039)	.012 (.039)	.012 (.039)	.012 (.039)	.012 (.039)	.007 (.039)
Employed		-.144*** (.037)	-.144*** (.037)	-.144*** (.037)	-.144*** (.037)	-.144*** (.037)	-.143*** (.037)	-.144*** (.037)
Union Member		-.097 (.062)	-.097 (.062)	-.097 (.062)	-.097 (.062)	-.097 (.062)	-.098 (.062)	-.099 (.062)
Job Safety		-.057 (.036)	-.057 (.036)	-.057 (.036)	-.057 (.036)	-.057 (.036)	-.056 (.036)	-.053 (.036)
<b>Country-year level</b>								
Economic Globalization			-.009 (.011)	-.010 (.060)	-.005 (.062)	-.005 (.074)	-.360 (.508)	-.011 (.062)
Economic Globalization <sup>2</sup>				-.000 (.001)	-.000 (.001)	.001 (.001)	.005 (.001)	-.000 (.001)
GDP PC					.057 (.217)	1.357 (1.000)	.269 (1.652)	.060 (.218)
GINI					-.016 (.021)	-.012 (.020)	-.017 (.021)	-.016 (.021)
GDP PC*Economic Globalization						-.024 (.018)	.021 (.058)	
GDP PC*Economic Globalization <sup>2</sup>							-.000 (.001)	
High Education*Economic Globalization								.020 (.014)
High Education*Economic Globalization <sup>2</sup>								-.000 (.000)
<b>Random Effects</b>								
$s_e^2$	8.911	8.803	8.803	8.803	8.803	8.803	8.803	8.797
$s_{u_0}^2$	.457	.434	.425	.425	.412	.386	.377	.416
$s_{v_0}^2$	.457	.434	.425	.425	.412	.386	.377	.416
-2LL	-77305	-77118	-77118	-77118	-77117	-77116	-77116	-77107
-2LL change		374.89***	0.59	0.000	0.85	1.71	0.67	19.57***

**Table A7 – Random Intercept Model with PRIVATE VS STATE OWNERSHIP OF BUSINESS as Dependent Variable. Regression Coefficients with Standard Errors in Parentheses.**

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	5.215*** (.101)	5.565*** (.103)	5.836*** (.282)	4.966*** (.552)	6.132*** (1.113)	.903 (1.874)	-.084 (3.015)	6.033*** (1.116)
<b>Individual level</b>								
Woman		.351*** (.014)	.351*** (.014)	.351*** (.014)	.351*** (.014)	.351*** (.014)	.351*** (.014)	.348*** (.014)
Age		.003*** (.001)	.003*** (.001)	.003*** (.001)	.003*** (.001)	.003*** (.001)	.003*** (.001)	.003*** (.001)
High Education		-.363*** (0.0179)	-.363*** (0.0179)	-.363*** (0.0179)	-.363*** (0.0179)	-.363*** (0.0179)	-.363*** (0.0179)	-.075 (0.124)
Income		-.115*** (.003)	-.115*** (.003)	-.115*** (.003)	-.115*** (.003)	-.115*** (.003)	-.115*** (.003)	-.115*** (.003)
Social Trust		-.055*** (.016)	-.055*** (.016)	-.055*** (.016)	-.055*** (.016)	-.054*** (.016)	-.054*** (.016)	-.066*** (.016)
Married		.050*** (.015)	.050*** (.015)	.050*** (.015)	.050*** (.015)	.050*** (.015)	.050*** (.015)	.044*** (.015)
Employed		-.072*** (.015)	-.072*** (.015)	-.072*** (.015)	-.072*** (.015)	-.072*** (.015)	-.072*** (.015)	-.071*** (.015)
<b>Country-year level</b>								
Economic Globalization			-.005 (.005)	.031 (.020)	.023 (.020)	.118*** (.033)	.170 (.128)	.029 (.019)
Economic Globalization <sup>2</sup>				-.000* (.000)	-.000 (.000)	.000 (.000)	-.000 (.001)	-.000 (.000)
GDP PC					-.233** (.107)	.488** (.235)	.593* (.345)	-.231** (.107)
GINI					.021** (.010)	.016* (.010)	.016* (.010)	.022** (.010)
GDP PC*Economic Globalization						-.015*** (.005)	-.021 (.014)	
GDP PC*Economic Globalization <sup>2</sup>							.000 (.000)	
High Education*Economic Globalization								-.025*** (.005)
High Education*Economic Globalization <sup>2</sup>								.000*** (.000)
<b>Random Effects</b>								
$s_e^2$	7.692	7.530	7.530	7.530	7.529	7.530	7.530	7.522
$s_{u_0}^2$	.194	.208	.215	.214	.216	.220	.218	.212
$s_{v_0}^2$	.610	.566	.536	.509	.408	.324	.328	.416
-2LL	-397113	-395373	-395373	-395371	-395365	-395360	-395360	-395282
-2LL change		3479.50***	0.98	3.33	11.37***	10.68***	0.17	167.50***

Note: \*\*\* = p<0.01, \*\* = p<0.05, \* = p<0.1.  $s_e^2$  = variance of level-1 residual,  $s_{u_0}^2$  = variance of level-2 residual,  $s_{v_0}^2$  = variance of level-3 residual.



**Table A8 – Random Intercept Model with INCOME EQUALITY as Dependent Variable.  
Regression Coefficients with Standard Errors in Parentheses.**

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	5.078*** (.102)	5.604*** (.106)	5.094*** (.309)	5.161*** (.636)	2.387** (1.198)	3.164 (2.208)	6.497* (3.635)	2.316* (1.196)
<b>Individual level</b>								
Woman		.110*** (.014)	.110*** (.014)	.110*** (.014)	.110*** (.014)	.110*** (.014)	.110*** (.014)	.109*** (.014)
Age		.004*** (.001)	.004*** (.001)	.004*** (.001)	.004*** (.001)	.004*** (.001)	.004*** (.001)	.004*** (.001)
High Education		-.387*** (.018)	-.387*** (.018)	-.387*** (.018)	-.387*** (.018)	-.387*** (.018)	-.387*** (.018)	-.075 (.124)
Income		-.129*** (.003)	-.129*** (.003)	-.129*** (.003)	-.129*** (.003)	-.129*** (.003)	-.129*** (.003)	-.129*** (.003)
Social Trust		.166*** (.016)	.166*** (.016)	.166*** (.016)	.166*** (.016)	.166*** (.016)	.166*** (.016)	.162*** (.016)
Married		-.053*** (.015)	-.053*** (.015)	-.053*** (.015)	-.053*** (.015)	-.053*** (.015)	-.053*** (.015)	-.054*** (.015)
Employed		-.133*** (.015)	-.133*** (.015)	-.133*** (.015)	-.134*** (.015)	-.134*** (.015)	-.134*** (.015)	-.133*** (.015)
<b>Country-year level</b>								
Economic Globalization			.009* (.005)	.006 (.023)	.009 (.021)	-.004 (.039)	-.173 (.151)	.013 (.021)
Economic Globalization <sup>2</sup>				-.000 (.000)	-.000 (.000)	-.000 (.000)	.002 (.000)	-.000 (.000)
GDP PC					.409*** (.115)	.303 (.280)	-.047 (.413)	.408*** (.115)
GINI					-.011 (.011)	-.012 (.011)	-.013 (.011)	-.015 (.011)
GDP PC*Economic Globalization						0.002 (.005)	.020 (.016)	
GDP PC*Economic Globalization <sup>2</sup>							-.000 (.000)	
High Education*Economic Globalization								-.016*** (.005)
High Education*Economic Globalization <sup>2</sup>								.000*** (.000)
<b>Random Effects</b>								
$s_e^2$	8.248	8.077	8.077	8.077	8.077	8.077	8.077	8.076
$s_u^2_0$	.432	.454	.449	.449	.441	.444	.439	.441
$s_v^2_0$	.512	.502	.483	.481	.359	.353	.352	.358
-2LL	-435731	-433891	-433890	-433890	-433882	-433882	-433882	-433869
-2LL change		3679.23***	3.05*	0.01	15.09***	0.17	1.33	26.64***

Note: \*\*\* = p<0.01, \*\* = p<0.05, \* = p<0.1.  $s_e^2$  = variance of level-1 residual,  $s_u^2_0$  = variance of level-2 residual,  $s_v^2_0$  = variance of level-3 residual.