NORGES HANDELSHØYSKOLE

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Inequality, Redistribution and Racial Heterogeneity

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NORGES HANDELSHØYSKOLE

Abstract

Standard models of electoral competition predict that countries with large income differences will have a high degree of redistribution. Empirical evidence, on the other hand, finds the opposite relationship to be true. The inverse relationship between income inequality and redistribution is known as the "redistribution puzzle". In this paper we explore possible explanation to this puzzle by focusing on differences between the US and Europe. Our empirical analysis shows that racial diversity serves as an important explanation to the puzzle. Based on data from the General Social Survey (GSS) we find that racial diversity, in addition to having a direct negative impact on support for welfare also has an indirect effect on welfare support by affecting important behavioural and psychological factors. We find that a high degree of racial heterogeneity is associated with lower levels of trust and negative perceptions about the poor. Our analysis further suggests that contact across races might contribute to reduce negative attitudes, and increase the support for welfare. However, the causality of this relationship is unclear.

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1. Introduction

The relationship between income inequality and redistribution has puzzled scientists for decades, and the topic has been subject to a vast body of research. Launching the 2008 OECD report "Growing Unequal?" OECD Secretary-General Angel Gurría warned about the dangers posed by inequality and the need for governments to tackle it. "Growing inequality is divisive (…). It polarizes societies, it divides regions within countries, and it carves up the world between rich and poor" (Gurria, 2008). The world has seen recent decades of rapid growth, but the fruits of this economic growth have not been equally divided–neither between nor within countries. An important function of the welfare state is thus to redistribute income from rich to poor through monetary and non- monetary transfers. From a normative perspective, it can be argued that countries with a high degree of income inequality should have more extensive redistribution schemes than more egalitarian countries in order to even out income differences.

Economic theory also predicts that income inequality will lead to more redistribution. Standard models of electoral competition state that countries with many poor voters (high income inequality) will experience a high political pressure for increased redistribution. A similar prediction can be found in the optimal tax literature, where the optimal tax rate is increasing in the degree of inequality.

However, empirical findings do not support these predictions. In fact, the opposite relationship is documented in several studies – that countries with low income inequality redistribute income amongst their citizens on a much larger scale than countries with a more unequal income distribution. Norway, a country with a relatively equal income distribution, is among the most generous welfare states and has a high level of redistribution. The US on the other hand, is much more unequal in terms of income distribution and has a relatively low level of redistribution.

It seems like a paradox that countries with low levels of inequality redistribute income on a much larger scale than countries that are more unequal when it comes to distribution of income. There exists a rich literature seeking to explain this puzzle.

In this paper we wish to gain a better understanding of the relationship between income inequality and the degree of redistribution by the government. In the first part of the paper we revisit previous studies and give a literature review of possible explanations to what is often referred to as the "redistribution puzzle" (the inverse relationship between inequality and redistribution). We have a special focus on the US-Europe difference, and use these two regions to illustrate the different theories and explanations.

The research purpose for the first part of the paper can be formulated as follows:

To gain a better understanding of the reasons behind different redistribution levels across countries, in order to explain the redistribution puzzle.

An interesting observation is that racially and ethnically[1] homogenous countries tend to redistribute income on a much larger scale than more heterogeneous countries. Racial and ethnic diversity is found to be a strong predictor of differences in social spending between the US and Europe, as well as differences within the US. Motivated by this relationship we want to explore the reasons behind the negative effect of race and ethnic heterogeneity on the level of redistribution. The research purpose for the second part of this paper can be formulated as follows:

To gain a better understanding of the importance of racial and ethnic diversity as factors affecting redistribution policies.

More explicitly we wish to gain an understanding of the underlying mechanisms through which racial and ethnic diversity affect redistribution policies. Several studies have documented the inverse relationship between ethnic and racial fragmentation and the generosity of public spending. However, there is limited evidence on the *forces* behind this relationship. We will in the second part of the paper try to find out *in what way* race and ethnic heterogeneity affect the willingness to redistribute income.

[1] Ethnic heterogeneity often refers to heterogeneity of factors like religion, language and race. Different papers use different combination of factors in order to measure ethnic heterogeneity. As we have a special focus on the US-Europe differences, and conditions within the US, we emphasize race as a more important dividing factor. In the US racial cleavage has served as a much bigger dividing factor than linguistic differentiation and religion. E.g. blacks and whites often speak the same language and belong to the same religion.

Our main questions concerning the subject of racial and ethnic diversity and redistribution are:

(1) Can racial and ethnic diversity help explain the different redistribution policies in Europe and the US? [2]
(2) How does ethnic and racial diversity affect individuals' support for redistribution?
    a. What role do factors like trust, solidarity, identification and prejudice vis-à-vis other ethnic and racial groups play in the formation of a welfare state?
    b. How does geographical proximity and social interaction affect attitudes towards people of another race or ethnic group?

Our paper is based on previous literature and empirical findings, as well as our own empirical analysis. By using data from General Social Survey (GSS) we investigate the relationship between racial diversity and behavioural and psychological factors and its effect on the support for welfare.

Prediction

Our prediction is that there will be a lower support for redistributive policies in communities where ethnic and racial fragmentation is high. We believe possible explanations for this can be linked to racial prejudice, difficulties of establishing trust in more heterogeneous societies and a lack of identification across races. Further we predict geographical segregation to intensify these behavioural and psychological factors, and hence harm the support for redistribution. Relatedly, we believe that social interaction and geographical proximity to people of a different race will contribute in the formation of more positive attitudes.

Findings

The data from our empirical analysis lend support to the prediction that racial heterogeneity has a negative effect on support for welfare and redistribution. Our analysis further suggests that racial fragmentation has an indirect effect on support for welfare by affecting e.g. attitudes towards poor, the level of trust, formation of in- and out-groups and preferences. In our regressions we find that racial fragmentation is associated with lower levels of trust and a

[2] By Europe we refer to Western-European countries

higher tendency to blame the individual for being poor. Racial prejudice seems to be an underlying factor in explaining these negative relationships.

On the issue of geographical segregation and contact our findings suggest that that geographical proximity and social interaction between blacks and whites in the US help break down stereotypes and form more positive attitudes. Positive attitudes towards blacks are found to have a positive effect on the willingness to support welfare

The rest of the paper is organized as follows: In sections 2 and 3 we introduce some concepts that are important in understanding the redistribution puzzle e.g. what we mean by inequality and different measures of redistribution. In addition we give an overview of recent trends in inequality and governmental spending across countries. In sections 4 and 5 we introduce the redistribution puzzle and present some well known theories developed to explain the paradox.

Section 6 is dedicated to exploring the effect of racial and ethnic heterogeneity on redistribution policies. We run several regressions where we focus on some of the underlying mechanisms we believe are important in explaining the connection between ethnic and racial heterogeneity and redistribution. In the end of this section we look at how the findings within the US help explain the US-Europe differences in welfare levels. In Section 7 we present some possible challenges for the European welfare state related to the findings from our empirical analysis.

Finally, in section 8 we give a summary of the paper and suggest possible topics for future research. The Appendix contains figures and description of data used in the paper.

2. Income Inequality

As the motivation for this paper is the inverse relationship between inequality and redistribution, known as "the redistribution puzzle", it can be useful to get a better understanding of what we mean by inequality in a society. What is inequality and how is it measured? What are the recent trends? Why do we care about inequality?

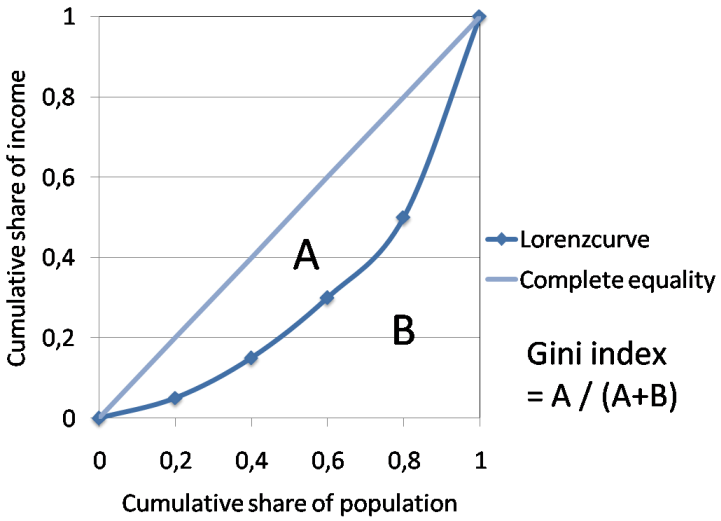
2.1 How to Measure Inequality

Most of us will agree that the US is a more unequal society than Norway. But how do we know this? And what do we mean by "more unequal"? Perhaps something like "a smaller share of the population own more of the country's resources in the US than in Norway" or "there is a larger difference between being poor and being rich in the US than in Norway" Because there are many ways to interpret "more unequal" we need to specify what we mean when we use the term.

One of the most common measures of inequality is the Gini index. The Gini index measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality (everyone having exactly the same income), while an index of 100 implies perfect inequality (where one person has all the income, while everyone else has zero income). The Gini measure can also be expressed as a coefficient between 0 and 1. Figure 1 shows a graphical illustration of the Gini coefficient. [3]

[3] For more info on the Gini index see the OECD "Glossary of Statistical Terms", available at http://stats.oecd.org/glossary/detail.asp?ID=4842 (10.06.09)

Figure 1: Illustration of the Gini Index



Even though the Gini index is a widely accepted measure for inequality, it is important to have in mind the limitations of the measure. One of the problems is that economies with similar incomes and Gini coefficients can still have very different income distributions. This is because the Lorenz curves can have different shapes and still yield the same Gini coefficient. Second, the Gini index gives maximum weight to the people who are clustered around the mode of an income distribution, making it an unsuitable measure if we wish to give greater importance to the most poor. (Shah, 2005 and United Nations, 2003)

Another way to measure inequality is by looking at the ratio of x % richest to poorest x %. As the Gini coefficient gives more weight to middle-income groups and less to the extremes, it can therefore be useful to take a look at the gap between the incomes of the very richest and the very poorest in order to get a better picture of the actual inequality in society.

Table 1 show a summary of different inequality measures for selected OECD countries.

Table 1: Different Inequality Measures, OECD

Country	(1) R/P 20 % (UN)[a]	(2) R/P 10 % UN)[a]	(3) Gini index (UN)[b]	(4) Gini index (OECD)[b]
Norway	3,9	6,1	25,8 (2000)	28
Sweden	4,0	6,2	25,0 (2000)	23
Denmark	4,3	8,1	24,7 (1997)	23
Germany	4,3	6,9	28,3 (2000)	30
France	5,6	9,1	32,7 (1995)	28
United Kingdom	7,2	13,8	36,0 (1999)	34
United States	8,4	15,9	40,8 (2000)	38

Notes:

a) Data show the ratio of the income or expenditure share of the richest group to that of the poorest. Column 1 show ratio of richest 20 % to poorest 20 % and column 2 show ratio of richest 10 % to poorest 10 %

b) The Gini indexes from the UN are calculated based on data from 1995 to 2000. The data from OECD are from the mid-2000s, and is rounded to 0 decimals. Both Gini measures are post tax and transfers.

Source: Column 1-3: United Nations (2008). Column 4: OECD Income distribution database.

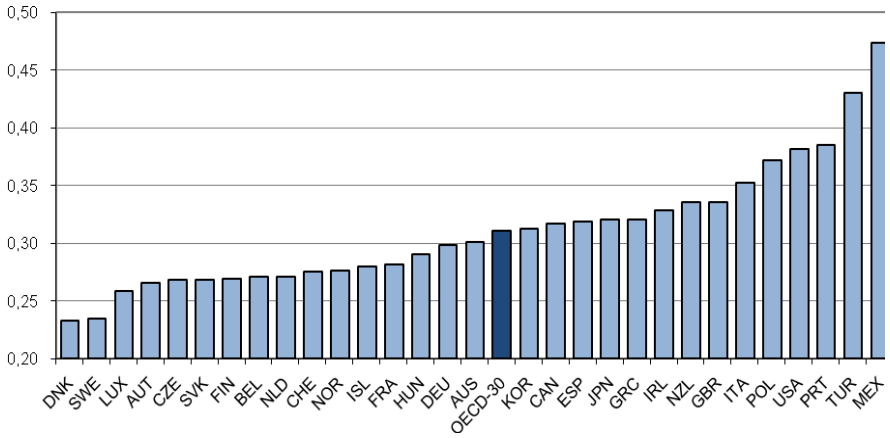
From the table we see that Norway in ranked as the most equal country in the sample when we look at the ratio between the richest and the poorest (column 1 and 2). In Norway the 20 percent richest have an income about 4 times higher than the 20 percent poorest in the country. This ratio is much lower than for the US, where the 20 percent richest have an income that is over 8 times higher than the income of the poorest 20 percent. Looking at the 10 percent richest compared to the 10 percent poorest gives almost the same ranking, with the US standing out as the most unequal country in the sample.

The Gini index for the Scandinavian countries are much lower than for the US, and Norway is ranked as number three after Sweden and Denmark. The United Kingdom has the highest Gini index out of the European countries. The two different Gini measures are obtained from different data sources, and reflect inequality at slightly different points in time. The OECD statistics are the most updated, as show a slight increase in inequality for Norway (from 25.8 to 28). However, it still shows a significant gap between the Scandinavian countries and the US.

Figure 2 is a graphical illustration of the differences in Gini coefficients for all OECD countries, compared to the OECD average (represented by the darker bar). As seen from the figure Denmark and Sweden are the countries with the most equal income distribution, while

the US is ranked as number 27 out of the 30 OECD countries. Norway is ranked as number 11, and is more equal than the OECD average.

Figure 2: Gini Coefficient of Income Inequality in OECD Countries (Mid-2000s)



Note: Countries are ranked, from left to right, in increasing order of the Gini coefficient. The income concept used is that of disposable household income in cash, adjusted for household size with an elasticity of 0.5. The Gini coefficient is post tax and transfers. Source: OECD (2008a)

While most studies of inequality focus of income, inequality can also be calculated based on other measures of well-being, like wealth and consumption. Wealth or consumption have the advantage that they are less subject to short term income shocks, and the inequality of lifetime earnings is probably more important than the inequality of transitory earnings. However, because wealth and consumption data are more difficult to obtain than data on income, most of the empirical work focus on inequality of annual income.

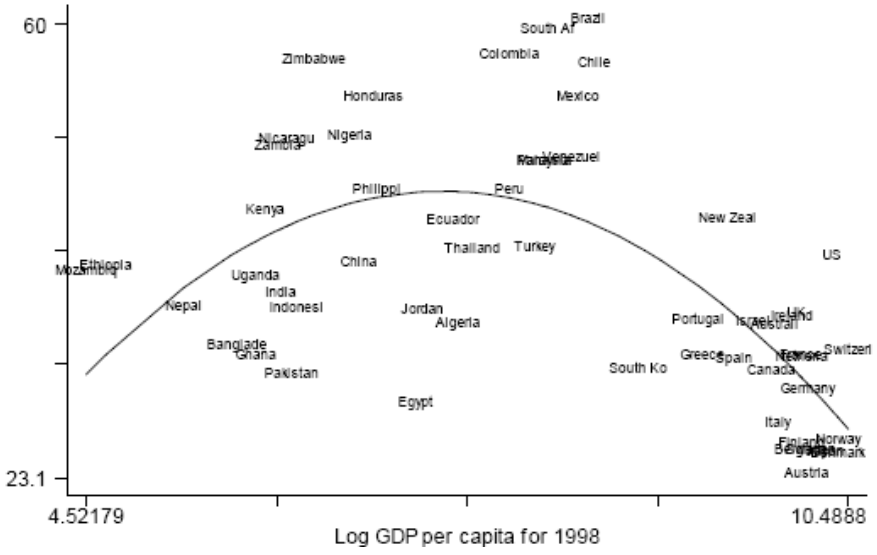
Other, more indirect measures of inequality, consider the skill premium, minimum wage and labour market regulation. All these factors reveal something about the degree of inequality in a society.

As different measures of inequality tend to be highly correlated, empirical studies that use these different measures often produce quite similar results (Glaeser 2005). In this paper we mainly focus on income inequality and the Gini index as a measure of inequality in society. It has the advantage that it is simple and can easily be interpreted. The Gini coefficient can also be used to indicate how the distribution of income changes within a county over a period of time, and it is therefore possible to see if inequality is increasing or decreasing.

2.2 Theories on Income Inequality

There a many theories on the relationship between income and inequality. Perhaps the most famous relationship is the Kuznets (1955) curve, shown in Figure 3. The figure shows how income inequality first rises and then falls as countries get richer.

Figure 3: The Kuznets Curve



Source: Glaeser (2005)

The Kuznets curve is the graphical representation of Simon Kuznets's theory (Kuznets hypothesis) that economic inequality increases over time while a country is developing, then after a critical average income is attained, begins to decrease

The curve can be interpreted in the following way: In early stages of development, when investment in physical capital is the main mechanism of economic growth, inequality encourages growth by allocating resources towards those who save and invest the most. In more mature economies human capital takes the place as the main source of growth. Inequality thereby slows economic growth by lowering education standards because poor people are unable to finance their education in imperfect credit markets.

The Kuznets curve is not just an economic phenomenon; it also reflects political factors (Glaeser, 2005). The transition from an agrarian sector to urban industrialization leads to a

growth in income inequality as income in agriculture is relatively low compared to income earned in the city. In addition there is more income inequality within the industrialized cities, where there is a divide in income levels between e.g. industrial workers and factory owners.

The general pattern in industrializing nations is that there is little public effort to redistribute during the early stages of industrialization. In this period, traditional private providers of charity (churches, charities, families) are expected to look after people in the bottom end of the income distribution. However, when a country reaches a certain income level, the Kuznets Curve starts to decline. Reasons for this decline in inequality as industrialization proceeds can be addressed to a larger and more redistributive government and better education. As industrialization proceeds, governments almost universally start taking a more active role in redistribution. According to Glaeser (2005) development increases redistribution for at least three reasons: Development is generally associated with greater government size, development is associated with greater education and political skills for poorer citizens, and development transforms a dispersed agrarian workforce into clustered industrial workers who can more easily be organized.

Does empirical evidence support the Kuznets hypothesis? In the case of the US, the Kuznets curve seems to describe the relationship between inequality and income pretty well from 1775 to the 1970s (see Jones, 1774 and Wolff, 2006). Wolf (1995, referred to in Steward, 1998 p. 44-45) finds that the share of total wealth held by the top 1 percent peaked in 1929 with 44.2 percent. After this the share held by the top 1 percent wealth holders started to decline towards the civil-war era levels and this decline lasted until the 1970s. These observations are consistent with the theory. However, since then there has been a steady increase in the share of wealth held by the top 1 percent. In 1989 the top 1 percent possessed about 37.4 percent of total wealth, the highest level in 50 years. In 2004 the richest one percent of US households owned about 34.3 percent of total net worth (Wolf 2006, referred to in Mishel et al. 2007, Table 5.3). These findings seem to conflict with the Kuznets hypothesis.

According to the Kuznets curve as a country grows richer its government will make greater effort towards social spending and redistribution. However, this does not seem to be the case for the US after the 1970s. Katz & Murphy (1992) argue that the period of rising inequality in the US has been driven by a rising demand for more skilled workers. The rise in demand for the skilled might be the result of a number of different changes including skill-biased

technological change, increasing trade and globalization, the decline of manufacturing and formation of unions.

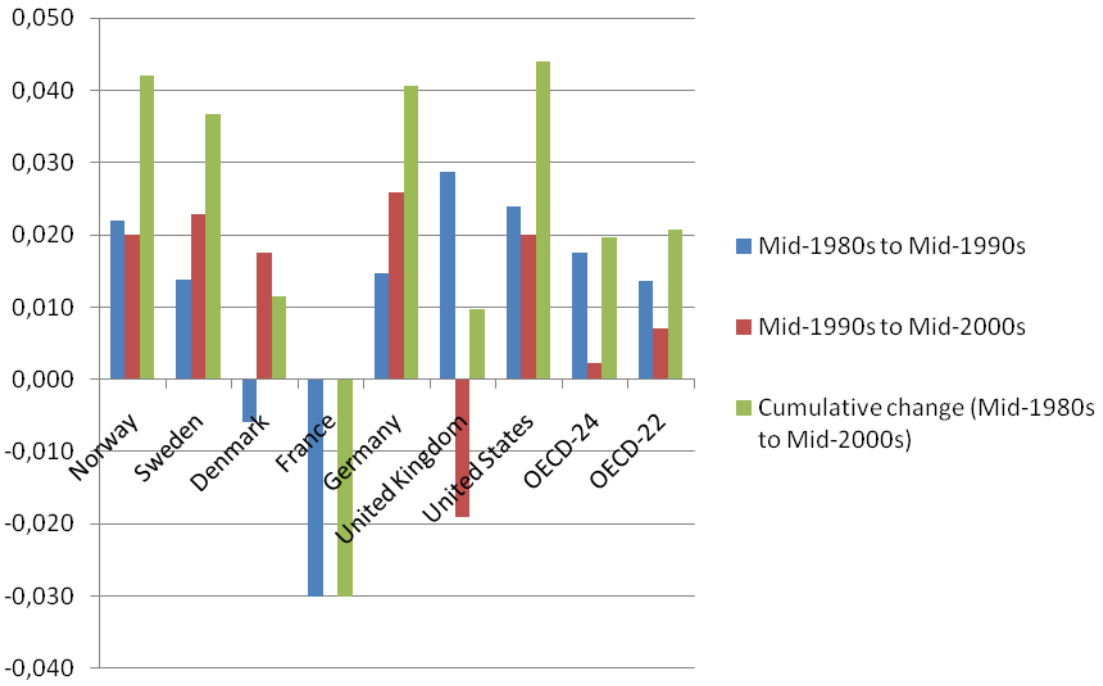
Even though a large part of the rise in inequality within the US in recent years is a result of economic changes, it does not explain why the US has diverged so much from the European countries. Technological changes and globalization should impact most developed countries in similar ways. Yet the US has experienced a much more striking increase in inequality than most other comparable countries (Picketty & Saez 2003, Hanratty & Blank 1992), and economic forces alone do not appear to explain why inequality rose so much more within the US. The impact of these economic changes will depend upon the politics in different countries, and political factors have most likely played a significant role in increasing the inequality in the US.

2.3 Recent Trends

The OECD report "Growing Unequal?" (2008a) brings together a range of analyses on the distribution of economic resources in OECD countries. The report looks at evidence on income distribution for 30 OECD countries in the mid-2000s, and presents information on trends extending back to the mid-1980s. According to the report, the gap between rich and poor has grown in more than three-quarters of OECD countries over the past two decades. They find that the economic growth of recent decades has benefitted the rich more than the poor, and that the number of people below the poverty line has grown over the past two decades. In some countries, such as Canada, Finland, Germany, Italy, Norway and the United States, the gap also increased between the rich and the middle-class. They further find that income inequality increased significantly in the early 2000s in Canada, Germany, Norway and the United States, while incomes in Greece, Mexico and the United Kingdom became more equal.

Figure 4 shows how inequality has changed since the mid 1980s for selected OECD countries by illustrating point changes in the Gini coefficient over different time periods.

Figure 4: Trends in Income Inequality



Source: OECD (2008a)

As we see from the figure, all the selected countries have experienced a cumulative increase in inequality since the 1980s, with the exception of France. According to the OECD report a key driver of income inequality has been the number of low-skilled and poorly educated who are out of work. More people living alone or in single-parent households have also contributed. "(…) the largest part of the increase in inequality comes from changes in the labour markets. This is where governments must act. Increasing employment is the best way of reducing poverty" (Gurria, 2008).

According to the report, better education is also a powerful way to achieve growth which benefits all, not just the elites. In the short term, countries have to do better at getting people into work and giving them in-work benefits to provide working families with a boost in income, rather than relying on unemployment, disability and early retirement benefits.

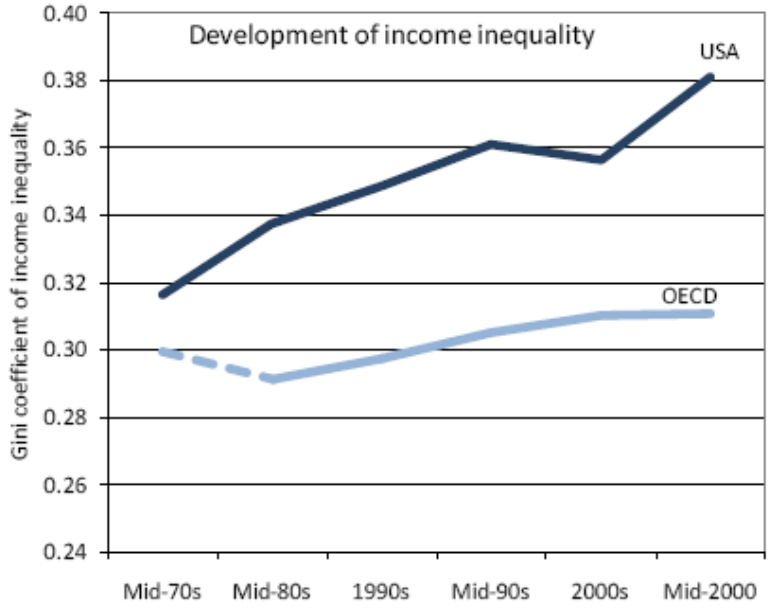
2.3.1 Special Case of the US

According to OECD (2008b) rich households in America have been leaving both middle and poorer income groups behind. This has happened in several countries, but nowhere has this

trend been as strong as in the United States. "The average income of the richest 10 % is US$93,000 US$ in purchasing power parities, the highest level in the OECD. However, the poorest 10% of the US citizens have an income of US$5,800 US$ per year – about 20% *lower* than the average for OECD countries"(OECD, 2008b).

The distribution of earnings in the US, measured by the Gini coefficient, has spread by 20 percent since the mid-1980s which is more than in most other OECD countries. The report states that this is the main reason for increasing inequality in America. Figure 5 illustrates how the US has diverged from the OECD average and has shown a sharp increase in inequality since 2000.

Figure 5: Development of Income Inequality: The US vs. OECD Average



Note: Income is disposable household income adjusted for household size.
Source: OECD (2008b)

Wealth in the US is distributed much more unequally than income: the top 1 percent controls about 25-33 percent of total net worth and the top 10 percent hold 71 percent. For comparison, the top 10 percent have 28 percent of total income. Social mobility is also lower in the United States than in other OECD countries like Denmark, Sweden and Australia. Children of poor parents are less likely to become rich than children of rich parents (OECD, 2008b).

2.4 Why Do We Care About Income Inequality?

Why do we care about inequality? What are the consequences of inequality and is there a need for governments to intervene?

It can be argued that inequality can be both good and bad for society as a whole. A common measure to see whether inequality has a negative or positive effect on society is by looking at its effect on economic growth. Some studies find that inequality has favourable effects on economic growth. Explanations for a positive link between inequality and growth are often linked to efficiency arguments concerning mobility, wage and allocation of labour (see previous discussion under the Kuznets curve) as well as the importance of saving for economic growth (Kaldor, 1960 and Kalecki, 1971). The authors suggest that transfers from workers to capitalists would raise the economy's aggregate savings rate and therefore the growth rate.

Other studies find that inequality has a negative effect on economic growth. Persson & Tabellini (1994) find in their paper that inequality is harmful for growth. They test the relationship between inequality and growth by using historical panel data and post-war cross section data and find that there is a significant and large negative relation between inequality and growth[4]. Glaeser (2005) argue that a great gap between rich and poor may hurt democracy and rule of law. Easterly (2002) finds that inequality causes underdevelopment: "(…) the paper finds high inequality to be a large and statistically significant hindrance to developing the mechanisms by which economic development is achieved."(p. 33). There is also a fairness argument. All other things equal, it is better to have a situation where we split equally than a situation where one gets everything and all other people get nothing. Using a social welfare function, the total welfare in the society as whole increases by sharing the cake in equal pieces instead of giving some a lot and others nothing.

OECD Secretary-General Angel Gurria warned about the dangers posed by inequality when launching the OECD report "Growing Unequal?" in Paris in October 2008. In his speech he argues that inequality polarizes societies and carves up the world between rich and poor. Based on the findings in the report he states that "(…) greater income inequality stifles

[4] The authors find that the relation is present in democracies

upward mobility between generations, making it harder for talented and hard-working people to get the rewards they deserve. (...) Ignoring increasing inequality is not an option." (Gurria, 2008)

The world has seen recent decades of rapid growth. However, the fruits of this economic growth have not been equally divided. As it is written in the introduction to the OECD report, Growing Unequal?, "there is widespread concern that economic growth is not being shared fairly" (Atkinson, 2008 p. 15). A rising tide does not necessarily raise all boats.

3. Government Spending and Redistribution

Most industrialized countries redistribute income from rich to poor. However, how much different governments transfer from rich to poor is hard to assess as different countries have a variety of welfare systems. "The poor benefit not only from transfer programs directly targeted to them but also take advantage, more than the rich of publicly provided goods" (Alesina & Glaeser, 2004 p. 15).

3.1 How to Measure Redistribution

There are different ways to measure the degree of redistribution in a society. A common measure is social expenditures as a share of GDP in a country. Social expenditures involve welfare benefits both "in cash" and "in kind", and often favour certain groups in society like the poor and disadvantaged. Table 2 shows social expenditures as a share of GDP for selected OECD countries. The expenditures are divided into five categories.

Table 2: Social Expenditures as a % of GDP (2005)

		of which:				
Country	**Total**	**Old age, incapacity related and survivors**	**Family**	**Unemployment and labour market**	**Health**	**Others***
Norway	21,6	11,0	2,8	1,2	5,8	0,7
Sweden	29,4	15,8	3,2	2,5	6,8	1,1
Denmark	26,9	11,5	3,2	4,5	5,9	1,7
France	29,2	14,6	3,0	2,6	7,8	1,2
Germany	26,7	13,5	2,2	2,7	7,7	0,8
United Kingdom	21,3	8,7	3,2	0,8	7,0	1,6
United States	15,9	7,4	0,6	0,4	7,0	0,6
OECD Total*	20,5	10,0	2,0	0,6	6,2	0,7

*Others include housing benefits and what OECD define as "other social policy areas"
*OECD Total refers to an un-weighted average of 28 OECD countries
Source: OECD Social Expenditure Database

It can be seen from the table above that the US spends less than the OECD average on all the above categories except health. Sweden has the highest expenditures as a share of GDP of the countries in the sample. Transfers to households and expenditures related to unemployment

and labour market are much lower for the US than for the Scandinavian countries, France and Germany.

According to OECD (2008a) redistribution of income by the government plays a relatively minor role in the US. After Korea, the US has the smallest effect of redistribution of all the OECD countries. The report states that this is partly due to the low level of spending on social benefits such as unemployment benefits and family benefits. These benefits are equivalent to just 9 percent of household incomes, while the OECD average is 22 percent.

In Table 2, social expenditure is measured as a share of GDP. This may give a misleading picture of the welfare state in Norway, as the GDP is very high due to oil production. It might look like Norway spends a lot less on welfare than the other Scandinavian countries even though Norway is considered as one of the most generous welfare states in Europe. Table 3 shows social expenditure per head in US dollars for the same sample. From the table we see that Norway is the country that spends the most on welfare per capita (US$ 10.306,8) followed by Sweden (9.629,4) and Denmark (9.023,4). The US spends significantly less than the Scandinavian countries per head (6.531,2).

Table 3: Social Expenditure per head (in US dollars) (2005)

Country	Total (in US dollars)
Norway	10 306,8
Sweden	9 629,4
Denmark	9 023,4
France	8 648,2
Germany	8 156,7
United Kingdom	6 816,2
United States	6 531,4
OECD - Total	6 294,0
OECD – 23	7 272,8

Note: The numbers are per head, at current prices and current PPPS, in US dollars
Source: OECD Social Expenditure database

Another way to measure the degree of redistribution is by looking at the Gini index before and after taxes and transfers. Relative to pre-tax income distribution, redistributive policies create a more equal post-tax income distribution. Table 4 shows the extent of income redistribution by the state for selected OECD countries, measured as percent change in the Gini index.

Table 4: Redistribution Measured as % Change in the Gini Index (Mid-2000s)

Country	Gini before tax and transfers (1)	Gini after tax and transfers (2)	% Changes (2)/(1) - 1
Norway	0,43	0,28	**-0,35**
Sweden	0,43	0,23	**-0,47**
Denmark	0,42	0,23	**-0,45**
France	0,48	0,28	**-0,42**
Germany	0,51	0,30	**-0,41**
United Kingdom	0,46	0,34	**-0,26**
United States	0,46	0,38	**-0,17**
OECD Total	0,45	0,31	**-0,31**

Source: OECD Income distribution database

A surprising observation is that the pre-tax Gini index for US is not much higher than for the other countries in the sample. In fact, pre-tax inequality in the US, measured by the Gini coefficient, is actually lower than for both France and Germany. This finding seems to be inconsistent with the perception of the US as a more unequal nation. However, we have to keep in mind the limitations and problems associated the Gini index (mentioned under section 2). The index does not do very well in capturing the extremes (the very rich and the very poor) when measuring inequality. Wealth is also distributed much more unequally than income in the US, something the Gini coefficient on income does not reflect (see section 2.3.1)

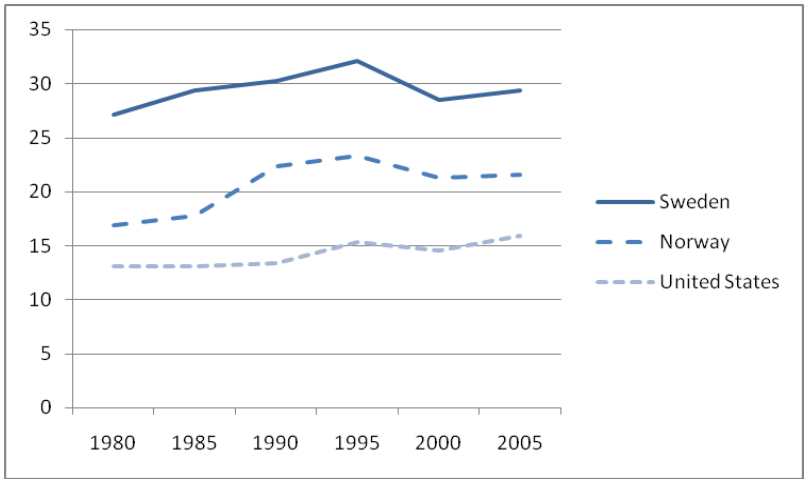
When it comes to the degree of redistribution it can be seen that Denmark and Sweden reduce income inequality by about 47 and 45 percent respectively, and Norway reduces inequality by 35 percent. In contrast, the reduction of pre-government inequality through redistribution in the US is only 17 percent

In addition to looking at government spending and changes in the Gini index, the progressiveness of the tax system can also say something about the degree of redistribution. A higher degree of progressiveness leads to more redistribution from the rich to the poor, because the tax rate increases when the taxable amount increases. Redistribution can also occur through market regulations of labour and goods that often favour low income groups. In our empirical analysis in section 6 we use self-reported attitudes towards welfare spending to measure preferences for redistribution. We argue that these reported attitudes reflect underlying preferences and correlate with actual voting behaviour, and can therefore serve as an additional method for measuring redistribution (Luttmer, 2001).

3.2 Recent Trends

In Figure 6 we see the development of social expenditures as a share of GDP the last 25 years for Norway, Sweden and the US.

Figure 6: Aggregate Social Expenditure as a % of GDP (1980 – 2005)



Source: OECD Social Expenditure Database

Social expenditures in Sweden increased as a share of GDP from 1980 to 1995 with about 5 percent. However, the figure shows a downward trend from around 1995 to 2000, and social spending almost returns to the same level as in 1980. After 2000 the graph shows a slight increase in social spending. Norway experiences a significant growth in social expenditures from around 1985 until the mid-1990s, followed by a decline from around 1995 until 2000. After the turn of the millennium expenditures seem to increase again. In the US social expenditures have only increased slightly in the 25 year period from 1980 to 2005.

3.3 Why Do We Redistribute Income?

Why do societies engage in redistributive policies, and what can legitimize redistribution by the state? Economic theory presents a wide range of hypotheses to explain and legitimize redistribution by the state.

Schwarze (2004) presents three arguments to explain and defend the role of redistribution by the government. The first argument is an efficiency argument and states that individual preferences might be better satisfied by institutions such as the state if private transactions are affected by market failure. Market failure is often associated with free-rider problems, information asymmetry, externalities, public goods and natural monopoly. The existence of market failure is therefore often used as a justification for government intervention (Pindyck & Rubinfeld, 2004).

The second argument is related to self-interest. Redistributive policy is driven by election, group pressure, rent seeking and so on, and it may be in people's self-interest to vote for a high tax rate and hence more redistribution (e.g. the median voter model, explained in section 4.2).

The third argument states that people are intrinsically inequality averse, which implies that inequality aversion enters the individual's utility function. Redistribution reduces the inequality in society, and thus leads to an increase in the individual's utility level (Rawls, 1971).

Redistribution by the state can also be legitimized if people feel that the pre-tax income distribution is "unfair". Society might want to correct for privileges and "unfair" advantages, as well as compensate for people being "unlucky". If society believes that luck, birth, connections or corruption determines wealth or income, it can be argued that redistribution create more equal economic opportunities and makes the income distribution more fair. If people, on the other hand, believe that individual effort to a large degree determines income, and that everyone have the right to enjoy the fruits of their own effort, they will want a low level of redistribution and a low tax level (Alesina & Angeletos, 2003). We will come back to the role of luck vs. effort later in the paper.

4. The Redistribution Puzzle

In this section we present two predictions on the relationship between income inequality and the demand for redistribution. We look at how the distribution of income (and thus inequality) influence redistribution policies, and look at empirical studies to see if the predictions are confirmed. The conventional view is that a higher degree of inequality tends to generate a larger demand for redistribution, and as mentioned in the introduction there are different theories predicting this relationship

4.1 Welfare Maximizing Government

According to optimal tax literature, the optimal tax rate is increasing in the degree of inequality (Sandmo, 1976). The reason for this is as follows: The larger the pre-tax income inequality between rich and poor, the larger is the gap in the pre-tax marginal utility of consumption between the two groups. This means that the welfare gains of redistributing income towards poor should increase as the income inequality increases. If we believe that policies are guided by a welfare maximizing government, welfare economics predict that larger inequality in pre-tax income distribution will be accompanied by larger transfers to the poor.

4.2 Median Voter Framework

A similar prediction can be derived from standard median voter models of taxation, see for instance Roberts (1977) and Meltzer & Richard (1981). The Meltzer & Richard (1981) model is a classical political economy model aiming to explain the relationship between inequality and redistribution. It shows – under the simplifying assumptions of majority rule, universal suffrage and a linear tax rate – how redistribution depends on the relation between mean income and the income of the decisive voter (the median voter[5]).

[5] The median income is the income that separates the 50 percent poorest from the 50 percent richest. In other words: half of the population has a higher income than the median voter and the other half has a lower income (Barth et al., 2003)

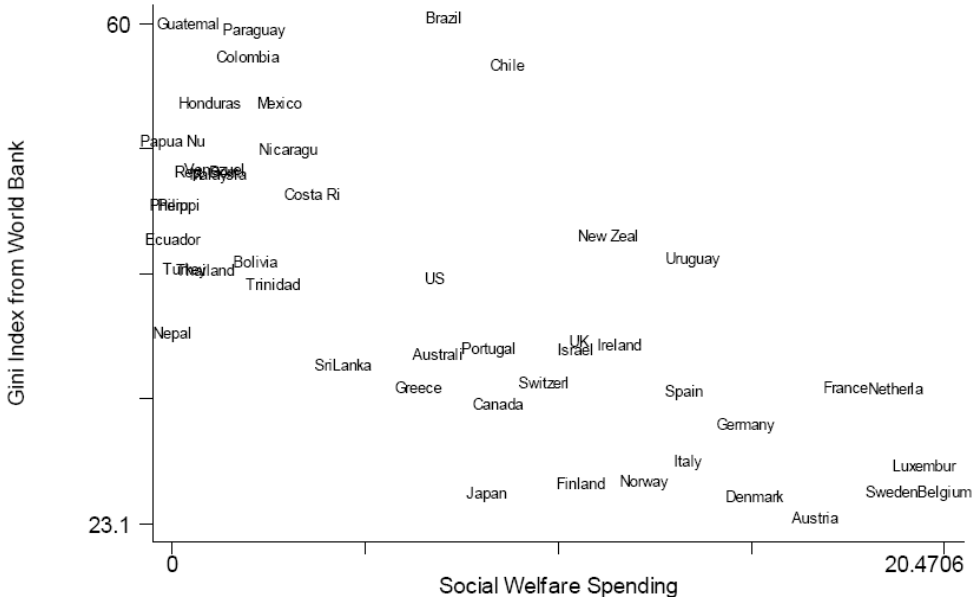
In a society with large pre-tax inequalities, the median voter will be poor relative to the average income. For all advanced industrialized countries the distribution of income is skewed to the right, implying that the income of the median voter is below mean income. In this case, the median voter will increase his or her marginal utility if the government undertakes more redistribution.

In a majority election, where politicians want to maximize their number of votes, they will try to commit to the policy position preferred by the median voter. In this case, the larger the pre-tax income inequality in society, the lower is the median voter's tax price for any given transfer level. The median voter will in other words prefer a higher tax rate, and thereby a more generous welfare state, when the income inequality is high. We should therefore expect to see more redistribution the larger the pre-tax income gap is between rich and poor. The question is whether income inequality actually increases redistribution.

4.3 Empirical Observations

In a cross-country regression on the relationship between inequality and social welfare spending, Glaeser (2005) finds a strong negative correlation, which seems to contradict the claim that inequality increases redistribution.

Figure 7: Inequality and Redistribution



Source: Glaeser (2005)

In a paper investigating the relationship between income distribution, democratic institutions and growth Perotti (1996, referred to in Bjorvatn & Cappelen, 2003 p. 1658) concludes that "there is (…) very little evidence of a negative association between equality and fiscal variables in democracies." Bradley et al. (2003) study the relationship between pre-tax inequality and redistribution in post-industrial democracies using pooled time-series data base on welfare state effort. The authors find a negative correlation between pre-transfer inequality and redistribution. Other examples are Persson (1995) and Iversen & Soskice (2006) who also find a negative correlation between government spending and the degree of pre-tax inequality. Finally, Horstmann & Scharf (1999, referred to in Bjorvatn & Cappelen, 2003) observe that increasing income inequality in the US and other developed countries has been accompanied by increased reliance on local level provision of public goods. Since local communities typically consist of people with relatively similar income levels, fiscal decentralization means less redistribution.

The papers cited above suggest that advanced industrialized countries with a high level of pre-tax inequality spend less on welfare and redistribute less than countries with a low level of pre-tax inequality. In light of the prediction from both welfare economics and median voter models on this subject, these empirical results are puzzling. The findings imply that there is a higher degree of redistributive in societies that are relatively egalitarian to begin with, while little redistribution takes place in countries were pre-tax income inequality is high and thus more needed. As mentioned this paradox is known as "the redistribution puzzle".

Looking at the different income distribution in countries like Norway and the US, standard median voter theory provides little ability to explain the differences between these countries. The US income distribution is more variable and skewed to the right than the Norwegian income distribution. In a standard median voter model, both of these factors predict that there should be more redistribution in the US, not less. According to Glaeser (2005) there is no evidence that the US tax system is more inefficient than European tax systems. Alesina & Gleaser (2006, p.54) find that charity contributions are much larger in the US than in Europe: "(…) private charitable donations are around 600 dollars a year in the US, more than six times as much the average donation in Europe". Based on this it is hard to believe that the low level of redistribution in the US simply reflects a lack of American generosity or altruism.

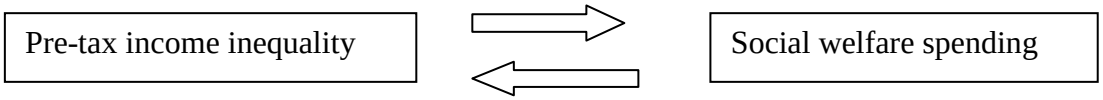
As seen from the evidence above, standard theories on the relationship between income and redistribution are contradicted by empirical evidence. There seems to be an inverse relationship between the level of inequality and redistribution. The rest of the paper is devoted to explain this paradox.

5. Explanations to the Redistribution Puzzle – An Overview

There exists a rich literature on plausible explanations to the redistribution puzzle, and it is obvious that no factor alone can explain this phenomenon. In this chapter we present some of the most common explanations featured in research papers, with a special focus on the difference between the US and Europe. We try to give a balanced presentation of some of the main factors in order to get a better understanding of what determines the degree of redistribution in society.

5.1 Reverse Causality

First of all, the negative correlation between inequality and welfare raises a question about causality. Does pre-tax inequality lead to less redistribution, or does a lower level of social welfare spending lead to a more unequal pre-tax income distribution? In other words, the correlation reflects both that less social welfare increases inequality and that less initial inequality leads to more redistribution.



If we consider a reverse causality, there are several reasons why a higher degree of social welfare spending might affect the income distribution in a society. First, redistribution can take different forms, both "in cash" and "in kind". "In cash" redistribution includes e.g. sick relief, pension, unemployment benefit, while "in kind" redistribution includes e.g. government spending on education and health. As a large share of the redistribution in society takes the form of government investment in health and education, it can be argued that societies that vote for a large public sector experience a more equal pre-tax income distribution as these investments help equalize people's productivity (Bjorvatn & Cappelen, 2003).

A basic education and access to free health care help improve the standard of living for the poor and gives them better opportunities to climb the social latter. It can also be argued that a decent standard of living for the poor may increase their bargaining power in the work life. An employer cannot offer an employee a wage that gives a worse standard of living then what the welfare state can provide. The poor in the Scandinavian countries can thus demand higher wages than the poor in countries where they don't have equivalent generous welfare arrangements (Barth et al., 2003).

Second, pre-tax inequality and redistribution may have a common cause. If a society for some reason has strong preferences for equality, this might affect both the income distribution as well as the actual redistribution. Strong preferences for equality might affect the wage bargaining process, making the collective bargaining more solidary. This will, in turn, help reduce the income gap between the rich and poor. In addition to affecting the income distribution, preferences for equality might affect the choice of tax policy, and hence the degree of redistribution.

Even though the relationship between inequality and redistribution might reflect reverse causality and omitted variables that drive both variables, we assume in this paper that the causality goes from inequality to redistribution.

5.2 Social Insurance

It is important to point out that the welfare state has two functions: To redistribute income amongst its inhabitants and to be a provider of social insurance. The welfare state redistribute from rich to poor, from the working part of the population to the unemployed or disabled, from young to old etc. However, there is also an important insurance aspect of the welfare state. The future is uncertain, and most people want some kind of insurance to protect them against future income loss.

When we take this insurance aspect into account, there is not a clear connection between income inequality and the size of the welfare state. Barth et al. (2003) argue that insurance

can be seen as a normal good[6] and for any given risk of losing this income people would want higher taxes in line with a higher income. A study by Congleton and Bose (2008) also shows that electoral support for social insurance programs tends to increase with income. In Scandinavian countries like Norway the pre-tax income inequality is lower than for the US, which implies that the lower income group in Norway is relatively richer. Barth et al. (2003) argue that since the median voter in Norway is relatively richer than the median voter in the US, this will lead to a political pressure for a higher level of social insurance through higher taxes, and thus a higher level of redistribution will take place.

In Scandinavia the welfare goods are characterized by universal arrangements that the whole population benefit from. In the US the social insurance is to a much larger degree based on earned points or on demonstration of financial needs (means tested). In debates about welfare arrangements it is often argued that we more easily can improve the conditions of the poor with means testing. Barth et al. (2003) argue that this is not the case. The majority of voters will have little interest in means tested efforts. Most people will not end up in a situation where they need means tested help, and when they vote according to their self-interest they will most likely vote against an increase in means tested welfare initiatives. Universal welfare systems, on the other hand, involve everybody which makes it easier to mobilize a majority of voters to support these kinds of arrangements.

In sum, the insight that the welfare state has an important insurance function helps us understand why there is so much more redistribution in countries with low income inequality, such as Norway, in contrast to more unequal countries like the US. The fact that the median voter model does not take this insurance aspect into account might be one of the reasons why the model fails to explain the differences in welfare levels across countries.

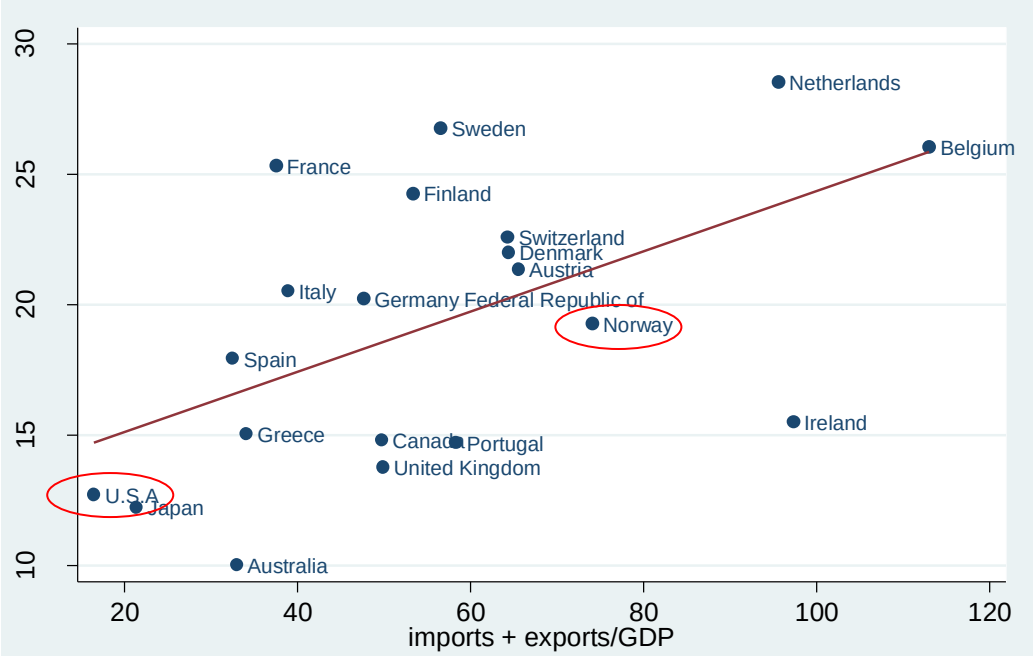
[6] A normal good is an item for which demand rises when income rises and falls when income falls. Source: Pindyck & Rubinfeld (2004)

5.3 A Small, Open Economy

Studying countries with a big, generous welfare state two common features are striking; their relatively small size and the high level of foreign trade. Empirical findings show that the welfare state is more developed in small open economies, such as the Norwegian economy. An often cited paper is Rodrik (1998), who finds that international trade increases government and social spending. He argues that the size of government, and especially income support policy, are explained by the degree of openness. Lillelien (2008) finds that both social spending and openness have increased in the OECD countries since 1970 which may indicate that there is a positive relationship between the two measures.

Alesina et al. (2001) explore the differences in welfare states across countries and find that the degree of transfers in a country, as a share of GDP, is positively correlated with the degree of openness, measured as imports and exports as a share of GDP. Their finding is reproduced in Figure 8.

Figure 8: Transfers/GDP vs. (Imports + Exports/GDP), OECD



Source: Alesina et al. (2001)

One explanation to why a high level of foreign trade as a share of GDP might affect the size of the welfare state is the need for protection. An economy characterized by a high level of foreign trade is more vulnerable to turbulence in the world marked (external shocks). A high level of welfare spending is thus desired to compensate inhabitants against this risk (Barth et al., 2003 and Lillelien, 2008). This hypothesis is known as the *compensation hypothesis*, and is linked to the social insurance argument presented in section 5.2.

On the other hand, more market integration can also have the opposite effect, namely less redistribution. *The efficiency hypothesis* claims that economic integration causes both welfare migration and competition for mobile tax bases and goods between countries. Openness undermines governments' sovereignty in domestic matters and leads them to alter tax rates and cut back on social transfers (Wilson & Wildasin, 2004, Sinn, 1994 and Tiebout, 1956). According to the efficiency hypothesis, more integrated markets will create a downward pressure on welfare generosity.

Previous studies find conflicting evidence on the effect of openness on welfare state generosity - both positive effect, negative effect and no effect have been advocated. Whether or not openness is a major determinant of the size of the welfare state remains an unsettled issue, and is not something we will focus on in this paper.

5.4 Political and Historical Factors

Political and institutional factors can help explain many of the difference between the European and the US welfare levels. Glaeser (2005) argues that political institutions like majority government, federalism and checks and balances have limited the expansion of the American welfare state. In addition to having an important direct effect on the level of redistribution, institutions also reflect deeper aspects of society. According to Glaser (2005) the institutional differences between Europe and the US are not exogenous, but rather reflect historical factors such as revolution, war, strength of labour unions and the success of left wing politicians in Europe. In the following we look at both the direct effect of these factors, as well as historical aspect of the development of welfare systems in Europe and the US.

5.4.1 Proportional Representation vs. Majority Election

There are basically two systems in parliamentary elections: the majority election system (ME) and the proportional representation system (PR). With the majority election system, only one Member of Parliament is to be elected per constituency (electoral district). The system can be characterizes as a "winner takes it all" system, where small parties have little chance to win a mandate. The majority election system will therefore inevitably lead parties to unite or build blocks (tight alliances) until only two major players remain on the political scene, forcing voters to choose between the candidates of two big parties. While this tends to create a stable parliamentary majority for the government, it will not likely represent a pluralistic modern society adequately.

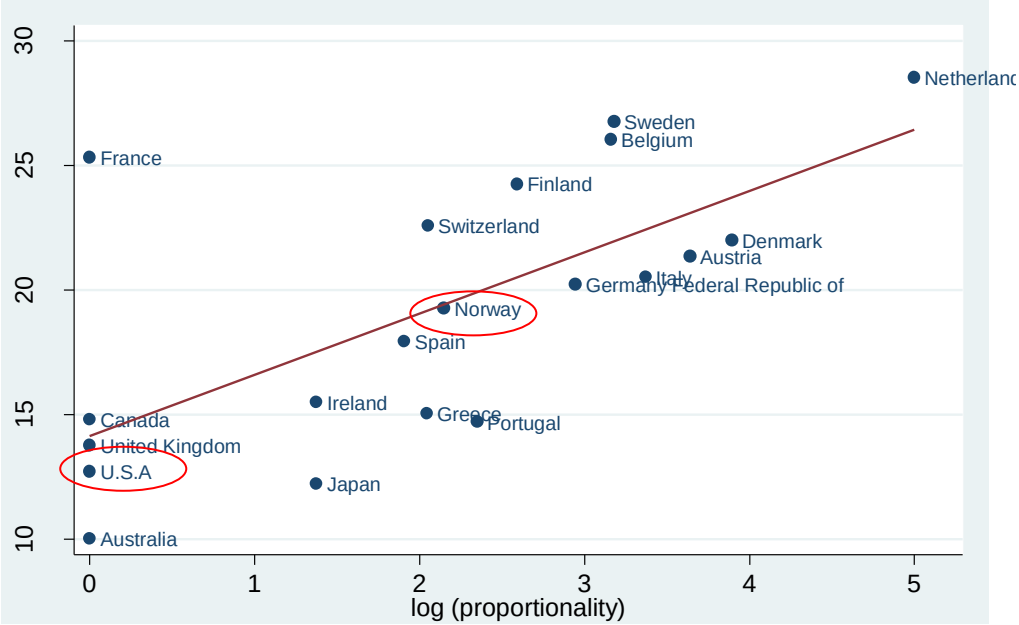
With the proportional representation (PR) system several members of parliament are elected per constituency and the different parties are assigned parliamentary seats proportionally to the number of votes they get. The basic principles underlying PR elections are that all voters deserve representation and that all political groups in society deserve to be represented in the legislatures in proportion to their strength in the electorate.[7]

Gleaser (2005) refers to a rich literature when he suggests that countries with a system of PR will to a larger degree serve the needs of the poor (see Persson & Tabellini, 2003 and Miles-Feretti, Perotti & Rostagno, 2000). These authors argue that majority election induces governments to cater to the needs of the median voter, while proportional representation ensures the election of representatives who may be particularly focused on the desires of the poor. The majority election thus prevents minorities from gaining political power, and may help explain why the US diverged from Europe when it comes to the expansion of the welfare state.

The figure below is taken from Alesina et al. (2001). The authors use data from Persson & Tabellini (2000) and Miles-Feretti, Perotti & Rostagno (2000) to show how the degree of proportionality is positively correlated with the size of government transfers across OECD countries.

[7] For more information on election systems see Democrazy Building at <http://www.democracy-building.info/voting-systems.html> (09.06.2009) and Economic Expert.com at <http://www.economicexpert.com/a/Proportional:representation.htm> (09.06.2009)

Figure 9: Transfers/GDP vs. Log (Proportionality). OECD



Source: Alesina et al. (2001)

As we can see from the figure, the US differs a lot from most European countries when it comes to electoral system and government transfers. While the US has a pure majority election, most European countries have some version of proportional representation. Countries like Sweden and Denmark have both high transfers and a high degree of proportionality. The electoral system is only one of the politic-institutional forces that have led the US to diverge from Europe. In addition, the electoral system may itself be endogenous to other variables, including attitudes towards the poor and ethnic minorities, something we discuss later in section 6.2.

5.4.2 Federalism and Mobility Across Borders

The fact that tax rates are decided on state level is a big obstacle for setting high tax rates in the US. In general, the opportunity to move to another region or county limits the freedom of politicians to set the tax rate. It can be argued that the mobility within the US is higher than the mobility across European borders. The US states are much more similar to each other than what the different European countries are. Language, culture, institutions, etc. make moving between European countries a bigger transition than moving from one state to another within the US. The relatively high moving costs in Europe (social and financial), and the fact that

people often prefer to stay in their own country, gives the politicians more latitude when it comes to setting the tax rate. In the US, however, the tax competition between states is more intense due to higher mobility.

According to Tiebout (1956), mobility leads to revelation of peoples preferences for common goods and income distribution politics. He predicts that in a society with perfect mobility and where the voters have the opportunity to "vote by feet", there will be a strong downward pressure on the tax rate. Glaeser et al. (2008) state that the level of mobility between states is high, and that this may lead to an emigration of the rich from high tax states and immigration of the poor to states where redistribution is high. The threat of outmigration of capital and the wealthy might in this way serve as a break on the tendency to redistribute income. If say Scandinavians are less willing to move, tax competition can be an important explanation to the different levels of redistribution in the US and Europe.

5.4.3 Historical Factors

While there is little doubt that political institutions matter for the level of redistribution in society, the greater question is whether these institutions should be taken as first causes or as endogenous factors that reflect deeper social forces (Glaeser et al., 2004). Since institutions have a certain "stickiness", and don't change overnight, it is necessary to look at some historical factors in order to understand why Europe and the US have ended in up such different equilibriums.

According to Alesina et al. (2001) there are three monumental historical forces that distinguish the US from Europe. The American Civil War (1861–1865), the "open frontier" in the West, and the nonexistence of a large and influential Socialist or Communist party.

At the end of the 19th century, both the US and European countries had a minimal welfare state (Skocpol, 1992 and Glaeser, 2005). The welfare programs in the US consisted mostly of veteran pensions, and several social reformers viewed this program as the stepping stone upon which to build a universal social security system. However, reformers met substantial resistance and forces working against them. First, there was a general mistrust in the administration of the program. Second, the US courts systematically rejected any legislation

that could threaten the principle of protection of private property against government intervention. In 1895 the courts actually declared the US income tax to be unconstitutional, and it took a constitutional amendment to undo this decision. The power and independence of US courts are unique and are not matched anywhere in Europe.

Given the relative failure of public provision of welfare, social assistance took a turn towards private initiatives (Alesina et al., 2001). This path towards private charities characterizes the US society even today. Skocpol et al. (2000, referred to in Alesina et al., 2001) document the active role of different private associations. These associations provided civic assistance to their members and target groups. In some degree private charities in the US have been a substitute for local provision of public assistance. However, these private organizations are very far from providing the kind of protection that European governments offer.

The second force that contributed to the diversion of the US and Europe was the waves of European immigrants to the US that formed the country under the era of the open frontier (the time between the Civil War and the turn of the 19th century). The image of a frontier—an area of free land on the western edges of the advancing settlements—has been a pervasive influence in the settlement of the American West. It has conjured up visions of cowboys, Indians, free-spirited individuals, and happy and prosperous farmers. Unlimited land in the zone was available and thus offered a psychological sense of unlimited opportunity, which led to optimism and future orientation (Turner, 1921 and Francis & Kitzan, 2007).

Alesina et al. (2001) argue that the open frontier in a county of immigrants strengthened individualistic feelings and a belief in equality of opportunities, rather than equality of outcomes. It can be argued that the people who chose to migrate to the US were not a random group of people, but people who had preferences for individual solutions. In other words, self-selection may have led to a systematic difference between those Europeans who migrated to the US and those who did not. The ones who decided to leave Europe might have been those that, ceteris paribus, were more sensitive to "individual" incentives and were less risk averse. This may have led to the reluctance towards state intervention that characterizes the American culture even today.

The third important historical factor Alesina et al. (2001) mention is the lack of an influential socialist movement in the US, relative to the strong socialist parties in Europe. Especially the

First World War represents a milestone in the history of the European welfare state. The war led to the defeat of ancient dynasties and opened up for the entry of left-wing ideology. Left-wing groups gained control and started to construct institutions that strengthened left-wing power. According to Glaeser (2005) the European welfare state is, in many cases, built on political institutions which are the legacy of the chaos and defeats of 1918. While European political institutions reflect the chaos of the 20th century and the power of socialist forces during that chaos, the US is still run by a constitution from the 19th century designed to protect private property

A related factor is the vast size of the US and the low density of the country made it hard to mobilize groups and to really threaten the political leadership. The US certainly didn't lack violent strikes or an active labour movement, but due to the widespread landscape and decentralization of the country, these groups were unable to force change in the American constitution and threaten the centres of the government (Glaeser, 2005 and Alesina et al., 2001). Europe, on the other hand is characterized by small, dense countries. Violent riots, strikes and revolutions thus had a much larger impact on the current institutions and politics. Almost every county in continental Europe had some kind of violent uprising, like revolutions, general strikes or civil war that led to a constitutional revision that, to a large degree, changed pre-existing institutions.

We return to political and historical explanations under the section 6.2, where we look at ethnic and racial heterogeneity as an important underlying cause for the development of different institutions on the two continents. Next we turn to behaviour and psychological arguments to further investigate possible explanations to the redistribution puzzle.

5.5 Behavioural and Psychological Explanations

5.5.1 Reciprocal Altruism

The median voter model assumes that people are motivated by their own self-interest. This assumption can be challenged, as most people also care about the well-being of those around them. The utility function thereby depends not only on a person's own utility level, but on the utility of the people around that person. However, it can be questioned if people care about the welfare of all people, or if there are specific groups that are more important.

In evolutionary biology and evolutionary psychology, reciprocal altruism is a form of altruism in which one organism provides a benefit to another without expecting any immediate payment or compensation. The theory of reciprocal altruism was originally developed by Trivers (1971) as an attempt to explain cases of (apparent) altruism among unrelated organisms, including members of different species. However, reciprocal altruism is not unconditional. Firstly the act of altruism must give rise to a surplus of cooperation, in the sense that the gains to the beneficiary must be perceived to be meaningfully larger than the costs to the benefactor. Secondly the act of altruism should be reciprocated by the original beneficiary if the situation is later reversed. Failure to do so will usually cause the original benefactor to withdraw future acts of altruism.[8]

In a welfare context, reciprocal altruism implies that voters will dislike giving money to the poor, if the poor are perceived as undeserving, or as someone who is taking advantage of the system. Right-wing politicians and people who oppose welfare often try to emphasize the fact that welfare recipients are taking money from taxpayers, and do not contribute to society. The fact that the non-working poor who receive income from working taxpayers might generate some sense of resentment is pretty clear. However, it is harder to understand why this force might differ between the US and Europe. Are there special features of the US culture, mindset, history or composition of population that has led Americans to sympathize less with the poor part of the population? We believe that there is a link between Americans view of the

[8] Stanford Encyclopedia of Philosophy <http://plato.stanford.edu/entries/altruism-biological/> (09.06.09)

poor and the racial composition in the country, something we will return to under racial and ethnic diversity in chapter 6.

5.5.2 Luck vs. Effort

Perceptions and beliefs about why people are poor have a great impact on the willingness to redistribute. Alesina et al. (2001) find that opinions about the poor differ sharply between the US and Europe. While Europeans generally think that the poor are unfortunate and not personally responsible for their own condition, Americans tend to think that people to a larger degree are in control of their own situation, and as long as they work hard enough they will be able to work their way up in society. Based on data from the World Value Survey (WVS) the authors find that 70 percent of West Germans believe that people are poor because of society, and not because of laziness. In contrast, 70 percent of Americans said that people are poor because of laziness in response to the same question.

An interesting question is whether there is a reason to believe that the poor in America have better chances of working their way out of poverty than the poor in Europe. We address this question in the following section.

5.5.3 Social Mobility

Both the beliefs about social mobility and the actual mobility rates can have an impact on the view of the poor, and hence the willingness to redistribute. Using data from the WVS, Alesina et al. (2001) find that Americans believe in upwards mobility to a much higher degree than Europeans. According to WVS, 70 percent of Americans believe that the poor have a chance to escape from poverty, while only 40 percent of Europeans gave the same answer. The idea of the self-made man and the belief that "anyone" can make it, as long as they try hard enough is embedded in the American culture.

In the context of the median voter model, if the level of redistribution is fixed for a given period and the median voter expects a higher income in the future he will expect to end up as net loser of the redistribution in the future and vote for lower taxes (Alesina et al., 2001 and Alesina & La Ferrara, 2001). In that way the *expected* income in the future will decide how

the median voter chooses to vote, and not the actual income. If Americans are more optimistic, and believe they will earn higher wages in the future, they might vote for lower taxes today in the belief that this will benefit them in the long run. Alesina & La Ferrara (2001) find that individuals with greater expected income growth are more likely to oppose redistribution.

Piketty (1995, referred to in Finseraas, 2008) argues that our beliefs about the role of effort and the incentive effects of redistribution are learned, and thus may not reflect true social mobility rates. Subjective mobility rates might therefore play an important role in the explaining the cross-county differences in welfare state arrangements.

Corneo & Grüner (2002) find that people are more favourable to redistribution if they believe that the current income distribution in society is determined by exogenous factors, such as family background, rather than individual effort. It can be argued that in Europe, many of the big fortunes are inherited and originate from aristocracy, royal families or was gained on the basis of other "unfair" advantages. Alesina & Angeletos (2003) argue that due to its history the class differences in Europe are more rooted and wealth more associated with privileges. In the US the perception has historically been that those who were successful and wealthy had made it on their own.

When it comes to actual mobility rates in the US and Europe literature presents conflicting evidence. Alesina et al. (2001) state that there is some possibility that the middle class in the US has a greater chance of moving up in the income distribution, a feature that would make the median voter more averse to redistribution. In contrast, the OECD report "Growing Unequal?" (2008a) states that social mobility is lower in countries with high inequality, such as the US, and higher in the Nordic countries where income is distributed more evenly.

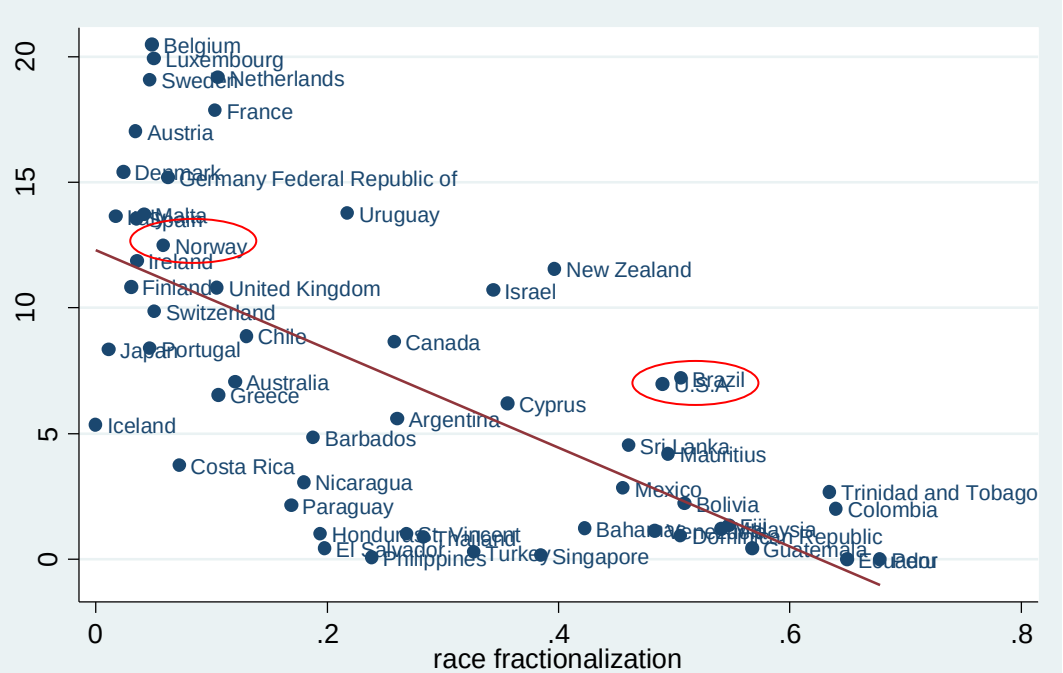
The question of whether the perception of more mobility in the US is correct or mistaken awaits further research. However, an important insight is that the beliefs about social mobility might be more related to feelings about the poor, than to actual mobility rates.

In section 6.3 we explore the possibility that ethnic heterogeneity and racial division in the US effect perceptions and beliefs about the poor, and thereby the redistribution level in society.

5.5.4 Ethnic and Racial Heterogeneity

The level of redistribution varies greatly across states and countries, and many researchers have noted that relatively racially and ethnically homogeneous areas tend to have more income redistribution and other forms of public spending (see Luttmer, 2001, Easterly & Levine 1997, Poterba, 1997 and Alesina et al., 2001). Alesina et al. (2001) find that across countries, racial fragmentation is a powerful predictor of redistribution. The authors plot social spending as a share of GDP against an index for racial fractionalization, and find a significant negative relationship between the two measures (Figure 10).

Figure 10: Social Spending/GDP vs. Race Fractionalization



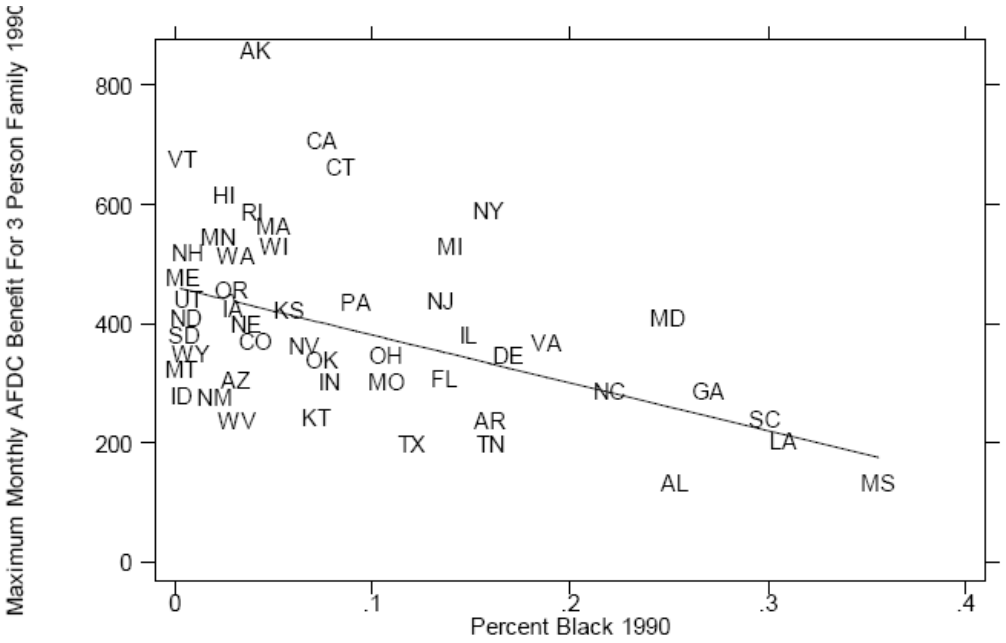
Source: Alesina et al (2001)

While Western European countries can be characterized as relatively homogenous, the US is a highly diverse and heterogeneous nation. As seen from the figure most European countries have a low score on the racial fractionalization index, and relatively high levels of social spending. The US, on the other hand has a much higher score on the racial fractionalization index, and spends less on social benefits than most European countries.

Within the US, race is found to be an important predictor of welfare support. (See Luttmer 2001, Alesina et al. 2001 and Gleaser 2005). Figure 11 is also from Alesina et al. (2001) and

shows how states with a high percentage of blacks tend to provide lower welfare benefits then more racially homogenous states.

Figure 11: AFDC Monthly Maximum vs. Percent Black by State



Source: Alesina et al. (2001)

Racial and ethnic heterogeneity can affect the level of redistribution through many different channels. This form of heterogeneity may affect the formation of in-groups and out-groups and weaken the feeling of solidarity. Racial discord also plays a critical role in determining beliefs about the poor, and people often find it harder to identify with people who look and act different from themselves. As minorities are overrepresented amongst the poor in America, any income-based redistribution scheme will redistribute particularly to minorities (Alesina et al., 2001)

Racial and ethnic fragmentation can also be seen as important factors affecting the formation of institutions in the US and Europe. Aspects of the American history have led to the formation of institutions, such as the electoral system, that prevented minorities from gaining power and have hampered the construction of the welfare state. There is little doubt that race and ethnicity have had significant effects on the path the US have taken concerning welfare.

In the next chapter, and throughout the rest of the paper, we try to explain the redistribution puzzle by focusing on race and ethnic fragmentation. We have a special focus on behaviour and psychological explanations, and explore how these factors are affected by racial and ethnic heterogeneity.

6. Racial and Ethnic Diversity – Empirical Evidence

In the previous section we explored different explanations to the redistribution puzzle. In this section we look at how a number of these explanations can be linked to ethnic and racial diversity. We look at how racial diversity in the US has influenced political and institutional factors, and thereby hampered the development of an American welfare state. Further we explore how behavioural and psychological factors such as trust, preferences and attitudes are affected by ethnic and racial diversity in society. Factors such as trust, altruism and attitudes towards poor can be seen as important building blocks for the welfare state, and by affecting these building blocks ethnic and racial heterogeneity may have an important impact on the level of redistribution. We believe that ethnic and racial diversity can be seen as an important underlying cause for the different welfare levels observed across countries, as well as within the US.

In order to gain a better understanding of how race and ethnic diversity affect the level of redistribution we present different theories and revisit previous literature on the topic. We also present findings from our own analysis to support the different theories described. Our empirical analysis is based on data from the General Social Survey (GSS), which is a social survey conducted in the US. The data contains self-reported attitudes to behavioural and attitudinal questions as well as demographic characteristics. The GSS dataset is also used by Alesina et al. (2001) in their article "Why doesn't the US have a European-style welfare state", which has inspired our empirical analysis.

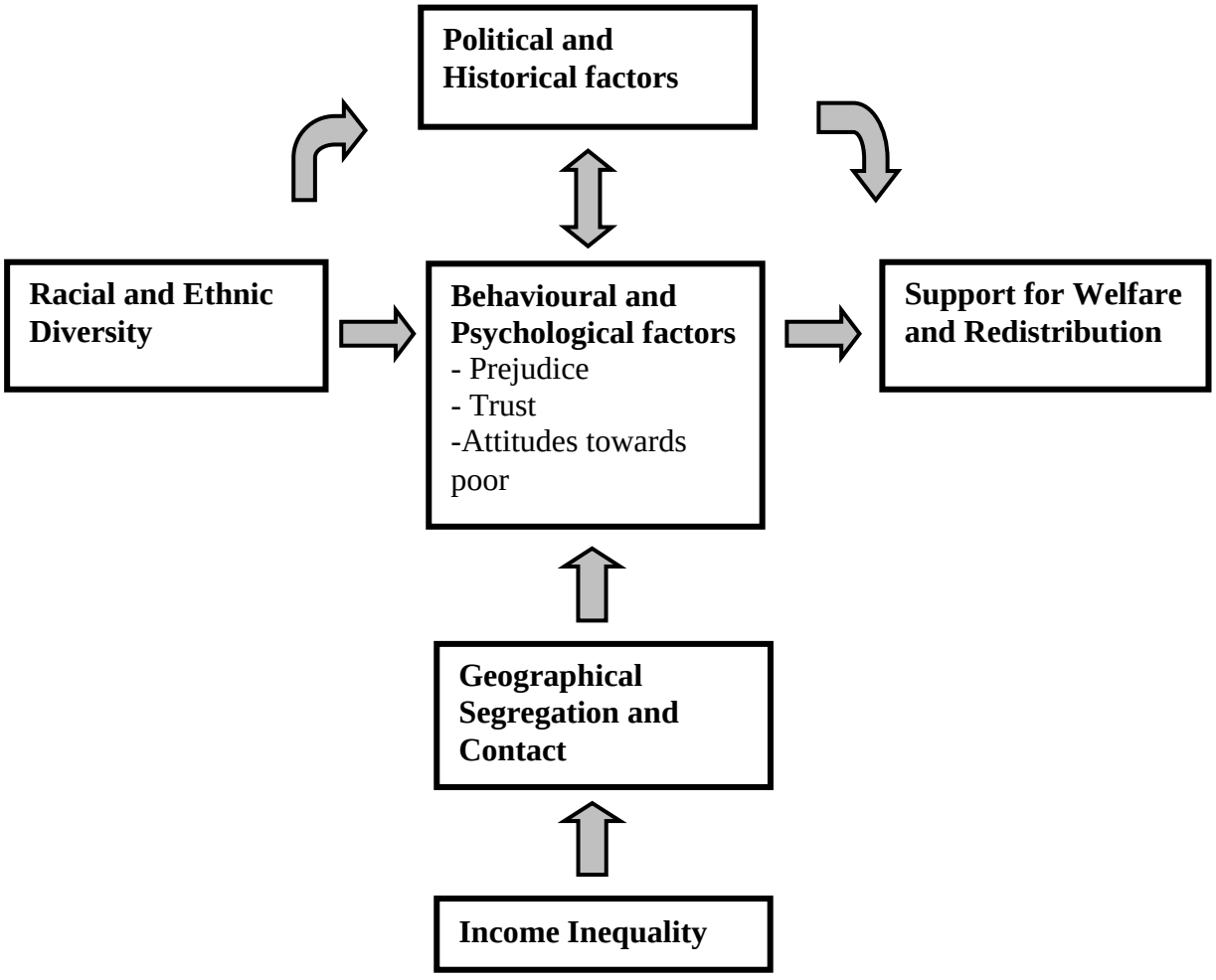
Even though our data is limited to the US, we believe that analyzing the underlying mechanisms between race and redistribution in the US can help us understand the different redistribution levels in Europe and the US. The US is more racially heterogeneous than countries in Europe, and any effect that racial heterogeneity might have on redistribution will therefore help explain differences in welfare levels between the US and Europe.

In addition, incorporating data from European surveys to do a cross country comparison would not be very useful as a lot of the questions from the GSS concerning welfare support are relative questions. One example is the question of whether government is spending too much or too little on welfare. This question asks people about ideal spending on welfare

relative to current spending, which varies from country to country. A cross-country comparison will in this case be difficult, and not very meaningful. A Norwegian person who opposes more spending on welfare in Norway is not the same as a Texan who opposes more spending on welfare in Texas. The Norwegian's answer to the question obviously reflects the already large level of welfare spending in that country. However, as mentioned above we believe that looking at variations in support for welfare across states in the US help us to get a better understanding of how racial heterogeneity serves as a critical factor influencing preferences for redistribution.

Figure 12 illustrates how we picture the relationship between the different factors we are focusing on in the following sections.

Figure 12: The Relationship between Racial and Ethnic Diversity, Income Inequality and Support for Redistribution and Welfare



Previous studies have shown that racial and ethnic diversity has a negative effect on welfare spending across states. In section 6.1 we analyze the direct effect of racial diversity on support for welfare to see if our data on self-reported attitudes supports previous findings. We point to formation of in- and out-groups and heterogeneity of preferences as possible explanations to the inverse relationship between racial diversity and welfare support.

In section 6.2 we look at political and historical factors in order to explain the negative effect of race on redistribution.

In section 6.3 we dig deeper into the psychological impact of race, and analyze how different behavioural and psychological factors are affected by racial diversity. First we analyze the effect of racial prejudice on the support for welfare. Next we explore how racial diversity affects the level of trust in society as well as the perception of social mobility and the role of luck vs. effort. We argue that racial prejudice, trust and perception of why people are poor are all important factors in determining welfare support.

In section 6.4.1 we demonstrate how income inequality leads to a segregation of rich and poor. As minorities are often disproportionally represented amongst the poor, this leads to segregation between different ethnic and racial groups. In the US the high income inequality has to a large degree resulted in a segregation of blacks and whites. We argue that this segregation will intensify the behavioural and psychological factors presented under section 6.3 and thereby reduce the support for welfare.

In section 6.4.2 we test if geographical proximity and social interaction between blacks and whites can contribute in creating positive attitudes. We analyze if contact between blacks and whites, when certain conditions are met, can help form more positive attitudes and increase the level of trust, solidarity and sympathy across races. We look especially at how geographical proximity and contact with blacks affect white people's perception of this group as well as their preferences for welfare.

Description of the data

In our empirical analysis we use data from the General Social Survey (GSS). The data contains a standard 'core' of demographic, behavioural, and attitudinal questions and many of the core questions have remained unchanged since 1972. In our analysis we use the same time span as Alesina et al. (2001), which means that our newest data is from around 1999/2000. We also use all the same standard control variables such as income, gender, age and education level. Details of the key variables used in our empirical analysis are as follows:[9]

- The dependent variable used by Alesina et al. (2001) *Support for increased welfare* is a scale (normalized 0-1) for how much the respondent supports increased spending on welfare.
- We include two new measures for welfare support; *government should reduce income differences*, where a high value reflects support for increased redistribution and the variable *lefty,* which reflects if the respondent is left on the political spectrum. A large literature exists on the correlation between leftist orientation and preferences for redistribution, and self-identification with the left is often found to be a driving force behind support for redistribution (Finseraas, 2008)
- *Percent black* is the number of African-Americans living in a respondent's state. When using this variable we limit the sample to white respondents only to see how they are affected by the number of blacks in their state.
- *Racial fractionalization is* a fractionalization index where a high value represents a high level of fragmentation. The index is constructed in the following way:

  $$Racial\ fractionalization\ in\ state = 1 - \sum_i s_i^2$$

  where s_i is the share of group i over the total of the population. The index is a measure of the probability that two randomly drawn individuals belong to two different groups. (Alesina et al. 2001).
- *People are poor due to lack of effort* represents a belief in high social mobility and a belief that people can work their way out of poverty (values 1, 0.5 and 0) A value of 1 reflects the view that lack of effort is an important reason for why people are poor. This view indicates that a person believes that hard work can bring people out of poverty.

[9] More details on the variables can be found in Appendix 1 and 2.

- We use several variables to describe attitudes towards blacks, some of them are: *Blacks are lazy, blacks lack willpower* and *would vote for black president.*
- Variables representing contact with black people are: *Live in neighbourhood with blacks*, *black person home for dinner* and *live close to black families*.

It can be questioned if self-reported preferences on welfare spending are accurate in reflecting underlying preferences and if they correspond to actual voting behaviour. Luttmer (2001) examines the validity of self-reported measures of welfare support from the GSS. He does so by comparing self-reported support for welfare to voting behaviour on a ballot proposition for welfare cuts in California. He finds that the same demographic characteristics that increase the likelihood of voting against welfare cuts in California also raise the probability of reporting a preference for more welfare spending. This suggests that the use of self-reported preferences can complement approaches in which preferences are inferred from observed behaviour.

6.1 Racial Fragmentation and Support for Welfare

Earlier we showed the inverse relationship between racial fragmentation and social spending across states in the US, documented by Alesina et al. (2001) (see Figure 11). In this section we wish to see if this inverse relationship is supported by the GSS data. We look at self-reported attitudes towards welfare, and see how variations in welfare support across states are associated with the race of the respondent, percentage black in state and racial fractionalization in state.

In column (1) and (2) of Table 1[10] we have reproduced columns (1) and (2) from table 4.4 in Alesina et al. (2001), where they look at how the respondents' race and percentage black in

[10] When we write Table in this chapter we refer to Regression Tables

the state affect the support for increased welfare. Our contribution to Alesina, Glaeser and Sacerdote's analysis is by expanding the regression with new variables and testing the robustness of the results by using different variables on welfare support. We include the two new variables: *government should reduce income differences* and *lefty* (columns 4-9) as well as add a new variable for measuring *racial fractionalization* in the respondents' state. This new right-hand side variable is run against all the three dependent variables (column 3, 6 and 9).

Regression Table 1:
EFFECTS OF RACIAL HETEROGENEITY ON SUPPORT FOR WELFARE

The dependent variable in regressions (1)-(3) *Support for increased welfare* is a scale (normalized 0-1) for how much the respondent supports increased welfare.
The possible responses are that the US is currently spending too much, about right or too little on welfare. A value of 1 reflects the view that too little is spent on welfare.
Regression (1) and (2) are reproductions of regression (1) and (2) from table 4.4 in Alesina et al. (2001).
The dependent variable in regressions (4)-(6) *Government should reduce income differences* is a scale between 0 and 1 on support for government reducing income differences. A value of 1 reflects that respondent think government ought to reduce income differences.
The dependent variable in regressions (7)-(9) *Left on the political spectrum is a scale* between 0 and 1, where 1 represents extremely liberal.
The idea is that people on the more liberal left side of the political scale are more supportive of redistribution relative to people situated on the right of the scale.

	Support for increased welfare			***Government should reduce income differences***			***Left on the political spectrum***		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Income	-0.0197***	-0.0186***	-0.0197***	-0.00880***	-0.0105***	-0.00929***	-0.00215***	-0.00222***	-0.00224***
	(0.000994)	(0.00108)	(0.00106)	(0.000962)	(0.00105)	(0.00106)	(0.000348)	(0.000367)	(0.000375)
Female	0.00709	0.00922*	0.00634	0.0236***	0.0258***	0.0236***	-0.000619	0.00212	-0.00275
	(0.00524)	(0.00552)	(0.00558)	(0.00462)	(0.00480)	(0.00518)	(0.00176)	(0.00179)	(0.00192)
Married	-0.0335***	-0.0378***	-0.0337***	-0.0101**	-0.00955*	-0.00810	-0.0184***	-0.0200***	-0.0162***
	(0.00575)	(0.00611)	(0.00618)	(0.00510)	(0.00534)	(0.00576)	(0.00193)	(0.00198)	(0.00213)
Children	0.00638***	0.00599***	0.00591***	1.61e-05	-0.000823	0.000618	-0.00211***	-0.00258***	-0.00197***
	(0.00161)	(0.00177)	(0.00170)	(0.00150)	(0.00163)	(0.00165)	(0.000564)	(0.000599)	(0.000606)
Edu: less than HS	0.0416***	0.0422***	0.0443***	0.0796***	0.0799***	0.0768***	0.0158***	0.0177***	0.0154***
	(0.00712)	(0.00760)	(0.00749)	(0.00659)	(0.00701)	(0.00723)	(0.00248)	(0.00256)	(0.00265)
Edu: Some College	-0.00205	-0.00217	-0.00230	-0.0339***	-0.0422***	-0.0396***	0.00854***	0.00895***	0.00883***
	(0.00723)	(0.00764)	(0.00778)	(0.00621)	(0.00652)	(0.00702)	(0.00238)	(0.00244)	(0.00262)
Edu: Coll Graduate	0.0305***	0.0296***	0.0234**	-0.0863***	-0.0837***	-0.0879***	0.0135***	0.0135***	0.0134***
	(0.00843)	(0.00869)	(0.00910)	(0.00711)	(0.00727)	(0.00806)	(0.00276)	(0.00276)	(0.00306)
Edu: Post College	0.106***	0.107***	0.103***	-0.0600***	-0.0587***	-0.0696***	0.0552***	0.0563***	0.0560***
	(0.0121)	(0.0124)	(0.0133)	(0.00996)	(0.0101)	(0.0114)	(0.00384)	(0.00381)	(0.00431)

Cont.

	Support for increased welfare			***Government should reduce income differences***			***Left on the political spectrum***		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Log City Size	0.00959***	0.00958***	0.00925***	0.00395***	0.00230*	0.00438***	0.00543***	0.00540***	0.00532***
	(0.00123)	(0.00133)	(0.00132)	(0.00112)	(0.00120)	(0.00126)	(0.000423)	(0.000439)	(0.000464)
Black	0.232***		0.242***	0.112***		0.117***	0.0283***		0.0341***
	(0.00814)		(0.00874)	(0.00704)		(0.00796)	(0.00275)		(0.00303)
Percent black in state		-0.0438			-0.0814**			-0.0342***	
		(0.0384)			(0.0329)			(0.0124)	
Racial fractionalization in state			-0.0502**			-0.0487**			0.00306
			(0.0248)			(0.0229)			(0.00856)
Constant	0.403***	0.395***	0.418***	0.449***	0.479***	0.469***	0.269***	0.273***	0.268***
	(0.0128)	(0.0145)	(0.0152)	(0.0124)	(0.0138)	(0.0150)	(0.00451)	(0.00490)	(0.00538)
Observations	20848	18157	18573	16632	14377	13491	28737	25037	24128
R-squared	0.104	0.042	0.107	0.079	0.057	0.083	0.041	0.040	0.044

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Black is a dummy for black respondents.
Percent black in state is a measure of how many black people resides in a state, in percentage of total population in that state
Racial fractionalization in state is an index of racial fractionalization which is constructed in the following way:
1 – percent Black in state^2 – percent White in state^2 – percent Asian in state^2 – percent Hispanic in state^2. The index captures the probability that two individuals randomly drawn from the population belong to different groups. A value of 1 represents the theoretically maximum level of fragmentation.

Regressions containing the variable *percent black in state* (columns (2), (5) and (8)) are limited to white respondents.
All regressions include dummies for age categories which are not shown in the table.

Using the dependent variable *support for increased welfare* (column 1 and 2) Alesina et al. (2001) find that there is a large negative income effect. The impact of education is non-monotonic. People in big cities appear to be much more pro-welfare, and the effects of age and marital status are weak. Gender does not matter at all. Adding the new variables *government should reduce income differences* and *lefty* does not change the effect of these basic control variables to a large extent. The income effect is still negative and significant. The effect of being *female* is significant and positive on the view that government should reduce income differences. This might reflect that females experience more discrimination in the job market and perhaps, to a larger extent than men, feel that existing income differences are unfair. Being *married* has a negative and significant effect on all the dependent variables. *Education* has an ambiguous effect on the different dependent variables. The reason might be that the dependent variables capture different aspects of the welfare system. E.g. higher education has a negative effect on government should reduce income differences; this might be because the dependent variable only captures redistribution of income and not other aspects of the welfare state. People with higher education will more likely become net contributors to income redistribution than people without higher education. Financial self-interest may thus be the reason behind their negative attitudes towards redistribution. Finally, people in big cities are more likely to support welfare.

Alesina et al. (2001) find that the race of the respondent is the single most important predictor of welfare support (column 1). A black respondent is more likely to support increased welfare than a white respondent, ceteris paribus. This finding is supported by regressions 4 and 7 were we use *government should reduce income differences* and *lefty* as dependent variables. The coefficients on *black* are both positive and significant. If the respondent is black it increases the probability of supporting income redistribution by 11.2 percent, all other factors being equal[11]. A black respondent is also 2.8 percent more likely to be on the left side of the political spectrum. Even though these effects are not as strong as when we use *support for increased welfare*, they still lend firm support to findings made by Alesina et al. (2001).

The regressions with *percent black in state* as a right-hand side variable are limited to white respondents only. This allows us to look at how white people's attitudes towards welfare are affected by racial diversity in the respondents' state. According to theory and previous

[11] We only look at the partial effects of the explanatory variables, meaning that all other factors are held equal. This applies for all the regressions.

empirical evidence on racial heterogeneity we expect the percentage black in a state to have a negative impact on whites' welfare support. The reproduction of Alesina et al. (2001) in column (2) shows that percent black has a negative effect on support for increased welfare, but the effect is weak and not statistically significant. However, when we use the two other measures for welfare support in regression (5) and (8), we find that percent black in state has a negative and significant effect (-0.0814 and -0.0342). The effect of this variable can be illustrated as follows: In a state with 50 percent blacks, white people are 4.1 percent more likely to oppose income redistribution than in a state with no black residents[12]. Even though the effects are small, the findings imply that whites are less willing to support welfare when an increasing number of the welfare recipients are black. The implication of this finding is that states with a higher percentage of blacks, with a majority of white voters, are likely to have lower levels of welfare spending than more homogenous states.

In addition to the right-hand variables used in Alesina et al. (2001) reflecting the impact of race, we include an index for *racial fractionalization.* To control for the effect that blacks are more willing to support welfare, we include race of the respondent in the regressions. As seen from regression (3) and (6), the index for racial fractionalization has a negative and significant effect on the support for increased welfare and the view that government should reduce income differences. However, the effect on lefty from regression (9) is not statistically significant. Despite a small economic effect, the negative and significant coefficients from the two first regressions imply that higher fractionalization in a state increases the possibility of opposing welfare. The findings on racial fractionalization along with percent black supports the theory that racial diversity leads to lower levels of welfare spending.

Out of the three dependent variables used in the regression, *lefty* is probably the most inaccurate measure when it comes to capturing support for welfare and redistribution. The reason for this is that the question does not directly ask about people's preferences concerning redistribution and welfare. However, being on the left side of the political spectrum probably increases the likelihood of supporting welfare. The variable *government should reduce income differences* probably does a better job in capturing preferences for increased redistribution, while *support for increased welfare* captures people's preferences for welfare in general. Since Alesina et al. (2001) use *support for increased welfare* in their regressions,

[12] Calculation: -0.0814*0.5 = 0.0407

and as we are building our regressions on their findings, we will continue using this measure throughout the paper.

In sum, adding the two new dependent variables lend support to the predicted negative effect of racial heterogeneity on support for welfare. The additional right-hand side variable racial fragmentation has a significant negative effect on the willingness to support welfare and redistribution in the US. Percent black also becomes significant and negative when we use the two new measures for welfare support. The findings are in line with previous work on the topic; that racial fragmentation across states is associated with lower welfare spending (Luttmer, 2001, Alesina et al., 2001 and Glaeser, 2005).

By presenting theories on imagined communities, heterogeneity of preferences and group formation we seek to explain why percent black and racial fragmentation is associated with lower levels of welfare.

Imagined Communities

Lindqvist & Östling (2009) discuss how people tend to identify with groups of high status, which they define in their paper as groups with a high after-tax income. They also suggest that people tend to identify with groups that are similar to themselves. Based on these assumptions they construct a model that tries to explain the low levels of redistribution in ethnic heterogeneous societies based on what type of group individuals identify with, either their ethnic group or their social class.

Their model consists of a simplified society where there are two social classes, rich and poor, and two ethnic groups, blacks and whites. They suggest that poor whites are likely to identify themselves as poor and favour high taxes when there are no blacks in society, but as the number of black people increases, their identification with the poor group diminishes. This might eventually lead poor whites to identify with their ethnic group instead of their social class. As whites are on average richer than blacks a higher percentage of blacks may lead poor whites to favour lower taxes, even though this conflicts with their own financial self-interest. "(..) the higher degree of ethnic diversity in the US may imply that poor whites in the US are

more likely to identify as white and favour a low level of redistribution (under the conditions given in Proposition 5 of Lindqvist & Östling 2007)" (Lindqvist & Östling, 2009 p. 22).

This theory supports that *percent black* has a negative effect on white's willingness to support welfare. Because an increase in percentage blacks leads poor whites to identify more with their racial group than with the poor, they may vote for lower levels of redistribution.

Heterogeneity of Preferences

An additional theory that seeks to explain why more ethnic and racially diverse communities have less redistribution is difference of preferences. Alesina et al. (1999) present a theory that racially heterogeneous cities supply lower amounts of public goods because of heterogeneity of preferences. They claim that public goods in the form of education and infrastructure are inversely related to ethnic and racial fragmentation in US cities. The reason for this is that different ethnic groups have different preferences over what their tax revenues should be allocated for. Disagreement on this subject reduces the level of public good provision in ethnically and racially heterogeneous areas.

Another explanation is that groups with one ethnic base is likely to value only the benefits of public goods that their group acquires and discount the benefits achieved by other groups. The authors conclude, based on empirical findings that people will vote for a lower level of public goods when a large fraction of tax revenues collected on one ethnic group is used to supply public goods shared with other ethnic groups. Their findings are mainly driven by how white majority cities react to minorities. Since an increase of percentage blacks indicates a higher level of black welfare recipients, the theory of Alesina et al. (1999) may help explain why percent black in state has a negative effect on measures of welfare support among whites.

In- and Out-Groups

Putnam (2007) finds that diversity fosters out-group distrust and in-group solidarity. Freeman (2007) refers to several findings that document the existence of ethnic and racial animosity between in-groups and out-groups. Based on Alesina & La Ferrara (2005) and Gilens (1999) he states that if the people who are different are concentrated among the poor, this animosity leads to lower support of programs designed to aid the poor. In more heterogeneous communities such as the US, it is more common to attribute racial characteristics to the poor

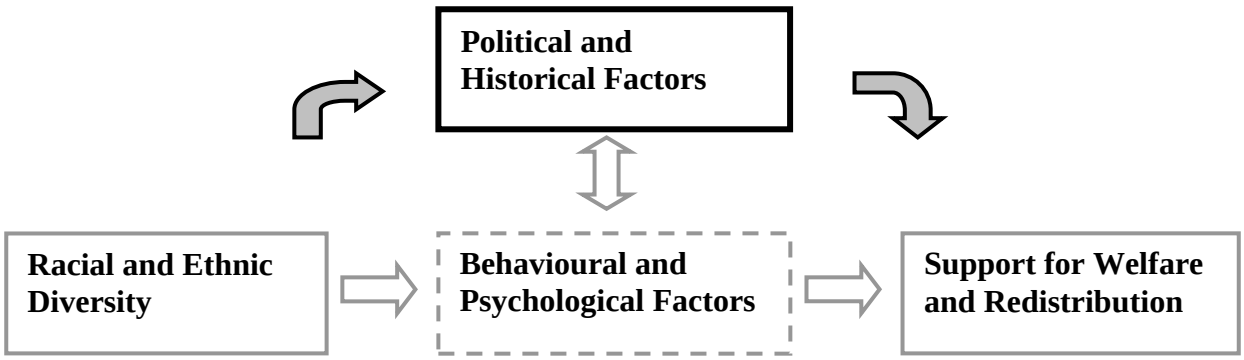
than, say, in Sweden where 95 percent of the population has the same race, ethnicity and religion (Alesina and Glaeser 2004).

Luttmer (2001) examines the determinants for welfare support among individuals in the US. He shows that individuals' attitudes towards welfare spending are not only determined by financial self-interest but is also affected by the characteristics of others around them. His findings show evidence of racial group loyalty. Racial group loyalty is apparent when an additional black welfare recipient in one area reduces white respondents' support for welfare while it has little effect on black respondents and vice versa. Luttmer's theory is based on interpersonal preferences, where individuals prefer to redistribute to people of their own racial, ethnic or religious group. The racial group loyalty makes individuals "(…) prefer less redistribution when members of their own group constitute a smaller share of beneficiaries. As demographic heterogeneity increases, on average, the share of beneficiaries belonging to one's own group declines. Thus average support for redistribution declines as heterogeneity increases" (Luttmer, 2001 p.519).

Alesina et al. (2001) state that in the US, race is the most salient factor in creating cleavages in society. The authors argue that there is a negative relationship between interpersonal altruism and race, and that this relationship can be explained by the fact that people are genetically programmed to form in-group out-group associations and prefer people in their own in-group. Race can be a marker in forming these in-groups, thus creating lower altruism across racial lines. As altruism is the selfless concern for other peoples welfare, relatively low levels of altruism is likely to result in relatively low levels of welfare support. According to the theory of reciprocal altruism people feel altruistic towards people who are good to them and vengeful towards people who taken advantage of them. In light of this people will oppose welfare if they believe that welfare recipients are taking advantage of the system (Alesina et al., 2001). We will come back to this under section 6.3.1 where we analyze the effects of racial prejudice on welfare support.

Until now we have analyzed the direct effects of racial diversity on redistribution by looking at percent black and racial fractionalization. In the following sections we continue exploring possible mechanisms behind the inverse relationship between welfare support and racial heterogeneity by looking at historical factors and behavioural and psychological factors such as racial prejudice, trust and attitudes towards poor.

6.2 Political and Historical factors



In contrast to the homogenous Nordic countries the US can be split along ethnic, racial or religious lines, and racial diversity has influenced American politics in several ways. The most important effect might be the way racial politics have been used to influence redistributive policies. Historically the political power in the US was held by the affluent and white elite, who were net contributors in welfare schemes. Because of racial animosity members of the white elite were likely to oppose redistribution that would benefit the disproportionally poor black communities. Alesina & La Ferrara (2002, referred to in Alesina & La Ferrara, 2004) support this when they find that communities with more racial fragmentation are less willing to reduce income differences, as the white majority feel that redistribution favours racial minorities. The desire to use proportional representation versus majority rule was hampered by the ethnic heterogeneity in the US because the white majority feared that proportional electoral systems would increase representation and thus political power to minorities, and especially to African Americans (Alesina & Glaeser, 2004).

In the period after the Civil War enemies of welfare in America used race in order to defeat an uprising of left-wing politics and redistribution. In the south, racial hatred in politics was used to reduce the influence of populists who in the late 19th century desired income redistribution from richer to poorer Americans. In the south instruments such as Poll Tax[13] and literacy tests that reduced the number of poor voters of both races were introduced with the main objective to disenfranchise African-Americans (Alesina et al., 2001). According to Alesina & Glaeser

[13] The Poll Tax was used as a voting prerequisite in the Southern states of America. By being a prerequisite to voting, impoverished blacks and often poor whites, unable to afford the tax, were denied the right to vote. Its use was declared unconstitutional in 1964. Source: Encyclopaedia Britannica

(2004) racial hatred has often been used strategically by politicians whose main objective is to avoid redistributive policies. By using racial animosity in their campaigns they manage to gain support from even relatively poor whites that would benefit from increased redistribution.

Another way in which racial heterogeneity might explain the relatively low welfare levels in the US is the lack of union cohesion. Lipset & Marks (2000, referred to by Lindqvist & Östling, 2009) state that racial diversity among the American working class has contributed to the failure of establishing a strong workers movement in the US. Strong unions is an essential building block in the welfare state in e.g. Norway, and if racial heterogeneity breaks down union cohesion, racial heterogeneity would indirectly lead to lower levels of welfare.

6.3 Behavioural and Psychological Explanations

6.3.1 Racial Prejudice

People belonging to different ethnic and racial groups tend universally to display some level of suspicion, mistrust, and hostility toward each other. Anyone familiar with the history of ethnic conflict around the world such as slavery, racially motivated violence, prejudice and discrimination will probably find this notion self-evident (Freeman, 2007). The author concludes that the reason for these conflicts is that people like people of their own race more than they like people of other races.

Historically the US has experienced several race related conflicts, and negative attitudes towards people of different races have been evident trough the presence of extremist groups such as the Ku Klux Klan. Although groups that actively show their disregard towards non-ethnic whites still exist, we are more interested in attitudes that perhaps can be placed under the term *laissez fair racism*. Laissez faire racism involves "persistent negative stereotyping of African Americans, a tendency to blame blacks themselves for the black-white gap in

socioeconomic standing, and resistance to meaningful policy efforts to ameliorate America's racist social conditions and institutions" (Bobo et al., 1997 p. 16).

As blacks are disproportionally represented amongst welfare recipients (see Appendix 3), we are especially interested in whites' attitudes towards this group. Negative stereotyping of blacks combined with blacks constituting a larger relative share of welfare receivers might have a negative effect white people's willingness to support increased welfare. According to Bobo (2004) negative stereotypes of African Americans are common and he finds that most whites have lower views on basic behavioural characteristics of black people than blacks have themselves.

How negative attitudes towards blacks are present today can be seen from the responses to the GSS questions regarding attitudes towards African Americans. One question asks if African Americans on average have worse housing, income and jobs than white people due to lack of will power. Out of the white respondents in the survey 56.1 percent answered yes to this question while 39.1 percent of blacks gave the same answer. When respondents were asked to place blacks on a scale from 1 to 7, where 1 represents hard working, only 1.6 percent of white respondents chose 1 while 10.7 percent of the black respondents gave this answer. According to GSS 15.7 percent of white respondents would not vote for a black president, while only 2.1 percent of black respondents answered the same.[14]

Bobo (2004 p.20) states that "(...) this pattern indicates that African Americans remain a culturally dishonoured and debased group in the American Psyche". Related to the Americans' view of lazy people being undeserving of welfare, white people who consider black people to be lazy might feel that blacks are undeserving of welfare.

In Table 2 we explore how attitudes towards blacks affect support for increased welfare among white respondents. Regression (1) in our table is a reproduction of regression (3) in table 4.4 from Alesina et al. (2001). In addition to the reproduced regression we have produced six new regressions that include several variables from the GSS data that reflects positive or negative attitudes towards blacks.

[14] Survey Documentation and Analysis, University of California Berkley. More details can be found in Appendix 4.

Regression Table 2:

EFFECT OF ATTITUDES ON SUPPORT FOR INCREASED WELFARE

The dependent variable in regressions (1)-(7) *Support for increased welfare* is a scale (normalized 0-1) for how much the respondent supports increased welfare. The possible responses are that the US is currently spending too much, about right or too little on welfare. A value of 1 represents the view that too little is spent on welfare. Regression (1) is a reproduction of regression (3) from table 4.4 in Alesina et al. (2001)

	Support for increased welfare						
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
Income	-0.0218***	-0.0172***	-0.0217***	-0.0204***	-0.0221***	-0.0186***	-0.0213***
	(0.00406)	(0.00205)	(0.00162)	(0.00127)	(0.00471)	(0.00194)	(0.00146)
Female	0.0321*	0.0127	0.00979	0.00887	0.0188	0.0129	0.00511
	(0.0165)	(0.00954)	(0.00829)	(0.00650)	(0.0194)	(0.00968)	(0.00732)
Married	-0.0164	-0.0253**	-0.0338***	-0.0324***	-0.0148	-0.0344***	-0.0301***
	(0.0180)	(0.0104)	(0.00943)	(0.00722)	(0.0213)	(0.0109)	(0.00817)
Children	0.0105*	0.00626**	0.00785***	0.00656***	0.0129*	0.00881***	0.00558**
	(0.00593)	(0.00318)	(0.00253)	(0.00208)	(0.00694)	(0.00301)	(0.00234)
Edu: less than HS	-0.00976	0.0222	0.0589***	0.0484***	0.0139	0.0488***	0.0481***
	(0.0259)	(0.0138)	(0.0110)	(0.00898)	(0.0305)	(0.0129)	(0.0100)
Edu: Some College	-0.00482	-0.00783	-0.00345	0.00491	0.00888	-0.0117	-0.0113
	(0.0225)	(0.0131)	(0.0118)	(0.00908)	(0.0259)	(0.0138)	(0.0102)
Edu: Coll Graduate	0.0286	0.00324	0.0163	0.0349***	0.0459	-0.0193	0.0194*
	(0.0246)	(0.0147)	(0.0136)	(0.0104)	(0.0287)	(0.0158)	(0.0115)
Edu: Post College	0.0796**	0.0553***	0.142***	0.131***	0.0891**	0.107***	0.0760***
	(0.0322)	(0.0195)	(0.0201)	(0.0148)	(0.0374)	(0.0228)	(0.0164)
Log City Size	0.0110***	0.00981***	0.0127***	0.00974***	0.0134***	0.0117***	0.00864***
	(0.00423)	(0.00238)	(0.00191)	(0.00155)	(0.00496)	(0.00227)	(0.00176)

Cont.	***Support for increased welfare***						
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
Believe blacks are lazy	-0.0298***						
	(0.00698)						
Blacks lack Willpower		-0.104***					
		(0.00989)					
Opposes having black person to dinner			-0.0594***				
			(0.0196)				
Opposes racial intermarriage				-0.0385***			
				(0.00803)			
Favours living in half black neighbourhood					0.264***		
					(0.0577)		
Whites and blacks should go to same schools						0.0428***	
						(0.0155)	
Would vote for a black president							0.0642***
							(0.0102)
Constant	0.597***	0.486***	0.375***	0.409***	0.399***	0.289***	0.374***
	(0.0606)	(0.0270)	(0.0219)	(0.0166)	(0.0631)	(0.0261)	(0.0193)
Observations	1 921	5 929	7794	12971	1443	5541	10573
R-squared	0.045	0.051	0.060	0.048	0.053	0.051	0.047

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The variable *Believe blacks are lazy* is based on a GSS question where respondents are asked if black people tend to be hard-working or if they tend to be lazy. The answer is a scale from 1 to 7, where 7 reflect the belief that blacks are lazy.
Blacks lack willpower reflects the belief that blacks on average have worse jobs, income, and housing than white people because they don't have the motivation or will power to pull themselves up out of poverty. The answer yes takes the value of 1.
Opposes having black person for dinner is a scale from 0 to 1 on how strongly the respondent would object if a member of the family wanted to bring a black friend home to dinner. Objecting strongly takes on the value of 1.
Opposes racial intermarriage reflects the respondents attitudes towards racial intermarriage. The variable takes on the value of 0 or 1, where 1 reflects that the respondent opposes marriage between black and white people.
Favours living in half black neighbourhood reflect the respondent attitudes towards living in a neighbourhood where half of the neighbours are black. The answers are on a scale from 0 to 1, where 1 reflects being in favour of living in a half black neighbourhood.
Whites and blacks should go to same schools reflect the respondent's views on whether blacks and whites should go to same or separate schools. The value 1 reflects a wish for joint schooling.
Would vote for a black president is a question that asks the respondent if he or she would vote for a black president. The value 1 reflects the answer yes.

All regressions are limited to white respondents.
All regressions include dummies for age categories which are not shown in the table.

Regression (1)-(4) show the effect of negative attitudes on support for increased welfare while regression (5)-(7) show the effect of positive attitudes on support for increased welfare. The results we get from our own regressions (regression (2)-(7)) lend support to the findings of Alesina et al. (2001) that negative attitudes towards blacks are associated with lower support for welfare (regression (1)). The variables *blacks are lazy, blacks are worse off than whites due to lack of willpower, would oppose having black person to dinner* and *opposes racial intermarriage* all have a negative effect on support for increased welfare and all coefficients are significant at a 1 percent level. The attitude that represents the strongest negative effect is the belief that *blacks are lazy.* The maximum score of 7 reflects a strong belief that blacks are lazy, and people giving this response are 20.8 percent less likely to support increased welfare[15]. The belief that *blacks lack willpower* is also a strong predictor for welfare support. White people who agree with this statement are 10.4 percent more likely to oppose increased welfare spending.

In favour of living in half black neighbourhood, whites and blacks should go to same schools and *would vote for black president* represents positive attitudes towards blacks and have a positive effect on support for increased welfare. All of these variables are statistically significant on a 1 percent level. The variable that has the largest impact on support for welfare is *in favour of living in half black neighbourhood.* Perhaps this measure for attitudes towards blacks is relatively good since living in a neighbourhood with 50 percent blacks implies that the person is open and trusting towards people belonging to this racial group. The coefficient of 0.264 tells us that a person who strongly favours living in a half black neighbourhood is 26.4 percent more likely to support increased welfare spending.

Based on the regressions above we find that attitudes towards blacks have a significant impact on white people's desire to redistribute. Positive attitudes towards blacks are associated with support for increased welfare, while negative attitudes are associated with reluctance to support increased welfare. Blacks are disproportionally represented among the poor in the US, and are to a larger degree than whites net receivers of welfare benefits. Increased welfare therefore means increased welfare support for African Americans, and negative attitudes towards this group may thus lead white respondents to lower their support for welfare.

[15] Calculation: 7 * 0.0298 = 0.208. The mean value in the sample is 4.28

We return to some of the attitudes from our regression under section 6.4 where we look at how geographical proximity and social interaction affect formation of attitudes.

6.3.2 Trust

Ethnic and racial diversity may have a negative impact on redistribution by reducing the level of interpersonal trust. Miller (1995, sited in Banting et al., 2004 p. 34) write that "mutual trust facilitates solutions to collective action problems inherent in social welfare programs, where citizens must trust each other to both take part as contributors and not take advantage as beneficiaries". Banting et al. (2004) suggest that trust is more likely to occur between citizens that can identify with each other, and that identification is easiest between people in ethnic- and culturally homogeneous societies. More diverse societies are therefore more likely to have lower support for social welfare programs. Putnam (2007) refers to social psychology when he writes that people find it easier to trust each other and cooperate when the social distance[16] between them is small. "When social distance is small, there is a feeling of common identity, closeness, and shared experiences. On the other hand, when social distance is great, people perceive and treat the others as belonging to a different category" Alba & Nee (2003, referred to in Putnam, 2007 p. 159).

Glaeser et al. (2000) find trough experiments on trust and participation that trust does not travel well across racial lines. Alesina & La Ferrara (2002) find that people in American cities living in more racially diverse communities have a lower tendency to trust other people. In an earlier paper Alesina & La Ferrara (2000) also examine the relationship between trust and heterogeneity at state level. They find that trust is lower in more racial and ethnic fragmentized states. The authors point out that the southern states, which are characterized by a high level of racial and ethnic fragmentation, have a lower level of trust than other parts of the country.

Banting & Kymlicka (2006) refer to an increasing number of researchers who argue that ethnic and racial diversity makes it more difficult to sustain redistributive politics, despite different types of policies adapted by governments to manage this diversity. "Such arguments

[16] Social distance is defined as the degree of intimacy to which an individual is willing to admit persons of other groups (Healey, 2005). These groups vary along a number of dimensions, including wealth, education, race, culture, religion, and language.

assume that it is inherently difficult to generate feelings of national solidarity and trust across ethnic/racial lines, and that the very presence of sizable ethnic and racial diversity erodes the welfare state" (Banting & Kymlicka, 2006 p. 3).

In Table 3 we analyze the effect of race, percent black in state and racial fractionalization on two different measures of trust.

Regression Table 3:
EFFECT OF RACIAL HETEROGENEITY ON TRUST

The dependent variable in regressions (1)-(4) *Believe people in general can be trusted* is a scale from 0 to 1. The respondents are asked if most people can be trusted or if he or she can't be too careful in dealing with people. A value of 1 reflects that the respondent believes people can be trusted.
The dependent variable in regressions (5)-(8) *Believe people try to be fair* is also a scale from 0 to 1, where the value 1 represents the belief that people try to be fair and would not try to take advantage of you if they are given the chance.

	Believe people in general can be trusted				***Believe people try to be fair***			
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
Income	0.00524***	0.00464***	0.00541***	0.00660***	0.00498***	0.00450***	0.00489***	0.00678***
	(0.00123)	(0.00123)	(0.00140)	(0.00133)	(0.00121)	(0.00121)	(0.00134)	(0.00130)
Female	-0.0218***	-0.0213***	-0.0167**	-0.0251***	0.0525***	0.0529***	0.0523***	0.0567***
	(0.00639)	(0.00637)	(0.00701)	(0.00703)	(0.00631)	(0.00630)	(0.00673)	(0.00681)
Married	0.0281***	0.0308***	0.0295***	0.0264***	0.0340***	0.0361***	0.0304***	0.0293***
	(0.00700)	(0.00698)	(0.00775)	(0.00778)	(0.00691)	(0.00690)	(0.00744)	(0.00753)
Children	0.00240	0.00150	0.00362	0.00246	0.00141	0.000634	0.00356	0.000752
	(0.00201)	(0.00200)	(0.00230)	(0.00217)	(0.00198)	(0.00198)	(0.00221)	(0.00211)
Edu: less than HS	-0.128***	-0.119***	-0.141***	-0.126***	-0.0989***	-0.0916***	-0.107***	-0.0943***
	(0.00889)	(0.00889)	(0.00990)	(0.00956)	(0.00872)	(0.00874)	(0.00946)	(0.00924)
Edu: Some College	0.0707***	0.0741***	0.0779***	0.0792***	0.0411***	0.0437***	0.0400***	0.0449***
	(0.00871)	(0.00871)	(0.00961)	(0.00969)	(0.00861)	(0.00862)	(0.00925)	(0.00939)
Edu: Coll Graduate	0.196***	0.200***	0.197***	0.203***	0.146***	0.149***	0.145***	0.149***
	(0.0101)	(0.0100)	(0.0108)	(0.0112)	(0.00993)	(0.00992)	(0.0104)	(0.0109)
Edu: Post College	0.235***	0.239***	0.238***	0.228***	0.159***	0.162***	0.161***	0.151***
	(0.0144)	(0.0144)	(0.0153)	(0.0163)	(0.0144)	(0.0144)	(0.0148)	(0.0159)
Log City Size	-0.00377**	-0.00554***	-0.00485***	-0.000974	-0.00834***	-0.00938***	-0.00868***	-0.00631***
	(0.00153)	(0.00155)	(0.00171)	(0.00168)	(0.00150)	(0.00153)	(0.00164)	(0.00163)

Cont.	***Believe people in general can be trusted***					***Believe people try to be fair***		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
Black	-0.218***	-0.205***		-0.216***	-0.233***	-0.224***		-0.233***
	(0.00987)	(0.00999)		(0.0110)	(0.00978)	(0.00991)		(0.0107)
South		-0.100***				-0.0817***		
		(0.00819)				(0.00808)		
West		-0.0441***				-0.0433***		
		(0.00942)				(0.00929)		
East		-0.0335***				-0.0362***		
		(0.00929)				(0.00916)		
Percent black in state			-0.273***				-0.188***	
			(0.0485)				(0.0461)	
Racial frac in state				-0.275***				-0.220***
				(0.0312)				(0.0302)
Constant	0.446***	0.500***	0.480***	0.520***	0.665***	0.711***	0.691***	0.723***
	(0.0160)	(0.0167)	(0.0188)	(0.0193)	(0.0158)	(0.0165)	(0.0180)	(0.0187)
Observations	21309	21309	18526	17734	21516	21516	18730	18361
R-squared	0.109	0.116	0.079	0.116	0.095	0.099	0.058	0.099

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Black is a dummy for black respondents.
Percent black in state is a measure of how many black people resides in a state, in percentage of total population in that state.
Racial fractionalization in state is an index of racial fractionalization.
The variables *South, West* and *East* are dummies representing geographical areas in the US. The base category is the Central states.

Regressions containing the variable *percent black in state* (columns 3 and 7) are limited to white respondents.
All regressions include dummies for age categories which are not shown in the table.

From the regressions we find that *income* has a significant and positive effect on trust. Gender has an ambiguous effect on the two measures of trust, while being *married* has a positive and significant effect on both trust measures. Higher *education* increases the probability of trusting others while younger people seem to find it harder to trust others than older people. Living in a big city has a small and significant negative effect on trust.

Race is the strongest predictor of *trust* and *fair*. According to regressions (1) and (5), blacks have a much lower probability to trust people than whites. The coefficients of -0.218 and -0.233 can be interpreted as meaning that blacks are 21.8 percent less likely to say that most people can be trusted and 23.3 percent less likely to believe that people try to be fair relative to whites.

The regional dummies in regressions (2) and (6) are significant and negative, meaning that people from the South, West and East have a lower probability to trust others than people from the Central part of the US. The coefficient on the south is the strongest out of the three, meaning that a person from the South is less likely to trust others than people living in other parts of the country. A person living in the South is 10 percent less likely to believe that people can be trusted and 8.2 percent less likely to believe people try to be fair compared to people from the Central states. As pointed out by Alesina & La Ferrara (2000), the South is an area characterized by high levels of ethnic and racial fragmentation.

Regressions (3) and (7) include the independent variable *percent black in state* and are limited to white respondents only. We see that percent black in the state has a negative effect on whites' probability to trust other people and believe that they try to be fair. A 10 percent increase in black residents in a state reduces white people's propensity to trust others by 2.7 percent and reduces the belief that people try to be fair by 1.9 percent. These effects on trust may seem small, but since the number of black residents varies a lot across the US states the impact on trust will vary a great deal depending on the state. To illustrate how the percentage of blacks varies across states, the District of Columbia has 60 percent black residents while Montana only has 0.26 percent black residents.[17] According to our findings, all other factors

[17] Source: Census 2000

held equal, people living in Montana are about 16.3 percent more inclined to trust others than people living in D.C.[18]

Racial fractionalization in regressions (4) and (8) has a negative and significant effect on trust and on the belief that people try to be fair. The strong effect of race is controlled for by including *black* in the regressions. The negative and strong coefficient tells us that people living in states with a high level of racial fractionalization are less likely to trust others. A 10 percent increase in the fractionalization index leads to a decline in trust of 2.75 percent, and a reduction in the belief that people try to be fair by 2.2 percent.

Our finding of lower trust levels in more racially heterogeneous states supports the previous findings of Alesina & La Ferrara (2000, 2002) and Glaeser (2000). Based on literature that finds trust to be important in establishing welfare programs (e.g. Banting et al., 2004), we suggest that racial heterogeneity indirectly reduces the level of redistribution and welfare by eroding trust in society.

6.3.3 Luck vs. Effort – Beliefs about Social Mobility

As mentioned in section 5.5.3, Americans are known to believe in high upwards mobility and that poor can make their way out of poverty as long as they try hard enough. In contrast Europeans to a higher degree believe that people are trapped in poverty and that an individuals' position in society to a higher degree depends on luck.

In the following regressions we look at what affects Americans belief about why people are poor. From GSS we use the question of whether lack of effort is important or not for why there are poor people in the US. 49 percent of white respondents answered very important, 43.4 percent answered somewhat important and only 7.7 percent answered that lack of effort is not important[19]. We are especially interested in seeing if racial fragmentation affects white people's perception of why people are poor. In Table 4 below we use GSS data to examine this relationship. In column (2) and (3) we have limited the sample to whites only.

[18] Calculation: 0.273* (0.60-0.0026)=0.1631
[19] Survey Documentation and Analysis, University of California Berkley. More details can be found in Appendix 4.

Regression Table 4:
EFFECT OF RACIAL HETEROGENEITY ON WHITES' PERCEPTIONS OF WHY PEOPLE ARE POOR

The dependent variable represents to what degree the respondent feels that lack of effort by the poor themselves is very important (value 1), somewhat important (value 0.5), or not important (value 0) in explaining why there are poor people in the US.

	People are poor because they lack effort		
	(1)	*(2)*	*(3)*
Income	0.0104**	0.00829*	0.00817*
	(0.00429)	(0.00457)	(0.00456)
Female	0.00207	0.00862	0.00887
	(0.0188)	(0.0197)	(0.0197)
Married	0.00971	0.0177	0.0176
	(0.0211)	(0.0223)	(0.0223)
Children	0.00607	0.00925	0.00904
	(0.00644)	(0.00697)	(0.00696)
Edu: less than HS	-0.00588	-0.0167	-0.0125
	(0.0272)	(0.0290)	(0.0288)
Edu: Some College	-0.0308	-0.0407	-0.0417
	(0.0247)	(0.0262)	(0.0261)
Edu: Coll Graduate	-0.0887***	-0.0947***	-0.0919***
	(0.0285)	(0.0295)	(0.0294)
Edu: Post College	-0.185***	-0.181***	-0.182***
	(0.0398)	(0.0410)	(0.0410)
Log City Size	-0.00394	-0.00956*	-0.0127**
	(0.00474)	(0.00509)	(0.00519)
Black	-0.0380		
	(0.0320)		
Percent black in state		0.257**	
		(0.123)	
Racial fractionalization in state			0.231***
			(0.0844)
Constant	0.650***	0.653***	0.624***
	(0.0533)	(0.0574)	(0.0593)
Observations	1187	1061	1060
R-squared	0.037	0.048	0.050

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Black is a dummy for black respondents.
Percent black in state is a measure of how many black people resides in a state, in percentage of total population in that state.
Racial fractionalization in state is an index of racial fractionalization.
Regressions (2) and (3) are limited to white respondents only.
All regressions include dummies for age categories which are not shown in the table.

Out of the basic control variables, income, education and city size are significant. A higher income level is associated with a higher tendency to blame the poor themselves for their situation. Higher education reduces the probability of believing that lack of effort is the reason behind individuals' poverty. This effect is significant at a 1 percent level for all three regressions. Higher education might increase the knowledge of obstacles poor people face in society, and may lead to increased understanding and sympathy. Living in a big city reduces the probability of believing that poor people lack effort, but this effect is not statistically significant in regression (1).

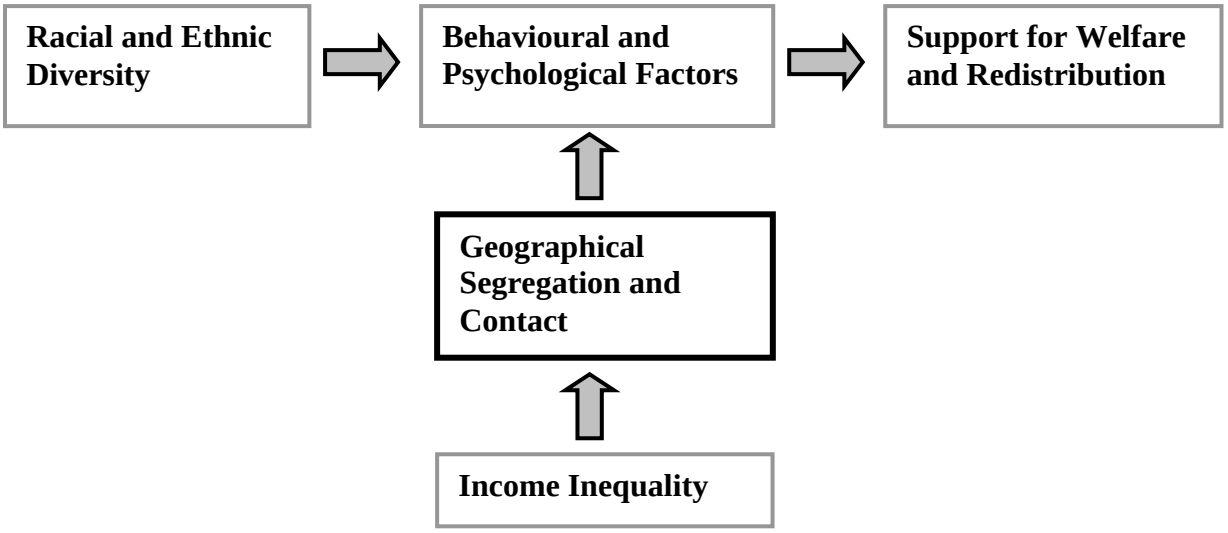
Regression (1) shows that *black* people have a lower inclination of believing that people are poor because they lack effort, but this effect is not statistically significant.

From regression (2) and (3) we find that *percent black* and *racial fractionalization* are both statistically significant and positive. Percent black has a coefficient of 0.257 which means that a 10 percent increase of black residents in a state increases the probability of believing that poor lack effort by 2.57 percent among white respondents. A 10 percent increase in the fractionalization index increases the likelihood of believing that poor lack effort by 2.3 percent. Even though the effects are small, the findings imply that a higher level of racial diversity in society is associated with a higher tendency for whites to believe that people are poor due to lack of effort.

We can only suggest why white people's view of why people are poor is significantly affected by percent black and racial fragmentation in state. This finding is probably linked to racial prejudice, and as pointed out under section 6.3.1 stereotypes like "blacks are lazy" and "blacks have lower income due to lack of will power" are prevailing among whites. Since a higher percentage of blacks in one state implies that a higher percentage of the poor in that state are black, white people will observe more poor black people in their surroundings and perhaps in media. Combining the attitudes towards blacks and their observations of the poor, white residents might become more negative towards poor and find it harder to sympathize with their situation. Alesina and Glaeser (2004) suggest that the racial differences between rich and poor facilitated the spreading of negative views like "poor are lazy" because racial prejudice connects laziness with different skin colours.

The implication of our findings is that white people living in racial diverse societies are more likely to blame individuals for their social status, which may in turn lead to a lower degree of sympathy and willingness to aid the poor. When believing that lack of effort from the individual's part is the reason for poverty, the net contributors to welfare might feel the recipients are undeserving and therefore oppose welfare spending that redistribute from rich to poor.

6.4 Geographical Segregation and Contact



6.4.1 Geographical Segregation and Persisting Stereotypes

In this section we look at how physical distance between individuals affect the behaviour and psychological factors presented in the previous chapter. Murdie & Borgegard (1998, p. 1870) find that "physical and social distance tends to be mutually reinforcing with the result that spatial segregation is both a measure of and an influence on social distance". We argue that physical segregation and lack of social interaction intensify the effects of e.g. trust, perception of the poor and stereotypes found earlier, and therefore have an effect on the willingness to redistribute.

Bjorvatn & Cappelen (2001) introduce an alternative explanation to the redistribution puzzle based on two mechanisms. They make a link between income distribution and residential

segregation, where the idea is that large pre-tax income differences lead poor people and rich people to live geographically separated from each other. They refer to Jargowsky (1996, 1997) when they write that increased poverty is a significant factor in explaining why spatial segregation for all ethnic groups has increased during the last three decades in the US. In a second link they connect geographical segregation to formation of negative attitudes. The authors write that "segregation may reduce the social attachment between groups in society, and reduce the willingness of the rich to make transfers to the poor. Conversely, societies with small pre-tax differences in income may be characterized by larger transfers and a less segregated population structure".

From Jargowsky (1997, p.16) it is clear that minorities are highly represented among the poorer groups in the American society. He finds that residents of high-poverty neighbourhoods, neighbourhoods with poverty rates of at least 40 percent, are predominantly minority. The segregation between whites and minority groups is also apparent. Despite an increasing number of white residents in high-poverty neighbourhoods, most people belonging to the lower income groups reside in poor neighbourhoods that are dominated by their own ethnic group. He also states that black ghettos are the most common type of high-poverty neighbourhood.

Since the segregation of rich and poor becomes a segregation of whites and blacks, this may lead to a lack of social attachment between different racial groups. With little social interaction, white people will more likely base their beliefs about blacks on stereotypes, and as mentioned earlier these stereotypes are common and often negative. Negative attitudes may contribute in reducing rich white people's wish to redistribute to poorer minorities. Alesina et al. (2001, p. 30) state that "racial differences between the poor and the non-poor in the US will tend to create the perception of the poor as "others" in the US". This perception will likely be intensified by geographic isolation. Stereotypes such as "blacks are lazy" and "blacks are not willing to work hard" combined with Americans' view that upwards mobility is high can contribute to low support for welfare programs among white Americans.

In the following we present some evidence on how geographical segregation makes blacks and minority groups stay in poverty. Studies show that social mobility among poor blacks and minority groups are low, and that the reasons why they stay in poverty are largely due to the negative effects of geographical segregation.

Poor Education Quality and Lack of Job Opportunities

Massey & Denton (1993) point at housing segregation as a major cause of the underclass problems for blacks in the US. Their research indicates that residential segregation, through maintaining urban poverty, is the primary reason for racial inequality in the US. Ethnic enclaves are often located in older neighbourhoods and are therefore likely to be under relatively strained central city and inner-ring suburb governments. This leads to lower quality of local public goods, such as primary and secondary education which in turn have negative effects on family welfare according to Glaeser et al. (2007).

Wilson (1987, referred to in Jargowsky, 1997 p.18) states that "when the poor are residentially isolated from the non-poor, they are spatially and socially cut off from mainstream resources, opportunities, and role models". A lack of good public schools and good jobs for minorities in segregated communities results in a "(…) disproportionate concentration of the most disadvantaged segments of the urban black population". La Ferrara & Mele (2006) argue that increased segregation leads directly to worsening economic outcomes of minority groups. As ethnic conflict leads to low provision of public schools, the skill levels of minorities in ghetto areas are not improving. A vicious circle arise where poverty levels increase, making central cities' unemployment and decay even worse and ethnic conflict get even more acute, according to Alesina et al. (1999).

By reducing access to jobs for blacks, housing segregation directly affects their employment opportunities. Segregation may also have an indirect effect on employment opportunities if employers tend to hire workers who reflect the racial composition of the surrounding area (McDonald, 1981). In addition Jargowsky (1997) finds that spatial mismatch between inner-city residents and available jobs further worsen poor minorities' employment opportunities. The reason for this mismatch is largely due to decentralization of employment because businesses move away from the city centre.

From the evidence listed above poor blacks are not staying in poverty solely based on their own effort. Kluegel & Smith (1982, 1986, referred to in Bobo et al., 1997) state that whites' perception of the reasons behind the black-white socioeconomic gap is an important input to the whether they will support or oppose policies designed to improve the position of blacks.

When white's perceptions of blacks are influenced by the negative stereotypes mentioned, (e.g. blacks are lazy) government interventions that seek to promote blacks will likely not be supported. If whites believe that blacks are in the economic situation described above because of racial discrimination or poor education opportunities they will probably be more supportive to such intervention. Unfortunately there has been little or no change in the prevailing tendency to blame the individuals instead of society for the black-white socioeconomic status gap according to Kluegel (1990, referred to in Bobo et al., 1997).

In Table 2 we found that negative attitudes and perceptions about blacks have a negative effect on the willingness to support increased welfare (see section 6.3.1). As suggested above, geographical segregation may intensify these negative attitudes by leading to little social contact between poor and non-poor and whites and blacks. Geographical segregation can both worsen the opportunities for the poor and weaken the feeling of solidarity and identification across different social classes and races. In the next section we explore the link between contact and attitude formation and analyze how geographical proximity between races might have a positive impact on interpersonal relations and attitudes towards blacks, as well as the willingness to support increased welfare.

6.4.2 Contact Hypothesis

As mentioned in the previous section, Bjorvatn & Cappelen (2003) make a link between geographical segregation and attitude formation, and argue that segregation may weaken the feeling of solidarity of the rich for the poor. Lower solidarity will in turn reduce their willingness to vote for income redistribution. The authors point out that even though their paper does not explicitly focus on race, there is typically a strong correlation between race and socioeconomic status, and segregation between rich and poor often leads to segregation between people of different races. "Our paper could therefore be interpreted as describing the attitudes of, say, a white middle class towards a coloured lower class" (Bjorvatn & Cappelen, 2003 p. 1660).

Related to this some may argue that geographical *proximity* and *social interaction* between people of different races can help reduce negative attitudes and perhaps even contribute to formation of positive ones. A familiar perspective on the effect of diversity on social connections is the "contact hypothesis". The hypothesis claims that increased contact between people that are different from each other make them overcome any initial hesitation and ignorance that might exist, and more trust is created between them (Putnam, 2007). The hypothesis was formalized by Robin Williams in 1947 followed by Gordon Allport in 1954, and has since then received considerable research attention and support, and been central in social psychological work on intergroup relations. Putnam (2007) refers to striking evidence for the contact hypothesis in a study of American Soldiers during WW2. The study revealed that white soldiers with no previous contact with black soldiers were more opposed to the idea of serving in a platoon with blacks than soldiers who had been assigned with black soldiers in the past. That race relations will improve if blacks and whites interact was also the logic behind the desegregation of American schools in 1954[20].

An opposing theory named the "conflict theory" argues that diversity fosters out-group distrust and in-group solidarity because of, among other things, conflict over limited resources. The conflict theory states that the closer we get in physical proximity of people of another race or ethnic background, the more we stick to 'our own group' and the less we trust the people outside the group (Putnam 2007).

[20] The Brown v. Board of Education case in 1954 referred to in Putnam (2007).

Wittig and Molina (2000) discuss whether contact is the problem or the solution to prejudice between races. Even though conflict often is based on some degree of contact (suggesting a positive relationship between contact and prejudice), individuals who get to know each other better tend to like each other more (suggesting a negative relationship). This is referred to as the contact-conflict paradox. Pettigrew (1998 referred to by Wittig & Molina 2000) present an explanation to the paradox based on the level of interaction in the contact setting. Increased contact in a superficial setting tends to increase prejudice, while deeper interpersonal associations between people of different races will reduce prejudice. In short, contact if managed properly is believed to reduce intergroup prejudice, discrimination and conflict.

Allport (1954, referred to by Pettigrew & Tropp, 2000) presents four optimal conditions that need to be realized in order for intergroup contact to reduce prejudice. First, the setting and situation in which the contact occurs requires equal status between the groups, secondly the groups need to have common goals, the third requirement is no competition between groups, and fourth, contact between the different racial groups must be socially sanctioned and encouraged by authorities.

Recent findings show that experiments with contact that satisfied all of Allport's optimal conditions had a higher mean effect on attitudes than in cases where only some of the conditions were met. Even though the conditions increase the probability of establishing positive attitudes, they are not essential in gaining positive outcomes of intergroup contact. Pettigrew & Tropp (2006) find in their analysis that only 19% of 713 samples involved contact situations in line with Allport's conditions but still 94% of all samples showed a negative relationship between contact and prejudice. Van Dyk and Wisman (1990 and 1972, referred to in Pettigrew and Tropp 2006) also find that contact has a positive effect on attitudes even though the conditions are not fulfilled.

Pettigrew (1998, referred to in Kadushin & Livert, 2002) points out that the optimal contact situation for reducing prejudice is one that provides individuals with the opportunity to become friends. In line with the formulation of Jackman and Crane (1986, sited by Gibson, 2007) we believe that for positive attitudes to be formed between people from different groups the contact need to be sustained rather than episodic and even more importantly it must be characterized as personal, informal, and one-to-one contact. On samples from South Africa, Gibson (2006) finds that workplace contact has no significant effect in producing

more reconciled racial attitudes and believes that the reason is the often hierarchical structure in companies that makes it difficult for people to get to know one another. On the other hand, he finds that sharing a meal together enhances racial understanding and reconciliation for blacks, white, and Coloured people.

Even though research on the contact hypothesis have shown mixed support, a meta analysis[21] performed by Pettigrew & Tropp (2000) shows that out of 203 studies 95% found an inverse relationship between contact, namely face to face interaction, and prejudice. In short, more contact and interaction between people of different races leads to less prejudice. The strong link could not be explained by selection bias, which has been a critique against research on contact theory. Selection bias is really a question about the causality of contact and attitudes. Do people develop positive attitudes towards ethnic minorities because of contact, or is it the other way around? Perhaps people who already are relatively unprejudiced toward a certain ethnic group deliberately have more contact with members of this group.

Sonleitner & Wood (1996) take into account this causality problem; that initially tolerant attitudes often lead people to engage in interracial contact, and try to control for this by focusing on past (childhood) contact to predict present (adult) stereotype adherence and prejudice. They argue that "(...) childhood interracial contact in schools, neighbourhoods and churches is not voluntary-that is, children don't usually choose to attend a desegregated school or church, or decide to live in an integrated neighbourhood." (p.4). Their conclusion is that interracial contact promotes real and lasting improvement in racial attitudes into adulthood, both through disconfirmation of negative stereotypes and through a direct effect on prejudice itself.

In Table 5 we look at how contact with blacks affect whites' attitudes towards this racial group. We use three dependent variables to capture negative and positive attitudes towards blacks; *Blacks are lazy, blacks lack willpower* and *would vote for black president*.

To measure the effect of contact with blacks we use *black person home for dinner* as an independent variable. As mentioned earlier, Gibson (2006) argues that sharing a meal together may help reduce prejudice between whites and blacks. This type of contact will likely be

[21] A statistical procedure to combine a number of existing studies

personal and informal and we therefore expect this variable to have a positive effect on attitude formation.

In addition we include two variables that capture geographical proximity to blacks: *Living in a neighbourhood with blacks* and *live close to black families*. To what extent living in a neighbourhood with minorities affects white people's attitudes can be discussed. Although a neighbourhood allows for contact between different groups, considerable isolation of individuals in the neighbourhood may occur. Still, the belief that neighbourhood interaction will reduce prejudice is shared by contemporary social scientists (Massey & Denton, 1993, referred to in Dixon & Rosenbaum, 2004). The belief that integration of blacks and whites in neighbourhoods will lower the barrier between blacks and whites by aiding white people to overcome their ignorance and fears towards blacks was an argument used by members of the U.S. congress who wanted to implement the Fair Housing Act from 1968[22] according to Dubofsky (1969 referred to in Dixon & Rosenbaum 2004).

Even though geographical proximity between whites and blacks does not directly indicate social contact, we argue that the probability of contact is relatively high when people live in e.g. the same street or on the same block. We therefore believe that these variables can serve as proxies for contact between blacks and whites.

[22] The Fair Housing Act banned discrimination in the sale and rental of housing (Massey and Denton 1993).

Regression Table 5:
EFFECT OF CONTACT WITH BLACK PEOPLE ON WHITES' ATTITUDES TOWARDS BLACKS

The dependent variable in regression (1)-(3) *Black people are lazy* is from the GSS question where respondents are asked if black people tend to be hard-working or if they tend to be lazy. The answer is a scale from 1 to 7, where 7 reflect the belief that blacks are lazy.
The dependent variable in regression (4)-(6) *Blacks lack willpower* reflects the belief that blacks on average have worse jobs, income, and housing than white people because they don't have the motivation or will power to pull themselves up out of poverty. The answer yes takes the value of 1 and the answer no equals 0.
The dependent variable in regression (4)-(6) *Would vote for black president* shows the respondent's willingness to vote for a black president if he or she was appointed by the respondent's party and qualified for the job. The value 1 reflects desire to vote for a black president.

	Black people are lazy			***Blacks lack willpower***			***Would vote for black president***		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Income	0.0183	0.0166*	0.00662	0.00287	0.00165	0.00574*	0.00961***	0.00925***	0.00574***
	(0.0171)	(0.00943)	(0.0262)	(0.00273)	(0.00206)	(0.00327)	(0.00163)	(0.00119)	(0.00171)
Female	-0.0703	-0.0569	-0.184	-0.0502***	-0.0437***	-0.0388**	0.0254***	0.0277***	0.0163*
	(0.0689)	(0.0387)	(0.115)	(0.0128)	(0.00932)	(0.0159)	(0.00817)	(0.00590)	(0.00868)
Married	0.0303	0.0533	0.158	0.0416***	0.0435***	0.0173	0.00431	-0.00141	-0.00689
	(0.0765)	(0.0427)	(0.131)	(0.0141)	(0.0103)	(0.0177)	(0.00898)	(0.00656)	(0.00970)
Children	0.0194	-0.00253	0.0295	0.00594	-0.00255	-0.00380	-6.32e-06	0.00546***	0.00809***
	(0.0245)	(0.0142)	(0.0418)	(0.00431)	(0.00318)	(0.00554)	(0.00266)	(0.00191)	(0.00289)
Edu: less than HS	0.0758	0.00326	0.288*	0.0429**	0.0586***	0.0693***	-0.0800***	-0.0643***	-0.0588***
	(0.104)	(0.0606)	(0.169)	(0.0181)	(0.0136)	(0.0234)	(0.0113)	(0.00815)	(0.0123)
Edu: Some College	-0.135	-0.0974*	-0.158	-0.0989***	-0.0927***	-0.103***	0.0220*	0.0343***	0.0352***
	(0.0915)	(0.0516)	(0.147)	(0.0175)	(0.0126)	(0.0214)	(0.0112)	(0.00814)	(0.0118)
Edu: Coll Graduate	-0.157	-0.270***	-0.344**	-0.187***	-0.194***	-0.184***	0.0578***	0.0701***	0.0785***
	(0.101)	(0.0575)	(0.174)	(0.0202)	(0.0142)	(0.0242)	(0.0130)	(0.00924)	(0.0134)
Edu: Post College	-0.402***	-0.426***	-0.355	-0.282***	-0.292***	-0.246***	0.0651***	0.100***	0.0917***
	(0.137)	(0.0755)	(0.243)	(0.0268)	(0.0190)	(0.0326)	(0.0177)	(0.0130)	(0.0185)
Log City Size	-0.0181	-0.00686	-0.0296	-0.00779**	-0.00215	-0.00686*	0.00310	0.00546***	0.00909***
	(0.0171)	(0.0101)	(0.0288)	(0.00319)	(0.00243)	(0.00393)	(0.00198)	(0.00150)	(0.00208)

Cont.	***Black people are lazy***			***Blacks lack willpower***			***Would vote for black president***		
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Had black person home for dinner	-0.210***			-0.100***			0.0924***		
	(0.0744)			(0.0143)			(0.00911)		
Live in neighbourhood with blacks		-0.0873**			-0.0302***			0.0284***	
		(0.0416)			(0.00972)			(0.00610)	
Live close to black families			-0.0977			-0.0149			0.00917
			(0.128)			(0.0176)			(0.00950)
Constant	4.698***	4.620***	4.868***	0.774***	0.751***	0.754***	0.654***	0.636***	0.671***
	(0.209)	(0.121)	(0.346)	(0.0341)	(0.0262)	(0.0451)	(0.0207)	(0.0150)	(0.0237)
Observations	1421	3816	539	5504	10770	3730	7513	14443	6073
R-squared	0.044	0.031	0.075	0.093	0.072	0.069	0.074	0.057	0.051

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Live in neighbourhood with blacks reflects if there are any black families living in the respondent's neighbourhood at present. The answer "yes" takes on the value 1.
Had black person home for dinner represents whether anyone in the respondent's family has brought a friend who was black home for dinner during the last few years or not. A value of 1 reflects that there has been a black person for dinner.
Live close to black families reflects whether there are any black families living close to the respondent. The value 1 means that there are black families living close by.

All regressions are limited to white respondents only and include dummies for age categories which are not shown in the table.

According to regression (4)-(6) *women* are less likely to believe that blacks lack willpower and more likely to vote for a black president (regression (7)-(9)). Higher *education* is associated with more positive attitudes towards black people. *City size* is also associated with more positive attitudes towards blacks, but does not have a significant effect on all the dependent variables.

White people who have had a *black person home for dinner* are more likely to have positive attitudes towards blacks. The coefficient of -0.210 in regression (2) means that having a black person for dinner reduces the tendency of believing black people are lazy by 3 percent.[23] Having had a black person for dinner is associated with a reduction in the belief that blacks lack willpower by 10 percent (regression (5)) and an increase in the probability of voting for a black president by 9.24 percent (regression (8)).

The variable *living in the same neighbourhood as blacks* has a significant effect on all three dependent variables. From regressions (1) and (4) we find that living in the same neighbourhood as blacks has a negative effect on the belief that black people are lazy and that they lack willpower. E.g. living in a neighbourhood with blacks reduces white people's tendency to believe that blacks are relatively worse off than whites due to lack of willpower by about 3 percent. The explanatory variable also has a positive and significant effect on would vote for a black president, as seen in regression (7). White people living in a mixed neighbourhood are about 2.8 percent more likely to vote for a black president. Although the effects on the dependent variables are small, the findings suggest that living in a neighbourhood with blacks is associated with more positive attitudes towards this racial group. As argued earlier this might be because geographical proximity leads to more social interaction between races.

People who report *living close to black families* have a lower tendency to think that blacks are lazy and lack will power, and are more willing to vote for a black president. However, none of the coefficients are statistically significant.

Having had a black person home for dinner has the strongest effect out of the contact variables in creating positive attitudes and reducing negative attitudes towards blacks. A

[23] A reduction of 0.210 on a scale from 1 to 7 equals a reduction of 3 percent.

reason for the stronger effect might be that having someone over for dinner is a better context for forming positive attitudes, than just living close to someone.

Based on the signs and significance of living in a neighbourhood with blacks and had a black person for dinner, we find that contact with blacks has an effect on white people's attitudes towards the racial group. Contact seemingly impairs negative attitudes such as *blacks are lazy* and *blacks lack will power* and seems to strengthen positive attitudes here represented by *would vote for black president*. These results lend support to the contact hypothesis. However, the regressions on contact and attitudes require a discussion about the causality between the variables. Do people with already positive attitudes towards blacks decide to live in mixed neighbourhoods, or does living in mixed neighbourhoods contribute in forming positive attitudes? People are mobile, and if they do not like living in a neighbourhood with blacks they have the opportunity to move. Living in a mixed neighbourhood and having a black person over for dinner might therefore reflect already positive attitudes towards blacks. Based on the regressions we cannot say anything definite about the causality of the relationship. Ideally we should have controlled for initial attitudes e.g. by using variables that capture childhood interracial contact (see Sonleitner & Wood 1996). Unfortunately our data is limited, which makes it difficult to produce regressions where the causality is more clear.

In Table 2 we found that positive attitudes towards blacks lead to support for increased welfare. In Table 5 we find that contact with blacks is associated with less racial prejudice among whites. However, since the causality between contact and attitudes is difficult to assess we find it hard to conclude that contact with blacks leads to support for increased welfare. To further investigate the effect of contact with black people on whites' support for increased welfare we run three regressions, presented in Table 6. In these regressions we focus on the direct effect of contact with blacks on white people's support for increased welfare. Regression (1) is a reproduction of column (4) in table 4.4 in Alesina et al. (2001). In addition to their variable *had blacks for dinner*, we include the two new contact variables from Table 5 in order to test the robustness of their results.

Regression Table 6:

EFFECT OF CONTACT ON THE SUPPORT FOR WELFARE

The dependent variable *Support for increased welfare* is a scale (normalized 0-1) for how much the respondent supports increased welfare. The possible responses are that the US is currently spending too much, about right or too little on welfare. Regression (1) is a reproduction of regression (4), table 4.4. in Alesina et al. (2001)

	Support for increased welfare		
	(1)	*(2)*	*(3)*
Income	-0.0184***	-0.0189***	-0.0205***
	(0.00136)	(0.00111)	(0.00175)
Female	0.00977	0.00908	0.00513
	(0.00702)	(0.00565)	(0.00901)
Married	-0.0356***	-0.0377***	-0.0346***
	(0.00778)	(0.00629)	(0.0100)
Children	0.00674***	0.00616***	0.00397
	(0.00222)	(0.00180)	(0.00293)
Edu: less than HS	0.0484***	0.0416***	0.0518***
	(0.00953)	(0.00774)	(0.0126)
Edu: Some College	0.00255	-0.00389	0.00869
	(0.00980)	(0.00784)	(0.0124)
Edu: Coll Graduate	0.0250**	0.0283***	0.0454***
	(0.0113)	(0.00894)	(0.0140)
Edu: Post College	0.133***	0.107***	0.133***
	(0.0162)	(0.0128)	(0.0198)
Log City Size	0.00984***	0.00867***	0.00746***
	(0.00167)	(0.00141)	(0.00211)
Had black person home for dinner	0.0432***		
	(0.00804)		
Live in same neighbourhood as blacks		0.0178***	
		(0.00585)	
Live close to black families			0.0173*
			(0.00980)
Constant	0.362***	0.389***	0.410***
	(0.0171)	(0.0140)	(0.0238)
Observations	11048	17345	7160
R-squared	0.049	0.043	0.051

NOTE: Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Live in neighbourhood with blacks reflects if there are any black families living in the respondent's neighbourhood at present. The answer "yes" takes on the value 1.
Had black person home for dinner represents whether anyone in the respondent's family has brought a friend who was black home for dinner during the last few years or not. A value of 1 reflects that there has been a black person for dinner.
Live close to black families reflects whether there are any black families living close to the respondent. The value 1 means that there are black families close by.

All regressions are limited to white respondents only and include dummies for age categories which are not shown in the table.

From regression (1), reproduced from Alesina et al. (2001), we see that white people who have *had a black person over for dinner* during the last few years are 4.3 percent more likely to support increased welfare. The effect is significant at a 1 percent level.

From regression (2) we find *that living in a neighbourhood with blacks* has a positive effect on whites' willingness to support increased welfare. The effect is significant at a 1 percent level, but the economic effect is not very strong. White people living in the same neighbourhood as blacks have a 1.78 percent higher probability to support increased welfare. White people who *live close to black families* (regression (3)) are more likely to support increased welfare, but the coefficient is small and only significant on a 10 percent level.

Despite the small effects of the additional variables they still lend support to the finding of Alesina et al. (2001) that contact with black people are associated with a higher support for welfare among whites. The stronger effect of having had a black person over for dinner on welfare support might imply that it is a better measure for social contact between races. Having someone over for dinner will probably to a larger degree meet the four optimal conditions introduced by Allport (1954, referred to by Pettigrew & Tropp 2006) than just living close to someone of another race.

Alesina et al. (2001, p.32) point out that the variable blacks for dinner reflects "(…) both contact with blacks and an underlying lack of hostility towards blacks". Whites who have initially positive attitudes towards blacks are more likely to invite a black person over for dinner. In the light of this we believe that the two new variables added might capture the separate effect of contact to a larger degree. The two new variables reflect geographical

proximity to blacks, and as argued earlier geographical proximity often leads to contact and social interaction. However, the question of the causality of attitude formation and contact is also present here. As we know mobility in the US is relatively high, and if white people don't like living in the same neighbourhood as blacks, they might move. On the other hand, moving away from an area and building a new life somewhere else solely because blacks live nearby is an extreme measure to take. To some extent the same argumentation holds for whites moving to an area because they are positive towards blacks. We therefore argue that the positive effects of living close to blacks and living in a neighbourhood with blacks have on welfare support to a larger degree reflect contact created between the races due to geographical proximity. Our belief is that these two variables are not biased by initial attitudes to the same extent as having a black person over for dinner.

6.5 Summary of Empirical Analysis

The regression results in Table 1 lend support to the prediction that racial diversity has a negative effect on the support for welfare and redistribution. This finding is in line with previous studies that show an inverse relationship between racial heterogeneity and welfare spending across states. We pointed to the tendency to form in- and out- groups in heterogeneous societies and differences in preferences as possible explanations to the negative impact of race on redistribution.

In section 6.2 we focused on political and historical factors as important underlying causes for differences between the US and European welfare levels. By looking into previous literature we found evidence that racial diversity has served as an important obstacle for the development of a welfare state in the US.

Under behavioural and psychological explanations we explored the importance of prejudice against blacks on white's willingness to support welfare. In Table 2 we found that white people who report negative attitudes towards blacks are more likely to oppose increased welfare. As blacks are disproportionally represented among the poor, a large fraction of the tax money will be transferred to black recipients. Negative attitudes towards this racial group may lead white people to oppose increased welfare spending.

Further we found that psychological factors like trust and the perception of why people are poor to a large degree are affected by the level of racial heterogeneity in society. In Table 3 we found the level of trust across states in the US to be negatively related to racial fractionalization and percent black in state. We pointed to social psychology to explain this inverse relationship, and emphasized identification as a major contributor in establishing trust. We also found that blacks have a lower tendency to trust people in general. Based on earlier findings we concluded that trust is an important factor in welfare arrangements, and through eroding trust, racial diversity has a negative effect on redistribution.

In Table 4 we found that the perception of social mobility and why people are poor is related to racial heterogeneity. The table shows that white people living in more racially diverse states are more likely to report that people are poor due to lack of effort. This relationship is

rooted in racial prejudice, and Alesina and Glaeser (2004) claim that racial differences between rich and poor facilitate the spreading of negative attitudes towards poor, such as "poor people are lazy". However, under geographical segregation we point to the fact that geographically segregated areas dominated by blacks and other minorities are often economically strained and provide poor education and few job opportunities. These factors serve as important obstacles for poor people to improve their economic status. Still there has been little or no change in the tendency for whites to blame the individuals instead of society for the black-white socioeconomic status gap. We argue that segregation of blacks and whites contribute in maintaining prejudice towards blacks, and that support for welfare is not likely to increase as long as these negative attitudes and belief in high social mobility persist.

On the issue of contact and geographical proximity our findings show a positive effect of contact on both attitudes towards blacks and the willingness for whites to support increased welfare. These findings are presented in Table 5 and 6. However, we cannot say anything definite about the causality of the relationship, as social interaction with blacks may reflect already positive attitudes towards this group. We refer to previous studies to support the hypothesis that social interaction help diminish negative attitudes and stereotypes across races and ethnic groups.

6.6 The US and Europe

In the previous sections we explored the impact of racial diversity on factors that are important for the construction and support of the welfare state. We have studied several mechanisms linking the degree of racial heterogeneity in the US to the support for welfare. In the following we elaborate how these mechanisms may help explain the US-Europe difference in redistribution levels and welfare support.

We suggest that racial diversity leads to heterogeneity of preferences, foster in- and out-group solidarity and lead to lower sympathy among whites towards out-groups such as the poor. Freeman (2007) argues that if people who are different are concentrated among the poor, creation of in- and out-groups and animosity between groups may lead to lower support of programs designed to support the poor. In the US, blacks, Hispanics and other minorities are concentrated among the poor, and any income based transfer scheme will therefore disproportionally favour these groups. European countries, on the other hand, are much more homogeneous than the US, and no minorities in European countries are as relatively poor as the blacks in the US (Alesina et al., 2001). Based on these demographic characteristics, poor people in the US might to a larger extent than the poor in Europe be considered an out-group and hence obtain lower sympathy from people around them. From the theory of imagined communities, a lower degree of racial heterogeneity in Europe might also increase the odds of poor whites identifying with the poor instead of their racial group, and hence favour higher tax rates.

Through effecting politics, racial diversity has hampered the growth of the American welfare state. Proportional representation, which has been important in the creation of welfare states in Europe, was opposed in the US because white Americans feared giving power to African Americans. Proportional representation systems have generally facilitated the growth of left-wing parties that are primarily oriented towards increased redistribution and an enlarged welfare state (Alesina & Glaeser, 2004). The absence of majority election systems in Europe made it easier for fringe parties to elect representatives, and is a plausible explanation for why socialism succeeded (Alesina & Glaeser, 2004).

We have also seen how trust is negatively affected by racial heterogeneity. More racially homogeneous states in the US have higher trust levels than states with a high percentage of blacks. The inverse relationship between trust and heterogeneity can also be observed across countries. The relatively homogenous Scandinavian countries display the highest levels of social trust in a comparative study of 86 countries (Svendsen & Svendsen, 2008). The US was ranged as number 13 on the list. As trust is important for the establishment of welfare programs and finding that trust does not travel well across racial lines, lower trust due to high levels of racial diversity in the US can help explain why there are relatively low levels of redistribution in the US compared to the Scandinavian countries.

Another important link to racial diversity is the negative attitudes towards blacks that are very much present in the American society. This "laissez fair racism" is obvious through stereotyping of blacks and white people blaming blacks alone for the socio-economic gap between blacks and whites. Negative attitudes towards blacks have to a large degree affected the US history and politics, and through this affected the development of redistribution policies. However, we also argue that attitudes have a more direct influence on redistribution in today's society. It seems that people who possess negative attitudes towards blacks have a tendency to favour less redistribution. This relationship might be explained by racial heterogeneity as it is more common in heterogeneous societies to attribute negative racial characteristics to the poor (Alesina & Glaeser, 2004). Identifying all poor with racial characteristics will likely reduce sympathy towards the whole group, and not just the one racial group. This will in turn reduce support for welfare programs that exist to aid the poor. In contrast, in the more homogeneous countries in Europe people will probably to a lower degree attribute negative racial characteristics to the poor, and hence find it easier to sympathize with the poor and support welfare schemes that redistribute from rich to poor.

The lower sympathy for poor people in the US is probably also affected by the Americans view of high social mobility. The belief that effort and hard work can pull people out of poverty is much more prevalent in the US than in Europe. In our analysis we find that racial diversity is associated with a larger tendency of blaming individuals themselves for being poor. Europeans on the other hand are more likely to believe that poor people are trapped in poverty. This view might be related to the more homogeneous composition of races in European countries. Blaming society to a larger degree than the individuals themselves for

the socio-economic gap may lead Europeans to be more supportive of income redistribution and welfare than Americans.

In our analysis we pointed to geographical segregation as a factor preventing poor and minorities from prospering in society. Although spatial segregation exists in Europe, ethnic segregation in European cities is not as strong as in American cities, and the development of ghettos is far from reality (Musterd & Ostendorf, 2005). Since the spatial segregation between whites and blacks in the US is rooted in historical events and direct actions taken by the white population to segregate blacks from whites (Massey, 1988), segregation might not only be more evident in the US, but also more rigid (Musterd & Ostendorf, 2005). According to Glikman & Semyonov (2008) the ethnic segregation in Europe is much lower than the one between blacks and whites in the US; in fact it is more similar to the segregation between whites and Hispanics. Since spatial segregation of racial groups is not as distinctive in Europe the possibility that people of different races establish contact might be higher relatively to the US.

If the contact theory holds and positive attitudes are formed from contact this may lead to more positive attitudes between people of different races in Europe relative to the US. We found that positive attitudes is associated with higher support for redistribution, thus more contact across races can be an important factor in explaining the different welfare levels in US and Europe.

European welfare state is characterized by universal welfare arrangements that reach out to a larger part of the population than welfare schemes in the US. This will probably increase the likelihood of knowing welfare recipients. Alesina et al. (2001, p. 36) suggest that negative views of welfare recipients might be endogenous and come about because of the social isolation of the poor in the US. “If Europeans are more likely to know welfare recipients (both because of their relative integration and because there are more of them) then they might react negatively to aspersions of their integrity”.

7. Challenges for the European Welfare State

Both income inequality and heterogeneity are on the rise in Europe, and based on the findings in this paper, these trends represent possible challenges for the European welfare state. OECD (2008a) reports that the gap between rich and poor has grown in more than three-quarters of OECD countries over the past two decades, and that income inequality increased significantly in e.g. Norway and Germany in the early 2000s. Quadagno (2000) points out that the "(...) European welfare states developed prior to the post-war flows of racially and ethnically diverse immigrant groups.(...) Before the war, most migrants were from neighbouring countries."(p. 229). If the increasing racial and ethnic heterogeneity in Europe affect the behaviour and psychological factors in the same way as found in our US analysis, this could represent a challenge for the support of an extensive European welfare state.

Geographical segregation is also on the rise in many European cities. Gilkman & Semyonov (2008) refer to previous studies when they claim that, for the most part, rates of residential ethnic segregation in European cities have been increasing over the years. The authors also refer to previous literature when they mention metropolitan centres like London, Amsterdam, Frankfurt, Athens, Brussels, Paris, Lisbon, and Stockholm as examples of areas that are currently characterized by homogeneous and distinct ethnic neighbourhoods.

According to contact theory, geographical segregation of different ethnic and racial groups will likely reduce the odds for building positive inter-ethnic contacts. Using data from the 2003 European Social Survey on 21 European countries Glikman & Semyonov (2008) find evidence that supports the hypothesis that positive inter-ethnic contacts are likely to reduce anti-minority attitudes. The trend of European cities becoming more heterogeneous and more segregated might therefore present a substantial threat to the support for welfare and redistribution.

8. Conclusions and Suggestions for Further Research

This paper has investigated the relationship between inequality, redistribution and racial and ethnic heterogeneity. Median voter framework and welfare economics predicts that a high income inequality will lead to high levels of redistribution. However, empirical observations show the opposite relationship – that high income inequality is associated with low levels of redistribution. This inverse relationship between inequality and redistribution has been subject to widespread research, and especially the differences between the US and Europe have been emphasized.

Previous studies have found political, historical and institutional factors to be important explanations to the US-Europe difference in redistribution levels. Behaviour and psychological factors, such as perception of social mobility, perception of why people are poor and trust have also been presented as important factors affecting the level of social spending and support for welfare. Several studies show that redistribution is much lower in more heterogeneous areas than in countries characterized by low levels of racial and ethnic heterogeneity. Motivated by this finding, we have explored some of the mechanisms that lie beneath this inverse relationship. We have used data from the US to analyze self-reported attitudes towards welfare spending and redistribution.

The data from our empirical analysis lend support to the theoretical expectation that racial heterogeneity has a negative effect on support for welfare and redistribution. Our analysis further suggests that racial fragmentation has an indirect effect on support for welfare e.g. by affecting attitudes towards poor and the level of trust. On the issue of geographical segregation our data lend support to the contact hypotheses, suggesting that geographical proximity and social interaction between blacks and whites in the US help break down stereotypes and form more positive attitudes. Positive attitudes towards blacks are found to have a positive effect on the willingness to support welfare. However, the causality of the relationship between contact and attitude formation is questionable, and we cannot say anything definite about the effect of contact between races on the formation of attitudes based on our findings. On the other hand we have found support for this relationship from previous literature on the subject, where steps have been made to correct for selection bias.

Two important events that may have an impact on our findings are the election of Barack Obama and the financial crisis. It could be interesting to see if the election of a black president has an effect on attitudes towards blacks in general. By representing a contrast to the image of blacks as poor and lazy a black president might dampen the negative attitudes towards blacks that are held by many white Americans. In addition, by mobilizing many black and poor voters, the pressure for increased welfare benefits might increase during Obama's presidency.

The effect of the ongoing financial crisis has had a deep impact in the US society by increasing the level of unemployment and the number of mortgage foreclosures. The crisis has revealed that events beyond the individuals control can ruin families and leave them bankrupt. It would therefore be interesting to see if the crisis will have an effect on Americans' perceptions of why people are poor and to what degree they feel people are accountable for their own economic situation.

The effects of these events will probably not be revealed in some time. We therefore suggest a new analysis with updated data in order to account for these possible effects as an interesting topic for future research.

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Appendix

APPENDIX 1. Description of Data	
Variable	**Description**
Support for increased welfare	The variable is a scale from 0 to 1 for how much the respondent support increased welfare. The question behind the variable is as follows: "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. Are we spending too much, too little, or about the right amount on Welfare?" "Too little" is given the value 1, "about right" is given the value 0.5 and "too much" is given the value 0. In the GSS data the variable is called natfare.
Government should reduce income differences	The question behind this variable is as follows: "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?" We have rescaled the variable to range between 0 and 1 by calculating the inverse value. For example a score of 7 is recoded to (1/7) = 0,14 and a score of 1 is recoded to (1/1) = 1. In the GSS data the variable is called eqwlth
Lefty	The variable lefty is the inverse of the GSS variable polviews. The question polview is asked as follows: "We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal--point 1--to extremely conservative-- point 7. Where would you place yourself on this scale?" Because lefty is the inverse of polviews it ranges from 0.14 to 1, where 1 represents extremely liberal.

Black	Black is a dummy variable that takes the value 1 when the respondent is black, and 0 when non-black. (The respondents are given the choice between White, Black or Other). The dummy variable is created form the variable race in the GSS data
Percent black in state	Percent black in state is a measure of how many black people resides in a state, in percentage of total population in that state. The variable was constructed by Alesina et al. (2001).
Racial fractionalization	The variable is a fractionalization index where a high value represents a high level of fragmentation. The index is constructed in the following way: $$Racial\ fraczionalization\ in\ state = 1 - \sum_i s_i^2$$ where s_i is the share of group i over the total of the population. The index is a measure of the probability that two randomly drawn individuals belong to two different groups. This racial fractionalization index consists of three different groups: Blacks, Whites, Asians and Hispanics. We have expanded the index constructed by Alesina et al. (2001) by including Hispanics.
Blacks are lazy	The question asked for this variable is as follows: "Do black people tend to be hard-working or do they tend to be lazy?" The variable is a scale from 1-7, where the value 1 stands for hardworking while the value 7 stands for lazy. The variable is called workblks in the GSS data
Black people lack willpower	The question asked for this variable is as follows: "On the average Negroes/Blacks/African-Americans have worse jobs, income, and housing than white people. Do you think these differences are because most Negroes/Blacks/African-Americans just don't have the motivation or will power to pull themselves up out of poverty?" The answer "yes" equals 1, and "no" equals 0. The variable is named racdif4 in the GSS data
Favors living in half black neighborhood	The respondents are asked about how they would feel about living in a neighborhood where half of the neighbors were blacks. The respondents are given the following options: Very much in favor of it, somewhat in favor, neither in favor nor opposed to it, somewhat opposed, or very much opposed to living in a neighborhood where half of the neighbors were blacks. The variable is rescaled to range between 0 to 1 by calculating the inverse value of the variable.

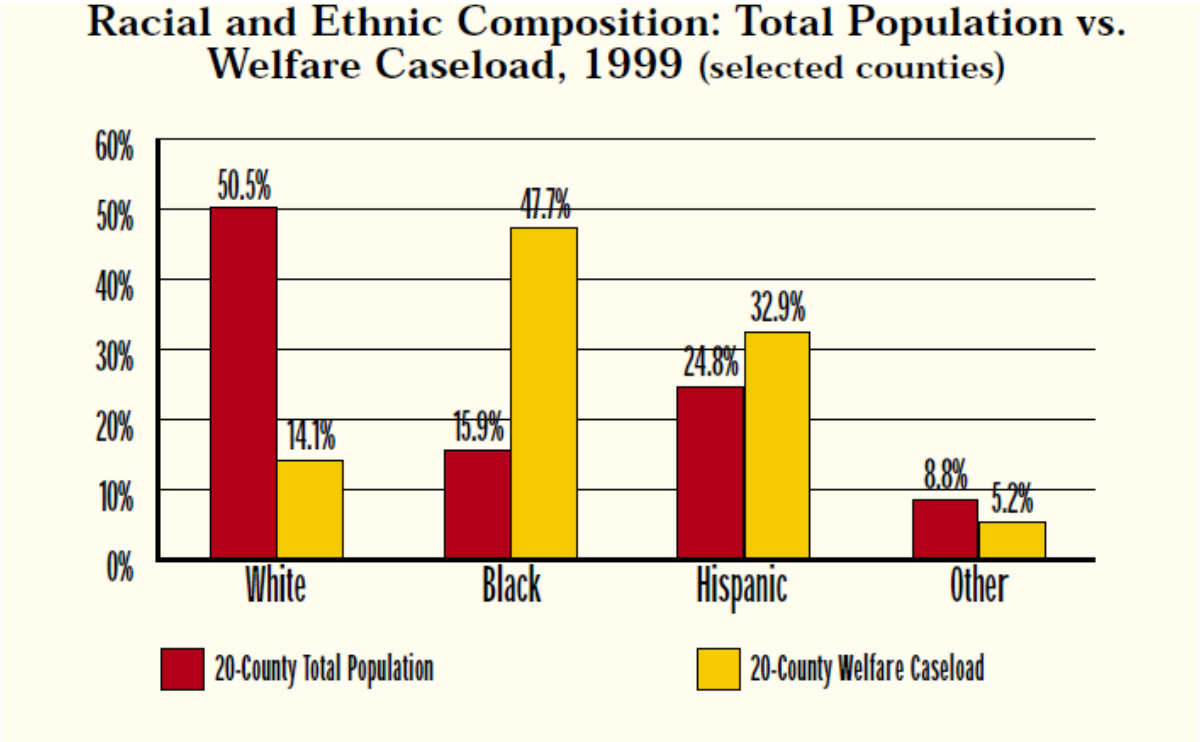
	(1/1) =1 equals strongly favor living in half black neighborhood, while (1/5) =0.2 equals strongly oppose. In the GSS data the variable is called liveblks.
Opposes having black person to dinner	The question asked is as follows: How strongly would you object if a member of your family wanted to bring a Negro/Black friend home to dinner? Would you object strongly, mildly, or not at all? The variable is a scale ranging from 0 to 1, where objecting strongly takes on the value of 1. The variable is called racdin in the GSS data
Opposes racial intermarriage	The question behind this variable is asked as follows: "Do you think there should be laws against marriages between Negroes/Blacks/African- Americans and whites?" The respondents are given the options strongly object, mildly object or not object. The options are given values 0, 0.5 and 1, where the value 1 equals strongly objecting to interracial marriage. The variable is named racmar in the GSS data.
Blacks and whites should go to same schools	Question asked: "Do you think white students and Negro/Black students should go to the same schools or to separate schools?" Yes equals 1 and no equals 0. The variable is named racschol in the GSS data.
Would vote for a black president	Question asked:" If your party nominated a Negro/Black/African-American for President, would you vote for him if he were qualified for the job?" Yes takes the value 1, and no takes the value 0. In the GSS data the variable is called racpres.
Believe people in general can be trusted	Question asked: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The options given are "can trust", "cannot trust" and "depends". The variable is recoded to a scale between 0 and 1 where a value of 1 equals "can trust", 0 equals "cannot trust" and "depends" equals 0.5. The variable is called trust in the GSS data
Believe people try to be fair	Question asked: "Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair?" The options given are "take advantage", "fair" and "depends". The variable is rescaled to range between 0 and 1, where 1 equals "fair", 0 equals "take advantage" and 0.5 equals "depends". The variable is called fair in the GSS data.

Poor are poor because they lack effort	Question asked: "Please tell me whether you feel lack of effort by the poor themselves is very important, somewhat important, or not important in explaining why there are poor people in this country. The variable is recoded to range between 0 and 1. "very important" equals 1, "somewhat important" equals 0.5 and "not important" equals 0. The variable is called whypoor4 in the GSS data.
South, West and East	Dummy variables for the southern states, western states and eastern states in the US.
Had black person home for dinner	Question asked: "During the last few years, has anyone in your family brought a friend who was a Negro/Black/African- American home for dinner?" "Yes" equals 1 and "no" equals 0. The variable is called rachome in the GSS data
Live in neighbourhood with blacks	Question asked: "Are there any Negro/Black/African-American families living close to you?" "Yes" equals 1 and "no" equals 0. The variable is called raclive in the GSS data
Live close to black families	Question asked: "Are there any Negro/Black/African-American families living close to you?" "Yes" equals 1 and "no" equals 0. The variable is called racclos in the GSS data
Income	Income is a measure of total family income, and the respondents are given the choice between 12 income intervals. The value 1 is given to the lowest interval (under $1000) and the value 12 is given for the highest income interval ($25000 or over).
young	Dummy variable for respondents under 30 years old
thirties	Dummy variable for respondents between the age of 30 and 39 years old
forties	Dummy variable for respondents between the age of 40 and 49 years old
fifties	Dummy variable for respondents between the age of 50 and 59 years old
Female	Dummy variable for gender. A value of 1 equal female, a value of 0 equals male
Married	Dummy variable for marital status. A value of 1 equal married, a value of 0 equals not married
Children	Number of children (range 1 to 8)
Edu: less than HS	Less education than high school
Edu: Some College	Some college education
Edu: Coll Graduate	Collage graduate
Edu: Post College	Post college
Log City Size	Log of city size

APPENDIX 2. DESCRIPTIVE STATISTICS

Variable	No of obs.	Mean	Std. Dev.	Min	Max
Support for increased welfare	23428	.3412156	.3895387	0	1
Government should reduce income differences	18999	.4066467	.3040495	.1428571	1
Lefty	32481	.2844147	.1481609	.1428571	1
Black	38975	.133034	.3396158	0	1
Percent black in state	30755	.1189216	.0747538	.0028954	.6828258
Racial frac in state	30755	.3408509	.1125125	.0446859	.54067
Blacks are lazy	5403	4.276143	1.26906	1	7
Black people lack willpower	14628	.5605688	.4963348	0	1
Favors living in half black neigbourhood	4129	.3818479	.2109489	.2	1
Opposes having black person to dinner	12034	.4278018	.2066937	.3333333	1
Opposes racial intermarriage	26173	.2433806	.4291311	0	1
Blacks and whites should og to same schools	9946	.8934245	.3085883	0	1
Would vote for a black president	20503	.8534361	.3536793	0	1
Believe people in general can be trusted	25833	.4195603	.4830411	0	1
Believe people try to be fair	26042	.608613	.4735035	0	1
South	38975	.3344195	.4717932	0	1
West	38975	.1800898	.3842672	0	1
East	38975	.1995638	.3996776	0	1
Poor are poor because they lack effort	1337	.6888556	.3191305	0	1
Had black person home for dinner	21267	.3007476	.4585939	0	1
Live in neigbourhood with blacks	35295	.5294518	.4991389	0	1
Live close to black families	14429	.7175133	.4502244	0	1
Income	33148	9.501629	2.999768	1	12
young	38975	.2233226	.4164782	0	1
thirties	38975	.2179089	.4128305	0	1
forties	38975	.1689031	.3746712	0	1
fifties	38975	.1346761	.3413816	0	1
Female	38975	.5495318	.4975469	0	1
Married	38111	.572092	.4947819	0	1
Children	37984	1.998052	1.843678	0	8
Edu: less than HS	38975	.2646312	.4411423	0	1
Edu: Some College	38975	.2098268	.4071901	0	1
Edu: Coll Graduate	38975	.131982	.3384756	0	1
Edu: Post College	38975	.0545991	.227199	0	1
Log City Size	36961	3.487136	2.198447	0	8.973985

APPENDIX 3.



Source: Allen, K. and Kirby, M. (2000)

APPENDIX 4.

Differences due to lack of will, white respondents

General Social Surveys, 1972-2006 [Cumulative File] May 06, 2009 (Wed 05:19 AM PDT)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**RACDIF4**	DIFFERENCES DUE TO LACK OF WILL	1-2	0,8,9	1
Weight	**WTSSALL**	WEIGHT VARIABLE	.4297-6.4287		1
Filter	**RACE(1)**	RACE OF RESPONDENT(=WHITE)	1-3	0	1

Frequency Distribution

Cells contain: -Column percent -Weighted N		**Distribution**
RACDIF4	1: YES	**56.1** 9,233
	2: NO	**43.9** 7,230
	COL TOTAL	***100.0*** *16,463*

Differences due to lack of will, black respondents

General Social Surveys, 1972-2006 [Cumulative File] May 06, 2009 (Wed 05:19 AM PDT)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**RACDIF4**	DIFFERENCES DUE TO LACK OF WILL	1-2	0,8,9	1
Weight	**WTSSALL**	WEIGHT VARIABLE	.4297-6.4287		1
Filter	**RACE(2)**	RACE OF RESPONDENT(=BLACK)	1-3	0	1

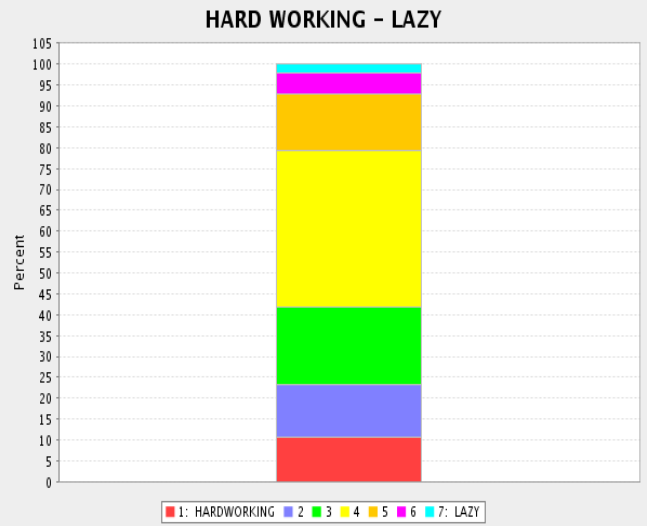
Frequency Distribution

Cells contain: -Column percent -Weighted N		**Distribution**
RACDIF4	1: YES	**39.1** 913
	2: NO	**60.9** 1,424
	COL TOTAL	***100.0*** *2,338*

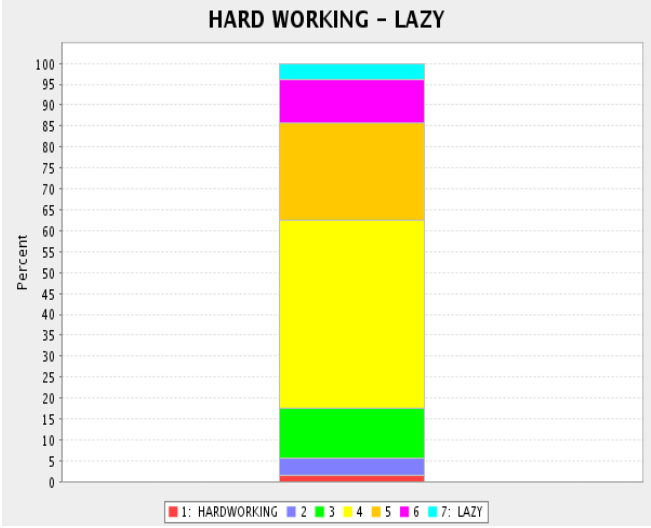
GSS question:

“Do black people tend to be hard-working or do they tend to be lazy?”

Black respondents



White respondents



Vote for black president, white respondents

General Social Surveys, 1972-2006 [Cumulative File] May 06, 2009 (Wed 05:38 AM PDT)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**RACPRES**	WOULD VOTE FOR BLACK PRESIDENT	1-2	0,8,9	1
Weight	**WTSSALL**	WEIGHT VARIABLE	.4297-6.4287		1
Filter	**RACE(1)**	RACE OF RESPONDENT(=WHITE)	1-3	0	1

Frequency Distribution

Cells contain: -Column percent -Weighted N		**Distribution**
RACPRES	1: YES	**84.3** 14,977
	2: NO	**15.7** 2,798
	COL TOTAL	***100.0*** *17,775*

Vote for black president, black respondents

General Social Surveys, 1972-2006 [Cumulative File] May 07, 2009 (Thu 04:48 AM PDT)

Variables

Role	Name	Label	Range	MD	Dataset
Row	**RACPRES**	WOULD VOTE FOR BLACK PRESIDENT	1-2	0,8,9	1
Weight	**WTSSALL**	WEIGHT VARIABLE	.4297-6.4287		1
Filter	**RACE(2)**	RACE OF RESPONDENT(=BLACK)	1-3	0	1

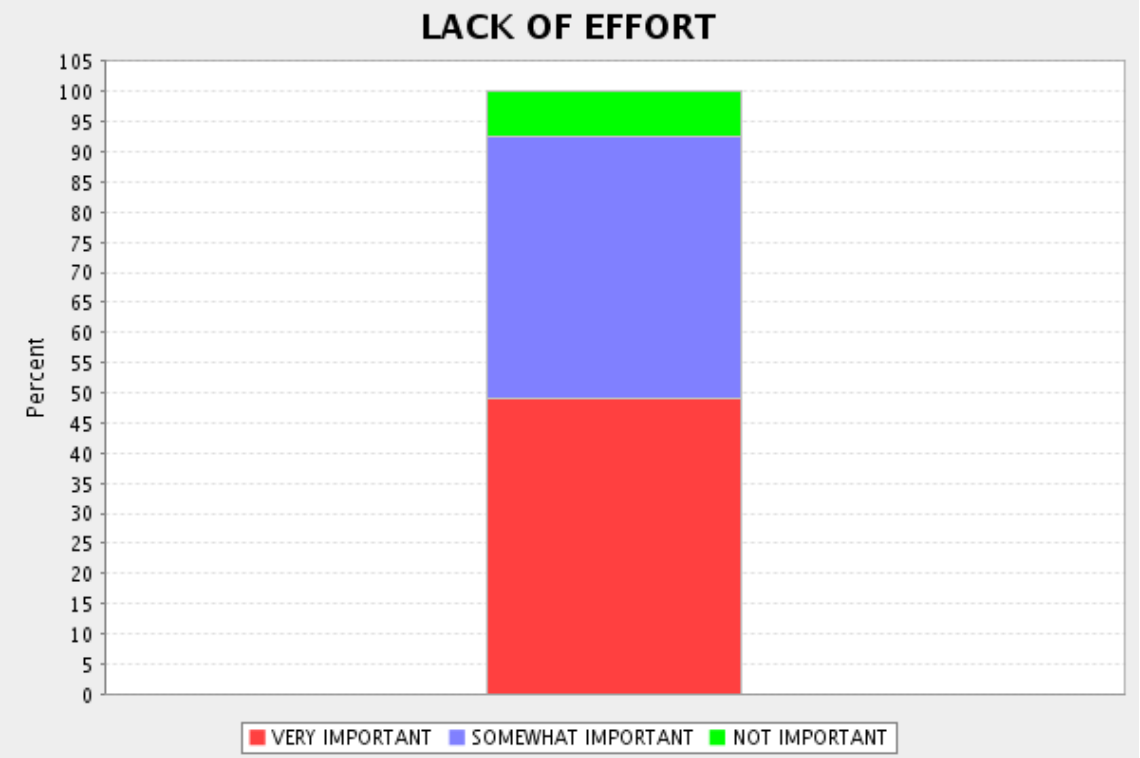
Frequency Distribution

Cells contain: -Column percent -Weighted N		**Distribution**
RACPRES	1: YES	**97.9** 2,180
	2: NO	**2.1** 47
	COL TOTAL	***100.0*** *2,227*

GSS question:

”Is lack of effort by the poor themselves very important, somewhat important, or not important in explaining why there are poor people in this country?”

White respondents



Source: Survey Documentation and Analysis, University of California Berkley.