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WHY DOESN'T THE US HAVE A EUROPEAN-STYLE WELFARE SYSTEM?

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Why Doesn't the US Have a European-Style Welfare System?  
Alberto Alesina, Edward Glaeser and Bruce Sacerdote  
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**ABSTRACT**

European countries are much more generous to the poor relative to the US level of generosity. Economic models suggest that redistribution is a function of the variance and skewness of the pre-tax income distribution, the volatility of income (perhaps because of trade shocks), the social costs of taxation and the expected income mobility of the median voter. None of these factors appear to explain the differences between the US and Europe. Instead, the differences appear to be the result of racial heterogeneity in the US and American political institutions. Racial animosity in the US makes redistribution to the poor, who are disproportionately black, unappealing to many voters. American political institutions limited the growth of a socialist party, and more generally limited the political power of the poor.

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## 1. INTRODUCTION

European governments redistribute income amongst their citizens on a much larger scale than does the United States government. European social programs are more generous and reach a larger share of citizens. European tax systems are more progressive. Europe has more intrusive regulations that are often meant to protect the poor. In this paper we try to understand why.

The literature on “the size of government” is rich and varied. However, here we do not focus on the size of government per se, but on the redistributive side of government policies. Thus, our goal is narrower than answering the question “what explains the size of government,” since we focus on a single, though increasingly important, role of fiscal policy. In another sense, our focus is broader, because redistributive policies go beyond the government budget—think, for instance, to labor market policies.

We consider economic, political and behavioral explanations for the differences between the US and Europe. Economic explanations focus on the variance and the skewness of the pre-tax, pre-transfer income distribution, the social costs of taxation, the volatility of income, and the expected income changes for the median voter. We conclude that most of these theories cannot explain the US-Europe differences. Pre-tax income in the US has both more variance and is more skewed. There is no evidence that the deadweight losses from taxation are lower in Europe. The volatility of income in Europe appears to be lower than in the US. 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.

Political explanations for the level of redistribution focus on institutions that prevent minorities from gaining political power or strictly protect individuals’ private property. Cross-country comparisons indicate the importance of these institutions in limiting redistribution. For instance, America does not have proportional representation, which played an important role in facilitating the growth of socialist parties in many European countries. America has strong courts that have routinely rejected popular attempts at redistribution, such as the income tax or labor regulation. The European equivalents of these courts were swept away as democracy replaced monarchy and aristocracy. The federal structure of the US may have also contributed to constrain the role of the central government in the redistributive arena.

The political institutions result from particular features of US history. The formation of the US as a federation of independent territories led to a federal structure that often creates obstacles to centralized redistributive policies. The relative stability of the US means that it is still governed by an 18<sup>th</sup> century constitution designed to protect property. As world war and revolution swept away the old European monarchies, the 20<sup>th</sup> century European constitutions that replaced the old regimes were more oriented towards majority-rule, and less towards protection of private property. Moreover, the spatial

organization of the U.S.—in particular, its low density—meant that the US government was much less threatened by a socialist revolution. Many of the European institutions were either directly implemented by revolutionary groups, or a response by elites to the threat of violence.

Finally, we discuss reciprocal altruism and redistribution. Reciprocal altruism implies that voters will dislike giving money to the poor, if the poor are perceived as lazy, which they are in the US. In contrast, Europeans overwhelmingly believe that the poor are unfortunate. This difference in views is part of what is sometimes referred to as “American exceptionalism” (Lipset (1996))

Racial discord plays a critical role in determining beliefs about the poor. Since minorities are highly over-represented amongst the poorest Americans, any income-based redistribution measures will redistribute particularly to minorities. The opponents of redistribution have regularly used race based rhetoric to fight left-wing policies. Across countries, racial fragmentation is a powerful predictor of redistribution. Within the US, race is the single most important predictor of support for welfare. America’s troubled race relations are clearly a major reason for the absence of an American welfare state.

The paper is organized as follows. In Section 2 we highlight the different redistributive roles of government in the US and Europe. We also briefly address the question of whether larger welfare states have achieved the goals that they were set up to reach. Section 3 describes the “theories” that we test. We divide possible explanations into three groups, which we label, for lack of better terms, i) economic; ii) political; and iii) behavioral. We also illustrate a simple model that allows us to present most of the explanations in a unified general framework. In Section 4, we present empirical evidence on all the possible explanations described above. We make a special effort to evaluate the relative explanatory power of different arguments. The last section concludes and summarizes our results.

## **2. THE SIZE AND STRUCTURE OF REDISTRIBUTIVE POLICIES IN THE US AND EUROPE**

In this section, we review the basic facts about the level of redistribution to the poor in the US and Europe.

### **2.1. THE SPENDING SIDE OF THE GOVERNMENT BUDGET**

Table 2.1 displays the structure of government spending in Europe and in the US.<sup>1</sup> In addition to the average of Western European countries we selected the UK, as the European country with a “small” government, Germany as the largest European country, and Sweden as the prototype of a country with an especially large welfare state.

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<sup>1</sup> In this table as well as all the other ones in this section, the average for Europe is computed as the unweighted average for the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, UK. All the data are from OECD; see the Appendix for more details on data sources.

Total general government spending in Europe is 48 per cent of GDP, (60 percent in Sweden). In the US, total government spending is 35.5 percent of GDP. The composition of spending is also instructive. The largest difference between the US and Europe is in the area of transfers to households (including social security), and subsidies. In fact, the sum of these two categories of spending is almost twice as large a share of GDP in Europe (relative to the US): 20 per cent in Europe vs. 11 per cent for the US. The US-Europe difference in transfers and subsidies comprises 9 of the 13 points of the US-Europe difference in total spending. Consumption of goods and services and government wages are also higher in Europe, but the difference relative to the US is much smaller than that for transfers and social security. Public investment is actually higher in the US than in the “average” European country. Of course, military spending is higher in the US than in Europe, even today when defense spending in the US is low by post Second World War standards. Western Europe since the Second World War has been a “free rider” on the defense provided by the US. That is, if the US did not have to spend more on defense in order to defend Western Europe from the Soviet threats, the difference in the overall size of government between Europe and the US would be even larger.

The OECD offers a different breakdown of social spending, presented in Table 2.2 for 1995 (the latest available date). In all categories, except health, the US spends less than the European average. There are particularly large differences in family allowances and unemployment compensation and other labor market programs. According to this classification, social spending in the US was about 16 percent of GDP in 1995. The European average was 25 percent.<sup>2</sup>

Consider the other non-European OECD countries. The size of government in Canada (52.3 per cent) is similar to France and slightly above the European average. Japan and Australia have a smaller government (36 and 38 per cent of GDP) but still a bit larger than the US, while New Zealand with 41 per cent is in between the US and Europe. The average of the non-European, non-US OECD countries falls somewhere in between the US and Europe. Thus in comparing the US and Europe we are comparing two extremes in the OECD group.

Differences in the overall size of governments or even of transfer programs are only indirectly related to the size of redistribution from the rich to the poor. Take for instance the social security system; it involves flows from the young to the old, in addition to flows from rich to poor. Nevertheless, it is uncontroversial that a predominant share of public goods and especially transfers favor the poor disproportionately.

## **2.2. THE STRUCTURE OF TAXATION**

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<sup>2</sup> Note that the total amount of social spending in Table 2.2 is not meant to coincide with the item “social benefits and other current transfers” in Table 2.1 leaving aside the fact that the two Tables refer to two different years, the definition of the two items is different. For instance, the “health” component of Table 2.2 would include wages for health sector workers that would be classified as public wages in table 2.1.

Table 2.3 displays the composition of revenues. The most striking differences between Europe and the US are in social security contributions and taxes on goods and services. However, there are important differences in the structure of taxation even within European countries.<sup>3</sup> Our concern is with the tax burden of the rich relative to that of the poor. To calculate a precise measure of the progressivity of the tax system across all these countries, one would need an entire paper (at least) devoted to the task of unraveling the intricacies of different tax codes. While this is beyond the scope of the present paper, a simple attempt is made in Figure 2.1. We have assembled data on the different income tax brackets of the European countries and taken an average of them. We then subtracted this average from the federal income tax brackets in the US and we plotted that difference. Therefore a positive value in that picture implies that the tax bracket in the US at that level of income is higher than the European average, and vice versa. The picture shows that tax brackets in the US are higher for low levels of income (up to about 50 percent of the average worker's wage) and lower for higher levels of income. Also, the difference between the US and Europe becomes larger in absolute value as income levels rise. Thus, this picture shows that the income tax is much more progressive in Europe than in the US.<sup>4</sup>

### **2.3. HISTORICAL EVOLUTION OF THE SIZE OF GOVERNMENT**

Understanding the reasons for the striking differences between the US and Europe requires us to understand something of the history of redistribution in both regions. In particular, we want to know *when* the size of government, and especially, the size of the European welfare state diverged from the US. Did the two sides of the Atlantic share a similar size of government for a while and then diverge, or has the divergence always been present?

Table 2.4 and Figure 2.2 provide a clear answer: from the very beginning of the expansion of the public sector, the US and Europe show very distinct patterns. In absolute values the difference between the US and Europe grew with the size of the welfare state, but proportionally the difference between the two did not appear only at the time of the "explosion" of the welfare state in the sixties and seventies. It was there since the end of the nineteenth century. This observation is important, because it points to explanations of the US/Europe difference that are not specific to a certain specific period or event.

### **2.4. Income Support Policies and Safety Nets**

In addition to the aggregate data provided above, it is useful to compare specific programs for income support and safety nets at a more micro-level. We consider Germany, Sweden, and the US, and we focus on a representative household. We will

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<sup>3</sup> In fact a hotly debated issue within the European Union is precisely the "harmonization" of tax structures.

<sup>4</sup> In other federal systems (i.e. Germany) the structure of taxation also entails automatic redistribution from richer to poorer regions. This is not so, to the same extent, within US states. Some geographical redistribution does, however, occur within school districts in US states. For more discussion see Oates (1999) and the references cited therein.

determine the extent to which existing programs and their provisions can be beneficial to that particular household in case of increasing hardship. We examine the costs of raising a child, of sickness, of disability and of extreme poverty. We discuss unemployment policies in the context of more general labor market regulations in the next section.

Our representative household is composed of two adults and two children. The two adults, both aged 35, are average production workers with 15 years of work experience. The two children are aged 8 and 12, to take a benchmark that is often used by social security administrations. The monthly earnings of an average production worker are given in the following chart:

Average production worker monthly earnings

in \$, PPP (1999)	United States	Germany	Sweden
Pre-tax earnings	2498	2561	1880

### *Family benefits*

Child benefits are available in Germany and Sweden for every parent, without regard to the income of the parents, up to age 18 in Germany and age 16 in Sweden, but those limits can be extended if the child pursues higher education. By contrast, family allowances do not exist in the US.<sup>5</sup> However, special allowances for children are allocated under the recently introduced TANF (Temporary Assistance for Needy Families) programs, as discussed below. To summarize, each child will entitle the recipients to the following benefits:

Family benefits

in \$, PPP (1999)	United States	Germany	Sweden
Monthly family benefits per child	0	136.3	86.91

### *Health care*

Our two European countries also differ significantly from the US in terms of systems of health care. Both Germany and Sweden have universal coverage, with unlimited benefits. The US, on the other hand, relies on two programs, Medicare and Medicaid, which target mainly the aged and the low-income households. If one of the members of our representative family became sick, and saw a doctor or stayed in a hospital, he or she would not be eligible for public funds or services in the US. Most of the expenses would be covered by the German and Swedish health care programs. Benefits include payments of doctor fees, hospitalization and pharmaceutical products. Some parts of the costs are still borne by the patient in the form of a deductible, as indicated below:

Health care: patient's participation

in \$, PPP (1999)	United States	Germany	Sweden
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<sup>5</sup> The U.S. does have a fixed per child tax credit and the Earned Income Tax Credit, the amount of which increases with the number of children in the family.

Medical treatment: patient's participation	Full	0	10 to 14
Hospitalization: patient's participation for 24 hours	Full	9	8

Obviously in the US, a large fraction of employers offer medical insurance as part of their compensation package.

### *Sickness benefits*

Those funds were created to replace the loss of earnings due to sickness. Once again, the coverage and the extent of the benefits are radically different between the two European countries and the US. Indeed, only 5 states in the continental US offer sickness benefits, while German and Swedish legislation guarantees benefits for all persons in paid employment, replacing up to 70% and 80% of gross earnings, respectively. For instance, if the head of our representative household fell sick, the structure of the monthly earnings and the duration of the benefits would be:

### Sickness benefits

	United States (5 states)	Germany	Sweden
Sickness benefits (in \$, PPP, 1999)	452 to 1576	1793	1504
Sickness benefits (% of average wage)	18 to 63	70	80
Maximum duration of benefits (weeks)	52	78	no limitation

Accidental injuries occurring in the enterprise or in connection with the working situation of the employee are covered in the three countries (including every state in the US), and benefits are this time quite comparable. German and Swedish workers will see their income replaced according to the amounts allocated by sickness benefits, while the American laborers will receive a replacement income corresponding to two thirds of their weekly average earnings, with a maximum of \$270-\$714 per week, according to the state.

### *Disability*

All three countries also have provisions to replace the loss of income due to the inability to engage in any gainful activity. The three systems are also compulsory and are based on the laborers' work history. The US and Germany require at least 5 years of coverage (3 years for Sweden) before the worker can receive benefits. Nevertheless, the extent of the coverage differs dramatically from one country to the other. For instance, the amount of the US disability pension is computed on the basis of the worker's average monthly earnings, while Swedish schemes rely on a basic pension, augmented by the income-based supplementary pension, care allowances and handicap allowances. German pensions are computed using the level of income and the number of years of contribution. The situation could be summed up the following way for our average production worker.



### Disability benefits

	United States	Germany	Sweden
Monthly disability benefit (in \$, PPP, 1999)	1063	n/a	1496
Monthly disability benefit (% of average wage)	42	n/a	80

### *Poverty Relief Programs*

Certain programs are directed to individuals who are not able to support themselves, or who are not included in the normal schemes (such as sickness benefits, unemployment benefits). These individuals may fail to meet eligibility criteria due to insufficient contribution, or have incomes that are too low to take part in insurance schemes. Those pure cash transfers give rise to different plans in the three countries. Germany and Sweden rely on unlimited and unconditional unique plans (called Sozialhilfe and Socialbidrag, respectively), which are meant primarily to alleviate poverty. Additional plans covering the costs of housing and heating are also available for the recipients of the German plan. The United States, on the other hand, offers an array of plans targeting different layers of the population. A first plan, the Supplemental Security Income (SSI), targets the needy aged, blind and disabled persons (with annual income below \$5808), and provides a federal payment, which can be augmented by a state supplement. A second plan, the Temporary Assistance for Needy Families (TANF), is limited to two years of assistance, as the recipients must find employment at the end of that period. Furthermore, additional plans, such as the Food and Nutrition Assistance programs, and the Housing Assistance program, provide relief to low-income households.

We can summarize the various ingredients of those plans in the following chart, in the case in which our representative household lives with zero income and has exhausted all other claims to regular benefits. Note that the chart does not include any additional programs, such as housing allowances.

### Non-contributory minimums: monthly benefits

	US SSI	US TANF	Germany	Sweden
Monthly benefits (in \$, PPP, 1999)	484	580	1008	888
Monthly benefits (as % of average wage)	19.4	23.2	39.3	47.2

### *Labor Market Policies*

Redistributive policies may go beyond the government budget. Legislation in several other areas might affect the degree of government role in redistributing income. A particularly obvious case is that of labor market policies. Labor regulation may keep the

real wages higher than they would be in a less regulated market.<sup>6</sup> In Table 2.5 we summarize the available cross-country comparisons of minimum wages, measured as a share of the average wages. All the sources tell a very similar story. In continental Europe the minimum wage is between 50 and 60 per cent of average wage (between 40 and 50 in the UK), while in the US it is between 30 and 40 percent. Note, in particular, the very high level of the minimum wage in France.

Table 2.6 displays various measures of employment protection indices and regulations, assembled by Nickell and Layard (1999) and Nickell (1997). Even though there is a fair amount of variation within Europe, in all categories the US scores lower (often much lower) than the European average in terms of labor regulation and protection. Column 1 reports an index compiled by OECD, which refers to several aspects of legislation that protects workers in the workplace. The minimum score is zero; the maximum is 10. The US has a score of zero. Column 2 refers to employment protection. A score of 20 refers to the strictest protection. The US has a score of zero. Column 3 refers to annual leave and column 4 and 5 refer to unemployment compensation, their level and duration. In all categories the US has the lowest level of workers' protection.

If one looks at non-European, non-US OECD countries (Japan, Canada, Australia, New Zealand) one finds that this group of countries is somewhere in between the US and continental Europe. In some dimensions these countries may be closer to the US, in other dimensions closer to Europe. Overall, the US and Europe appear to be two polar extremes.

## **2.5. HAS IT WORKED?**

The question concerning the consequences of the greater expansion of the welfare state in Europe versus the US is only tangential to our purposes. We want to explain the **causes** of this difference, not its consequences. While it goes well beyond the (already broad) scope of the present paper to discuss this question, it is worth pausing to briefly characterize the conventional wisdom (if there is any) on this issue. Needless to say, the question of the effect of a large welfare state is difficult to answer and loaded with ideological biases. We think that a fair and relatively uncontroversial assessment of the effect of these different levels of redistributive policies in the broadest possible terms is as follows.

As Tanzi and Schuknet (2000) forcefully argued in a recent study of the growth of government, the average level of several social indicators such as health measures, life expectancy, educational achievements, etc. are not that different between countries with a large (continental European style) government and a small (US style) government. On the other hand, a large body of research (see for instance Atkinson (1995)), has shown that post tax income inequality is lower in countries with larger government and, in

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<sup>6</sup> One may argue, correctly, that in many cases labor regulations end up redistributing in favor of unionized and "protected" section of the labor force, while less protected members of the labor force may be at a disadvantage.

particular, with larger social spending. As everybody knows, comparing inequality and poverty rates across countries is a minefield. However, it is pretty clear that post tax income inequality is lower in Nordic Countries, intermediate in central and southern Europe, higher in the UK and even higher in the US. This picture emerges, for instance, from the detailed studies by Atkinson (1995).

A particularly interesting observation emerges when one compares the distribution of disposable income across deciles in the US and Europe. The most striking difference is the much lower proportion of income accruing to the lowest decile. That is, the greater inequality in the US does not come from the top decile being particularly wealthy relative to the median, but much more from the bottom decile being particularly poor. For instance in the eighties the income of the lowest decile of the population was about a third of the median in the US, compared to more than 55 percent in many European countries, including France, and more than 60 per cent in several Nordic countries (Atkinson 1995, pages 49-51). Another way of looking at this is to compute the fraction of the population with income below 50 percent of the median. This approach is used in many European countries as a definition of the “poverty line.” Depending on the criteria used, this fraction was around 17-18 in the US in the eighties, against values of 5 to 8 per cent in Sweden and Germany for example (Atkinson (1995), page 90).

In the nineties, income inequality increased sharply in the UK and somewhat less sharply in the US. In continental European countries, changes in income inequality in the last decade were smaller. It would appear that because of a smaller emphasis on redistributive policies toward the poor, the bottom decile in the income ladder in the US is less well off than the bottom decile of the population of European countries. That is, the poor are really poor in the US.<sup>7</sup>

How much the reduction in inequality achieved by a more redistributive government “costs” in terms of lower growth because of higher taxation, intrusive regulation, etc. is such a large and difficult questing that we do not even begin to answer it. Lindbeck (1997) provides an excellent and exhaustive discussion of the issue for the case of Sweden. His conclusion, looking at Sweden, is that in the long run the trade off between redistribution and growth is rather “steep.” In 1970 (before the “explosion” of the welfare state in Sweden), this country had a per capita income equal to 115 per cent of OECD countries, placing Sweden in fourth place. In 1995 Sweden had a per capita income of 95 per cent of OECD countries, placing it at the 16th place of the OECD ladder. However, one may wonder whether the trade off is so steep at a level of social protection less extreme than Sweden’s. However, other countries with extended welfare states have not done as poorly as Sweden. Also certain aspects of redistributive policies, like a well functioning public education system may foster human capital accumulation.

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<sup>7</sup> It should be clear, though, that this inverse relationship between inequality and the size of government is not monotonic. That is, certain countries are much more successful than others in reducing inequality for a given amount of social spending. That is, the welfare state in different countries has different degrees of success in reaching the really needy. One of the problems is that in certain countries (a perfect example being Italy), welfare spending is too biased in favor of pensions. See Boeri (2000).

A related discussion concerns the costs in terms of employment formation and growth of labor protection, another immense topic which would require not one, but several papers to do justice to.

## **2.6. Charity and the “Private Provision of Welfare”**

While the preceding evidence makes it clear that European countries have higher public provision of welfare than the US, Americans engage in more private provision of welfare (i.e. charity) than Europeans. As private citizens, Americans appear to give more of their time and their money to the poor than do Europeans.

We use the World Values Survey to calculate the share of adults who are members of charitable organizations. The World Values Survey is a collection of surveys where the same questions are asked in different countries in different years. Between 600 and 2000 people are represented in each country; details on the countries and years are in the Data Appendix. While membership in charitable organizations is an imperfect measure of the time contribution to charity, it is one of the best measures available.<sup>8</sup> In the US, eleven percent of respondents say that they participated in a charitable group over the last year. Across the European countries in the survey the average is 4 percent. The European country with the highest amount of private charity is the Netherlands with 8.6 percent of respondents saying that they participate in these activities. The lowest amount of charitable activity is Denmark where two percent of individuals participate in these activities.

This work corroborates the large literature on private charity in the US. For example, the UK National Council for Volunteer Organizations and United for a Fair Economy document that charitable contributions in the US total \$190 billion or \$691 per person. Per capita giving is reported as \$141 in the UK and \$57 for Europe as a whole. Notably a large fraction of American donors give even though they take only the standard deduction. This means that for many Americans contributions are not being driven by the tax deductibility of charitable donations. Skocpol, Ganz and Munson (2000) document the national coverage of the many US volunteer groups who provide a rich variety of forms of assistance to members.<sup>9</sup>

Overall, these results imply that while public provision of welfare is higher in Europe, private provision of charity is higher in the US. These results suggest, but hardly prove, two implications. First, public provision of welfare in part crowds out private charity. As argued by Glaeser and Shleifer (2001), if government transfers to particular individuals will fall with private donations, then these transfers will reduce the incentive for private charity. These results also suggest that greater European welfare provision does not come from a greater innate endowment of altruism in Europe.

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<sup>8</sup> One of the problems with this measure is that it does not capture the intensity of involvement.

<sup>9</sup> While Putnam (1999) argues that civic voluntarism has declined in the US, we are not addressing this decline here. We focus on the differences over space, not over time.

### 3. THEORY AND DISCUSSION

In this section, we present a brief formal model on the determinants of the level of redistribution. The logic of this model is closely tied to the work of Benabou and Ok (2001), Perotti (2000), Picketty (1999), and many others, and this work should be seen as a synthesis, not as a new model.

We model the welfare system as a schedule of transfers that is indexed with a single parameter: the tax rate on income  $\tau$ . In this system, each individual receives net transfers equal to  $\tau(\delta\hat{Y} - Y)$ , where  $Y$  is income,  $\hat{Y}$  is average income in the country and  $\delta < 1$  represents the waste involved in redistribution. This welfare system is self-financing, in the sense that the average payment in the country is equal to zero. The parameter  $\delta$  is meant to capture a wide range of possible inefficiencies related to government, such as administration costs and politically motivated spending on programs with little social value. It can also capture the welfare losses due to tax distortions; in this case  $\delta$  should be a function of  $\tau$  to capture the fact that social welfare losses generally rise proportionately to the square of the tax rate, but for simplicity we assume that  $\delta$  and  $\tau$  are independent.

The timing of the model is that in the first period, individuals receive first period income equal to  $Y_0$  and choose  $(\tau)$  for the second period. The first period tax rate was already fixed, and we do not model consumption or savings during this first period. First period income serves just as a signal for second period income and its distribution is captured by a density function  $g(\cdot)$ .

In the second period, incomes are revealed and redistribution (and consumption) occurs. Income in the second period,  $Y(Y_0, \varepsilon)$ , equals  $(1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)$ . The parameter  $\theta$  captures the extent of income mobility—a low level of  $\theta$  means that income in the second period will be almost equal to income in the prior period. The variable  $\mu(Y_0)$  is mean of the second period income shock, which is a weakly increasing function of prior income. This function will also capture the extent of income mobility. For example, if  $\mu(Y_0) = Y_0$  then incomes will be much more fixed than if  $\mu(Y_0)$  is constant across individuals. The term  $\varepsilon$  represents a mean zero disturbance term that is assumed to be orthogonal to the other terms and distributed with density  $f(\cdot)$ .

Individuals consume all of their second period income (net of redistribution) and receive utility from personal consumption equal to  $U((1-\tau)((1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)) + \tau\delta\hat{Y})$ . Thus, expected utility (as of the first period) from second period personal consumption equals:

$$(1) \quad \int_{\varepsilon} U((1-\tau)((1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)) + \tau\delta\hat{Y}) f(\varepsilon) d\varepsilon .$$

We assume that people care about the consumption of others, as well as their own consumption. For tractability we measure altruism as follows: each person puts a weight  $\alpha(Y_0)$  on the utility from the private consumption utilities of other people—this term reflects interpersonal altruism and we assume that  $\alpha(Y_0) \geq 0$ . Total expected utility from private consumption and interpersonal utility equals:

$$(2) \quad \int_{\varepsilon} U((1-\tau)((1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)) + \tau\delta\hat{Y})f(\varepsilon)d\varepsilon + \int_{Y_0} \alpha(Y_0) \int_{\varepsilon} U((1-\tau)((1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)) + \tau\delta\hat{Y})f(\varepsilon)g(Y_0)d\varepsilon dY_0$$

We represent the political process as the social choice problem of maximizing a weighted sum of all people's expected utility levels. The political arrangement is captured with the weights that different people get in the political process. In particular, each person receives a weight of  $\lambda(Y_0)$  in the social choice problem, where  $\lambda(Y_0) \geq 0$ . This weight is a function of their initial endowment. For example, under a system of majority rule when preferences for redistribution (i.e. the level of  $\tau$ ) are single peaked, then the social choice problem will put weight only on the tastes of the individual with median income. In the proposition, we will assume  $\lambda(Y_0) = 1 + \lambda * (\hat{Y} - Y_0)$  which gives us a single parameter,  $\lambda$ , that reflects the extent to which the preferences of the poor are internalized by the political process.

Thus, the total social welfare function becomes:

$$(3) \quad \int_{Y_0} (\alpha(Y_0) + \lambda(Y_0)) \int_{\varepsilon} U((1-\tau)((1-\theta)Y_0 + \theta(\mu(Y_0) + \varepsilon)) + \tau\delta\hat{Y})f(\varepsilon)g(Y_0)d\varepsilon dY_0,$$

and the optimal amount of redistribution will satisfy the first order condition:

$$(4) \quad \int_{Y_0} (\alpha(Y_0) + \lambda(Y_0)) \int_{\varepsilon} (\delta\hat{Y} - Y(Y_0, \varepsilon))U'((1-\tau)Y(Y_0, \varepsilon) + \tau\delta\hat{Y})f(\varepsilon)g(Y_0)d\varepsilon dY_0 = 0$$

The following proposition captures the role of altruism or political power:

*Proposition 1:* If  $\lambda(Y_0) = 1 + \lambda * (\hat{Y} - Y_0)$ , and  $\alpha(Y_0) = \alpha_0 + \alpha(\hat{Y} - Y_0)$ , and the level of  $\tau$  that maximizes social welfare is between 0 and 1, then the level of redistribution is rising in both  $\alpha$  and  $\lambda$ .

This proposition is unsurprising, but highlights the two factors that will probably be most important in driving spatial differences in redistribution. First, factors that reduce altruism towards the poor will reduce redistribution. Second, factors that increase the political power of the poor will increase redistribution.

This proposition suggests two broad explanations for why redistribution levels might differ between the US and Europe. First, it might be that political structure leads the level of  $\lambda$  to be higher in Europe, i.e. the poor get more political representation. One reason why  $\lambda$  might be higher in Europe is that the proportional representation that exists in several European countries makes it easier for parties focusing on the poorest citizens to exist. Another reason is that the US constitution puts considerable brakes on democracy in ways that European institutions do not. Certain US institutions, which are not all that democratic, have veto rights over redistribution in some contexts. For example, the Supreme Court ruled the income tax to be illegal in the 1890s in the US (despite its earlier use during the Civil War).

The level of  $\alpha$  might be different in the US and Europe for several reasons. Most obviously, if (as in Becker, 1957) altruism between races is limited, then we might think that the racial heterogeneity in the United States leads to a lower desire of a white median voter to give to a poor person of another color. More subtly, it may be that Americans are more likely to associate poverty with laziness and being unworthy. We will discuss these issues later.

We now turn to the economic model of selfish redistribution and majority rule. This model assumes that there is no altruism, and that the level of redistribution is determined by the median voter. In this extreme model, the optimization problem becomes:

$$(3a) \int_{\varepsilon} U((1-\tau)((1-\theta)Y_{Med} + \theta(\mu(Y_{Med}) + \varepsilon)) + \tau\delta\hat{Y})f(\varepsilon)d\varepsilon ,$$

and this yields the derivative:

$$(4a) \int_{\varepsilon} (\delta\hat{Y} - ((1-\theta)Y_{Med} + \theta(\mu(Y_{Med}) + \varepsilon)))U'(Y(\varepsilon))f(\varepsilon)d\varepsilon .$$

Inspection of (4a) yields this well known result of the literature:

*Proposition 2:* When  $\theta = 0$ , the median voter will redistribute if and only if  $\delta > Y_{Med} / \hat{Y}$ , and the median voter will demand complete redistribution when that condition holds.

Thus, when there is no income uncertainty, and no altruism, the median voter goes to a corner solution.<sup>10</sup> Proposition 2 is a special case of Meltzer and Richards (1981).<sup>11</sup>

The absence of income uncertainty when  $\theta = 0$  can also be interpreted as suggesting a static model where income is known at the time that redistribution is chosen.

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<sup>10</sup> In this formulation, optimization gives us a corner solution because waste is independent of the tax rate. In the more general model, the median voter chooses an interior solution for the tax rate that sets the marginal benefits from an additional dollar of equal to the marginal social loss from waste.

<sup>11</sup> Alesina and Rodrik (1994) and Persson and Tabellini (1994) developed this redistribution model in a growth context.

In general, there are two things that determine whether the median voter demands redistribution. If the social welfare losses inherent in taxation may be quite high (i.e.  $\delta$  is low), then redistribution is unlikely. Second, if the income distribution is quite skewed then  $Y_{Med}$  will be low relative to  $\hat{Y}$  and redistribution is more likely.

When there is income uncertainty, and when levels of redistribution are set before income levels are revealed, then we are much more likely to find an interior solution for the level of redistribution. To concentrate on income dynamics, we persist in examining the median voter model with no altruism. In this case, equation (4a) will be set to zero when there is an interior solution and differentiating this first order condition provides the following comparative statics:

*Proposition 3:*

- a. If the coefficient of relative risk aversion is less than one then the level of redistribution will fall with  $\mu(Y_{Med})$  and rise with  $\delta$ .
- b. If the variance of epsilon is small, and expected income growth for the median voter is strictly positive then redistribution will fall with  $\theta$ .
- c. If  $\mu(Y_{Med}) = \delta \hat{Y}$  and expected income growth is weakly negative then redistribution will rise with  $\theta$ .

Part (a) tells us that redistribution will fall as the median voter's expected income in the second period rises (holding average income) constant. The comparative static for  $\delta$  tells us that redistribution declines when it creates more deadweight loss. Part (b) tells us that when income shocks have a positive mean for the median voter, then more income mobility leads to a decreased desire for redistribution. This result is closest to the work of Benabou and Ok (2000) who show that expected income growth for the median voter limits the demand for redistribution.

Part (c) of the proposition tells us that that the impact of income mobility will increase the demand for redistribution if income shocks have a negative mean. When income shocks have a zero mean, risk aversion means that more income mobility leads to more demand for redistribution. One can also interpret this result as a variant on Rawls (1973), who argues that risk aversion provides a justification for welfare policies. If there is no heterogeneity of first period income, so that all people have the same tastes, then a greater value of  $\theta$  implies a greater value of the variance of second period income. This interpretation suggests that countries with high pre-tax income inequality will have more redistribution.

Overall, there is a complicated relationship between income mobility and redistribution. More mobility leads to less redistribution if, as in the case of Benabou and Ok (2000), expected income shocks move the median voter up the income distribution. However, if expected income shocks have a zero mean, then risk aversion means that more mobility leads to greater demand for redistribution.



## 4. EMPIRICAL EVIDENCE

### 4.1. Economic Explanations

#### *Pre Tax Income Inequality*

Propositions 2 and 3 suggest that redistribution will be higher in Europe if pre-tax income inequality is higher in Europe, or if the income distribution in Europe is more likely to be highly skewed. We showed above that after tax income inequality is higher in the US. Nevertheless, it is possible that government intervention in Europe is so widespread that it reverses a basic pattern where pre-tax inequality is higher in Europe.

The standard source on pre-tax income inequality is the Denninger and Squire database. The pre-tax Gini coefficient for the US is 38.5. The pre-tax Gini coefficient averaged across European countries is 29.6, which means that Europe appears to have significantly less pre-tax inequality. The United Kingdom has the most income inequality in the European sample, but still has a Gini coefficient of only 32.3. To look at skewness, we can look at the share of income earned by the top quintile. In the US, the top 20 percent earners take home 43.5 percent of the pre-tax dollars in the country. Across European countries, on average the top quintile earns 37.1 percent of pre-tax dollars in the country, and in no country did the top quintile earn more than 39 percent of total pre-tax dollars. It seems clear that the US has more pre-tax inequality than Europe and a more skewed income distribution. While these numbers are pre-tax, redistribution may still have taken place in many ways before earnings occur at all (through education, etc.). Indeed, lower pre-tax income inequality may be yet another example of the effects of European redistribution. More generally, the evidence on whether inequality creates more redistribution is mixed at best. Perotti (1996) finds little support for this channel in a broad empirical investigation.<sup>12</sup>

There are two possible explanations for the apparent failure of pre-tax inequality as measured by the Gini coefficient to lead to more redistribution. First, in countries with high levels of income inequality, the poor are unlikely to have much political clout and as such they may not be able to extract much redistribution from the rich. That is we do not have a one person one vote rule, which underlies the model's results, but something closer to a one dollar one vote rule. We devote much space below to a discussion of political determinants of redistribution, and the degree of political power of the poor is a critical factor in this respect. Second, the measured pre-tax Gini is a poor indicator of pre-tax inequality since a host of other policies (in addition to the tax system) affect inequality, so the Gini index may over estimate the true pre-tax inequality in the US. However, direct evidence on executive compensation and the minimum wage discussed above suggest that this interpretation is not likely to hold.

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<sup>12</sup> Benabou (1998) also surveys the evidence and comes to a similar conclusion.

## *The Costs of Redistribution*

Proposition 2 also suggests that there might be more redistribution in Europe if taxation created fewer distortions in Europe, or if spending on redistribution in Europe was less likely to be associated with administrative costs or wasteful pet projects. For example, if Europeans had access to less distortionary forms of taxation we would expect Europeans to have bigger welfare states.

While we suspect that improvements in the technology of taxation have played a major role in increasing redistribution over time, we do not believe that European taxation is much more efficient than American taxation.<sup>13</sup> Indeed, evidence on tax evasion suggests the contrary—the US appears more efficient at taxation. Tax evasion does not itself capture inefficiency, but it suggests more limits on efficient tax collection. The ability of citizens to avoid taxes is a primary limit on the menu of forms of taxation that the state can use.

The Global Competitiveness Report in 1996 surveyed business leaders about tax compliance in their countries. According to this subjective ranking, the US received a score of 4.47 (where 5 represents maximal compliance). While there is considerable heterogeneity across Europe, on average tax compliance appears to be much lower in Europe where the average score was 3.5. Furthermore, there is no evidence that the Europeans are using less distortionary taxes. As discussed above, the tax structure in Europe is quite varied. Europe is the home of the Value Added Tax, a consumption tax, which is thought to be less distortionary than pure income taxes. However, Europe also uses rent control and labor market interventions which appear to be much more distortionary (see, for example, Blanchard and Portugal, 2001), to help the poor.

While redistribution in the US is probably not more wasteful than redistribution in Europe, it certainly seems plausible that Americans are inherently more hostile to government and believe that governments are more wasteful and more likely to spend on projects that the voters oppose. Indeed, the history of the US includes both an anti-government revolution which formed the country (and its stated ideology) and a Civil War in which half of the country fought against the state. Indeed, 48 percent of European respondents to World Values Survey report that they think that the government should own more of the economy. Only 26 percent of Americans say that they favor more government ownership. This probably reflects a greater distrust of the state within the US.

However, another piece of evidence makes it unlikely that American anti-statism explains low levels of redistribution and further casts doubt on the view that Europe has access to less distortionary taxes. If the real or perceived costs of government were

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<sup>13</sup> The strongest piece of evidence suggesting massive improvement in tax collection technology is the use of income taxes rather than much simpler taxes such as import fees and property taxes. It may well be true that differences in redistribution between the OECD and the developing world are a result differences in access to less distortionary taxation.

higher in the US, then we would expect European governments to be bigger along every dimension (since, after all, they face a lower social cost of funds). As we discussed above, this is not the case.

### *Social Mobility and Income Uncertainty*

The economic model suggests that there are two ways in which social mobility can explain the gap between US and European levels of welfare. First, the median voter in the US might have higher expected income growth (relative to the rest of America) than the median voter in Europe. According to this theory, high income mobility in the US (specifically upward mobility of the median voter) can explain lower US redistribution. Second, Europeans might demand more redistribution because they face more exogenous shocks to their incomes, perhaps because of openness, and redistribution reduces risk. According to this theory, low income mobility in the US could explain lower US redistribution.

As we will discuss later, there is also a third—behavioral—theory that links income mobility with redistribution. This theory suggests that in societies with high levels of income mobility, the non-poor are more likely to believe that poverty occurs because of laziness. In static societies, where birth determines income, the non-poor are more likely to think that the disadvantaged are poor solely because of the accidents of their birth. We will discuss the third theory as part of our section on the determinants of altruism, and we just note now that this theory offers an alternative interpretation of why higher American mobility might be associated with less redistribution.

Alesina and La Ferrara (2001) provide evidence on the first economic theory linking economic mobility with support for redistribution. They find that individuals with greater expected income growth are more likely to oppose redistribution. Within the US, they compute the probability that individuals in difference income brackets will reach levels of income in the future which will make them net losers from redistribution. This probability of upward mobility is a strong predictor of individual support for redistribution.

For this theory to explain US-Europe differences, it must be the case that the median voter in the US is more likely than the median European voter to become rich at some future date. This probability combines mobility with the specific chance of moving upwards for individuals in the middle of the income distribution. There are two types of evidence on this question—actual income mobility data and survey questions about income mobility. Survey questions seem to have the advantage of getting directly at individual beliefs, which should be the direct determinant of voting behavior. Differences in income mobility across countries turn out to be quite controversial (Fields and Ok, 2001, provide a survey), and measurement here is quite difficult because of the high degree of idiosyncratic measurement error present in all survey measures of individual income.

It is certainly clear that Americans believe that they live in a country with more income mobility. According to the World Values Survey, seventy one percent of Americans believe that the poor have a chance to escape from poverty. According to the same survey, only forty percent of Europeans believe that the poor can escape poverty. While these survey questions suggest very different beliefs about mobility, they do not directly relate to the relative income growth prospects of the median voter. Indeed, the question seems to relate more to feelings about the poor and the altruistic sources of redistribution, than to the financial gains from redistribution to the median voter.

Harder data on income mobility does not suggest such strong differences between the US and Europe in mobility for the middle classes. For example, Gottschalk and Spolaore (2001) produce a fifteen year transition matrix by income quintile for the US and Europe. This matrix shows the share of the middle income quintile in 1984 who were in various income quintiles in 1999. To us, the similarity between the US and Germany was striking, even though there seems to be a slightly higher upward mobility of the middle class in the US. Ten percent of the Germans in the middle quintile moved up to the top quintile. Eleven percent of the middle quintile Americans moved to the top quintile. Twenty-one percent of the Germans in the middle quintile moved up to the second quintile. Twenty-two percent of Americans in the middle quintile moved up to the second quintile. Thirty-one percent of both groups stayed in the same middle quintile. Germans were somewhere more likely to end up in the absolute bottom quintile (sixteen percent relative to twelve percent) and correspondingly less likely to end up in the next lowest quintile, but overall the differences seem small.

The Fields and Ok (1999) survey suggests a wide range of estimates on income mobility and the comparison between the US and Europe. However, there is no clear cut evidence that the US has substantially more upward relative mobility for the middle quintile. The bottom line is that the Alesina and La Ferrara (2001) evidence stresses the importance of upward mobility. Americans believe that there is more upward mobility in their country. These two facts together can explain aversion to redistribution. The question of whether the perception of more mobility in the US is correct or mistaken awaits further research.

The second theory—that income variability drives demand for redistribution—has received less extensive testing, with the exception of Rodrik (1998), who focuses on the variability of income induced by openness, an argument to which we now turn.

#### *More on income uncertainty: Openness*

Rodrik (1998), following a suggestion by Cameron (1978), has argued that the size of government and, especially, of income support policies are explained by openness. Figure 4.1 highlights this relationship. According to Rodrik, open economies are more “unstable” because they are more subject to external shocks. Larger public transfers provide insurance and reduce instability in the stream of lifetime income of individuals. Thus, a larger government is “needed” in more open economies. Alesina and Wacziarg (1998) argue that open economies are small, that is, size and openness are strongly inversely correlated. Thus, it is difficult to disentangle the openness argument against an

alternative one; that is in larger (and more closed) economies the size of government per capita, or as a share of GDP, is smaller because of economies of scale in the production of public goods.<sup>14</sup> In fact, the openness argument should apply more directly to transfer programs, while the economy of scale idea more to public goods and infrastructure. Since in the present paper we are concerned with transfers and welfare programs, the openness argument is, in principle, especially appealing.

The US is a larger and less open economy than any European country, but as Table 4.1 shows, the US economy is less stable than the average European economy. Both in terms of growth, unemployment and productivity, the US economy has displayed more volatility than the average of the European countries in the last 40 years. We also report Rodrik's measure of external induced volatility which is a measure of terms of trade volatility multiplied by the degree of openness of the economy (exports plus imports over GDP). This can be interpreted in two ways. First, the US economy has more variability precisely because transfers are smaller. However, since the US economy is more closed, it should be less in need of a larger government. In other words, if all countries shared the same objectives in terms of the trade off between government size and business cycle variability, the US should be more, not less, stable than Europe.<sup>15</sup> Since it is larger and more closed to begin with, it should cost "less" in terms of taxation to achieve the same level of stabilization.<sup>16</sup> Therefore if Rodrik's theory is correct, then the fact that the US ends up with more variability than Europe suggests that Americans and Europeans evaluate very differently the trade off between government size and cyclical variability. Whether or not openness is a major determinant of the size of government, remains, in any case, an unsettled issue.

## 4.2. Political Explanations

We begin with several cross-country regressions; we then discuss the role of political history.

### *Cross-country regressions: the electoral system*

A lively recent literature has investigated theoretically and empirically the relationship between electoral rules and fiscal policy.<sup>17</sup> Particularly relevant for our purposes is recent work by Milesi-Ferretti, Perotti and Rostagno (2000) (MFPR) and Persson and Tabellini (2000) (PT).<sup>18</sup> These papers test the following idea: in majoritarian systems characterized by geographically based districts, in which each district chooses one representative, the elected government will favor spending programs that can be geographically targeted, like "pork barrel" projects. In proportional electoral systems,

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<sup>14</sup> See Alesina and Spolaore (1997) for more discussion.

<sup>15</sup> Similar considerations apply to Japan, a country which has a small government, is relatively closed (and large) and exhibits more variability than Europe.

<sup>16</sup> An additional measure of income uncertainty could be the extent of long term unemployment. However this measure is very likely to be directly affected by labor market regulation and policies.

<sup>17</sup> Persson and Tabellini (2000) provide an exhaustive review of this area of research.

<sup>18</sup> See also Persson (2001).

instead, spending on universal programs are favored, since in each district more than one representative is elected in proportion to the vote received. The clearest example of this is a purely proportional election in a single national district. In this case geographic targeting would make no sense at all.

In order to test these ideas, one needs to measure the degree of proportionality of electoral systems, and differentiate between spending programs that can be geographically targeted and those that cannot. In theory the contrast between these two types of programs is clear-cut, in practice, less so. Consider social security, for instance. Anybody above a certain age is eligible to receive it, regardless of his or her residence. However, certain districts may be disproportionately populated by elderly voters. In any event, the hypothesis tested is that universal transfer programs should be larger in more proportional electoral systems.

Both MFPR and PT report results consistent with this hypothesis. The two papers use different measures of transfers, a different sample of countries (larger for PT), and a different definition of proportionality. The differences in the data sets are explained more precisely in the Appendix, but one important observation in the dependent variable is that MFPR use OECD as a source for OECD countries and the data set constructed by Gavin and Perotti (1997) for Latin America. All these data refer to the general government. PT use IMF data, which is focused on the central government. This distinction is especially important if one focuses on comparing the US with other countries; the US is a federal country in which the difference between central and general government data is much larger than in most other (non-federal) countries. For proportionality, PT use a zero-one variable, obtained from “Interparliamentary Union.” This variable assumes the value of one if a country has a majoritarian system and zero otherwise. Obviously, electoral systems differ in many dimensions, and a zero one dummy may miss important differences between the two groups of systems lumped together.

For this reason, MFPR construct (for a smaller sample of countries) a continuous variable based on the following idea. They want to capture the share of electoral votes that guarantees a party a Parliamentary seat in an electoral district of average size. This variable, labeled UMS (Upper Marginal Share), is declining in proportionality since the higher the UMS, the more difficult it is for small parties to gain access to parliament. In a two party system with a first past the post rule, UMS is 0.5. This value declines with the degree of proportionality of the system. As these authors show, constructing this variable is not simple because of the many dimensions in which electoral systems across countries differ.<sup>19</sup>

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<sup>19</sup> There is an additional channel through which the electoral system may influence fiscal policy: the degree of fragmentation of the legislature. Since in proportional systems it is easier for small parties to gain representation, proportionality leads to multi-party coalition governments and fragmented policy arena. Theoretical work by Alesina and Drazen (1991), Tornell and Velasco (1999) amongst others, show how fragmentation of the political system leads to higher and more persistent deficits. Empirical work by Roubini and Sachs (1988), and Perotti and Kontopoulos (1998), amongst others, provides support for this hypothesis with regard to OECD countries. In these papers, fragmentation is measured as a function of the

In Table 4.2 we present results obtained using the data sets kindly provided by the authors of these two papers. Column 1 reports the MFPR regression on OECD countries. The proportionality variable is constructed as an “average district size” and it is a one to one inverse transformation from UMS.<sup>20</sup> Thus, one should expect a positive sign on this variable if transfers are larger in more proportional systems. This variable (in logs) has in fact a highly significant positive coefficient. The other controls used by MFPR are insignificant. In column 2 we add a measure of openness (exports plus imports over GDP). This variable is insignificant. Following MFPR, we explored Rodrik’s specification of openness, which includes the interaction of terms of trade shocks with openness but we did not find a significant relationship. (The same result is reported by MFPR). In the third regression, we report the MFPR result using the entire sample including Latin America. The proportionality variable is still significant, but the size of the coefficient is much lower and less precisely estimated. (Note that openness is still insignificant). Figures 4.2a and 4.2b show what is going on. These figures plot the dependent variable against the measure of proportionality for OECD countries and Latin American countries. They show a very strong positive correlation for OECD countries and a very weak one for Latin American countries.

The last column of Table 4.2 uses the PT data set, which allows us to expand the set of countries. We use their specification. In particular, in addition to the majoritarian variable, PT also focus on another political variable, that is whether or not a country has a presidential regime. Note that one should expect a negative sign on both the Presidential and Majoritarian variable. Neither of the two political variables is significant in the large sample. If we restrict the sample to OECD countries, the two political variables come much closer to significance, but the MFPR measure of proportionality seem to be more strongly correlated with the dependent variable than the PT variables. Note that openness is insignificant in this sample as well.

The bottom line seems to be that for OECD countries a measure of proportionality of the electoral system is highly correlated with the amount of government transfers. This correlation is much weaker or nonexistent for developing countries. The variable openness is not significant after one controls for political variables.

If we interpret the coefficient on proportional representation as reflecting a causal relationship, then the cross country regressions described in the previous sections suggest that if the US had an electoral system similar to that of, say, Sweden, the welfare state in the two countries would be very similar. This “narrow” interpretation of political explanations is incomplete. The electoral system is only one of the politico-institutional forces that have led the US to diverge from Europe. In addition, the electoral system may

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number of parties represented in the government coalition and/or in the legislature or by the number of different spending ministers in the government. Interestingly, Milesi-Ferretti, Perotti and Rostagno (2000) show that the degree of proportionality of the electoral system affects transfers even controlling for measures of fragmentation.

<sup>20</sup> The transformation is Standard Magnitude (SM), where  $SM=1/(1-UMS)$ .

itself be endogenous to other variables, including attitudes towards the poor, which we discuss later.

One may argue that in the US the present electoral system was chosen and maintained precisely because it supported certain policy outcomes. Post War France went back and forth from more to less proportionality in part to suit the needs to various leaders.<sup>21</sup> Italy recently moved to a less proportional rule in response to the perceived failures (including fiscal matters) of the previous proportional system. New Zealand recently made a move in the opposite direction. Nevertheless electoral laws have a certain “stickiness” and do not change too often. Our preferred interpretation is that while the electoral systems in part reflect deeper aspects of societies, they also have an important direct effect on the level redistribution.

### *Political History*

A discussion about political variables would not be complete without an historical perspective. There are three “monumental” historical forces that distinguish the US from Europe. The Civil War, the “open frontier” in the west, and the nonexistence of a large and influential Socialist or Communist party.

Skocpol (1992) noted that at the end of the 19th century, the US had a “minimal” welfare state similar to that of European countries. This was based on veteran pensions that grew more and more generous and with more and more “relaxed” eligibility requirements. Several social reformers viewed this program as the stepping stone upon which to build a universal social security system. However, their efforts were halted by several factors. First, a general “mistrust” in the administration of the program and by the fact that it emerged from a “divisive” experience (the Civil War), rather than a “cohesive” one (an external war). Second, the US courts systematically rejected any legislation that was perceived as anti-business. In doing so they appealed to the principle of protection of private property against government intervention (often the doctrine of freedom of contract was invoked). Most strikingly, in 1895, the courts declared the US income tax to be unconstitutional, and it took a constitutional amendment to undo this decision.<sup>22</sup> The pro-property actions of the courts were influenced both by the US constitution, which was designed by property owners, in part, to protect property from democracy, and by incentives that firms created to influence judges.

Different legal systems (say, the French versus the Anglo Saxons) attribute very different roles to Courts, which also have a different institutional structure.<sup>23</sup> The involvement of Courts in social legislation in the US has been a constant feature of the US experience, contrary to that of countries based on the French or German legal tradition. Indeed, the power and independence of US courts are unique and are not even matched in England

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<sup>21</sup> In 1958 De Gaulle changed the proportional system of the Fourth Republic making it more majoritarian. Mitterand in 1986 reintroduced proportionality.

<sup>22</sup> The Supreme Court’s decision in this case was far from a foregone conclusion. The US had a functioning income tax during the Civil War which was not challenged by the court.

<sup>23</sup> See Glaeser and Shleifer (2000) for a recent discussion.



where parliamentary dominance is much more established. In the UK, the House of Lords was the closest equivalent to the Supreme Court and its power was stripped in the triumph of parliamentary democracy.

Given the relative failure of public provision of welfare, social assistance took a turn toward “private” initiatives, which permeate US society even today.<sup>24</sup> Skocpol, Ganz and Muson (2000) document the active role of a varied universe of civic associations that provide a host of civic assistance to their members and “target groups.” Many of these organizations have a national coverage. Obviously these private organizations are very far from providing the kind of social protection that a European government would offer. However, this is another example of the fact that we documented above, namely that private charities in the US tend to substitute a little for the lower provision of public assistance.

The open frontier in a country of immigrants strengthened individualistic feelings and beliefs in equality of opportunities, rather than equality of outcomes. In fact, one may argue that self-selection led to a systematic difference between those Europeans who migrated to the US and those who didn’t. The former might have been those that, *ceteris paribus*, were more sensitive to “individual” incentives and were less risk averse. This of course contributed to cementing an anti-statist feeling that permeates American culture.

A related factor is the lower density of the United States. Redistribution in many contexts is a response to the physical power of the poor and the threat of riot and revolution. Acemoglu and Robinson (1999) argue that democracy in Europe is itself a response to the physical power of the poor. While America was full of class-related violence in the late 19<sup>th</sup> century (see Skowronek, 1982), and saw riots in the 1930s and 1960s, American decentralization has generally meant that the US has never had a rebellion that threatened the centers of government.<sup>25</sup> On the other hand, popular uprisings in Paris led to at least four changes of government. Berlin and London were more stable but still faced considerably more popular unrest than Washington, D.C.

Indeed, across OECD countries there is a significant positive effect of density on redistribution: 38.6 percent. Elsewhere (DiPasquale and Glaeser, 1998) one of us has argued that urban density facilitates riots and rebellions. More generally, the historical evidence on countries like France suggests that urban density lead to the political empowerment of the poor, certainly relative to dispersed farmers of the 18<sup>th</sup> century. As such, America’s low density may also have contributed to its stability and lack of redistribution.<sup>26</sup>

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<sup>24</sup> A particularly interesting example at the end of the 19th century was the role of women's organizations in providing family assistance to mothers and children (Skocpol, 1992).

<sup>25</sup> The Civil War was, of course, fundamentally a rebellion of elites, who can be interpreted as fighting for the right to take from the poor.

<sup>26</sup> It is also possible that density has a second effect on redistribution working through altruism. If proximity creates empathy, then we might expect support for welfare to be higher in denser countries.

The absence of a large and cohesive socialist workers movement in the US is a critical factor in shaping redistributive policies. Marx and Engels (especially the latter) were already aware of the “American exceptionalism.” They attributed it to the lack of a feudal period in American history, a missing phase that did not create the basis of clear-cut class differences.<sup>27</sup> Already in the 19th century worker’s movements, which could have been the precursors of a socialist party, professed an “ideology that reflected the strong belief of many Jacksonian Americans in equality of opportunity, rather than equality of results” (Lipset and Marks (2001), page 21). In fact, workers’ groups were “social Darwinist, not Marxist” (Lipset and Marks (2001), page 20). Sombert (1905) (who was then a socialist) argued that American capitalism may create inequality but offered opportunities to all. He wrote that “Equality and Liberty ... [for the American workers] are not empty ideas and vague dreams as they are for the European working class.” In other words, class struggle was (and is) not “second nature” to the American workers. In Sombert’s (1905) words: “In America there is not the stigma of being the class apart that almost all European workers have about them.”

The fact that the American working class was formed by waves of immigration also contributed to preventing the formation of a European style class consciousness. Ethnic divisions within the working class (for instance old Protestant immigrants on one side, new Catholic immigrants on the other) were as strongly felt as class-based cleavages.<sup>28</sup> Even contemporary socialist leaders (including Engels) recognized the powerful effect of ethnic fragmentation within the union movement.

The Great Depression could have galvanized socialist ideals. However, with the New Deal, Roosevelt and the Democratic party managed to “co-opt” important fringes of the left which might otherwise have strengthened the Socialist party. At the same time, the Socialists persisted in not understanding and in not accommodating “distinctive elements of American culture, anti-statism and individualism” (Lipset and Marks (2001)). These cultural features were of course at odds with the Socialist emphasis on taxation and heavy government intervention. American Socialists were systematically less successful in “working with” these cultural characteristics, relative to their counterparts in other Anglo-Saxon countries, like Canada, Australia or the UK. Finally, one should not forget the role of repression of communism and socialism in post-Second World War America.

The electoral system also made it difficult for a third party to move into the political arena, as emphasized for instance by Lipset (1996). This observation is consistent with the econometric evidence described in the previous section on the importance of proportional representation. However, the interpretation is different from those of the models sketched above. The US electoral rules, by making it difficult for third parties to enter, contributed to the failure of Socialist and Communist Parties in the US.

Additionally, the US evolved as federal system, as opposed to a unitary centralized country like several European ones. To the extent that the redistributive role of the

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<sup>27</sup> For an extensive review of the writing of Marx and Engels concerning the American case see Lipset and Marks (2001).

<sup>28</sup> See Lipset and Marks (2001) and the vast literature cited therein on this point.

central government is in part delegated to sub national level of government, geographic mobility of individuals and tax competition might limit government size.<sup>29</sup> Even though the evidence on the relationship between fiscal decentralization and the size of government across countries is inconclusive (after all Germany is a federal country!)<sup>30</sup> the fact that many public goods in the US are locally provided may affect the size of redistribution to the poor. Think, for instance, of people fleeing to wealthy suburbs to escape the taxation needed to finance inner city schools. However, the choices concerning these fiscal arrangements and the relationship between different levels of government is clearly endogenous to preferences for redistribution.

As a final aside, it is worthwhile re-emphasizing that all of the political rules are in some sense endogenous and the outcome of deeper features of the United States and Europe. The writers of the constitution chose to have a federalist system with strong separation of powers, a Bill of Rights, and proportional representation. It is very clear that the authors of the constitution, in particular, James Madison, were focused on protecting American citizens against the “encroaching spirit of power” (Hamilton et al., 1982) and “the violence of faction.” The authors of the constitution make it clear in the Federalist papers that they are disturbed by the possibility that in an unfettered democracy “measures are too often decided, not according to the rules of justice, and the rights of the minor party; but by the superior force of an interested and over-bearing majority.” As such, they tried to design the constitution to protect “private rights” against factions, even if those factions include the majority of the population.

Of course, the U.S. is not the only country which had a constitution designed to limit the majority by protecting property. In the pre-modern era, electoral rules designed by elites customarily attempted to protect property against majoritarian redistribution. However, the big difference between the U.S. and most of Europe is greater American stability which means that 18<sup>th</sup> century rules are still in effect in the US. Whereas European monarchies were toppled by world wars and revolutions, the US has had an enormously stable system of government. Indeed, across countries we see a significant relationship between the date of the most recent constitution and redistribution. Across 16 OECD, the correlation between social spending and the year of the most recent constitution is 52 percent.<sup>31</sup> Indeed, America’s stability may be one of the true causes of the political electoral rules that seem to limit redistribution.

Political factors which influence the US “exceptionalism” are deeper than differences in electoral rules. It is highly unlikely that holding history constant (including the long-

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<sup>29</sup> For a recent survey of the literature on this point see Oates (1999).

<sup>30</sup> In fact in many cases decentralization has led to an increase in spending and it is often a source of fiscal imbalance.

<sup>31</sup> In this correlation, we have excluded both the Netherlands and Belgium. They are reported as having their most recent constitutions in 1814 and 1830. However, the actual degree of change in these countries has been quite dramatic, as they have moved away from monarchism towards republicanism over the past 200 years. If we include these countries, and weight by population, the correlation is also 58 percent. The correlation is only 9.5 percent if we include Belgium and the Netherlands and do not use population weights.

term stability of the US constitution, the Civil War, the waves of immigration, ethnic fragmentation and the difficulty of establishing a unified socialist working class movement), a change in the electoral rules for Congress would have turned the United States welfare state into one like those of France or Sweden. In addition, Americans may not have wanted a change in their electoral rules, precisely because they feared the consequences of this change on policy outcomes.

### **4.3. Behavioral Explanations**

The previous section explored reasons why political institutions could explain different levels of redistribution in the US and Europe, even if the demand for redistribution was the same in both places. Now we look at theories of why the demand for redistribution might differ between Europe and the US, and in particular why the median voter in Europe might be more positively disposed towards the poor than the median voter in the US.

The economic literature on the determinants of altruism is limited. We know of two main strands in the literature. First, there is a substantial body of work following Becker (1957) and arguing that people like people of their own race more than they like people of other races. Second, there is a smaller and more recent body of work on reciprocal altruism. This literature argues that people feel altruistic towards people who are good to them and vengeful towards people who take advantage of them. In the welfare context, reciprocal altruism means that people would vehemently oppose welfare if they believe that the poor who are on welfare are taking advantage of the system.

#### *Racial Prejudice*

Becker (1957) proposed a model where he assumed that people of one race dislike people of another race, and that model started the modern economic literature on racial discrimination. There is, of course, a vast literature on different aspects of discrimination. Allport (1952) is a classic sociology text describing the early work in this area that shows discrimination in a wide array of settings. More modern work has shown the impact of racial discrimination on markets ranging from baseball cards (Nardinelli and Simon, 1990) to housing (Taeuber and Taeuber, 1965, is the classic text on housing market segregation—Cutler, Glaeser and Vigdor, 1999, show the evolution of segregation in the housing market). Alesina and LaFerrara (2000) show that participation in social activities involving direct contact between individuals is lower in racially fragmented communities in the US. The same authors (2001) show that trust is higher in more racially homogeneous communities. Glaeser, Laibson, Scheinkman and Soutter (2000) document experimentally that people of different races are more likely to cheat one another.

The importance of racial heterogeneity seems to be a significant part of the political process. Alesina, Baqir and Hoxby (2000) show that individuals prefer to form racially homogenous political jurisdictions. DiPasquale and Glaeser (1998) document that racial heterogeneity is closely linked to riots. Other forms of heterogeneity (national origin

and religion) appear as much less important. In other parts of the world, religious cleavages for instance, may be much more hard felt than racial ones; in the US it appears that the most salient dividing line is race.

We do not really know why interpersonal altruism seems linked to race. It is possible that human beings are just hard-wired to dislike people with different skin colors. A more reasonable theory is that human beings are genetically programmed to form in-group-out-group associations and to prefer members of one's own perceived group. There is an extensive social psychology literature which documents individuals' tendencies to favor members of their own group and documenting the malleability of group definitions. A particularly famous experiment randomly allotted boys into different teams and then documented how these boys become deeply hostile to members of rival teams. According to this view, race may serve as a marker for in-group status, but it need not be such a marker.

Other markers are available for group identification, but, again, in the US race seems to be the strongest. In fact, political entrepreneurs regularly try to use race as an excuse for expropriation. For example, D'Souza (1997) argues that modern racism came about as a justification for the profitable slave trade.<sup>32</sup> During reconstruction, southern political leaders pushed a racist philosophy as an excuse for taking on the basis of race (and not income). We do not know why altruism seems to be lower between the races than within the races, but there is certainly a vast amount of evidence that suggests that racial prejudice is a real and enduring feature of the American landscape.

The history of American welfare suggests that enemies of welfare often used race to defeat attempts at redistribution in the post-bellum period. For example, during the populist era in the late 19<sup>th</sup> century, the US first contemplated significant government action to redistribute income towards poorer Americans (specifically farmers), other than Civil War veterans. In the south, the political action against populists would frequently take the form of racial politics. For example, Woodward (1955) describes how the conservative Democrats in the South defeated the left-wing Readjuster movement by using racial politics. The Poll Tax and Literacy Tests, which reduced voting by the poor of both races in the South, were enacted because they disproportionately disenfranchised African-Americans. A later example of how racial hatred was used to defeat left-wing politics is George Wallace—the famous proponent of race-based policies in Alabama—who originally ran for Governor in 1958 on a primarily anti-rich ticket. He was defeated, in that first run, by a more racist candidate who was endorsed by the Klu Klux Klan. In more recent times, national campaigns of relatively anti-welfare candidates have often attempted to use the race card (some observers have alleged this about both the Reagan and Bush campaigns).

A natural generalization of the race-based theory is that Americans think of the poor as members of some different group while Europeans think of the poor as members of their

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<sup>32</sup> In particular, he claims that the enlightenment had made slavery of one's peers unacceptable. Therefore, it became necessary to define blacks as an out-group which could "ethically" be enslaved.

own group. Racial differences between the poor and non-poor in the US will tend to create the perception of the poor as “other” in the US, but geographic or social isolation might do this as well. If the poor in the US are more geographically or socially isolated, this might create a situation where non-poor Americans have little sympathy for the poor. Furthermore, as Lipset (1996) noted, (page 133) several polls suggest that a large majority of white American, believe that African Americans would be as wealthy as whites if they tried hard enough.

Hard evidence on the importance of race and in-group status in the support for welfare corroborates these anecdotes. Luttmer (2001) looks at support for welfare in the General Social Survey in the US. He finds that support for welfare is higher among people who live near to many welfare recipients who are of the same race. This confirms the idea that geographic isolation from the poor may lead Americans to think of them as member of some out-group.

Conversely, support for welfare is lower among people who live near welfare recipients who are of a different race. The difference between within race and across race effects seems to mean that people have a negative, hostile reaction when they see welfare recipients who are of a different race and a sympathetic reaction when they see welfare recipients who are of their own race. Alesina, Baqir and Easterly (1999) use data on cities, metropolitan areas and counties to look at the effect of race on redistribution. They find that states that are more ethnically fragmented spend a smaller fraction of their budget on social services and productive public goods, and more on crime prevention and (probably) on patronage.

This racial argument provides us with our first reason why tastes for redistribution might be lower in the United States, a view shared by Lipset (1996) amongst others. The US has significantly more racial heterogeneity than Europe, and importantly, American minorities are disproportionately represented among the poor. It could be argued that ethno-linguistic heterogeneity within some European countries (such as Belgium) is as severe as racial heterogeneity in the US. Furthermore, it is at least possible that this heterogeneity creates antipathy that is as robust as the race-based animosity in the US. However, in no European country is there a minority that is as relatively poor as the blacks. The poverty rate is 7.7 percent in the US among non-Hispanic whites. Among blacks, the poverty rate is 23.6 percent. Across the US as a whole, in 1999, only 46.1 percent of people in poverty are non-Hispanic whites (70.5 percent of the population as a whole are non-Hispanic whites during the same year), and in metropolitan areas, less than 40 percent of the poor are non-Hispanic whites. As such, any income based transfer scheme will disproportionately transfer income to African-Americans, Hispanics and other minority races. If people dislike transferring money to people of a different color, then this could possibly explain the US-Europe redistribution gap.<sup>33</sup>

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<sup>33</sup> The closest European equivalent would be anti-Arab feeling among the French or anti-Gypsy sentiment in Eastern Europe, where antipathy is aimed at extremely poor groups. The politics surrounding these groups supports the importance of race, as right-wing leaders (such as LePen or Haider) emphasize their hostility to these poor minorities.

We will have several methods of quantifying this hypothesis. First, we look at racial heterogeneity across countries. Table 4.3 reports two regressions which start with the Persson and Tabellini (2000) specifications and introduce fractionalization measures. In column one we add the now standard measure of ethno-linguistic fractionalization widely used in the literature.<sup>34</sup> This variable gives the probability that two randomly drawn individuals in the same country speak different languages. While the raw relationship between this variable and redistribution is quite high (a correlation coefficient of 41 percent), with other controls, the coefficient of this variable is insignificant.

However, this variable does not capture racial heterogeneity. After all, it classifies blacks and whites in the US as part of the same language group! In order to correct this problem we constructed a new variable which captures differences in racial origin rather than language. Of course in many cases the two coincide, but not always. For example, Belgium would be classified as a very fragmented country in terms of language but more uniform in terms of race. The US would be much less uniform in terms of race than in terms of language. Latin America is less uniform racially than linguistically. We have obtained information about racial composition from the sources detailed in Appendix II, and created a new racial fragmentation variable. The correlation between this variable and redistribution is 66 percent.

In column 2 we add this new variable which turns out to be significant at the 5 per cent level. The majoritarian regime variable still has the expected negative sign. Figure 4.3 displays the relationship between the dependent variable and our measure of racial fractionalization. The US is not far from the regression line. European countries are very homogeneous and, as we know, have a large measure of social spending.<sup>35</sup>

We can also use micro-survey evidence on this topic using the General Social Survey. This survey provides us with data on between 1200 and 2400 people annually from 1972 to the present. It is the data source used by Luttmer (2001) and Alesina and La Ferrara (2001) to address related issues. We focus on the question “do you think that the state should spend more on welfare?” People respond to this question by saying that they think the state should spend more, spend less, or spend about the same amount. We have quantified these answers by giving a score of 1 to spend more answers, a score of 0 to spend less answers, and a score of .5 to respondents who say that spending should stay about the same. This question is asked in most of the years and seems to be the best thing that we have available on peoples’ desires for more welfare.

Significantly, this question is difficult to use across countries or even to make time series comparisons within the US. Since the question asks people about ideal spending on welfare relative to current spending, it is not appropriate for comparisons when the level of current spending has changed. Cross-country comparisons are obviously impossible. A Swede who opposes more spending on welfare in Sweden is not the same as a Texan

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<sup>34</sup> This variable is the same one used by Easterly and Levine (1997). See Appendix for more details.

<sup>35</sup> Note that this strong inverse correlation displayed in Figure 4.3 is not an artifact of not controlling for per capita income. In fact an even stronger correlation would appear if one plots the residual of a regression of SSI against per capita income against our measure of racial fragmentation.

who opposes more spending on welfare in Texas. The Swede's answer to the question obviously reflects the already large level of welfare spending in that country.

However, we will present results using this question for the US in Table 4.4. Our first regression shows the basic results for the entire sample and our results mirror those of Luttmer (2001). There is a large negative income effect. The impact of education is non-monotonic. High school dropouts want more welfare spending than high school graduates, but people with graduate degrees favor welfare spending even more than high school dropouts. The pro-welfare orientation of the highly educated is an interesting phenomenon that fits with stereotypes but is still not really understood. People in big cities appear to be much more pro-welfare, probably because people in those cities are more likely to live around the poor. Finally, there are weak effects of age and marital status. Gender doesn't matter at all.

However, the single biggest coefficient in the regression is race. African-Americans are much more likely to be pro-welfare than whites. The coefficient of 23.2 can be interpreted as meaning that blacks are 23.2 percent more likely to say that welfare spending should be increased relative to non-blacks. While we are not surprised that blacks support welfare spending more than whites—for example, race could well be correlated with permanent income—the magnitude of the coefficient suggests that race has an impact on the desire for redistribution that is far greater than any income effect. These results are very consistent with those of Alesina and La Ferrara (2001), who look at a different GSS question concerning support for government redistribution to fight income inequality. These authors also find that whites are much less likely to support such redistribution, and this effect has an order of magnitude similar to that reported above.

In the second regression, we look at support for welfare among whites only. Our goal is to see whether patterns of support for welfare across whites further support the importance of race. The second regression looks at the impact of percent black in respondent's state of residence. The theory suggests that whites in more heterogeneous states should be less likely to support welfare. We find that this is the case, but the effect is weak and not-statistically significant.

In the third regression, we look at whether whites who believe that blacks are lazy are less likely to support welfare. A link between this measure of racial prejudice and support for welfare is made by Gilens (1999). This survey question should be interpreted as an attempt to get at both racial prejudice and, in particular, attitudes about why blacks tend to be relatively poor. We again find an effect but it is weak, perhaps because people don't answer the question honestly.

In the fourth regression, we look at whether there is a correlation between knowing blacks and support for welfare. We use the survey question—have you had a black person for dinner in your home in the last few years. Only 27 percent of whites say that they had. Naturally, this variable reflects both contact with blacks and an underlying lack of hostility towards blacks. People who have had blacks over to dinner are indeed more



likely to support increased welfare (there is also a weak connection where people who have had a black over to dinner are less likely to think that they are lazy).

As a final check, we look at the relationship across states between racial heterogeneity and the generosity of welfare payments. States have discretion in the way that they structure their Aid to Families with Dependent Children (AFDC) payments, and there is considerable heterogeneity in the generosity of these programs. To avoid problems associated with welfare reform in the 1990s, we use data from 1990. Our dependent variable is the maximum AFDC payment to a family of three. Our explanatory variable is the share of the population that is black. If our theory is correct, states with more African-America residents should have less generous programs.

Figure 4.4 shows that this is the case. There is a strong negative relationship between the generosity of the program and the share of the state that is black—the raw correlation is 49 percent. It is worth emphasizing that in all of these states, blacks are a minority of the population, and they are disproportionately represented among the poor. One possible confound in this relationship is the average income of the state—states with more blacks are poorer, and may have less generous payments for that reason. When we regress the maximum AFDC payments on both median income and percent black in the state, our primary result is still significant. The estimated regression is (standard errors are in parentheses):

$$\text{Maximum AFDC Payment} = -149 - 692 * \text{Percent Black} + .017 * \text{Median Income}$$

(72)      (131)                              (.002)

N=50, R-Squared=.71.

These coefficients mean that a one- percent change in percent black reduces the maximum AFDC payment by six dollars and ninety-two cents. A \$1,000 increase in median income increases maximum AFDC payments by 17 dollars. These results confirm the strong connection between racial homogeneity and redistribution.

Overall, the cross-country evidence, the cross-state evidence (of Alesina, Baqir and Easterly, 1999, 2000, and the work presented here) and the survey evidence given here (and of Luttmer, 2001 and in Alesina and LaFerrara, 2001) all suggest that hostility between the races limits support for welfare. It is clear that racial heterogeneity within the US is one of the most important reasons why the welfare state in America is small.

### *Reciprocal Altruism*

A final explanation of the Europe-US difference in redistribution is reciprocal altruism. This simple idea is generally credited to Robert Trivers (1971) who argued that animals

evolved to respond in kind, i.e. a tit-for-tat policy is simple and generally optimal.<sup>36</sup> Rabin (1994) presents an economic model showing reciprocal altruism in action. Romer (1996) uses the taste for vengeance (a specific form of reciprocal altruism) to understand the politics surrounding social security.

Reciprocal altruism relates to welfare because anti-welfare forces generally try to emphasize the fact that welfare recipients are taking money from taxpayers, and generally not working. A classic image of this type is Ronald Reagan's apocryphal Welfare Queen who was living high on taxpayer dollars. Since the 1960s, anti-welfare politics has emphasized the claim that the poor are unworthy and cheating the system. It is easy to see why the non-working poor who receive income from working taxpayers might generate resentment and hostility. It is less easy to understand why this force might differ between the US and Europe.

One thing, however, is clear. Opinions about the poor differ sharply between the US and Europe. In Europe, the poor are generally thought to be unfortunate, but not personally responsible for their own condition. For example, seventy percent of West Germans believe that people are poor because of society, not laziness. However, 70 percent of Americans in response to the same question said that people are poor because of laziness. On another World Value Survey question respondents were asked whether poor people could work their way out of poverty—71 percent of Americans said that this was possible. Only 40 percent of Europeans thought that this type of social mobility existed (shown in Table 4.7). Americans essentially believe that anyone can work their way out of poverty by dint of hard work and that the poor only remain poor because they refuse to put in this effort. Given these beliefs, we are not surprised that the Americans think that the poor are undeserving because they are not trying hard enough and the Europeans think that the poor are unfortunate but deserving.<sup>37</sup> We have also run the same cross country regressions as in Table 4.3 adding the country mean belief that income differences across individuals are driven by luck. This variable has a significant positive coefficient, indicating that the more people believe that luck drives success the larger is the share of social spending. This holds even after controlling for all the other right hand side variables of Table 4.3, although the intersection of countries for which all these data are available is of only 29.

Indirect evidence on American attitudes towards the poor can also be taken from Alesina, DiTella and McCulloch (2000). This paper examines the determinants of happiness in the US and Europe and finds that most individual characteristics influence happiness in almost identical ways on the two sides of the Atlantic. However, while more Europeans get unhappier as inequality in their country rises, American happiness is unrelated to inequality in their state of residence.

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<sup>36</sup> Obviously, simple tit-for-tat policies not going to dominate complete rationality—in the absence of reputation concerns. However, for non-human primates (and perhaps even for humans) evolution may have trouble creating complete rationality.

<sup>37</sup> Lipset (1996) reports results from various polls which all suggest an overwhelming beliefs that the poor can lift themselves out of poverty if they tried hard enough.

What forces might be responsible for the cross-continent differences in these beliefs? We can only speculate at this point, but there are a plethora of plausible explanations for the US-Europe gap. First, there might be a reality underpinning the data. Indeed, as Table 4.5 shows, there is a strong positive correlation between earnings and hours worked in the US. The median person in the top income quintile in the US works 45 hours per week, the average being 48. Both of these numbers are significantly higher than comparable numbers for all other income quintiles in the US. People in the bottom quintile work 27 hours per week on average. This includes all males 25-34, but if we include only full-time workers, it is still true that poorer workers in the US work much fewer hours. These patterns are less common in Europe. For example, in Switzerland and Italy, men in the bottom income quintile work more hours than men in the top income quintile. In Sweden, median hours worked equals 39 in all income quintiles. Other countries have patterns that are somewhat closer to that of the US.

The connection between effort and income in the US has deep historical roots. In the 19<sup>th</sup> century, DeTocqueville described a connection between effort and wealth in the US which contrasts strongly with a European connection between indolence and aristocracy. For example, he wrote, “It is to escape this obligation of work that so many rich Americans come to Europe; there they find the debris of aristocratic societies among which idleness is still honored.” At the extreme, it is still true that while the richest person in America is the self-made man, Bill Gates, the richest people in England are the Queen and the Duke of Westminster.

Second, it is entirely possible that the US has an ethos of hard work coming from their Puritan antecedents and Americans still seem to think that laziness is something of a sin. The Congregationalists who settled New England were intellectual descendants of Calvin and these views are still seen in the US. DeTocqueville describes the history of the American work ethos: “[an American] would deem himself disreputable if he used his life only for living.” Current survey evidence still supports this pro-work orientation. For example, in the General Social Survey only 22 percent of respondents agreed that a job is just a way of earning money. Conversely, 63 percent of respondents said that they would enjoy a paying job even if they did not need the money.

A third factor is that the US might in general be more comfortable with punishing miscreants than Europe, and as such Americans might be happier with the idea of punishing welfare recipients by cutting back on welfare. The view that Americans are more comfortable with punishment, and in particular punishing the less fortunate, than Europeans, has some basis in fact. For example, the General Social Survey asked whether respondents thought that the courts punished criminals too harshly or not harshly enough. Eighty six percent of respondents say that the courts are not harsh enough. Four percent of respondents said that courts were too harsh. Americans overwhelmingly support the death penalty. Americans spend more on defense and are generally more enthusiastic about wars (since WWII). Nisbet and Cohen (1996) suggest that an American taste for retribution might have come from the frontier and the need to protect goods when property rights are uncertain. Alternatively, it is possible that two disastrous

world wars, and awful experiences with punitive fascist regimes, have discredited vengeful punishment in Europe.

A fourth possibility is that the view of welfare recipients as lazy (or even cheaters) is endogenous, and comes 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 on their integrity. In the US where welfare reciprocity is rarer, we might expect it to be easier for anti-welfare leadership to malign the character of the welfare recipients. Naturally, this creates an increasing returns phenomenon, where the ability to push a welfare state increases as the welfare state itself grows.

Our first evidence on mobility and support for welfare is shown in Table 4.6. In this table we look at support for welfare in the General Social Survey. In the first regression, we estimate the connection between occupational mobility and support for more spending on welfare. Occupational mobility is defined as the mean difference in occupational prestige between the respondent and his father in the occupation. We separate out the races because it may well be that attitudes about mobility are formed only on the basis of one's own race. There is a significant negative effect of mobility on support for welfare. This supports the idea that people who have themselves risen from poverty are more likely to think that the poor can do it as well, and therefore are only on welfare because they are cheating the system. Of course, this relationship might also occur because more mobility is associated with higher future wage growth, a point investigated by Alesina and La Ferrara (2001).

In the second column, we look at support for capital punishment and welfare. This column tests the notion that people who are more comfortable with retribution are more likely to oppose giving money to the poor. There is an extremely strong relationship between supporting capital punishment and opposing welfare in the US. Indeed, the correlation of these opinions (which is fairly high—16 percent in the US) is hardly natural. However, it makes sense if opposition to welfare comes from a desire to punish people who are seen as “stealing” from taxpayers.

Our third regression looks at the hypothesis that Protestantism is an important force in driving beliefs about the poor and about welfare. Here, we regress support for increased welfare on church attendance and on being a Protestant. In both cases, there is a significant effect of the variables. More religious Americans and Protestant Americans are more likely to oppose increased spending on welfare. Protestantism is also linked to the belief that success results from effort.

To look at these issues further, we examine the distribution of opinions in Europe and the US using the World Values Survey. As we argued earlier, support for the nation's current welfare policies makes little sense as a variable for cross-national comparisons. Instead, we use left-wing political attitudes as our best proxy for attitudes towards the poor. Within countries, the correlation between support for welfare and left-wing status

is considerable. The mean difference in percent left-wing is 13 percent (30 percent of Europeans vs. 17 percent of Americans say that they are left-wing).

In Table 4.7 we look at three questions about the poor: (1) whether the poor are trapped, (2) whether luck determines income, and (3) whether the poor are lazy. As discussed earlier, the first panel of Table 4.7 shows the large differences between the US and Europe in the responses to these questions. For example, 54 percent of Europeans believe that the poor are unlucky while only 30 percent of Americans share that belief.

The bottom panels of 4.7 show the connection between these variables and left-wing status (which is our proxy for support for welfare). The connection between believing that the poor are trapped and left-wing attitudes is strong in the US. 14 percent of those who say that the poor are not trapped are left-wing in the US. 26 percent of those who think that the poor are trapped are left-wing in the US. The difference in left-wing orientation between the US and Europe drops from 13 percent to 8 percent within the group that agrees that the poor are trapped. There is no drop among those who believe that the poor are not trapped.

The connection between belief in luck and left-wing status is weaker in the US. Sixteen percent of those who say that success is due to *effort* are left-wing in the US. Eighteen percent of those say that success is due to *luck* are left-wing in the US. This is not much of a difference. In Europe the comparable numbers are 25 percent and 35 percent. While there is a huge difference in belief in luck between the US and Europe, it is not true that holding belief in the role of effort constant eliminates the US-Europe difference in left-wing attitudes.

The final panel looks at the belief in whether the poor are lazy. Again, there is a huge difference between the US and Europe. Sixty percent of American respondents say that the poor are lazy. Twenty-six percent of Europeans say that the poor are lazy. However, at the individual level there is little connection between this variable and left-wing attitudes. More specifically, holding constant belief in whether the poor are lazy causes the Europe-US difference in attitudes towards left-wing status to drop from 13 percent to 9-12 percent. These effects are not all that large.

As a third test, we regress transfers divided by GDP on the share of the respondents in the country who say that success is due to luck (rather than effort). In regression (3) of Table 4.3, we show this relationship controlling for our standard controls. The relationship is quite significant. Visually, we show the relationship between this belief and transfers in Figure 4.5.

Table 4.8 looks at the determinants of left-wing attitudes using data across countries from the World Values Survey. We interpret this variable as reflecting something like beliefs about welfare which should abstract from the effect of political institutions. In the first column, we show the basic US dummy which is  $-.125$ , controlling for individual characteristics: age, race, etc. There is no impact of these controls on the US dummy. This corresponds to the roughly 13 percent difference in left-wing status that has been

discussed earlier. Variables that can explain the US-Europe difference in attitudes towards redistribution will cause this difference to drop.

The second regression controls for racial fractionalization in the country (the same racial variable discussed earlier). This variable is available only at the country level, so we control for grouped country specific error terms. This variable is quite significant economically, but insignificant statistically. It also eliminates the US coefficient. The meaning of this is that racial heterogeneity can possibly explain the entire US-Europe difference in left-wing attitudes, but our statistical confidence in this claim is weak.

The third regression controls for belief that luck determines income. Because we are quite wary about looking at the relationship between two individual specific variables (left-wing status and beliefs about luck) that may really be the same thing, we have used the occupation/country mean belief that luck determines income. The logic of this is that this occupation group average may represent the outside influence that impact peoples' beliefs but will not be quite as endogenous as the respondents' own beliefs. This has a sizable effect on the US dummy—reducing it by 20 percent. The fourth regression includes both racial heterogeneity and beliefs about luck vs. effort. Race remains the dominant variable, but opinions about luck stay significant.

Our conclusion from this section is that we are very confident that race is critically important to understanding US-Europe differences. It is also true that Americans generally think that income comes from effort, and that welfare recipients are not pulling their weight. This opinion may itself be the outcome of racial factors.

## **5. CONCLUSION**

Why is redistribution so much higher in Europe than in the US? We have examined three sets of explanations that we labeled economic, political and behavioral. Overall, the economic explanations do not explain much of the puzzle. Pre-tax income inequality is higher in the US than in Europe and the income distribution appears to be more skewed in the US. There does not appear to be more income uncertainty in Europe. There is no evidence that the European tax system is more efficient. Perhaps there is more chance for upward mobility among political powerful groups in the US. Overall, we think that standard economic models of income redistribution do a poor job of explaining the differences between the US and Europe.

On the other hand, political variables including the electoral system (in particular, proportionality and the US two party system) and the role of the courts, are important. The two party system, and the lack of proportionality, created obstacles that blocked the formation of a strong and lasting Socialist party in the US. The upheaval in continental Europe over the last century has meant that there were no durable institutions which could protect property against popular demand for redistribution. Monumental differences in history such as the US Civil War and the open frontier with the West contributed to create a different climate and attitudes toward the relationship between the individual and the state.

The behavioral explanations also seem very important. Racial fragmentation in the US and the disproportionate representation of minorities among the poor has clearly played a major role in stopping rich-poor redistribution within the US, and, indeed, across the world racial cleavages seem to serve as a barrier to redistribution. This history of American redistribution makes it quite clear that hostility to welfare comes in part from the fact that welfare spending in the US goes disproportionately to minorities. Also Americans dislike redistribution because they feel that people on welfare are lazy. Europeans feel that people on welfare are unfortunate. Apart from the fact that in the US there is indeed a higher connection between effort and earnings than Europe, we don't know what explains these differences in beliefs.

Our bottom line is that Americans redistribute less than Europeans because (1) the majority believes that redistribution favors racial minorities, (2) Americans believe that they live in an open and fair society and that if someone is poor it is their own fault, and (3) the political system is geared towards preventing redistribution. In fact the political system is likely to be endogenous to these basic American beliefs.

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## Appendix I: Proofs of Propositions

*Proof of Proposition 1:* First, the impact of  $\alpha$  and  $\lambda$  are clearly the same, so it is sufficient to prove the redistribution is rising in  $\alpha$ .

We use the notation:  $Q(Y_0) = \int_{\varepsilon} (\delta \hat{Y} - Y(Y_0, \varepsilon)) U'((1-\tau)Y(Y_0, \varepsilon) + \tau \delta \hat{Y}) f(\varepsilon) g(Y_0) d\varepsilon$ .

Taking the derivative of (4) yields:

$$(A1) \quad \int_{Y_0} (\hat{Y} - Y_0) Q(Y_0) = - \frac{\partial \tau}{\partial \alpha} \int_{Y_0} (\alpha(Y_0) + \lambda(Y_0)) \int_{\varepsilon} (\delta \hat{Y} - Y(Y_0, \varepsilon))^2 U''((1-\tau)Y(Y_0, \varepsilon) + \tau \delta \hat{Y}) f(\varepsilon) g(Y_0) d\varepsilon dY_0$$

The term multiplying  $\frac{\partial \tau}{\partial \alpha}$  is obviously negative, so it is sufficient to prove that the term on the left-hand side of the equality is positive.

We will prove this by contradiction, and we start by assuming that  $\int_{Y_0} (\hat{Y} - Y_0) Q(Y_0) < 0$ ,

which implies that  $\int_{Y_0 > \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0) < - \int_{Y_0 < \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0)$ . From equation (4), we know that:

$$(A2) \quad \int_{Y_0 > \delta \hat{Y}} (1 + \alpha_0 + (\hat{Y} - Y_0)(1 + \alpha + \lambda)) Q(Y_0) = - \int_{Y_0 < \delta \hat{Y}} (1 + \alpha_0 + (\hat{Y} - Y_0)(1 + \alpha + \lambda)) Q(Y_0),$$

and both sides of this equation are positive since  $(1 + \alpha_0 + (\hat{Y} - Y_0)(1 + \alpha + \lambda)) > 0$ , and  $Q(Y_0) > 0$  for  $Y_0 > \delta \hat{Y}$  (which together imply that the left hand side is positive, when then implies that the right hand side is positive as well).

Equation (A2) implies that  $\int_{Y_0 > \delta \hat{Y}} Q(Y_0) < - \int_{Y_0 < \delta \hat{Y}} Q(Y_0)$  (because  $(1 + \alpha_0 + (\hat{Y} - Y_0)(1 + \alpha + \lambda))$

is declining in  $Y_0$ ) which in turn implies  $(1 - \delta) \hat{Y} \int_{Y_0 > \delta \hat{Y}} Q(Y_0) < -(1 - \delta) \hat{Y} \int_{Y_0 < \delta \hat{Y}} Q(Y_0)$ , and since

$\hat{Y} - Y_0 < (1 - \delta) \hat{Y}$  for all  $Y_0 > \delta \hat{Y}$  and  $\hat{Y} - Y_0 > (1 - \delta) \hat{Y}$  for all  $Y_0 < \delta \hat{Y}$ , this implies that  $\int_{Y_0 > \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0) < - \int_{Y_0 < \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0)$  and this contradicts

$\int_{Y_0 > \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0) < - \int_{Y_0 < \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0)$ . Thus it must be true that

$\int_{Y_0 > \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0) < - \int_{Y_0 < \delta \hat{Y}} (\hat{Y} - Y_0) Q(Y_0)$ , and thus  $\frac{\partial \tau}{\partial \alpha}$  is positive.

*Proof of Proposition 2:* When  $\theta = 0$ , equation (4a) is positive if and only if  $\delta > Y_{Med} / \hat{Y}$ .

*Proof of Proposition 3:* For any parameter “X” differentiation yields,

$$(A4) \quad \frac{\partial \int_{\varepsilon} (\delta \hat{Y} - Y_{Med}(\varepsilon)) U'((1-\tau)Y_{Med}(\varepsilon) + \tau \delta \hat{Y}) f(\varepsilon) d\varepsilon}{\partial X} =$$

$$- \frac{\partial \tau}{\partial X} \int_{\varepsilon} (\delta \hat{Y} - Y_{Med}(\varepsilon))^2 U''((1-\tau)Y_{Med}(\varepsilon) + \tau \delta \hat{Y}) f(\varepsilon) d\varepsilon$$

Since the terms multiplying  $\frac{\partial \tau}{\partial X}$  are positive, the sign of  $\frac{\partial \tau}{\partial X}$  will be determined by the

$$\text{sign of } \frac{\partial \int_{\varepsilon} (\delta \hat{Y} - Y_{Med}(\varepsilon)) U'((1-\tau)Y_{Med}(\varepsilon) + \tau \delta \hat{Y}) f(\varepsilon) d\varepsilon}{\partial X}.$$

In the case of  $\mu(Y_{Med})$ , this equals:

$$(A5) \quad \int_{\varepsilon} (-\theta U'(Y_N(\varepsilon)) + (\delta \hat{Y} - Y_{Med}(\varepsilon))(1-\tau)\theta U''(Y_N(\varepsilon))) f(\varepsilon) d\varepsilon.$$

This can be rewritten as:

$$(A5') - \theta \int_{\varepsilon} (U'(Y_N(\varepsilon)) + Y_N(\varepsilon) U''(Y_N(\varepsilon)) - \delta \hat{Y} U''(Y_N(\varepsilon))) f(\varepsilon) d\varepsilon.$$

Using the assumption that  $U'(Y) > -YU''(Y)$ , or  $U'(Y) + YU''(Y) > 0$ , we know that the expression in the integral is strictly positive, and thus the overall term is negative. Thus, the level of redistribution falls with  $\mu(Y_{Med})$ .

In the case of  $\delta$  the left hand side of equation (A4) equals:

$$(A6) \quad \int_{\varepsilon} (\hat{Y} U'(Y_N(\varepsilon)) + (\delta \hat{Y} - Y_{Med}(\varepsilon)) \tau \hat{Y} U''(Y_N(\varepsilon))) f(\varepsilon) d\varepsilon,$$

which can be rewritten as:

$$(A7) \int_{\varepsilon} (\hat{Y}(U'(Y_N(\varepsilon)) + \hat{Y}U''(Y_N(\varepsilon)) - ((1 - \tau)\delta)\hat{Y} + \tau Y_{Med}(\varepsilon))\hat{Y}U''(Y_N(\varepsilon)))f(\varepsilon)d\varepsilon$$

Again using  $U'(Y) + YU''(Y) > 0$ , this term is positive and thus redistribution will rise with  $\delta$ .

Finally, considering  $\theta$ , the left-hand side of (A4) equals:

$$(A8) \int_{\varepsilon} (-(\mu + \varepsilon)U'(Y_N(\varepsilon)) + (\delta\hat{Y} - Y_{Med}(\varepsilon))(1 - \tau)(\mu + \varepsilon)U''(Y_N(\varepsilon)))f(\varepsilon)d\varepsilon,$$

where  $\mu = \mu(Y_{Med}) - Y_{Med}$ . Rewriting this equation yields:

$$(A8') \int_{\varepsilon} (\mu + \varepsilon)(-U'(Y_N(\varepsilon)) + Y_N(\varepsilon)U''(Y_N(\varepsilon))) + \delta\hat{Y}U''(Y_N(\varepsilon))f(\varepsilon)d\varepsilon$$

If the variance of epsilon equals zero, then this term is clearly negative as long as  $\mu > 0$ , so more uncertainty leads to decreases in redistribution. Likewise if  $\mu$  is sufficiently negative, then the term will be strictly positive and more variation will lead to more redistribution. The problem is continuous, so these claims will continue to hold for as long as the variance of epsilon is low. If  $\mu \leq 0$  and  $\delta\hat{Y} = Y_{Med}(\varepsilon)$ , then the equation can be rewritten:

$$(A8'') \int_{\varepsilon} -(\mu + \varepsilon)U'(Y_N(\varepsilon))f(\varepsilon)d\varepsilon,$$

which from the concavity of  $U(\cdot)$  is positive if epsilon is symmetrically distributed, and thus more uncertainty leads to more redistribution.

## **Appendix II: Data Sources**

### **Social Protection:**

The comparative figures and descriptions of social security systems in Germany, Sweden and the United States were provided by publications from the German and US Social Security administrations, and by comparative charts published by both the US Social Security Administration and the MISSOC, a EU administration gathering information on the social security systems of the EU member countries. We report figures on family benefits, health care, sickness benefits, unemployment benefits, disability benefits and social assistance. Informations on old age and survivors pensions were also available but left aside for the purpose of the paper.

Federal Ministry of Labour and Social Affairs, Germany, Social Security at a Glance, 2001.

MISSOC (Mutual Information System on Social Protection in the EU Member States and the EEA), Social Security and Social Integration, Comparative Tables on Social Protection in the Member States, 2000.

Social Security Administration, Office of Research, Evaluation and Statistics, Social Security Programs in the United States, July 1997.

Social Security Administration, Office of Research, Evaluation and Statistics, Social Security Programs Throughout the World, 1999.

### **Minimum wages table:**

The second and third columns of Table 2.5 report measures of minimum wages for countries that have national or statutory minimum wages. The first column, reported from Nickell and Layard (1999), adds minimum wages for Germany and Sweden, which have sectoral minimum wages, but no minimum wage policy.

Eurostat, Minimum Wages in the European Union, 2001.

Nickell, Stephen, and Richard Layard, "Labor Market Institutions and Economic Performance", Handbook of Labor Economics, vol. 3 (1999), 3029-3084.

OECD, Employment Outlook, 2000.

OECD, Main Economic Indicators, April 2001.

### **Tax rates figure:**

The figure is based on comparative data published by the OECD. For each country, the tax rate schedule is translated in terms of average production worker earnings. Only

central government taxes are taken into account, regional or local taxes, as well as social security contributions, are omitted.

OECD, *Taxing Wages*, 2001.

### **Pensions data:**

Pension spending expressed as % of GDP. The sample range is 1992-97 for OECD countries, 1990-97 for Latin American countries, 1999 for Mauritius and 1990-96 for Asian countries (Palacios and Pallares-Miralles, 2000). However, for Fiji, India, Malaysia and Paraguay, an older database is used (World Bank, 1994) and the data correspond to the 1985-93 period.

Palacios, Robert, and Montserrat Pallares-Miralles, "International Patterns Of Pension Provision", World Bank Discussion Paper No. 0009, 2000.

World Bank, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*. (New York: Oxford University Press, 1994).

### **Labor market chart:**

The reported rigidity indices are all from Nickell (1997) and Nickell and Layard (1999), and are interpreted as follows:

1. Labor standards: index produced by the OECD (OECD Employment Outlook, 1994, and extended by Nickell and Layard, 1999) and referring to the strength of the legislation on five different aspects of the labor markets (working hours, fixed-term contracts, employment protection, minimum wages and employees' representation rights). Each country is scored from 0 (no legislation) to 2 (strict legislation) for each measure. Maximum score: 10.
2. Employment protection: OECD index (OECD Jobs Study, 1994) referring to the legal framework concerning hiring and firing. Maximum value: 20, 20 being the value attributed to the strictest legal provisions.
3. Minimum annual leave: (OECD Jobs Study, 1994), in addition to public holidays.
4. Benefit replacement ratio: (US Social Security Administration, *Social Security Programs Throughout the World*, 1999), share of income replaced by unemployment benefits.
5. Benefit duration: same sources.

Nickell, Stephen, "Unemployment and Labor Market Rigidities: Europe Versus North America", *Journal of Economic Perspectives*, vol. 11 (1997), 55-74.

Nickell, Stephen, and Richard Layard, "Labor Market Institutions and Economic Performance", Handbook of Labor Economics, vol. 3 (1999), 3029-3084.

**Racial index computations:**

We used the most recent demographic measures whenever they were available from national census bureaus (Australia, Canada, France, India, Israel, New Zealand, Singapore and the United States). However, for most countries, we used Levinson (1998) and the World Directory of Minorities (1997), that both provide detailed profiles of each country, including reports about the racial, ethnic, linguistic and religious composition of the population. The index is computed as the probability of randomly drawing out of the country's population two individuals that do not belong to the same racial group.

Australian Bureau of Statistics, 2001 Projections, 2001 (available online).

INSEE, Recensement de la population 1999, 2000.

Israel Central Bureau of Statistics, 1995 Census of Population and Housing, 2001 (available online).

Levinson, David, Ethnic Groups Worldwide, A Ready Reference Handbook (Phoenix: Oryx Press, 1998).

Minority Rights Group International, World Directory of Minorities, (London: Minority Rights Group International, 1997).

Registrar General and Census Commissioner India, 1991 Census, 2001 (available online).

Singapore Department of Statistics, 2000 Census, 2001 (available online).

Statistics New Zealand, 1996 Census, 2001 (available online).

Statistics Canada, 1996 Census, 2001 (available online).

United States Census Bureau, 2000 Census, 2001 (available online).

**Revenue and expenditure tables, including historical data and figure:**

All reported measures are for general government. Historical data are provided by both Tanzi and Schuknecht for the 1870-1960 period and the OECD Economic Outlook Database (1999) for the 1960-1998 period.

OECD Economic Outlook Database, 1999.

OECD Economic Outlook Database, 2001.



OECD Revenue Statistics 1965-1999, 2000.

OECD Social Expenditure Database 1980-1996, 1999.

Tanzi, V. and L. Schuknecht, Public Spending In The 20th Century, A Global Perspective (Cambridge University Press, 2000).

### **Instability table:**

The first four measures (GDP\growth, productivity, unemployment rate and competitiveness) are OECD measures, while the terms of trade shocks are reported from Rodrik's database (1998).

OECD, Statistical Compendium 1960-1999.

Rodrik, Dani, "Why Do More Open Economies Have Bigger Governments?", Journal of Political Economy, vol. 106 (1998), 997-1032.

### **World Values Survey Data:**

We use World Values Survey data to measure how individual attitudes towards social spending vary and how such attitudes correlate with beliefs about social mobility, laziness of the poor, and own characteristics. We use data from the US, France, Britain, German, Italy, Netherlands, Denmark, Belgium, Spain, Ireland, Norway, Sweden, Finland, and Switzerland.

Our dependent variable is a 0-1 dummy for whether the respondent classifies herself as being on the left side of the political spectrum. Specifically there is a 1-10 scale and we take as a "lefty" anyone who reports a four or lower. (The exact question is: "In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?")

We use this rather than more direct questions on social spending because all of the latter questions are asked about the appropriateness of the current level of spending in one's own country. There are large differences across countries in the level of spending and the level appears to affect how people respond to the question.

Our other variables of interest in the World Values Survey are responses to the following questions:

Why, in your opinion, are there people in this country who live in need? Here are two opinions: Which comes closest to your view?

0. They are poor because society treats them unfairly
1. They are poor because of laziness and lack of will power

In your opinion, do most poor people in this country have a chance of escaping from poverty, or is there very little chance of escaping?

0. They have a chance

1. There is very little chance

In the long run, hard work usually brings a better life. Hard work doesn't generally bring success—it's more a matter of luck and connections. This is coded as a 1-10 with 10 indicating a strong belief in luck. We rescaled this to range between 0 and 1.

### **GSS Data:**

The key dependent variable is a scale (normalized 0-1) for how much the respondent supports increased spending on welfare. The question (called natfare) is asked 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 whether you think we're spending too much money on it, too little money, or about the right amount."

Some of the key right-hand side variables in our analysis are percentage of blacks in own state, the belief that black people are lazy, and whether or not the person has had a black person over for dinner. In the laziness question, respondents are asked to report their beliefs about people of various races and ethnicities. The laziness question asks "Do people in this group tend to be hardworking or lazy?" and people respond on a 1-7 scale with 7 being the most lazy.

To study mobility we use a GSS variable (occmobil) which compares your own occupational prestige to that of your parents.

Figure 2.1: Difference in marginal tax rates, in %, between the US and EU15 (excluding Denmark)  
The difference equals the US marginal tax rate minus the unweighted average European marginal rate for each income class.

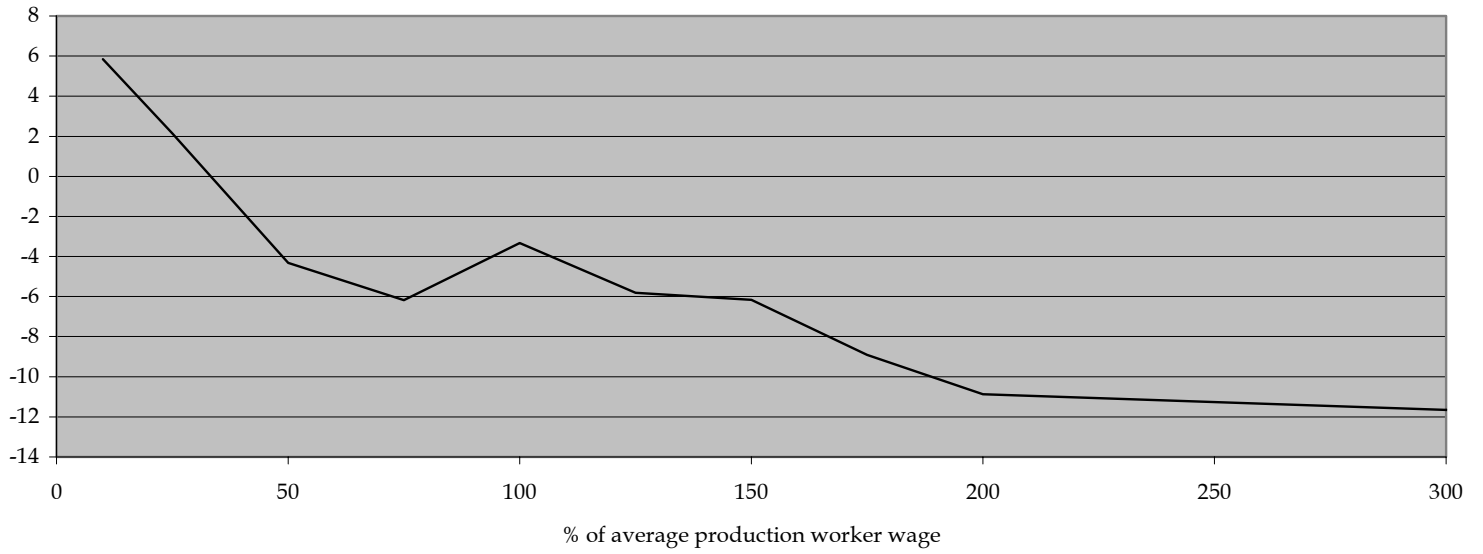
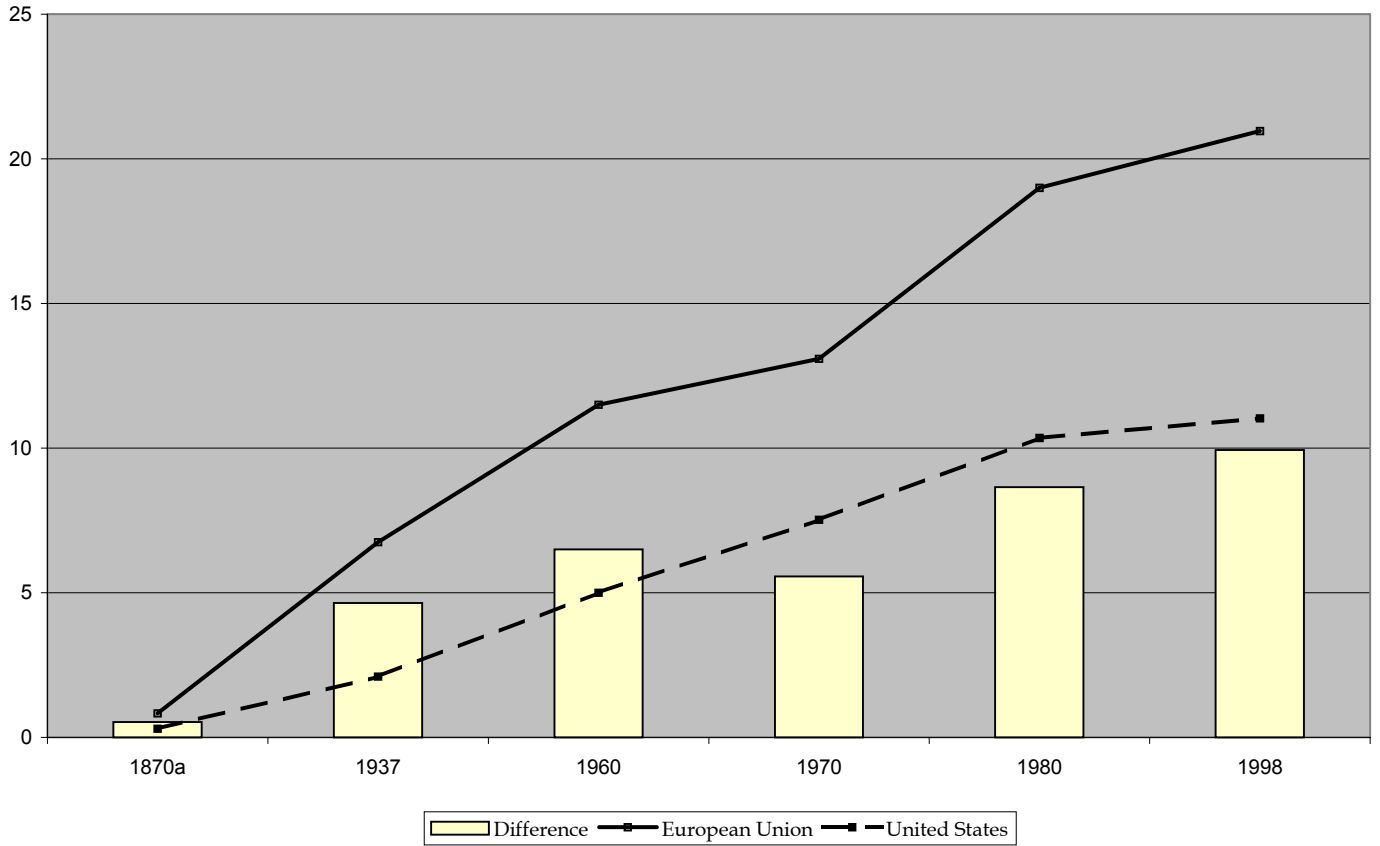
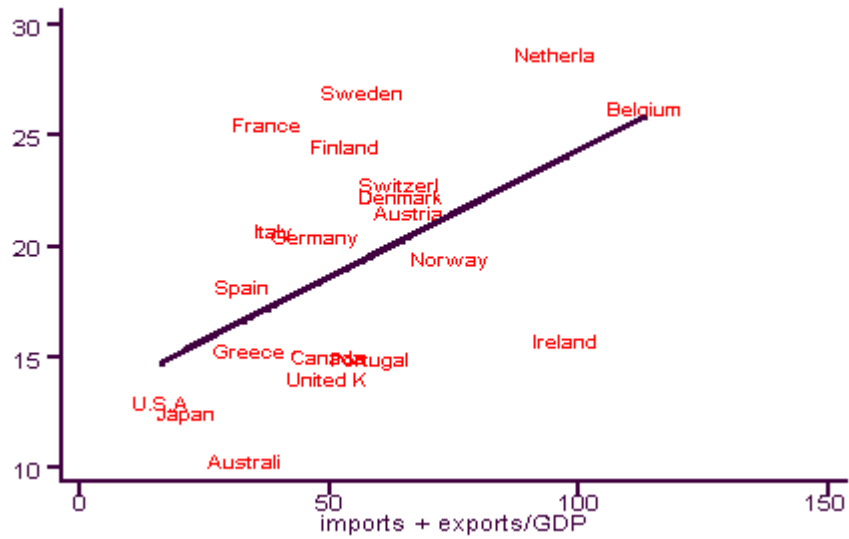


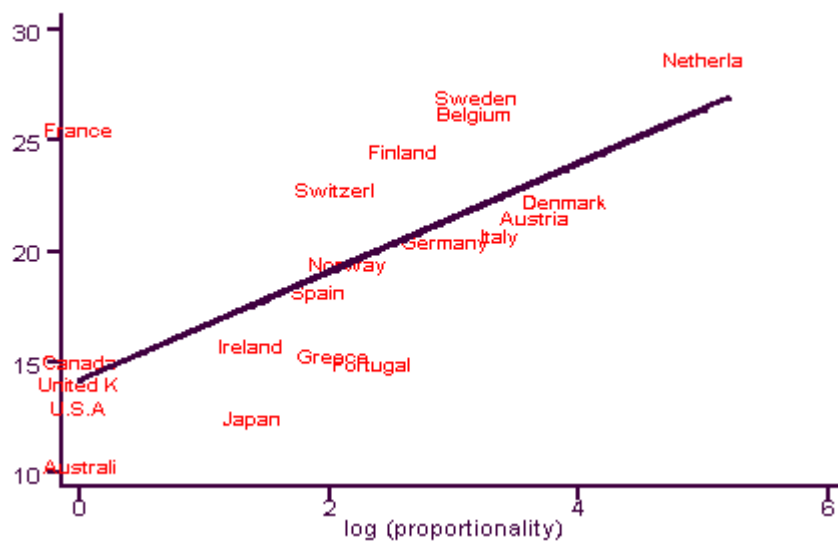
Figure 2.2: Government expenditure on subsidies and transfers (% of GDP) 1870-1998  
 (obtained from Table 2.4)



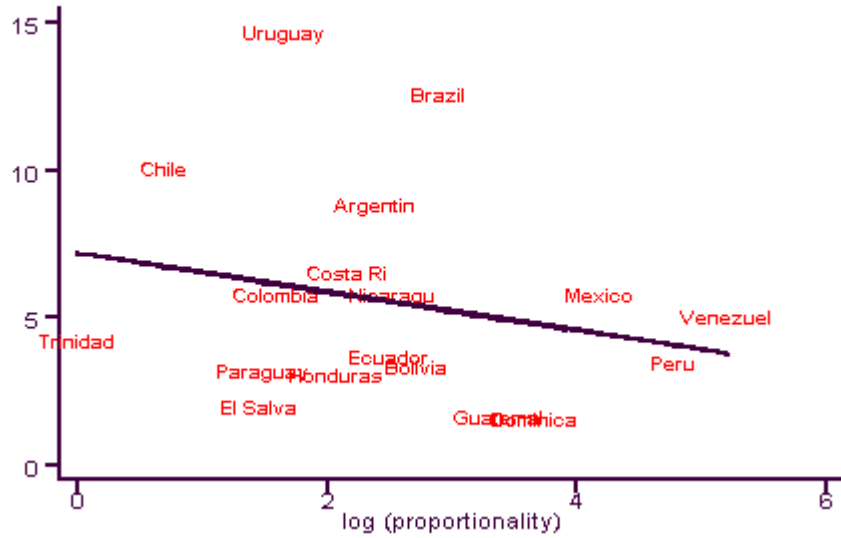
**Figure 4.1**  
**Transfers/GDP vs. (Imports + Exports/GDP)**  
**OECD**



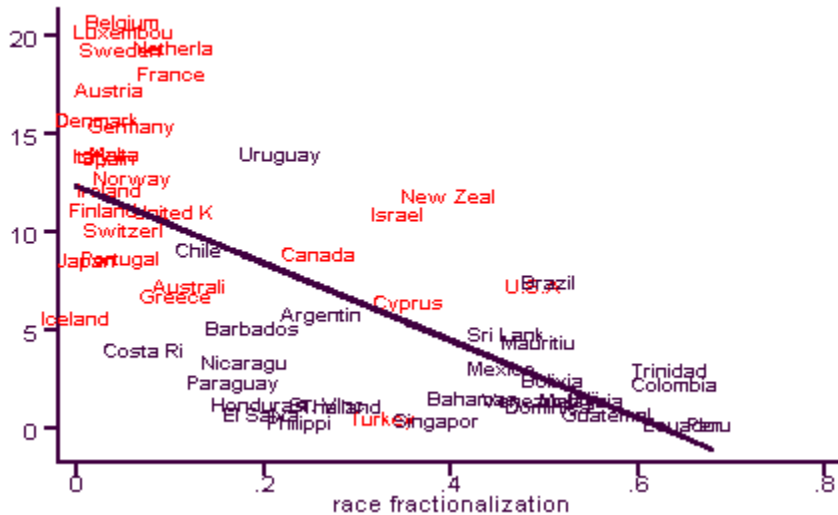
**Figure 4.2a**  
**Transfers/GDP vs. Log (Proportionality)**  
**OECD**



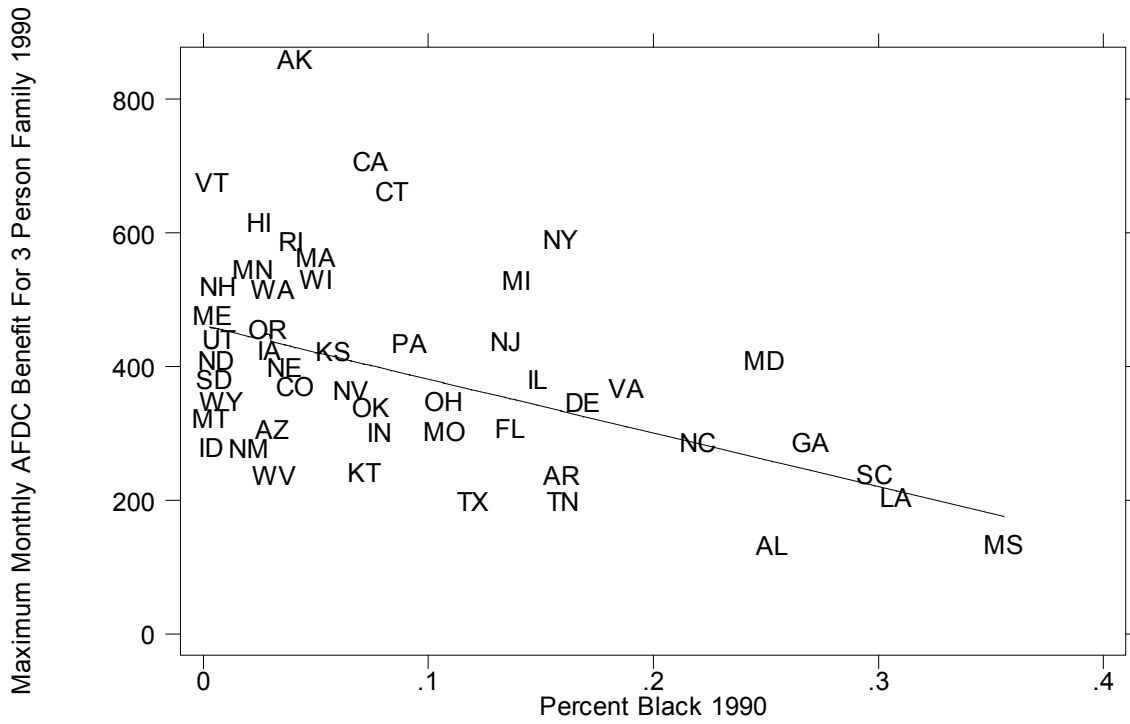
**Figure 4.2b**  
**Transfers/GDP vs. Log (Proportionality)**  
**Non-OECD**



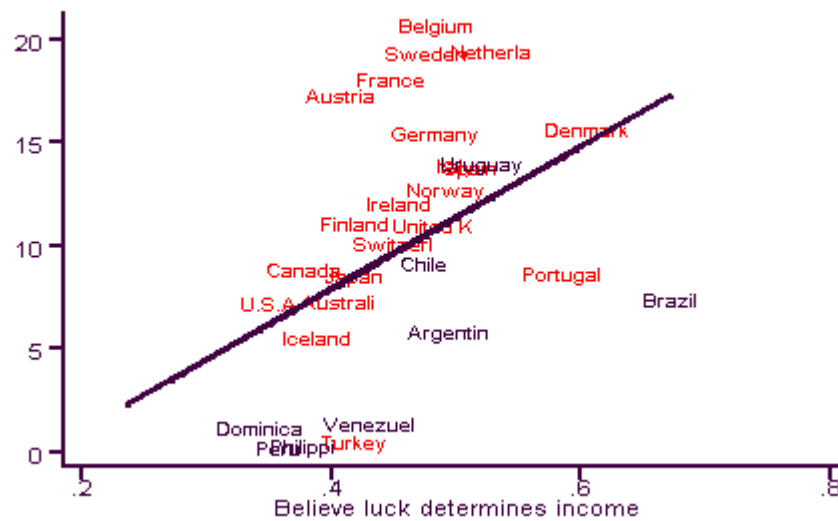
**Figure 4.3**  
**Social Spending/GDP vs. Race Fractionalization**



**Figure 4.4**  
**AFDC Monthly Maximum vs. Percent Black By State**



**Figure 4.5**  
**Social Spending/GDP vs. Mean Belief That Luck Determines Income**



**Table 2.1: General government expenditure, as % of GDP (1999)**

	Total	of which: General government current disbursements				of which: Gross government investment
		Government consumption, excluding wages	Government consumption, wages	Subsidies	Social benefits and other current transfers	
France	51.0	10.0	13.7	1.3	20.1	3.0
Germany	47.4	10.7	8.3	1.7	20.5	1.8
Sweden	60.2	10.3	16.7	2.0	21.1	2.5
United Kingdom	38.3	11.0	7.4	0.6	15.7	1.0
European Union (1)	47.9	8.4	12.0	1.5	18.1	2.8
United States(2)	35.5	5.2	9.2	0.2	11.0	3.1

Source: OECD Economic Outlook database, 2001.

1. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and United Kingdom.

2. Data for year 1998.

**Table 2.2: Social public expenditure, as % of GDP (1995)**

	Total	of which:				Others (1)
		Old age, disability and survivors	Family	Unemployment and labor market programs	Health	
France	30.1	14.1	2.6	3.1	8.0	2.3
Germany	28.0	12.5	2.0	3.7	8.1	1.6
Sweden	33.0	14.8	3.9	4.7	5.9	3.8
United Kingdom	22.5	10.6	2.4	1.3	5.7	2.5
European Union (2)	25.4	12.4	2.1	3.2	5.9	1.8
United States	15.8	7.3	0.6	0.6	6.3	1.0

Source: OECD Social Expenditure database 1980-1996 (1999).

1. Others include occupational injury and disease benefits, sickness benefits, housing benefits and other contingencies such as low income programs.

2. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom.



**Table 2.3: General government revenue, as % of GDP**

	Tax revenue (1999)							Non-tax revenue (1997)
	Total tax revenue	Total direct taxes	of which: households	of which: business	Social security contributions and other transfers	Property income	Taxes on goods and services	
France	50.4	12.2	9.5	2.7	19.3	2.8	16.0	4.9
Germany	44.5	12.0	10.3	1.5	19.6	0.7	12.2	9.9
Sweden	57.9	22.4	19.0	3.3	14.7	3.8	17.0	8.1
United Kingdom	40.4	16.3	12.5	3.8	8.0	2.1	14.0	4.0
European Union (1)	45.4	15.3	11.8	3.4	13.6	2.0	14.4	5.7
United States	31.0	15.1	12.4	2.8	7.1	1.0	7.7	7.2

Source: OECD Economic Outlook database (2001), OECD Revenue Statistics 1965-1999 (2000).

1. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and United Kingdom.

**Table 2.4: Government expenditure on subsidies and transfers, 1870-1998 (% of GDP)**

	1870 (1)	1937	1960	1970	1980	1998
France	1.1	7.2	14.1	14.8	18.2	21.6
Germany	0.5	7.0	7.0	15.4	20.4	22.0
Sweden	0.7	...	8.6	12.4	21.6	23.4
United Kingdom	...	10.3	9.2	...	...	16.6
European Union (2)	0.8	6.8	11.5	13.1	19.0	21.0
United States	0.3	2.1	5.0	7.5	10.4	11.0
Difference	0.5	4.7	6.5	5.6	8.7	9.9

Source: Compiled from Tanzi and Schuknecht (2000) and OECD Economic Outlook (1999).

1. Or closest year available for all columns

2. 10 countries only (Austria, Belgium, France, Germany, Greece, Ireland, Italy, Netherlands, Spain, UK)

**Table 2.5: Minimum wages in the US and Europe**

	Ratio of minimum to average wage (Percentages)	Ratio to mean hourly pay in manufacturing (Percentages)	Ratio to mean hourly pay in manufacturing (Percentages)	Ratio to mean hourly pay in manufacturing (Percentages)
Source	OECD Jobs Study 1994 (1)	OECD (2)	Eurostat (3)	Summary index (4)
Year	1991-1994	end-1997	2001	1991-2001
France	0.50	0.68	0.63	0.63
Germany	0.55	...	...	0.55
Sweden	0.52	...	...	0.52
United Kingdom	0.40		0.44	0.44
European Union	0.53	0.56	0.53	0.55
United States	0.39	0.36	0.34	0.34

1. Reported from Nickell and Layard (1999), using Dolado et al. (1996) and OECD Jobs Study (1994). European Union average:  
Austria, Belgium, Germany, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, UK.
2. Employment Outlook, 1999. European Union average: Belgium, France, Greece, Luxembourg, Netherlands, Portugal, Spain.
3. European Union average: Belgium, France, Greece, Ireland, Luxembourg, Netherlands, Portugal, Spain, UK.
4. This index reports the most recent measure.

**Table 2.6: Labor markets in the US and in Europe**

	Labor standards 1985-93	Employment protection 1990	Minimum annual leave (weeks) 1992	Benefit replacement ratio (%) 1989-94	Benefit duration (years) 1989-94
France	6	14	5	57	3
Germany	6	15	3	63	4
Sweden	7	13	5	80	1.2
UK	0	7	0	38	4
European Union (1)	4.8	13.5	3.8	58.7	2.6
US	0	1	0	50	0.5

Source: Nickell and Layard (1999) and Nickell (1997)

1. Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and UK.

**Table 4.1: Economic variability in the US and Europe (Standard deviations)**

Series	Sample Range	US	EU15
GDP growth	1960-1997	0.020	0.017
Total manufacturing labor productivity	1980-1996	0.026	0.016
Unemployment rate (1)	1970-2000	0.414	0.220
Competitiveness (2)	1975-1999	0.057	0.046
Terms of trade shocks	1971-1990	0.086	0.088
Terms of trade shocks x openness	1971-1990	1.65	7.01

Source: OECD Compendium 1999, Rodrik (1998).

1. Coefficients of variation reported

2. Index of Relative Export Price of Manufactured Goods. European average for 5 countries: France, Germany, Italy, Spain, UK.

**Table 4.2**  
**Effect of Political Variables on Social Spending: Cross Country Regressions**

The table contains cross country regressions using political variables from Persson and Tabellini and from Perotti. Log(proportionality) is Perotti's measure of the percentage of a district's vote needed to capture a seat. Openness is (exports+imports)/GDP. Majoritarian refers to a regime in which all seats in a district are awarded to a single party winning a majority or plurality in that district.

	(1)	(2)	(3)	(4)
	<i>Transfers/GDP</i>	<i>Transfers/GDP</i>	<i>Transfers/GDP</i>	<i>Social spending /GDP</i>
LSM: log(proportionality)	2.150 (0.656)**	1.809 (0.728)*	1.021 (0.421)*	
GDP/capita	5.151 (3.571)	5.035 (3.558)	1.823 (1.519)	-0.876 (0.980)
Openness		0.043 (0.040)	0.032 (0.027)	0.009 (0.010)
% 65+	0.753 (0.478)	0.678 (0.481)	1.096 (0.298)**	1.315 (0.217)**
% pop 15-64				0.140 (0.138)
Majoritarian regime				-1.526 (0.994)
Presidential regime				-0.207 (1.227)
Caribbean				-0.095 (2.164)
Asia				2.047 (2.691)
Latin America			-0.791 (3.102)	1.042 (1.776)
Constant	-44.885 (34.507)	-44.376 (34.365)	-17.779 (13.751)	-4.597 (9.225)
Observations	20	20	38	60
R-squared	0.58	0.61	0.84	0.82

T-statistics in parentheses

\* significant at 5% level; \*\* significant at 1% level

**Table 4.3**  
**Effect of Race Fractionalization on Social Spending**

Race fractionalization is the probability that two randomly chose individuals are of a different race. Ethno-linguistic fractionalization refers to the same concept for languages. The table contains two regressions using the Persson Tabellini (PT) cross country data. The dependent variable is the level of social spending as a percentage of GDP. Column (1) takes the base PT specification to explain the level of social spending and adds ethno-linguistic fractionalization. Column (2) adds race fractionalization.

	<i>(1)</i> <i>Social</i> <i>spending/GDP</i>	<i>(2)</i> <i>Social</i> <i>spending/GDP</i>
Ethnolinguistic fractionalization	-1.864 (2.863)	
Race fractionalization		-7.538 (3.378)*
GDP/capita	0.402 (1.351)	1.918 (1.289)
Majoritarian regime	-1.381 (1.502)	-2.305 (1.302)
% pop 15-64	0.628 (0.210)**	0.327 (0.184)
Latin America	-2.733 (1.812)	-2.416 (1.847)
Caribbean	-4.508 (2.653)	-2.981 (2.548)
Asia	-1.770 (3.273)	-0.092 (4.221)
Constant	-31.385 (11.465)**	-25.000 (12.056)*
Observations	56	55
R-squared	0.69	0.69

T-statistics in parentheses

\* significant at 5% level; \*\* significant at 1% level

**Table 4.4**  
**Effect of Race And Beliefs About Race**

This table uses data from the GSS. The dependent variable is a scale (normalized 0-1) for how much the respondent supports increased spending on welfare. The three possible responses are that the US is currently spending too much, about right, or too little on welfare. Column (1) shows the race effect on support for welfare. Columns (2)-(4) limit the sample to whites and show the connection between support for welfare spending and percent black in own state, the belief that black people are lazy, and whether or not the person has had a black person over for dinner.

	(1)	(2)	(3)	(4)
	<i>Support for increased welfare</i>	<i>Support for increased welfare</i>	<i>Support for increased welfare</i>	<i>Support for increased welfare</i>
Black	0.232 (28.55)**			
Income	-0.020 (19.78)**	-0.019 (17.19)**	-0.022 (5.36)**	-0.018 (13.54)**
Female	0.007 (1.35)	0.009 (1.67)	0.032 (1.94)	0.010 (1.39)
Married	-0.033 (5.82)**	-0.038 (6.19)**	-0.016 (0.91)	-0.036 (4.58)**
Number of children	0.006 (3.96)**	0.006 (3.38)**	0.010 (1.77)	0.007 (3.04)**
Education: less than HS	0.042 (5.84)**	0.042 (5.56)**	-0.010 (0.38)	0.048 (5.08)**
Education: some college	-0.002 (0.28)	-0.002 (0.28)	-0.005 (0.21)	0.003 (0.26)
Education: college graduate	0.031 (3.62)**	0.030 (3.40)**	0.029 (1.16)	0.025 (2.22)*
Education: graduate level	0.106 (8.76)**	0.107 (8.65)**	0.080 (2.47)*	0.133 (8.20)**
Log city size	0.010 (7.77)**	0.010 (7.21)**	0.011 (2.61)**	0.010 (5.90)**
Percent black in state		-0.044 (1.14)		
Believe that blacks are lazy			-0.030 (4.27)**	
Black person home for dinner recent years				0.043 (5.38)**
Constant	0.403 (31.59)**	0.395 (27.32)**	0.597 (9.85)**	0.362 (21.18)**
Observations	20848	18157	1921	11048
R-squared	0.10	0.04	0.04	0.05

**Table 4.5**  
**Median (mean) hours worked by income quintile**

Income Quintile	Switzerland	France	Germany	Italy	Netherlands	Sweden	USA
1	55 (62)	39 (38)	12 (26)	50 (50)	0 (16)	39 (35)	35 (27)
2	44 (50)	39 (41)	40 (39)	40 (41)	40 (35)	39 (38)	40 (42)
3	42 (46)	39 (41)	40 (41)	40 (40)	40 (40)	39 (39)	40 (44)
4	42 (46)	39 (42)	40 (42)	40 (40)	40 (41)	39 (39)	40 (45)
5	45 (50)	45 (47)	44 (45)	40 (42)	40 (44)	39 (40)	45 (48)
Survey year	1992	1994	1994	1995	1994	1995	1997

Source: Luxembourg Income Study. Samples include males age 25-54.

**Table 4.6: GSS Data**  
**Effects of Mobility, Support for Capital Punishment, Protestant Work Ethic**

	<i>(1)</i> <i>Support for</i> <i>increased welfare</i>	<i>(2)</i> <i>Support for</i> <i>increased welfare</i>	<i>(3)</i> <i>Support for</i> <i>increased welfare</i>
Black	0.260 (25.39)**	0.202 (22.89)**	0.245 (29.25)**
Income	-0.016 (11.74)**	-0.018 (17.17)**	-0.020 (19.85)**
Female	0.001 (0.19)	-0.001 (0.10)	0.012 (2.30)*
Married	-0.034 (4.55)**	-0.031 (5.16)**	-0.030 (5.19)**
Number of children	0.005 (2.83)**	0.006 (3.49)**	0.007 (4.23)**
Education: less than HS	0.038 (4.41)**	0.036 (4.75)**	0.040 (5.57)**
Education: some college	0.012 (1.37)	-0.008 (1.03)	-0.002 (0.23)
Education: college graduate	0.050 (4.13)**	0.015 (1.65)	0.032 (3.84)**
Education: graduate level	0.144 (7.87)**	0.082 (6.43)**	0.106 (8.74)**
Log city size	0.009 (7.04)**	0.008 (6.29)**	0.008 (6.48)**
Average occupational mobility in race, occupation group	-0.002 (6.44)**		
Supports capital punishment		-0.096 (15.13)**	
Church attendance (times per week) Protestant			-0.041 (5.08)** -0.025 (4.43)**
Constant	0.373 (24.20)**	0.485 (33.48)**	0.443 (31.52)**
Observations	14912	18509	20718
R-squared	0.10	0.11	0.11

Robust t-statistics in parentheses. Regressions include dummies for age categories.



**Table 4.7**  
**World Values Survey Data**  
**Decomposition of Belief in Redistribution**  
**Beliefs in: Mobility, Luck in Success, Laziness of Poor**

These matrices show the relationship between being left on the political spectrum and beliefs. The first panel shows the means and sample sizes of the four variables in Europe and the US. The second panel shows the percentage who are "left" by Europe versus US and by the belief that the poor are trapped. The third panel does the same breakdown for the belief that income differences are determined by luck. The fourth panel is for the belief that the poor are lazy.

<b>Means and Sample Sizes</b>		
	<i>Europe</i>	<i>US</i>
Percentage who are "left" on political spectrum	0.30 38,205	0.17 5,029
Percentage who believe that poor are trapped	0.60 6,100	0.29 1,471
Percentage who believe luck determines income	0.54 28,587	0.30 3,288
Percentage who believe that poor are lazy	0.26 5,188	0.60 1,188

<b>Percentage Who Are "Left" By Belief That Poor Are Trapped</b>		
	<i>Europe</i>	<i>US</i>
<i>Do not believe poor are trapped</i>	0.27	0.14
<i>Believe poor are trapped</i>	0.34	0.26

<b>Percentage Who Are "Left" By Belief That Luck Determines Income</b>		
	<i>Europe</i>	<i>US</i>
<i>Do not believe luck determines income</i>	0.25	0.16
<i>Believe luck determines income</i>	0.35	0.18

<b>Percentage Who Are "Left" By Belief That Poor Are Lazy</b>		
	<i>Europe</i>	<i>US</i>
<i>Do not believe poor are lazy</i>	0.34	0.25
<i>Believe poor are lazy</i>	0.23	0.11

**Table 4.8**  
**Regressions from World Values Survey**

This table uses data from the World Values Survey to examine the US-Europe difference in describing oneself as being left on the political spectrum. "Left" is a dummy which equals one when the respondent reported a number strictly less than 5 on a 1-10 scale (1= far left and 10=far right) of political affiliation. Column (1) shows the raw US-Europe difference. Column (2) adds demographic controls. Column (3) adds the race fractionalization measure at the country level (see the data appendix). Columns (4)-(6) add the mean belief that luck (more than effort) determines income and the mean (region level) desire for increased gov't ownership in the economy.

	(1)	(2)	(3)	(4)
	<i>Left on political spectrum</i>	<i>Left on political spectrum</i>	<i>Left on political spectrum</i>	<i>Left on political spectrum</i>
US dummy	-0.125 (12.14)**	-0.007 (0.02)	-0.096 (3.31)**	0.047 (0.25)
Income	-0.010 (7.20)**	-0.010 (2.38)*	-0.009 (3.78)**	-0.010 (4.00)**
Years of education	-0.004 (3.79)**	-0.004 (1.09)	-0.002 (0.74)	-0.001 (0.34)
City population	0.010 (7.43)**	0.010 (2.36)*	0.010 (4.29)**	0.010 (4.13)**
White	0.036 (4.83)**	0.029 (1.45)	0.051 (3.13)**	0.041 (2.57)*
Married	-0.026 (3.22)**	-0.025 (2.29)*	-0.030 (2.97)**	-0.029 (2.79)**
Number of children	-0.009 (3.63)**	-0.010 (1.82)	-0.010 (3.09)**	-0.011 (3.08)**
Female	-0.044 (6.93)**	-0.042 (3.57)**	-0.043 (3.43)**	-0.041 (3.28)**
Race fractionalization		-0.275 (0.33)		-0.298 (0.73)
Mean belief that luck determines income (mean in country occupation group)			0.541 (3.69)**	0.655 (3.74)**
Constant	0.347 (16.15)**	0.368 (3.74)**	0.045 (0.62)	0.005 (0.07)
Observations	20269	19265	16478	15489
R-squared	0.03	0.03	0.03	0.03

Absolute value of robust t-statistics in parentheses \* significant at 5% level; \*\* significant at 1% level. Regressions also include dummies for five age categories.