

**DOCUMENTS DE TREBALL
DE LA FACULTAT D'ECONOMIA I EMPRESA**

Col·lecció d'Economia

E10/240

**The determinants of social spending in Spain, 1950-1980,
Are dictatorships less redistributive?¹**

Sergio Espuelas-Barroso

Adreça correspondència:

Departament d'Història i Institucions Econòmiques
Universitat de Barcelona, Av. Diagonal, 690, Barcelona (08034), Spain
e-mail: sergio.espuelas@ub.edu

¹ I am very grateful to Alfonso Herranz and Peter Lindert for their valuable comments and advise. I would like to thank Daniel Carolo and Adoración Alvaro for sharing with me unpublished data. I also thank Jordi Catalan, Jordi Guilera, Julio Martinez-Galarraga, Javier San-Julian, Marc Prat and the participants at the 4th Globaleuronet Summer School, "Growth and Globalization: hardships, barriers and economic policies" hosted by Instituto de Ciencias Sociales (ICS), Lisbon; the 8th EHES Conference, which was held in Geneva during 4-5 September 2009, and the 29th APHES Conference, which was held in Porto in 13-14 November 2009 for their helpful comments. The Centre d'Estudis Antoni de Campmany, the ESF (GlobalEuroNet), the research project SEJ2005-02498/econ directed by Jordi Catalan, and the research group Globalization, income inequality and public policy from a historical perspective directed by Daniel Tirado generously provided funding for this research.

Abstract

Most of the studies about the welfare state have focused so far on the affluent democracies. However, poorer and non-democratic countries have deserved less attention. This paper provides new evidence on the evolution of social spending in both Spain and Portugal between 1950 and 1980. Since both of them were dictatorships throughout almost the whole period, that new evidence allows us to study the relationship between dictatorships and redistribution. In addition to the level of social spending and its distribution among different items, the way in which social spending is financed is also analyzed in this paper. More exactly, the ratio of social security contributions to social spending is used as an indicator of redistribution. The main findings of this paper show that besides economic and demographic factors (as the level of GDP and the ageing of population) political factors are key determinants of social spending and the way in which it is funded. During the time-period 1950-80 dictatorships had a negative effect on social spending, and were more prone to finance social protection via social contributions, which did not imply redistribution through government budgets. Therefore, in contrast to the *political legitimacy* theories and those theories neglecting the role played by political factors, we find that (at least in the southern-European periphery) dictatorships were less redistributive than democracies. On the other hand, this paper's findings also suggest that, rather than provoking a race to the bottom or an increase in social spending levels, globalization favored the adoption of tax-funded systems instead of contributory programs.

Keywords: Comparative economic history, public social spending, redistribution, dictatorships, public economics, welfare state

JEL codes: D6, H5, I00, N34, N44

Resumen

La mayoría de estudios sobre el Estado del Bienestar, hasta el momento, se han centrado en países democráticos y ricos. Sin embargo, los países pobres y no democráticos han recibido mucha menos atención. Este artículo aporta nueva evidencia empírica sobre la evolución del gasto social en España y Portugal entre 1950 y 1980. A partir de ésta se ha podido analizar la relación entre dictaduras y redistribución, ya que ambos países sufrieron gobiernos no democráticos durante la mayor parte del periodo. Además del gasto social público y su clasificación por funciones, en este artículo se analiza también la forma de financiación de dicho gasto social. Concretamente, se utiliza como indicador de redistribución la ratio entre cotizaciones sociales y gasto social. Los principales resultados muestran que, a parte de los factores económicos y demográficos (como el nivel de PIB y el envejecimiento de la población), los factores políticos son cruciales para el desarrollo del gasto social y también para la forma en que éste se financia. Durante el periodo 1950-80 las dictaduras ejercieron un claro efecto negativo sobre el gasto social, y fueron más proclives a financiar la protección social a través de contribuciones sociales, que no implican redistribución a través de los presupuestos públicos. Estos resultados, por tanto, contradicen las teorías de la *legitimación política* y las que niegan el papel de los factores políticos, ya que, al menos en los países del sur de Europa, las dictaduras fueron menos redistributivas que las democracias. Por último, los resultados de este artículo también sugieren que la globalización no provocó un efecto claramente positivo o negativo sobre el gasto social. Sin embargo, ésta favoreció la adopción de sistemas financiados vía impuestos, en lugar de sistemas contributivos.

1. Introduction

The rise of the Welfare State has been one of the most important events of the 20th century. Its emergence radically changed the role of the State in the economy and the traditional mechanisms of social protection. That transformation encouraged a number of studies about the determinants of the Welfare State, which suggested several hypotheses. However, there is no agreement yet about the role played by politics in the development of social policy. Some authors consider that political factors such as the advent of universal suffrage, high levels of voter turnout, or the pre-eminence of left-wing parties were significant determinants of social spending. Others, in contrast, maintain that the ageing of population and growing incomes are the key explanatory factors of the rise of social spending, while political factors did not have any significant influence on the evolution of the welfare state.

Even more complex is the relationship between dictatorships and social spending. Of course those who consider the ageing of population and growing incomes as the main determinants of social policy do not expect significant differences in social spending levels between democratic and non-democratic governments. However, even for those authors who stress the role of political factors, the expected sign of dictatorships' effect on social spending is not clear. According to some theories, we should expect a negative influence of dictatorships on social spending, because they suppress voting rights and ban trade unions and left-wing parties, and therefore, reduce the political influence of those social groups that are more willing to support social transfers. Other theories, in contrast, suggest that dictatorships' social policy does not differ considerably from that of democracies, because they might use social policy in order to achieve political legitimacy, or simply to avoid protests and massive opposition.

However, many of the studies about the welfare state focus on the affluent democracies, because the scarcity of internationally available data for non-democratic (and poorer) countries has prevented them to be analyzed. For example, Flora (1986)'s database and the OECD (1985) database of social spending, which covers the time-period 1960-1980, do not include Spain or Portugal, which were developing countries and dictatorships at that time. The objective of this paper is to fill in this gap by assessing the influence of non-democratic governments on the evolution of social spending. In order

to do this, new data on the evolution of social spending in both Spain and Portugal between 1950 and 1980 is provided. Since both Spain and Portugal were dictatorships for a long time (from the interwar period to the mid seventies), they offer us an interesting opportunity to test the relationship between dictatorships and social spending from a comparative perspective.

Non-democratic governments' impact on social policy is analyzed by estimating an econometric model. Both the level of social spending and its distribution among different items (pensions, health care, welfare, unemployment, and education) are analyzed. In fact, the distribution of social spending among different items may be also considered an indicator of redistribution by itself, because more redistributive countries are expected to have higher levels of social spending but also to spend more in more redistributive programs as for example unemployment compensation. My sample is composed of fifteen European countries: Spain and Portugal, which suffered long periods of dictatorships (from the interwar period to the mid-late seventies), Greece, which experienced a short period of dictatorship between the late sixties and the early seventies, and twelve more western-European democratic countries.

On the other hand, most of the studies about the welfare state focus on the evolution of social spending. However, this paper also addresses the revenue side by analyzing not only the determinants of social spending but also the way in which social protection was funded. More exactly, we focus on the ratio of social security contributions to social spending. Social protection systems are basically funded through social contributions (paid by employers and employees) plus public subsidies. One might assume that those systems mainly funded through social contributions involve less redistribution through government budgets. Therefore, we can use the ratio of social contributions to social spending as an indicator of redistribution. This can help us to clarify the relationship between non-democratic governments and social spending, and why some countries are more (or less) redistributive than others. On the other hand, the analysis of the determinants of social contributions may be also useful to clarify the role played by globalization. Our findings suggest that globalization did not exert a clear effect on social spending, but shaped the way that social protection is financed.

The next section introduces some of the leading theories and hypotheses about the evolution of social spending, paying special attention to the political-oriented theories. Section 3 briefly describes the data and offers an econometric analysis of the determinants of social spending levels between 1950 and 1978. Section 4 analyzes the role of dictatorships in explaining the differences in social spending levels among European countries. The determinants of social spending funding during the time-period 1950-81 are analyzed in section 5. Finally, section 6 provides an interpretation of the political economy of the Spanish welfare state during Franco's dictatorship on the light of this paper's findings, and section 7 concludes.

2. Theories about the Welfare State.

The earliest studies about the determinants of social spending emphasized the role played by industrialization, growing incomes or ageing populations (Kerr *et. al.* 1964, Wilensky 1975). Some variants of these theories consider that development creates the problems that make social protection more needed, while others suggest that development implies higher public revenues and, therefore, makes the provision of welfare easier. Similarly, more recent studies still consider that the key explanatory variables are the economic and demographic ones, while political factors are presumed to be much less important determinants of social spending (Becker 1983, Becker and Mulligan 1998, Mulligan and Sala-i-Martin 1999). In contrast, other studies have stressed the importance of political factors. Lindert (1994, 2004), for example, has pointed out that the extension of voting rights has a positive effect on social spending. The idea behind this positive link is that low income groups will be more in favor of redistributive programs, and the extension of suffrage integrates them into the political process. Therefore, democracies with universal suffrage will spend more than elitist democracies. According to Lindert (1996, 2004), voting turnout also has a positive effect on social spending. As Piven and Cloward (1994) highlight, high voter turnout typically changes the class content of elections, shifting the political centre of gravity to the left, because increases in turnout tend to reflect increases in participation by previously excluded lower income groups (Iversen 2001).

A number of models link income distribution, democracy and redistribution. Some of them suggest that higher levels of inequality might imply higher levels of redistribution. Generally speaking, when the median voter income is below the average income, he or she will be more willing to support redistributive policies (Meltzer and Richard 1981, Persson and Tabellini 1994, and Alesina and Rodrik 1994). Nevertheless, other models suggest that inequality can also have the opposite effect. For instance, according to Kristov *et. al.* (1992), the poor participate less in the political process. Therefore, if growing inequality makes poverty levels rise, then those more willing to support redistributive programs will be excluded from the political process. As a consequence, growing inequality might reduce political pressure in favor of redistribution. Other political economy theories focus on the role played by certain social groups. One of the most influential in this regard is the so-called *social democratic theory* or *power resource* theory. According to that theory, social policy can be considered as a working class instrument to modify the market distribution of income. Therefore, the strength of working class institutions, as unions and socialist and left-wing parties is considered crucial for the development of the welfare state (Korpi 1983, Esping-Andersen 1985, Hicks 1999).

Both the political economy models linking inequality and redistribution and the “social democratic theories”, are not applicable to non-democratic contexts. Neither the median voter nor the left-wing parties will be able to influence the political process if there are no elections. Since those theories emphasize the role of democratic institutions, they seem to implicitly suggest that the welfare state is less likely to develop under dictatorships¹. Nevertheless, other authors seem to have found evidence not necessarily supporting this hypothesis. For example, as mentioned before, Peter Lindert (2004) showed that the extension from restricted to universal suffrage might have a positive impact on social spending. But he also pointed out that democracies not necessarily spend more than dictatorships or, at least this was the case during the period before World War II. Similarly, Mulligan et al (2002) concluded that there are no differences in the level of social spending between dictatorships and democracies. They pointed out that the evolution of social spending is mainly driven by structural factors, such as the growth of GDP and the age structure of population. However they also suggest that

¹ Actually, using the “social democratic theories” framework, Hicks (1999) found the dictatorships to have a negative impact on social policy.

dictatorships might have (political) incentives not to differ considerably from their (democratic) neighbors in order to avoid social unrest and potential demands for regime shift.

Finally, Cutler and Johnson (2004) have suggested that non-democratic governments tend to create social insurance systems in order to legitimate themselves. The classical example in this regard is Bismarck's social policy, which was explicitly oriented at attracting the working class' political support. Nevertheless, they also argue that dictatorships provide social protection in a *different* way, because they are more likely to introduce insurance systems, instead of mean-tested systems, which suggest that dictatorships may be less redistributive.

Thus, we have several theories and hypotheses about the relationship between politics and social spending suggesting different results. Some of them predict no effect of the political variables; others predict differences among democracies depending on factors like the voting turnout or the strength of left-wing parties. Finally, there are different hypotheses on the relationship between dictatorships and social policy, some of them suggesting a positive effect of democracy *per se*, and others considering that dictatorships have incentives not to behave different from democracies, regarding social policy.

In addition to the political, demographic, and developmental variables, the effect of globalization on social spending has also deserved some attention in the literature. Initially, one may expect a negative impact of globalization on social spending, because increasing international capital mobility should provoke a fall in taxes and therefore in public revenues, motivating a "race to the bottom". Nevertheless, authors as Dani Rodrik (1997) have suggested that globalization might have a positive effect on social transfers, because the increasing instability provoked by international trade would lead to increasing demands for social protection. Similarly, Huberman and Lewchuk (2003) have found that social insurance programs were more extensive in more open economies during the period before World War I. Nevertheless, Haggard and Kaufman (2008) consider that globalization effects are more ambiguous. According to them, protectionist countries (like the Latin American ones during the 60s and 70s) tend to create contributory social protection systems, which imply higher labor costs. In these

countries, employers accepted increasing labor costs because they did not have to face international competition and, as a consequence, were able to increase final prices. In contrast, more open economies were more concerned about increasing labor costs, and less prone to accept contributory systems. In the next sections we turn to some formal test aimed at shed light upon these debates.

3. The determinants of public social spending, 1950-78

3.1. The data

Our analysis focus on fifteen European countries, and the time-period covered is 1950-1978. The countries included in the analysis are Spain and Portugal, which were dictatorships for most of that period, Greece, which suffered a short period of dictatorship between the late sixties and the early seventies, and twelve other European countries, which were democracies during the whole time-period. As usual, the dependent variable is public social spending as a share of GDP. For the time-period 1960-78 the data on social spending comes from the OECD (1985) database, while for the time-period 1950-59 it has been taken from Flora (1986). However, since both Spain and Portugal were not included in those databases, their levels of social spending have been estimated here from primary sources.

Our estimates for Spain and Portugal fit the OECD definitions of public social spending. The Portuguese levels of social spending between 1950 and 1978 have been estimated from the statistical yearbooks of Portugal. They provide detailed information on Portuguese social security system expenditures and the government expenditures. In addition, for the years 1970-78, data on Portuguese health care expenditures have been taken from the OECD health data, 2008 (www.oecd.org/health/healthdata). The functional classification of social spending before 1962 is based on Pereirinha and Carolo (2007), and public spending on education comes from Valerio (2001). On the other hand, the Spanish levels of social spending between 1950 and 1978 have been estimated through the careful examination of public budgets, and the reports, statistics, and yearbooks of the Spanish National Institute of Social Insurance (*Instituto Nacional de Previsión*). Public spending on education comes from Comín and Díaz (2005). As has

been indicated, for the remaining countries included in the sample (Sweden, Norway, Ireland, Netherlands, Finland, Belgium, Denmark, Austria, United Kingdom, Italy, France, Greece and Germany) the data on the level of social spending comes from the OECD (1985) statistics on social spending, while for 1950-59 the data was compiled from Flora (1986)².

The sample includes the level of total public social spending and its distribution among different items. Public social spending is classified into five different categories: 1. Pensions, which includes expenditures on old-age, and survivors and disability benefits, 2. health, which includes expenditures on health care, 3. welfare, which includes maternity and sickness leave expenditures, family allowances and other welfare expenditures, 4. unemployment, which reports unemployment compensation expenditures, and 5. education. Total social spending is the sum of these five categories. The analysis of the composition of social spending is interesting, because it might shed light upon the redistribution debate. More redistributive countries are expected to have higher levels of social spending but also to spend more in more redistributive programs, such as unemployment compensation.

Table 1 shows the evolution of total social spending in eight selected European countries between 1950 and 1980. In general we can see a growing trend of social spending in all these countries. However, there are significant differences in the level of social spending among countries and some of them seem to have grown faster. For example, Denmark, Germany, and Belgium had very high levels of social spending during the whole period under study. In contrast, Spain and Portugal had very low levels of social spending, at least during the fifties and the sixties (when both of them were dictatorships). However, social spending also grew very rapidly in those two countries, while the opposite happened in Ireland or the United Kingdom. The next section aims at determining if these differences may be explained by political factors or if they were mainly driven by economic and demographic factors.

[Table 1 over here]

² For more details on the data see the annexes.

3.2. Explanatory variables

Following the comprehensive theoretical framework developed by Lindert (2004), economic, demographic and political variables are included in the analysis, as well as the impact of globalization. The economic variables considered here are the log of GDP per capita, and the annual rate of GDP growth. The former captures the effect of growing incomes, while the latter captures the impact of the economic cycle. Initially, we would expect a positive relationship between the level of income and social spending, because growing incomes imply growing public revenues, and therefore more means for government handouts. One might argue too that development is linked to industrial society's problems and therefore it makes social protection more needed. In any event, the expected effect is positive. In the case of the GDP growth variable, however, the expected sign is less clear. On the one hand, we could expect a negative sign, because the demand for social protection tends to be higher in periods of lower GDP growth and economic crisis, that is to say, social spending has a counter cyclical component. On the other hand, economic crisis may reduce public revenues, and therefore, higher rates of GDP growth could affect social spending positively.

Among the demographic variables, the share of the total population over 65 years old is included in the analysis. The expected sign of this variable is positive. According to the "ageing-population hypothesis" social spending rises when a larger share of the adult population becomes elderly (Wilensky 1975, Pampel and Williamson 1989, Lindert 1994). In a society with a growing dependence on wage earnings, the elderly are more vulnerable than the young adults, and therefore they might be more willing to support social transfers. On the other hand, when the evolution of public spending on education is analyzed, the share of the total population over kids between 5 and 14 years old is included instead of the percentage of people over 65.

The existence of long periods of dictatorship before 1980 in Spain and Portugal, and a short period of non-democratic government in Greece between 1967 and 1973, allow us to test the possible effects of dictatorships upon social spending. In order to assess that impact a qualitative variable, which ranges from one to zero, has also been included in the analysis. When a country suffered a dictatorship during 4 years within the last four ones, our variable takes value one. When it suffered a dictatorship for three,

two or one year, our variable takes values 0.75, 0.5, and 0.25 respectively. If there was no non-democratic government within the last four years then our variable takes value zero³.

As we saw in section 2, some theories consider that the welfare state is less likely to develop under dictatorships, while others consider that we should expect no significant differences between dictatorships and democracies. Therefore the expected sign of this variable is not clear. Actually, the objective of this paper is to provide new quantitative evidence in order to help to clarify the relationship between social spending and non-democratic governments. In addition to the dictatorship dummy variable, the impact of political instability is also assessed. The expected sign is positive, as unstable dictatorships would probably try to find political support by increasing social spending. Political instability is measured as the number of executive adjustments in non-democratic governments within the last four years.

Finally, the impact of globalization is also analyzed in this paper. It is measured by the degree of openness, but again the expected sign of this variable is unclear. As seen before, initially one might expect a “race to the bottom” provoked by globalization, but authors as Dani Rodrik (1997) have suggested that globalization can have a positive effect on social transfers.

3.3. Discussion

Table 2 shows the econometric analysis’ results. Columns 1 to 6 show the results for education, pensions, health, welfare, unemployment and total social spending as dependent variables, respectively.

[Table 2 over here]

In general, the econometric results point out that there is empirical support for the hypothesis which predicts that growing incomes would rise social government spending. According to the econometric test, the log of the level of GDP per capita has a

³ For more details about the way this variable is built, please see annex 1.

positive and statistically significant impact on almost all types of social spending. Unemployment spending is the only exception, as the log of GDP has no statistically significant effect on it. As for the rate of growth of GDP, it seems to have had a counter-cycle behavior during the time-period 1950-78. All kinds of social spending were negatively affected by the variable “growth of GDP”. The only exception is welfare spending, which is not statistically significant. Similarly, unemployment spending also shows a counter-cycle effect, as the unemployment rate has a highly significant positive effect. Therefore, social spending seems to respond to social demands during lower economic growth periods.

Demographic variables also played an important role in the evolution of social spending. As expected, the variable “elderly”, which reflects the share of population over 65 years old, has a positive and statistically significant effect on several types of social expenditures (pensions, health, total social spending and even unemployment). The only exception is welfare spending, where the share of population over 65 has no significant effect. Therefore, as already stressed by Lindert (2004), it seems that the elderly exerted a positive influence upon different types of social programs and not only upon pensions expenditures, which suggests that they probably empathize with other vulnerable social groups and tend to establish political alliances with them in order to push up social spending. Similarly, the share of kids between 5 and 14 years old have a positive and statistically significant effect on education spending.

Globalization effect, in contrast, is less clear. Welfare, health and total social spending were not influenced by globalization, but in addition, those types of social spending which were certainly influenced, as education, pensions and unemployment, showed opposite signs. Globalization had a positive effect on unemployment spending, but a negative one on pensions and education. Therefore, Dani Rodrik’s hypothesis only seems to find empirical support in the case of unemployment spending, which is not completely surprising, as unemployment is the social risk which is more clearly linked to market stability, and therefore, it is highly sensitive to globalization. In any case, our results seem to suggest that there is weak support for Dani Rodrik’s hypothesis. Nonetheless, it does not mean we should conclude the race-to-the-bottom hypothesis finds empirical support. Although, globalization had a negative effect on pensions and education, its coefficient was smaller than in the unemployment spending regression. In

addition, as already mentioned, globalization did not show any statistically significant effect on welfare, health, and total social spending. Therefore, at least before the 80's, it is hard to conclude that globalization provoked a clear race to the bottom or that it clearly encouraged a rise of social spending.

Finally, our regression results show that being a dictatorship has a negative impact on the evolution of almost all types of public social spending. The only type of social spending that was not negatively affected by non-democratic governments was welfare spending, but as we will see next, there is a plausible explanation for that. Therefore, contrary to what authors as Mulligan et. all. (2002) have suggested, political variables seem to matter for the development of the Welfare State. The suppression of voting rights and the prohibition of free political parties and trade-unions seem to exert a clear negative effect on the evolution of social spending. Probably, those measures limited the political voice of those social groups which were more willing to support growing social spending: the working class and lower income groups. And as a consequence this contributed to reduce political demands for social spending. However, one might argue that dictatorships also limited the political voice of those groups that opposed the rise of social spending. But our results suggest that, even in that case, dictatorships were just maintaining the status quo, and therefore preventing the rise of social spending.

On the other hand, despite voting rights were suppressed for everyone, it seems that anti-social-spending groups held more political power than pro-social-spending ones. In Spain, for instance, free unions and other working class organizations were banned, and many of their members were put under arrest or killed. In contrast, employers' and landowner's organizations remained legal, so they could freely associate and let the society know their points of view and even act as a pressure group⁴. In addition, several landowners and businessmen were government's members during the

⁴ About the working class organizations in Spain see Molinero and Ysas (1993, 1998). About the Spanish employers organizations see Molinero and Ysas (1993), and Cabrera and Del Rey (2002). An eloquent example of how the employers acted as pressure groups during Franco's dictatorship can be found in Molinero and Ysas (1993). According to them, in the late 40's the government was not able to pass the *Work Council Act* (*Ley de Jurados de Empresa*), because of employers' opposition.

dictatorship⁵. Actually, these two social groups, plus high-ranking civil-servants, the Catholic Church, the army, the monarchic groups and the *Falange* were the main sources of political elites during Franco's dictatorship (Jerez 1996). Similarly, under Salazar's regime free workers unions were prohibited in Portugal and higher income groups were better represented in the government. Actually, during the Estado Novo era there was not any minister who was a member of a former working class organization, or who was an employee, or even a middle-ranking civil-servant. In contrast, Portuguese ministers in that period were mainly high-ranking civil-servants (as lawyers or engineers), and military officers, and there were also landowners and businessmen. This situation contrast with the government composition after democracy transition in Portugal, where member of labor organizations and middle-ranking civil-servants experience a significant increase. On the other hand, especially during the first years of the dictatorship, many of the Salazar's ministers were conservatives, coming from catholic or monarchists groups.⁶

As regards the *political legitimacy* theories, they do not to find empirical support either, at least in its hard version. According to those theories non-democratic governments tend to create social insurance systems in order to legitimate themselves (Cutler and Johnson, 2004). Therefore, no big differences should be expected between democratic and non-democratic governments. However, as already shown, being a dictatorship has a negative impact on social spending. It seems that dictatorships tended to legitimate themselves (if so) in a different way. However, if we consider the *political legitimacy theory* in a softer version, it seems to find some empirical support. As table 2 shows dictatorships' political instability, proxied by the number of government changes in the last four years, has a positive effect on some kinds of social spending (education and unemployment). This suggest that non-democratic governments try to buy political stability by increasing social spending (only) when they face social pressure from below and feel politically threatened. In fact, this probably helps to explain the growth of social

⁵ For example, Demetrio Carceller (linked to business interest) was minister of industry and commerce, Joaquín Benjumea (landowner) was minister of agriculture, labor, and treasury after the civil war, and Pere Gual Villalbí, who was the president of the *Fomento del Trabajo* (the most important and lasting Catalan employers' association) for a long time, became minister in 1957 (see Jerez, 1996).

⁶ For the role of unions under Salazar dictatorship see Barreto (1990, 1994). About, the social origins of Portuguese ministers see Pinto and Almeida (2002) and Pinto (2002).

spending in both Spain and Portugal during the last years of the dictatorships, when they were facing increasing democratic opposition.

On the other hand, the analysis of the distribution of social spending among different items is also useful to clarify the relationship between dictatorships and redistribution. As can be seen in table 2, dictatorships exerted a negative effect on almost all kinds of social spending, and its negative influence was bigger in the case of unemployment spending. This might be interpreted as a proof of non-democratic governments' preference for non-redistributive programs. However, there is one type of social spending: welfare spending, which was not negatively influenced by the variable dictatorship. As we saw in section 3.1, that welfare spending category is composed of maternity and sickness leave expenditures, family allowances and other welfare expenditures, among which traditional poor relief is included. In this regard, it is possible that welfare spending was not negatively affected by dictatorships simply because non-democratic governments did not dismantle traditional social protection programs. If that was the case, the lack of dictatorships' negative influence on welfare spending might be, at least partially, a consequence of the lack of modernization of non-democratic governments' social protection systems. In other words, it might be just indicating that traditional social protection programs represented a bigger share of total social spending in non-democratic countries.

On the other hand, the lack of negative influence of the variable "dictatorship" might also be due to the fact that non-democratic countries allocated a big share of social spending to family support (table 3). It seems that non-democratic countries developed family allowance systems in order to encourage the growth of population. Lynch (2006), for example, suggests that the pro-natal fascist policy helps to explain the rise of family allowance programs during Mussolini's era. However, besides non-democratic countries, pro-natal ideologies also existed in some democratic countries, as France, for example, which applied similar policies oriented to achieve a population growth. On the other hand, Pereirinha et al (2007) consider that the Portuguese family allowances system were conceived as a complement to the *family wage*, in other words, a complement to the male-bread-winner wage, instead of an instrument of Salazar's demographic policy. From this point of view, family allowances were, at least partially, an anti-poverty measure, but they were also an instrument to reduce female labor force participation (as

the objective of that measure was to guarantee that the male wage was enough to maintain the whole family).

[Table 3 over here]

Finally, non-democratic governments probably also developed family allowances systems to try to buy political support from the population. Family allowances seem to fit the requirements to be applied as a clientelist policy, as they were addressed to a big share of the population: every family with children, and not only the unemployed or the sick people, for example. In addition, they had a clear effect, easy to see by the beneficiaries, as it was a direct wage complement. If that was the case, then the *political legitimacy theory* would find some empirical support, but again, only in its softer version, as only one particular kind of social spending would not have been negatively influenced by dictatorships. In any event, it seems that non-democratic governments did not exert a negative influence on welfare spending because they did not dismantle traditional social protection networks and because they encouraged the rise of family social protection (regardless of whether they did so to encourage the growth of population, to favor the male-bread-winner wage and therefore keeping women out of the labor market, or to find political support, although probably all three objectives interacted).

Thus far we have analyzed the evolution of social spending and its distribution among different items. According to the results showed in this section, non-democratic governments appear to have a clear negative influence on the evolution of public social spending. Nonetheless, that negative effect disappears in the case of welfare spending. On the other hand, it seems that Dictatorships tended to rise social spending when they were facing periods of political instability. The next section analyzes how big the role of dictatorships is when it comes to explain the differences in social spending levels among European countries.

4. Explaining differences in social spending levels

We have seen so far that Dictatorships played an important role in the evolution of social spending. However, besides statistical significance, it is interesting to analyze how big the role played by Dictatorships was. As we saw in table 1, both the Spanish and Portuguese social spending levels between 1950 and 1980 were lower than in other European countries. Those two countries were dictatorships during almost the whole period, but they were also poorer and younger countries. Which forces played the biggest role in explaining the differences in social spending levels among countries?

[Table 4 over here]

Table 4 shows the observed and predicted differences in the level of social spending between Spain and three selected European countries (France, Italy, Ireland), and also the average European level of social spending in 1974. Most of the differences in social spending levels between Spain and those European countries were driven by political factors. Being a Dictatorship explains more than 40% of that difference, and it even explains 60% of the difference between Ireland and Spain. This means that being a dictatorship not only had a negative impact on social spending (as we saw in the previous section), but also that it was very large. Political instability, proxied by the number of government adjustments, also played an important role, although in the opposite way. A reduction in social spending differences of 5-10% (depending on the country) was due to political instability in non-democratic regimes. As held in the previous section, this seems to support the legitimacy theory, but only in its soft-version. In addition, and most importantly, the reduction in social spending differences due to political instability is far from enough to compensate dictatorships' negative effect. Even if we accept that dictatorships try to find political support by increasing social spending, when they are politically threatened, the suppression of voting rights appears to have a much bigger negative effect.

The ageing of population and the level of GDP also explain a big share of that difference, especially when explaining the gap between Spain and France, Italy and the European average, which were wealthier and older countries. However, the role played by these factors when it comes to explain the differences in the levels of social spending

between Spain and Ireland is much smaller, which is not surprising because differences in GDP levels and aged population between those two countries were also smaller. Finally, Globalization's effect appears to vary from country to country. While it helps to explain only around 2-3% of the difference between Spain and less open economies like France or Italy, it explains a bigger share (13.58%) of the difference between Spain and more open economies like Ireland. However, as we saw in the previous section, Globalization effect varied from type to type of social spending. It had a negative impact on pensions and education but a positive one on unemployment. In addition, its effect on total social spending was not statistically significant. Therefore, one should be cautious when it comes to analyze globalization role.

These results show that being a Dictatorship not only is statistically significant and helps to explain the evolution of social spending (as we concluded in the previous section), but also that it explains most of the differences in the level of social spending between Spain and other European countries before 1980.

5. The determinants of social spending funding

5.1 Hypotheses

Besides the level of public social spending, in this section we turn to an alternative way to test whether dictatorships are less redistributive than democracies or not. More exactly, this section analyzes the way in which social spending is funded. According to the OECD, social protection programs "*financed by compulsory employer and employee contributions to social insurance funds are by convention considered public*" (OCDE 2007). Therefore, according to OECD definitions, public social spending is basically funded by compulsory social security contributions plus government subsidies (which in turn come from direct and indirect taxes)⁷.

From this point of view, redistribution through public budgets is bigger in countries where compulsory social contributions are lower, as government subsidies,

⁷ In addition to social contributions and public subsidies some social protection programs have its own resources (like receipts from assets for example) but this does not affect our argument.

and therefore taxpayers' contribution, are bigger as well. On the other hand, despite social contributions are formally paid by employers and employees, in the long run, they are in fact taxes on wages and they are seen as a labor cost by employers. This means that the cost of social protection in countries where social contributions are high is mainly paid by wage-earners. Finally, contributory systems do not seem to involve more redistribution among employees either. In contrast to mean-tested benefit-systems or universal-benefit-systems, social benefits in contributory systems are usually more tightly linked to former wages (because social benefits usually depend on social contributions and these in turn depend on wages). In short, social protection systems based on high compulsory social contributions involve less redistribution through public budgets, and also less redistribution from employers to employees or among workers than non-contributory systems. Therefore, the ratio of social contributions to social spending may be plausibly considered a good indicator of redistribution, since the higher social contributions are the less redistributive a social protection system is.

Here, that ratio is used to assess the redistributive impact of dictatorships, complementing in that way the analysis of the previous sections. Thanks to the OECD national accounts records we have detailed information on the yearly sum of social security contributions collected by the state in several OECD countries since 1950. That allows us to calculate the ratio of compulsory social security contributions to social spending. That ratio is calculated just by dividing the sum of social contributions in year "y" by the sum of social spending in the same year "y". The difference between the level of social spending and the social security contributions is assumed to be financed via public subsidies, that is to say, via direct and indirect taxes.

Graph 1 shows the evolution of social contributions in four selected European countries between 1950 and 1981. The graph shows large differences among countries, which remained almost unchanged or even widened throughout the period under study. This behavior suggests that the evolution of social contributions is path-dependent, which is not completely surprising. Once social programs are introduced and the financing-style is established no big changes are expected.

[Graph 1 over here]

Thus, in order to understand the determinants of the level of social contributions it seems convenient to look at the early stages of the development of the Welfare State. To some extent this is actually what Esping-Andersen did in his influential book, *The three worlds of Welfare Capitalism*. He assumed that social protection systems were shaped by political forces, so he classified the welfare states into three different categories or models depending on their political roots: the conservative or continental model, the social-democratic or Scandinavian model and the liberal model. In other words, he classified the welfare states depending on whether conservative, social-democratic or liberal political forces were predominant in its origins and later evolution.

According to Esping-Andersen, the social-democratic model is the most generous and redistributive one. The conservative model is still generous but less redistributive. In that model, social benefits are still high but they tend to be wage-related, so the social protection system tends to reproduce or at least not to completely erode the market distribution of resources. Finally, social protection systems in liberal countries tend to be less generous, because they are more likely to rely on market mechanisms to provide insurance. However, liberal social programs tend not to reproduce market distribution as much as conservative models do. In general, they are mean-tested instead of wage-related programs. As a consequence, liberal social protection systems are tiny and redistributive at the same time (they have redistributive programs but for only a small share of the population).

To go back to the determinants of the ratio of social contributions to social spending, from Esping-Andersen's theory one would expect that ratio to be higher in countries which are members of the conservative group. There is however another way to analyze the determinants of the importance of social contributions. Our aim is to explain why different countries use social contributions (and finance social spending) in such a different way and why these differences are persistent along time. Botero, Djankov, La Porta, Lopez-de-Silanes and Shleifer (2004) suggested in an influential paper that employment regulation, collective bargaining laws and social security systems were mainly shaped by legal traditions. According to them different legal traditions use different strategies for dealing with market failure. Countries in the French civil-law-tradition tend to regulate labor markets more extensively than English-common-law countries do, because the latter tend to preserve the freedom of contract to a greater

extent. Similarly, French-civil-law countries tend to provide social security more generously than English-common-law countries. Finally, it is worthy to point out that in these authors' view legal traditions are exogenous to the economy, because most countries in the world received their legal structures through colonization or invasion. And in any case, those legal traditions were older than social legislation.

Despite Botero et. al. (2004) did not explicitly theorize on the determinants of social contributions, I think it is plausible to assume that compulsory social contributions imply more labor market regulation and less freedom of contract. Therefore, the ratio of social contributions is expected to be higher in French civil law countries. In addition, we could expect that the persistent differences in the level of social contributions among European countries might be explained by the long-term permanent effects of different legal traditions.

The role played by religion and globalization has also deserved some attention in the literature. Examining the factors leading to the creation and growth of national old-age protection systems, Cutler and Johnson (2004) found that catholic countries are more likely to create earning-related schemes, although they do not explain the theoretical reasons behind that behavior. From this point of view, we would initially expect social contributions to be higher in catholic countries, but given the lack of a clear theoretical link, one should be careful when interpreting the role of religion. On the other hand, some case studies on the political economy of social insurance have indirectly reserve a role for globalization. For example, according to Baldwin (1990) export-oriented-farmers in Denmark opposed contributory social insurance schemes, because compulsory social contributions would have implied higher labor costs. Similarly, Ullman (1981) maintained that German export-oriented firms (together with smaller and labor-intensive firms) were against Bismarck's social insurance laws in the 1880's. Finally, as already mentioned in section 2, in a recent book analyzing the evolution of social policy in developing countries, Haggard and Kaufman (2008) pointed out that protectionist countries (like the Latin American ones during the 60s and 70s) tended to create contributory social protection systems. Those systems implied higher labor costs but they did not find employers' opposition. Since firms did not have to face international competition, they were able, at least to some extent, to transfer the

increasing costs to final prices. In other words, more open economies are expected to favor lower levels of social contributions.

Although none of the previous studies focuses explicitly on the determinants of social contributions, we can derive from them several hypotheses which can help us to explain why different countries have such a different social contributions' levels. The development strategy (export-oriented vs. protectionist), the dominant religion, the legal tradition, and the political forces which in Esping-Andersen's view shaped the welfare state, are potential determinants of the social contribution's level. On the other hand, that basic theoretical framework allows us to test the role played by dictatorships. Are social contributions' levels mainly explained by those factors or did non-democratic governments played an active role too? If dictatorships are less redistributive than democracies we would expect the ratio of social contributions to social spending to be higher under non-democratic regimes.

5.2. Empirical test

To analyze the determinants of social contributions I use a logistic model, which allows us to test the probability of having a certain level of social contributions. The basic logistic model is given by:

$$y(t) = \alpha_t + \beta X_{it} + \varepsilon_t$$

Where $y(t)$ is the probability of adopting a certain level of social contributions in year t , α_t is the baseline hazard, β is a set of parameters and X_{it} is a vector of characteristics of country i in year t .

In our econometric test the endogenous variable is a dummy variable which takes value 1 when the ratio of social contributions to social spending is higher or equal to 0.7 and zero otherwise. This allows us to test the probability of a social protection system to be mainly funded through social contributions, and therefore, non-redistributive. Among the explanatory variables I have included: the population share of Catholics and

Protestants, a dummy variable for the legal tradition⁸, and a dummy variable for the three types of Esping-Andersen's welfare capitalisms. Globalization is also taken into account and proxied by the degree of openness. The impact of non-democratic governments is tested by including a dictatorship dummy variable, as defined in section 3. Lastly, the log of the level of GDP and the share of population over 65 are also included as control variables. The sample is composed of the same fifteen European countries we used in the previous sections (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and the UK) and the time period is 1950-81.

[Table 5 over here]

The results of our econometric analysis are shown in table 5. The level of GDP has a positive and statistically significant impact on the probability of having high levels social contributions. Therefore, it seems that richer countries are more prone to establish social protection systems mainly funded through social contributions. On the other hand, the share of population over 65, that as seen in previous sections had a clear impact on the evolution of social spending, does not seem to have any significant effect on the way that social spending is funded, because as table 5 show it is not statistically significant in four out of five regressions.

In the previous section we saw that globalization did not have a clear impact on social spending level, as its effect was not statistically significant on total social spending, but in addition, it was positive on unemployment spending, and negative on education and pensions. However, according to the results shown in table 5, globalization clearly influenced the way that social spending is financed. As can be seen in our regression results, the degree of openness, our proxy to globalization, is highly statistically significant and it has the expected sign. More open economies are less likely to establish social protection systems funded through social contributions and therefore more likely to adopt tax-funded social protection systems. It seems, therefore, that more open economies opposed contributory systems, which would have made production cost rise, and favored more neutral tax-funded systems. Previous qualitative studies showed that

⁸ Countries' legal origins are taken from Botero et. al. (2004), which in turn takes them from La Porta et. al. (1999).

firms' export-orientation was important for the political economy of social legislation (Ullman, 1981; Baldwin, 1990). Similarly, Haggard and Kaufman (2008) suggested that Latin American countries adopted contributory systems because they were protectionist countries. We have now shown from a comparative and quantitative perspective that globalization actually shaped European social protection systems. Rather than provoking a race to the bottom or an increase in social spending levels, globalization seems to favor the adoption of tax-funded systems instead of contributory programs.

Religion seems to have played a significant role too. The bigger the share of Catholics the more likely is a country to adopt contributory social protection systems (and the less likely to adopt tax-funded systems). In the same way, Protestantism reduces the probability of establishing contributory systems. These results fit Cutler and Johnson (2004)'s findings, according to which catholic countries tend to create wage-related systems. However, there is no clear theoretical reason to explain why Catholics prefer contributory systems. Do social-Catholics view employers' social contribution as a kind of modern alms? In my opinion, as I will elaborate next, religion is probably just capturing the effect of other related variables as the legal origins or the political traditions.

In fact, legal traditions are also significant and have the expected sign. As table 5 shows, countries with their legal origins in the English-common-law tradition, as well as the Scandinavian countries, are less likely to have higher levels of social contributions (and more likely to adopt tax-funded systems). In contrast, French-civil-law countries tend to create contributory systems with high levels of compulsory social contributions, which is consistent with Botero et. al. (2004)'s finding that French-civil-law countries tend to regulate labor markets more extensively than English-common-law countries. On the other hand, Esping-Andersen's theory seems to find empirical support too. Countries belonging to the so called conservative model are more likely to have high levels of social contributions. In contrast, countries in the Scandinavian and the liberal model are more likely to adopt tax-funded systems.

However, it is hard to choose one of these theories. Which factor is the more determinant one: religion, the legal origin or the political origin? As table 6 shows all three variables are related to each other. Countries in the French-law tradition are

mainly catholic and conservatives. Similarly, the English-law countries coincide with the Esping-Andersen's liberal countries, and countries in the Scandinavian legal tradition perfectly match the social-democratic ones. In any event, the Irish case (which is a non-protestant country with low levels of social contributions) and the Greek case (which is a non-catholic country with high levels of social contributions) seem to suggest that both legal and political origins are more decisive than religion. Which of those two theories is better depends on which variable is more exogenous: political tradition or legal tradition. However, maybe we do not need to choose. In practice, both political and legal traditions are closely related. English-law tradition legislation-style was (and is) just a more liberal legislation-style, and French and German-law traditions legislation-style a more regulatory-conservative legislation-style.

[Table 6 over here]

Regardless of whether political, legal or religious tradition is the more decisive factor, being a dictatorship had a clear impact on the level of social contributions. As table 5 shows, the dictatorship dummy variable has a strongly significant positive effect on the probability of having high rates of social contributions. This result holds in all five regressions in table 5. It makes no difference what *institutional* variable we include in our analysis: our dictatorship variable never loses its statistical significance. Therefore, it seems that non-democratic governments were more likely to have high levels of social contributions. As we can see in Graph 2, Spain and Portugal showed very high levels of social contributions, even higher than other catholic, conservative and French-law countries. In fact, the ratio of social contributions to social spending in both Spain and Portugal was well above 1 during the 50's and the 60's (especially in Spain). That means that social security revenues exceeded social benefits' level, which is an unknown scenario in other European countries other than Spain and Portugal.

[Graph 2 over here]

After the mid 60's the Spanish and Portuguese ratios of social contributions dropped to equal other countries' levels in the catholic, French-law and conservative tradition. As I will try to show in the next section by focusing on the Spanish case, that fall may be consistent with changes in the political context. Anyway, it seems that non-

democratic countries shared the basic features of less open economies, as well as those of catholic, conservative and French-law tradition countries: high levels of social contributions. However, it seems they took those features to an extreme by having extremely high rates of social contributions.

In the previous section we found that western European dictatorships had a negative influence on social spending. In this section, we have found that dictatorships financed social spending in a less redistributive way as well. Our results seem to confirm that political factors matter. It seems that dictatorships are less redistributive than democracies, both as regards the level of social spending and the way it is funded. The next section focuses on the Spanish case to complement our econometric results, and provides a plausible interpretation for the Spanish model of social protection under the light of this paper's findings.

6. A Francoist model of social protection?

Why were social contributions that high under non-democratic governments? And why did they drop in the mid 60's? As shown in section 3, social groups that were contrary to redistribution held more political power than pro-social-spending groups, because the political voice of pro-redistribution groups was particularly silenced and repressed. Given that scenario, it is not surprising that social contributions (which were a non-redistributive way to finance social security) reached such a high level in Spain before the mid 60's. In fact, the extremely high levels of Spanish social contributions allowed Franco's regime to finance social protection without carrying out any deep tax reform;⁹ that is to say, in a non-redistributive way. In addition, it seems that employers did not have big incentives to oppose high social contributions. Under Franco's dictatorship workers lost their bargaining power, particularly before the 60's, which probably allowed firms to easily transfer social security costs to wages, regardless of social contributions being formally paid by employers or employees. In fact, employers' opposition to social insurance was limited during the first decades of Franco's regime, although bigger among small-size firms. And in any case, it was weaker than their opposition to other social reforms, as for example, those aimed at strengthening labor

⁹ On the absence of any deep tax reform during Franco's dictatorship see Comín (2003).

bargaining power (Molinero and Ysas, 1993, 1998). Anyway, since employers were probably able to easily transfers the cost of social protection to wages and since the social protection system built after the Spanish civil war was basically addressed to wage-earners (because it was a compulsory-social-insurance-based system), this implies that workers paid in practice their own social protection.

On the other hand, Dictatorship's trade policy is also an element to be taken into account. As we have already seen, less open economies are more likely to establish contributory systems. Since firms have to face less international competition, they can easily transfer increasing production costs derived from social contributions to final prices. As a consequence, firms' opposition tends to be weaker, especially in strongly protectionist contexts. Franco's dictatorship was characterized by active protectionism, especially during its first decade, although national industry kept protected from international competition throughout the whole period. It is possible that the Spanish protectionist policy also contributed to reduce employers' opposition. Lastly, the low levels of social spending before the 60's may contribute to explain the high ratio of social contributions as well. Probably, if social spending had been higher more public subsidies would have been needed to finance social protection.

Social contributions drop in the mid 60's was probably driven by the changes in the political context which took place in the first half of the decade. Working class' bargaining power increased from the early 60's on¹⁰, which might have reduced employers' ability to transfer social contributions costs to wages. Similarly, increasing workers' capacity to act as a pressure group together with democratic opposition and political instability probably made social contributions fall, in the same way that it made social spending rise.¹¹ On the other hand, as a result of the gradual liberalization of the Spanish economy firms started to face more international competition and transferring social contributions' costs to prices became more difficult. Similarly, the growth of social spending, especially from the 60's, probably made that cost bigger. In fact, employers

¹⁰ In 1961 the Collective Bargaining Act came into effect. Although free unions remained illegal, this new institutional framework allowed workers to directly (and regularly) negotiate their working conditions with their employers. Despite strikes remained prohibited and considered a public order disturbance, after 1963 they became a frequent instrument used by workers during the negotiating process. Several secret workers organizations took advantage of that situation and appeared or expanded during the 60's and started to demand political democratization as well (Molinero and Ysas (1998).

¹¹ About the rise and growth of democratic opposition to Franco's regime see Tusell (2005).

complained for the first time about the high level of Spanish social contributions in the 70's, in a context of economic crisis but also in a context of relatively high social spending, relatively high international competition and intense labor disputes, which prevented firms to transfer social contributions' costs to wages or consumers (Cabrera and Del Rey, 2002).

To sum up, Francoist model of social protection was characterized by a low level of social spending and a high level of social contributions. The low level of social spending is mainly explained by the political repression of the social groups which were in favor of redistribution. The high levels of social contributions are partially explained by that political repression, and partially by the government trade policy and the weak employers' opposition. We suggest that employers did not oppose high social contributions because the political context together with Franco's protectionist trade policy allowed firms to transfer the cost of social protection to wages and final prices. Finally, changes in the political context, such as the consolidation of a democratic opposition, the strengthening of the labor movement, and increasing political instability made social spending rise. At the same time, that growth of social spending, plus increasing labor disputes, and increasing trade openness prevented firms to transfer social contributions' costs to wages or consumers, and therefore, made it more and more difficult to finance social protection through social contributions.

7. Conclusions

Most of the studies about the welfare state have focused so far on the affluent democracies. In contrast, poorer and dictatorial countries have deserved less attention, partially because of the lack of data. This paper provides new evidence on the evolution of social spending in both Spain and Portugal between 1950 and 1980. Since both of them did not enjoy democratic governments until the mid-late 70's that new evidence allows us to analyze the relationship between dictatorships and redistribution.

In addition to the level of social spending and its distribution among different items, the way that social spending is financed is also analyzed in this paper. More exactly, the ratio of social security contributions to social spending is used as an

indicator of redistribution. From the analysis of that ratio, we can complement the study based on the level of social spending and we can go deeply into the connections between dictatorships and redistribution. Similarly, the analysis of the determinants of social contributions has also been useful to clarify the role played by globalization. Instead of having a clear positive or negative effect on social spending, it seems that globalization shaped the way that social protection is financed.

In general, our findings confirm that economic and demographic factors were important determinants of social spending in 1950-78. On the one hand, there is empirical support for the so-called Wagner's law, as GDP per capita has a positive effect on almost all kinds of social spending. Social transfers, in turn, show a rather counter-cyclical effect, and it seems that the elderly favored the rise of several types of social spending besides pensions, which suggest that they empathized somehow with other vulnerable social groups.

Globalization, in contrast, exerted an ambiguous effect on social spending levels. Education, pensions and unemployment spending were influenced by globalization, but they show opposite signs (positive on unemployment spending and negative on pensions and education). Therefore, there is no strong empirical evidence for Dani Rodrik's hypothesis or for the existence of a *race to the bottom*. In other words, it seems that globalization neither encouraged social transfers nor was a hurdle for the rise of social spending. However, it played a bigger role in shaping social protection systems' financing-style. More open economies tended to establish tax-funded systems, while less open economies were more likely to create contributory systems (funded through compulsory social contributions paid by employers and employees). This suggests that export-oriented firms opposed contributory systems, which would have increased labor cost.

Besides economic and demographic factors, political factors appear to matter. According to our results, being a dictatorship hindered the development of the welfare state. In fact, it helps to explain a large share of the differences in social spending levels between Spain (which was a dictatorship until the late 70's) and other European countries. It seems that the suppression of voting rights and the banning of free unions and parties limited the political voice of those who were in favor of social transfers. And

this, in turn, decreased social demands for increasing redistribution. Political instability, in contrast, contributed to increase social spending, as non-democratic governments appear to use social transfers to avoid social unrest and demands for regime shift. However, that positive effect is not enough to compensate the overall dictatorships' negative effect.

On the other hand, dictatorships exerted a negative effect on almost all kinds of social spending. However, its negative influence was bigger in the case of unemployment spending, which might be interpreted as a proof of non-democratic governments' preference for non-redistributive programs. The only type of social spending which was not negatively influenced by non-democratic governments was welfare spending. This suggests that, although dictatorships in the post world war II era avoided the rise of social spending, they did not dismantle the traditional social protection systems. On the other hand, the lack of dictatorships' negative influence on welfare spending is also probably due to the fact that they encouraged the rise of family social protection (probably with the objective of encouraging the growth of population, keeping women out of the labor market, or finding political support).

The way that social spending is funded is also analyzed in this paper, which may help us to assess whether dictatorships are less redistributive than democracies or not. More exactly, the ratio of social contributions to social spending is analyzed here. As mentioned before, more open economies were more prone to establish non contributory systems. Similarly, institutional factors such as predominant religions, predominant political traditions, or legal traditions were also important determinants of the ratio of social contributions. Catholic, conservative and French-law-tradition countries appear to be more likely to create contributory systems, instead of tax-funded systems. The analysis of social protection funding also reveals that dictatorships were more prone to finance social protection via social contributions, which did not imply redistribution through government budgets.

In sum, the political regime seems to be crucial to explain the evolution of social spending and to analyze whether dictatorships are less redistributive or not. Western European countries which suffered non-democratic governments between the 50's and 80's had lower levels of social spending, and financed social protection in a non-

redistributive way. On the other hand, it seems that dictatorships in the post world war II era use social policy to legitimate themselves when they were politically threatened. It is also possible that they encouraged family social protection to achieve that objective. But this was not enough to compensate its overall negative effect. Finally, an interpretation of the political economy of the Spanish welfare state during Franco's dictatorship on the light of this paper's findings is also provided. We suggest that the Francoist model of social protection was characterized by a low level of social spending and a high level of social contributions. Political repression of pro-social-transfers groups explains the low level of social spending. On the other hand, the high levels of social contributions are partially explained by that political repression, and partially by the government trade policy and the weak employers' opposition. Employers probably did not oppose high social contributions because the political context together with Franco's protectionist trade policy allowed firms to transfer the cost of social protection to wages and final prices.

Bibliography

Alesina, Alberto and Rodrik, Dani (1994), "Distributive politics and economic growth", *The Quarterly Journal of Economics*, 109, 2, pp. 465-490.

Baldwin, Peter (1990), *The politics of Social Solidarity and the Bourgeois Basis of the European Welfare State, 1875-1975*, Cambridge, Cambridge University Press

Barreto, José (1994), "Comunistas, católicos e os sindicatos sob Salazar", *Análise Social*, 125-126, vol. XXIX, pp. 287-317

Barreto, José (1990), "Os primórdios da Intersindical sob Marcelo Caetano", *Análise Social*, 105-106, vol. XXV, pp.57-117

Becker, Gary S. (1983), "A theory of competition among pressure groups for political influence", *Quarterly Journal of Economics*, 98, 3, pp. 371-400

Becker, Gary S. and Mulligan, Casey B. (1998), "Deadweight Costs and the Size of Government", *NBER Working paper*, 6789

Botero, Juan, Djankov, Simeon, La Porta, Rafael, Lopez-de-Silanes, Florencio, and Shelifer, Andrei (2004), "The regulation of Labor", *The Quarterly Journal of Economics*, 119, 4, pp. 1339-1382

Cabrera, Mercedes and Del Rey Reguillo, Fernando (2002), *El poder de los empresarios: Política e intereses económicos en la España contemporánea, 1875-2000*, Madrid, Taurus historia

Comín, Francisco (2003), "La hacienda pública en el franquismo autárquico, 1940-1959", in Barciela, Carlos (Ed.) (2003), *Autarquía y mercado negro. El fracaso económico del primer franquismo, 1939-1959*, Barcelona, Crítica

Comín, Francisco and Díaz, Daniel (2005), "Sector público administrativo y Estado del bienestar", in Carreras, Albert and Tafunell, Xavier (coord.), *Estadísticas históricas de España*, Vol. II, Bilbao, Fundación BBVA, pp. 873-964.

Cutler, David and Johnson, Richard (2004), "The birth and growth of the social insurance state: Explaining old age and medical insurance across countries", *Public Choice*, 120, pp. 87-121

Esping-Andersen, Gosta (1985), *Politics against markets: the social democratic road to power*, Princeton, Princeton University Press

Esping-Andersen, Gosta (1990), *The three worlds of welfare capitalism*, Cambridge, Polity Press

Flora, Peter (Ed.) (1986), *Growth to limits: the Western European Welfare States since World War II*, Berlin, Walter de Gruyter

Flora, Peter (1983), *State, economy and society in Western Europe, 1815-1975: a data handbook in two volumes*, Frankfurt: Campus, London: Macmillan, Chicago: St. James Press

Haggard, Stephan and Kaufman, Robert R. (2008), *Development, Democracy and Welfare States: Latin America, East Asia and Eastern Europe*, Princeton and Oxford, Princeton University Press

Hicks, Alexander (1999), *Social democracy and welfare capitalism: A century of income security politics*, London, Cornell University Press

Huberman, Michael and Lewchuk, Wayne (2003), "European economic integration and the labour compact, 1850-1913", *European Review of Economic History*, 7, 1, pp. 3-41.

Iversen, Torben (2001), "The Dynamics of Welfare State Expansion: Trade Openness, De-Industrialization and Partisan Politics", in Pierson, Paul (ed.), *The New Politics of the Welfare State*, Oxford, Oxford University Press.

Jerez Mir, Antonio (1996), "El régimen de Franco: elite política central y redes clientelares, 1938-1957", in Robles, Antonio (coord.) (1996), *Política en penumbra. Patronazgo y clientelismo políticos en la España contemporánea*, Madrid, Siglo Veintiuno de España Editores

Kerr, Clark; Dunlop, J; Harbison, F; and Myers, C (1964), *Industrialism and industrial man*, New York, Oxford University Press

Khoudour-Castéras, David (2008), "Welfare State and Labor Mobility: The Impact of Bismarck's Social Legislation on German Emigration before World War I", *The Journal of Economic History*, 68, 1, pp.211-243.

Korpi, Walter (1983), *The democratic class struggle*, London, Routledge and Keagan Paul

Kristov, Lorenzo; Lindert, Peter and McClelland, Robert (1992), "Pressure groups and redistribution", *Journal of Public Economics*, 48, 2, pp. 135-163

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Sheleifer, and Robert Vishny, (1999), "The Quality of Government", *Journal of Law, Economics and Organization*, XV, pp. 222-279

Lindert, Peter H. (1994), "The Rise of social Spending, 1880-1930", *Explorations in Economic History*, 31, pp.1-37.

Lindert, Peter H. (1996), "What limits social spending", *Explorations in Economic History*, 33, pp.1-34.

Lindert, Peter H. (2004), *Growing public social spending and economic growth since the eighteenth century*, Cambridge, Cambridge University Press

Meltzer, Allan H. and Richard, Scott F. (1981), “A rational theory of the size of government”, *Journal of Political Economy*, 89, 5, pp. 914-927

Molinero, Carme and Ysas, Pere (1998), *Productores disciplinados y minorías subversivas. Clase obrera y conflictividad laboral en la España franquista*, Madrid, Siglo XXI Editores

Molinero, Carme and Ysas, Pere (1993), “Los industriales catalanes y el primer *ventennio* franquista: ¿adhesión política y disidencia económica?”, in Sánchez, Isidro, Ortiz, Manuel and Ruiz, David (1993), *España franquista, Causa general y actitudes sociales ante la dictadura*, Albacete, Universidad Castilla La Mancha

Momsen, W. J. (Ed.), *The emergence of the Welfare State in Britain and Germany, 1850-1950*, London, Croom Helm

Mulligan, Casey B. and Sala-i-Martin, Xavier (1999), “Gerontocracy, retirement, and social security”, *NBER Working Paper 7117*

Mulligan, Casey B, Gil, Ricard, and Sala-i-Martin, Xavier (2002), “Social Security and democracy”, *NBER Working Paper 8958*

OECD (1985), *Social expenditure: 1960-1990, Problems of growth and control*, Paris, OECD

OECD (several years), *National Accounts, detailed tables*, volume II, Paris, OECD, Department of economics and statistics

OECD Social Expenditure database (www.oecd.org/els/social/expenditure).

OECD (2007), *The social expenditure database: An interpretative guide. SOCX 1980-2003*, OECD (www.oecd.org)

Olson, Mancur (1993), “Dictatorship, Democracy and Development”, *The American Political Science Review*, vol. 87 (3), pp. 567-576.

Pampel, Fred C. and Williamson, John B. (1989), *Age, class, politics, and the welfare state*, Cambridge, Cambridge University Press.

Pereirinha, José António and Carolo, Daniel (2007), “*O Estado-providência em Portugal: a evolução da despesa social ao longo do século XX*”, 27th APHES Conference

Pereirinha, José António; Arcanjo, Manuela; and Carolo, Daniel (2007), “Social protection and family policy in the Portuguese corporatism: the creation and development of family allowances (*abono de família*) in the Estado Novo period”, 27th APHES Conference

Persson, Torsten and Tabellini, Guido (1994), "Is inequality harmful for growth?", *American Economic Review*, 84, 3, pp. 600-621.

Pinto, Antonio Costa and Almeida, Pedro Tavares de (2002), "Portuguese Ministers, 1851-1999: Social Background and Paths to Power", *South European Society and Politics*, vol. 7, 2, pp.5-40

Pinto, Antonio Costa (2002), "Decisión política y élite ministerial en las dictaduras de la época del fascismo", *Historia y Política*, 7, pp. 147-175

Piven, Frances Fox and Cloward, Richard A. (1994), *Regulating the poor*, New York, Vintage.

Rodrik, Dani (1997), *Has globalization gone too far?*, Washington, Institute for International Economy.

Taylor, Charles Lewis, and Jodice, David A. (1983), *World Handbook of Political and Social Indicators*, Binghamton, New York, Vail-Ballou Press.

Tusell, Javier (2005), *Dictadura franquista y democracia, 1939-2004*, Barcelona, Ed. Crítica

Ullman, H (1981), "German industry and Bismarck's Social Security System", in W. J. Mommsen (Ed.), *The emergence of the Welfare State in Britain and Germany, 1850-1950*, London, Croom Helm

Valério, Nuno (ed.), *Estatísticas Históricas Portuguesas*, Lisbon, INE, 2001 (2 vols.)

Wilensky, Harold (1975), *The welfare state and equality: Structural and ideological roots of public expenditures*, Berkeley, University of California cop. USA.

Annex 1, data and sources

Dependent variables (table 2):

Education: public spending on education

Pension: spending on old-age, and survivors and disability benefits.

Health: public spending on health care.

Welfare: maternity and sickness leave spending, plus family allowances and other welfare spending.

Unemployment: spending on unemployment compensation.

Total social spending: the total of the above five categories.

Sources:

The Portuguese levels of social spending between 1950 and 1978 have been estimated from the statistical yearbooks of Portugal. They provide detailed information on the Portuguese social security system expenditures and the government expenditures. For the time period 1970-78, data on the Portuguese health care expenditures comes from the OECD health data, 2008 (www.oecd.org/health/healthdata). Functional classification of social spending before 1962 has been taken from Pereirinha and Carolo (2007), and public spending on education comes from Valerio (2001). For more details on the Portuguese estimates see annex 2.

The Spanish levels of social spending between 1950 and 1980 have been estimated through the careful examination of public budgets, and the reports, statistics, and yearbooks of the Spanish National Institute of Social Insurance (*Instituto Nacional de Previsión*). Public spending on education comes from Comín and Díaz (2005).

The estimates of both Spanish and Portuguese social spending fit OECD functional classification and definitions.

Data for the remaining thirteen European countries included in the sample (Sweden, Norway, Ireland, Netherlands, Finland, Belgium, Denmark, Austria, United Kingdom, Italy, France, Greece and Germany) comes from Flora (1986) and OECD (1985). OECD's

data covers the time-period 1960-78, while Flora's data covers the time-period 1950-60. Flora (1986)'s levels of social spending have been rescaled to make them equal to OECD levels in 1960. French levels of social spending between 1950 and 1959 come from Flora (1983).

Dependent variables (table 5):

Ratio of social security contributions to social spending: social security contributions in current prices divided by public social spending in current prices

Sources:

The sample includes the following 15 countries: Sweden, Norway, Ireland, Netherlands, Finland, Belgium, Denmark, Austria, United Kingdom, Italy, France, Greece, Portugal, Spain and Germany.

Data on social contributions comes from OECD National Accounts [OECD (several years), *National Accounts, detailed tables*, volume II, Paris, OECD, Department of economics and statistics]. Most of the data actually comes from the 1983 edition [National Accounts, detailed tables, volume II, 1964-1981, OECD, Department of economics and statistics, Paris, 1983], which provides the longest and most homogeneous series on social contributions for the 60's and 70's. When the 1983 edition did not provide data for one particular year or country, data has been compiled from a different edition. However, sometimes, different editions of the OECD National Accounts show differences in the levels of social contributions. In that case, that discrepancy has been overcome by rescaling the series from the older edition so that it equals the last year available in the newer series.

Data on Spanish social contribution during the years 1958-81 comes from Comín and Díaz (2005). For the years 1954-58 data is coming from OECD National Accounts.

Independent variables (tables 2 and 5):

Log (GDP per capita): the log of GDP per capita, measured in 1990 International Geary-Khamis dollars. Source: Maddison (www.ggd.net/maddison/)

GDP growth: the annual rate of GDP growth. Source: Maddison (www.ggd.net/maddison/).

Elderly: Share of the total population over 65 years old. Source: *UN, World Population Prospects: The 2008 Revision*.

Kids (5-14): Share of the total population between 5 and 14 years old. Source: *UN, World Population Prospects: The 2008 Revision*.

Openness: imports plus exports divided by GDP. Source: Penn tables 6.2.

Dictatorship (in table 2): is a qualitative variable, which takes value 1 when a country was a dictatorship during 4 years within the last four ones. If a country was a dictatorship during three years within the last 4 years then it takes value 0.75. It takes value 0.5 if there were two years of dictatorship and 0.25 if there was one year. If a country did not suffer any non-democratic government it takes value zero.

Years in which transition to democracy or military coup happened are considered half democratic and half dictatorial. For example, if a country suffered a coup in 1976, the dictatorship variable in 1978 takes the value 0.625 (0.5 because that country was non-democratic during two years: 1977 and 1978, plus 0.125 because half of the year 1976 is considered dictatorial).

The countries included in our sample have been ranked as democratic or non-democratic according to the Polity-IV project. The Polity-IV project offers several combined indicators of democracy and autocracy. One of them is the Polity2 indicator, where countries are ranked from +10 (strongly democratic) to -10 (strongly autocratic). Those countries, whose combined polity2 indicator was

below zero, that is to say negative, have been considered dictatorships herein. In our sample the non-democratic countries are: Greece, from 1967 to 1974, Spain until 1977, and Portugal until 1974. Source: *Polity IV Project, Center for Global Policy, School of Public Policy, George Mason University and Center for Systemic Peace (www.systemicpeace.org/polity4)*

Dictatorship (in table 5): is a dummy variable which takes value one when there is a dictatorship and zero otherwise. Years in which transition to democracy or military coup happened are considered half democratic and half dictatorial. As in table 3, countries have been ranked as democratic or non-democratic according to the Polity-IV project.

Political instability: number of executive adjustments in non-democratic governments during the last 4 years. Source: Taylor, Charles Lewis, and Jodice, David A. (1983), *World Handbook of Political and Social Indicators*, Binghamton, New York, Vail-Ballou Press.

Unemployment: rate of unemployment (the denominator is the total active population), Source: *OECD, Annual Labor Force statistics*.

Annex 2, Portuguese social spending data

Portuguese social spending levels have been estimated from several sources, which are:

1. The statistical yearbooks of Portugal
2. The OECD health data, 2008
3. Pereirinha and Carolo (2007)
4. Valerio (2001)

As mentioned before, social spending is classified into five different categories: pensions, health, welfare, education and unemployment. Social spending on pensions, welfare and unemployment have been estimated from the statistical yearbooks of Portugal, and Pereirinha and Carolo (2007).

From 1962 onwards, the statistical yearbooks of Portugal provide detailed information on the Portuguese social security system expenditures. More exactly, social expenditures are classified into several categories (family allowances, sickness, old-age and invalidity pensions, survivors, general welfare and other subsidies, and unemployment compensation from 1977 on), and the administration cost are collected separately, so we can calculate social spending excluding the administration cost.

Pensions spending are composed of old-age and invalidity pensions plus survivors pensions. **Welfare** includes family allowances, sickness leave benefits, general welfare spending and other subsidies to families. It is worth mentioning that the total sickness benefits reported by the Portuguese statistical yearbooks include both *benefits in kind* (health care and medicines) and *cash benefits* (sickness leave benefits). Only *cash benefits* are included in the category *welfare*. Finally, **Unemployment** includes unemployment compensation spending.

Before 1962, the statistical yearbooks still provide information on social security expenditures, but they do not provide information about its distribution among different categories. However, Pereirinha and Carolo (2007) offer disaggregated data on Portuguese social spending levels and its distribution among different items. Therefore,

for the time-period 1950-61 we have calculated Portuguese levels of social spending from Pereirinha and Carolo's data. It is important to point out that the total levels of social spending provided by the Portuguese statistical yearbooks and Pereirinhas and Carolo's total spending levels are coincident, so we do not expect any distortion because of we use two alternative sources.

Data on Portuguese **health** spending levels are also coming from several sources. From 1970 onwards levels on public health spending reported by the OECD health data, 2008 (www.oecd.org/health/healthdata) are used. Before 1969 health spending are calculated adding up sickness benefits in kind (from the sickness insurance) and public health spending from the Department of Health and Welfare (*saúde e assistência*). This information comes from the statistical yearbooks.

As already mentioned, before 1962 the Portuguese statistical yearbooks do not provide disaggregated information, so we are not able to know the amount of sickness benefits in kind. Pereirinha and Carolo (2007) offer data on total sickness insurance benefits, but they do not distinguish benefits in kind from cash benefits. However, we can estimate the level of sickness in kind from the information we have for the sixties. Between 1960 and 1968 the ratio of benefits in kind to total benefits kept almost constant around 0.5¹². Therefore we can estimate sickness benefits in kind assuming that this ratio also remained constant and around 0.5 for the period 1950-61.

Finally, public spending on **education** comes from Valerio (2001).

¹² From 1969 on this ratio increased to more than 0.6, so I decided to take the period 1960-68 for the calculations.

Graphs and tables

Table 1, the evolution of social spending (as a % of GDP) in eight selected European countries, 1950-80

	Denmark	Germany	Ireland	Italy	Belgium	Portugal	Spain	United Kingdom
1950	12,46	16,63	10,01	9,39	12,57	3,21	4,07	12,45
1955	15,09	16,94	11,36	12,31	13,57	4,06	3,16	12,17
1960	16,06	20,48	11,33	16,58	17,58	4,69	4,17	13,87
1965	19,11	22,41	13,38	19,87	21,32	4,96	4,93	16,13
1970	26,19	23,55	16,55	21,11	25,10	5,99	9,98	18,42
1975	32,39	32,55	22,33	25,40	34,21	12,01	13,09	22,39
1980	35,49	30,78	24,62	26,18	37,88	13,98	19,02	21,88

Source: see text.

Table 2, the determinants of social spending levels, 1950-78

Dep. Var. (in Logs)	Education (1)	Pensions (2)	Health (3)	Welfare (4)	Unemployment (5)	Total (6)
C	-6,167 *** (1,558)	-5,729 *** (0,955)	-9,585 *** (0,891)	-5,083 *** (1,227)	-7,090 *** (1,920)	-4,534 *** (0,855)
Log(GDP per capita)	0,765 *** (0,131)	0,610 *** (0,181)	1,020 *** (0,161)	0,536 ** (0,240)	-0,417 (0,429)	0,575 *** (0,149)
GDP growth	-0,012 ** (0,005)	-0,020 ** (0,008)	-0,015 ** (0,006)	0,005 (0,010)		-0,011 ** (0,005)
Log(Elderly)		1,197 *** (0,369)	0,596 * (0,357)	0,815 (0,542)	2,599 *** (0,927)	1,034 *** (0,320)
Log(Kids, 5-14)	0,414 * (0,241)					
Log(Openness)	-0,140 * (0,077)	-0,240 ** (0,119)	0,040 (0,090)	-0,144 (0,158)	0,746 ** (0,286)	-0,083 (0,075)
Dictatorships	-0,407 *** (0,136)	-0,465 * (0,251)	-0,374 *** (0,109)	0,304 (0,237)	-1,277 *** (0,301)	-0,389 *** (0,144)
Political instability	0,021 ** (0,010)	0,026 (0,019)	0,011 (0,009)	-0,024 (0,020)	0,072 *** (0,022)	0,017 (0,011)
Unemployment					0,192 *** (0,023)	
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0,981	0,962	0,977	0,949	0,942	0,974
Mean dep. var.	1,568	2,227	1,503	1,827	-1,499	3,414
DW	1,889	2,128	2,316	2,037	2,283	1,960
Obs.	102	99	97	97	67	100

Notes: Dependent variables are education, pensions, health, welfare, unemployment and total social spending as a percentage of GDP. Dependent variables, GDP per capita, share of population over 65 and the degree of openness are in logs. For details about the sources and definitions of both the dependent and the independent variables see the annex. The sample is composed of 15 countries: Sweden, Norway, Ireland, Netherlands, Finland, Greece, Belgium, Denmark, Austria, UK, Italy, France, Germany, Spain, and Portugal. Eight four-year time periods are included (from 1950 to 1978). Estimation method is weighted least squares in order to correct for heteroscedasticity and adjusted for first order serial correlation. All the regressions include cross-country fixed-effects. Standard errors are in brackets, * significance at 10% level, ** significance at 5% level, *** significance at 1% level.

Besides the explanatory variables included in this table, it might be argued that migrations can also affect public social spending. For example, Lindert (1994) suggested that immigration could decrease society's willingness to support non-age-related benefits (and could favor age-related social transfers), because local people would want the immigrants not to benefit from their social protection system. On the other hand, emigration could reduce social demands for social protection in the home-countries, as people is leaving instead of asking for more social protection. However, there is also an endogeneity problem with the migration variable, because it might affect social spending, but social policy might also affects migrations. For example, Khoudour-Castéras (2008) showed that Bismarck's social policy made German emigration decline. Anyway, some regressions were run including migrations, but it had no significant influence on global public social spending. For that reason, and taking into account that it might involve endogeneity problems, that variable was removed from the final reported analysis.

Table 3, Social Spending in Family (as a % of total social spending), 1950-80

	Germany	UK	Ireland	Norway	Austria	Italy	France	Sweden	Netherl.	Belgium	Portugal	Spain
1950	0,90	3,33	4,14	5,58			12,96	17,58	13,69	13,73	28,22	16,38
1960	4,58	3,49	8,13	5,49	3,16	14,84	15,79	12,89	10,04	11,26	25,92	8,49
1970	5,39	3,45	5,31	8,51	8,05	8,01	14,41 ^b	9,57	7,98	12,86	19,20	15,79
1980	5,31		3,37	5,06 ^a	7,80	3,69		11,85	5,39	8,33	4,81	2,64

Sources: Spanish data is own making (see text). Data on Portugal comes from Pereirinha and Carolo (2007), data on France from Flora (1983), and data on the rest of countries from Flora (1986).

Notes: Denmark and Finland were removed from the table, but they show an evolution not very different from Sweden. In the case of Greece there is no information about family social spending.

a. this figure refers to 1978, instead of 1980.

b. refers to 1974, instead of 1970.

Table 4, explaining differences in total social spending, 1974

	Europe	Italy	France	Ireland
	(This country's level minus Spain's level in 1974)			
Country Fixed Effects	0,164 (21,90)	0,317 (33,85)	0,117 (12,44)	0,440 (68,00)
Log of GDP per capita	0,177 (23,57)	0,175 (18,68)	0,273 (28,95)	-0,084 (-12,96)
GDP growth	0,000 (0,06)	0,000 (0,03)	0,000 (0,04)	0,000 (0,06)
Elderly	0,191 (25,46)	0,151 (16,11)	0,257 (27,16)	0,058 (8,92)
Globalization	-0,060 (-7,95)	-0,028 (-2,94)	-0,024 (-2,58)	-0,088 (-13,58)
Dictatorships	0,318 (42,40)	0,389 (41,55)	0,389 (41,18)	0,389 (60,07)
Political instability	-0,041 (-5,43)	-0,068 (-7,27)	-0,068 (-7,20)	-0,068 (-10,51)
Total predicted difference (in logs)	0,749 (100)	0,936 (100)	0,944 (100)	0,647 (100)
Total observed difference (in logs)	0,614	0,669	0,660	0,517

Notes: each variable contribution is calculated by multiplying the coefficients from regression 6 (table 2) by the independent variables values in 1974. All variables are defined as in table 6 (the dependent variable, GDP per capita, share of population over 65 and openness are in logs). Europe's independent variables values are just the average of our 15 European countries included in the sample. Each variable contribution's percentage appears in brackets.

Table 5, the determinants of (high) social contribution levels, 1950-81

Dependent variable: social contributions are more than 70% of social spending					
C	-18,203 *** (6,411)	-24,415 *** (5,396)	-15,620 *** (5,723)	-21,113 *** (6,222)	-23,118 *** (6,452)
Log GDP	1,997 *** (0,763)	2,975 *** (0,688)	0,935 (0,707)	2,580 *** (0,815)	2,580 *** (0,815)
Elderly	-0,009 (0,097)	-0,121 (0,109)	0,424 *** (0,145)	-0,133 (0,113)	-0,133 (0,113)
Openness	-0,054 *** (0,011)	-0,046 *** (0,009)	-0,045 *** (0,008)	-0,047 *** (0,010)	-0,047 *** (0,010)
Catholicism	1,216 ** (0,473)				
Protestantism		-3,180 *** (0,661)			
Legal origin					
French			3,459 *** (0,595)		
Scandinavian & English				-2,004 *** (0,491)	
Continental					2,004 *** (0,491)
Dictatorship	8,175 *** (1,425)	7,733 *** (1,274)	7,540 *** (1,324)	7,849 *** (1,327)	7,849 *** (1,327)
McFadden R-squared	0,517	0,585	0,627	0,540	0,540
Log likelihood	-114,621	-98,514	-88,596	-109,095	-109,095
Obs. with dep. var. =0	346	346	346	346	346
Obs. with dep. var. =1	100	100	100	100	100
Total obs.	446	446	446	446	446

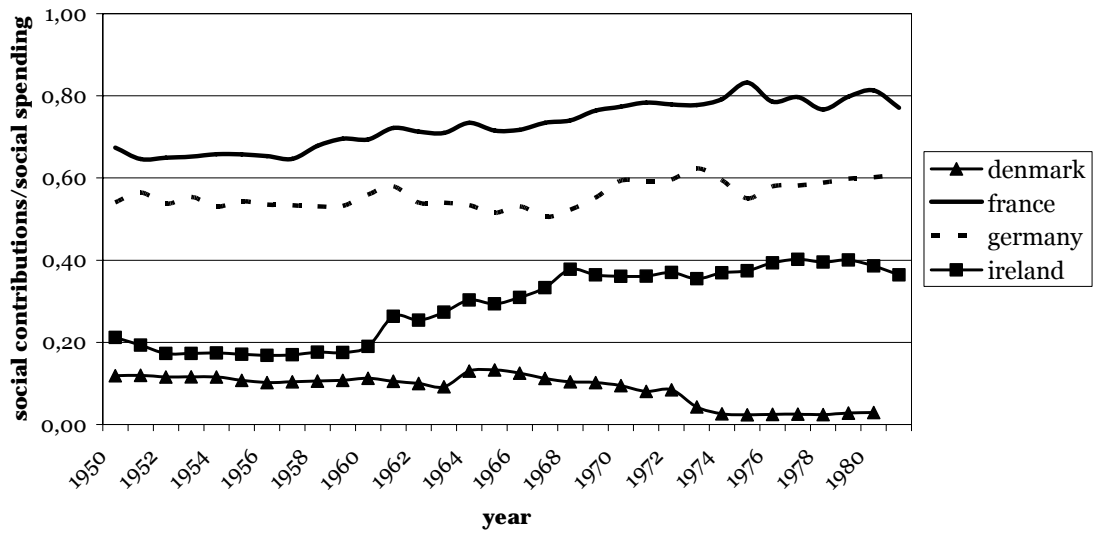
Notes: Dependent variable is a binary variable, which takes value one when the ratio of compulsory social contributions to social spending is higher or equal to 0.7, and takes value zero otherwise. For details about the sources and definitions of both the dependent and the independent variables see the annex. The sample is composed of 15 countries: Sweden, Norway, Ireland, Netherlands, Finland, Greece, Belgium, Denmark, Austria, UK, Italy, France, Germany, Spain, and Portugal. The time-period is 1950-81 and observations are annual. Estimation method is logit regressions. Robust Standard errors are in brackets, * significance at 10% level, ** significance at 5% level, *** significance at 1% level.

Table 6, comparing religion, legal origins and Esping-Andersen's classification

	average social contributions, 1950-81	share of Catholics	share of Protestants	Legal origins	Esping-Andersen's classification
Denmark	0,09	0,01	0,99	Scandinavian	Social-democratic
Finland	0,30	0	0,98	Scandinavian	Social-democratic
Norway	0,57	0	1	Scandinavian	Social-democratic
Sweden	0,35	0	1	Scandinavian	Social-democratic
Ireland	0,29	0,93	0,07	English	Liberal
UK	0,37	0,14	0,84	English	Liberal
Austria	0,47	0,91	0,04	German	Conservative
Germany	0,56	0,34	0,65	German	Conservative
Belgium	0,52	0,98	0,02	French	Conservative
Netherlands	0,58	0,43	0,53	French	Conservative
Italy	0,61	1	0	French	Conservative
France	0,73	0,98	0,02	French	Conservative
Greece	0,72	0,01	0	French	Conservative
Portugal	0,92	1	0	French	Conservative
Spain	0,89	1	0	French	Conservative

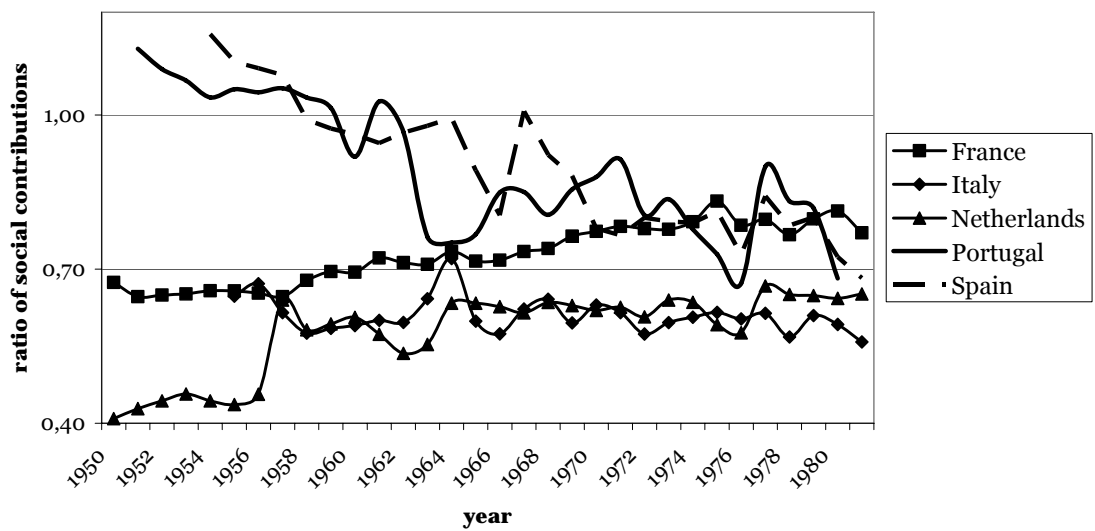
Source: for the ratio of social contributions see text. The share of Catholics and Protestants come from Lindert's worksheet, Legal origins classification from Botero et.al. (2004), and Esping-Andersen's classification comes from Esping-Andersen (1990).

Graph 1
the evolution of social contributions, 1950-81



Source: see text

Graph 2
Dictatorships and social contributions, 1950-81



Source: see text