

International spillovers in policy making? The rise of labour regulation in Europe, 1870-1913. Aggregate analysis and case-studies.

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Very, very preliminary draft (sorry)! Not for quotation.

Introduction.

This paper studies the diffusion of social legislation in Europe between 1870 and 1913 and analyses in depth the case of Spain in the early 20th century as a case study to provide further evidence on some of the main results obtained in the comparative analysis. The argument I want to make here is to a great extent old-fashioned and goes back to 1950s and 1960s claims that the origins of the welfare state in Europe were caused by changes in elites' ideology and emphasizing national histories and historical contingency rather diffusion processes and the role of pre-requisites (Hay, 1975; Rimlinger; Collier and Messick, 1975; Tan, 2005), like changes in democratization or policy spillovers. My main argument is that in fact there was very little done before 1913, most laws were not tax-funded subsidies to the workers but rather were either paid by workers or employers, bureaucracies devoted to social and labour matters were small, their impact on the government budget minimal. Probably influenced by religious thinking, elites were only willing to distribute towards the "deserving poor", with help being temporary and selective, to avoid those in distress becoming dependent on aid. Tellingly, very few countries passed unemployment insurance before World War 1. I do not find evidence of spillover effects. Countries passed similar laws because they were at similar levels of development, there is some evidence of international exchanges of ideas but countries passed laws based on their domestic balance of power and generally following strategic objectives and facing highly contingent circumstances. This argument is reinforced by drawing on the national histories and a detailed case study of Spain.

There have been several attempts to understand the rise of the regulation of labor and social insurance in the late 19th century. Initial efforts by political scientists had difficulties in isolating the most obvious variables. Levels of social spending or the timing of the passing of social legislation did not correspond to levels of GDP or democratization, or in the jargon of some of those studies, to levels of economic, political, and social modernization (structural change, percentage of urban population). Among the earliest of adopters, one study found social security legislation diffused up a hierarchy of nations ranked by levels of modernization rather than down (from relative laggard Scandinavian economies to more industrialized countries (Collier and Messick, 1975, p. 1314)). The middle group of adopters on the other hand adopted social security at very different levels of modernization. Late adopters' adoption of social security depended both on a process of diffusion and on economic fundamentals. "Diffusion" was therefore important, and for example the influence of Germany on British social legislation (the trip of Lloyd George to Germany in 1908 is frequently cited), which has been stressed by authors from Hayek to Patrick Attiyah.

Things however have changed thanks to the efforts of economic historians to build up panel data sets with the relevant legislation and economic and social indicators for each country. Peter Lindert for example amassed a great number of expenditure figures for the main social insurance programmes and then studied the correlations with a set of political, economic and social controls (Lindert, 1994). His main conclusion for the period 1880-1930 was that democratization explained most of the bulk of variation in levels of social spending relative to GDP, with also an income effect from GDP per capita. Lindert's conclusion turned the prevailing interpretation of the origins of the welfare state as a conservative reaction on its head (for example, Baldwin, 1990). In an interesting sequel to that article, Michael Huberman and Wayne Lewchuk (2003), using a panel of 17 European countries observed in 1870, 1900 and 1913 argued that openness and democracy explained most of the variation in their indices of labour legislation and social insurance. Greater openness, globalization, did not produce a race to the bottom in social protection and workers' living standards. Rather, they argued that workers demanded more protection from the state as the economy opened up to international trade and capital flows. These

results mirrored those found in Dani Rodrik's classic paper 'Why do more open economies have bigger governments?' (Rodrik, 1998).

Comparative new institutional economics has also tried to explain institutional variation in the extent of labor market legislation and social insurance. In an influential paper, Botero, Djankov, Lopez-de-Silanes and Shleifer (2004) compared the extent of labor market regulation in 85 developed and developing countries around the world in the late 20th century. They conclude in the article that it was each countries' legal tradition that determined the regulatory environment: countries in the so-called civil law tradition (meaning, whose civil law codes are inspired in the French code of 1804), had significantly higher levels of employment protection, union power and social security generosity. Contrary to Civil Law countries, countries whose legal architecture is grounded in the Common or English law tradition displayed a greater preponderance of private contracts over state regulation and displayed more labor market flexibility. In these authors' view, the legal tradition is largely exogenous, being in most cases with the exception of leading Western European countries transmitted through invasion (for example the whole set of civil law codes appearing in Europe after the Napoleonic invasion) or colonization (like in the many countries belonging to the British, German or French empires). Since countries adopted their legal traditions mainly in the 19th century, it is important that the independent institutional trajectory persists over time in order for the argument to make sense. This means that there is little influence between legal families and no convergence of legislation. What this means is that civil law countries should retain their interventionist bias and maintain a state interventionist bias through time (relative to common law countries).

Contrary to explanations stressing the role of path-dependence, large shocks like wars, natural disasters, depressions or technological change can also affect institutional change, especially through radical alterations of relative prices or because institutions are unable to absorb the shock. Generally speaking, the effects of large shocks are difficult to square with narratives emphasizing path-dependency that are more typical of the new institutional economics. Simon Deakin has noted how most labor legislation in Britain in fact reflected the sweeping socio-economic changes brought about by industrialization (Deakin, 2008, p. 1). The literature on Great Reversals stressed the impact of the Great

Depression and of concomitant banking crises in the regulation of financial markets in the 1930s (Rajan and Zingales, ?; Roe, 2006; Musacchio, 2008). In a recent working paper, Kenneth Scheve and David Stavasage have argued that the First and Second World Wars had a far more important role in increasing the progressivity of taxation than expansions of the suffrage and the rise of working class parties, via the effect mass conscription had on changing the attitudes of the upper classes.¹ An important corollary of these arguments, the exception possibly being Deakin's, is that we should observe that institutional changes evolve in large, discrete changes rather than through incremental, path- dependent change. Moreover, large shocks when they affect more than one country generate convergence in policy.

Shocks and policy choices affect countries at different levels of development differently. In the book Journeys toward progress (1967), Albert Hirschman studied episodes of policy implementation in different Latin-American countries over three years, whilst also tracking the early history of those policies (for example irrigation schemes in northern Brazil). One of the things he reports is that late-developers are no short of policy programmes which they can copy from other countries or are offered by aid agencies, those countries generally implement them in a rush after some particular crisis has erupted (a famine, a large protest), they generally do so with little understanding of the problem at hand and with underfunded and poorly trained bureaucracies. It is only after a period of trial and error, with more funding directed at a particular problem that the policy has a larger impact. This might be the reason why there might be convergence in policy choices after a great international shock like WW1, the Great Depression or similar.

This paper exploits variation in the timing of the enactment of legislation to study the determinants of social legislation in Europe before WW1. I show that the observed impact of trade in the passing of legislation is not robust to the inclusion of country random effects. GDP per capita and the level of democratization remain important determinants of social insurance but only higher GDP per capita can be associated with higher levels of

¹ Scheve, Kenneth and David Stavasage (2008). 'The conscription of wealth: mass warfare and the demand for progressive taxation'. Mimeo, Department of Politics, University of Yale.

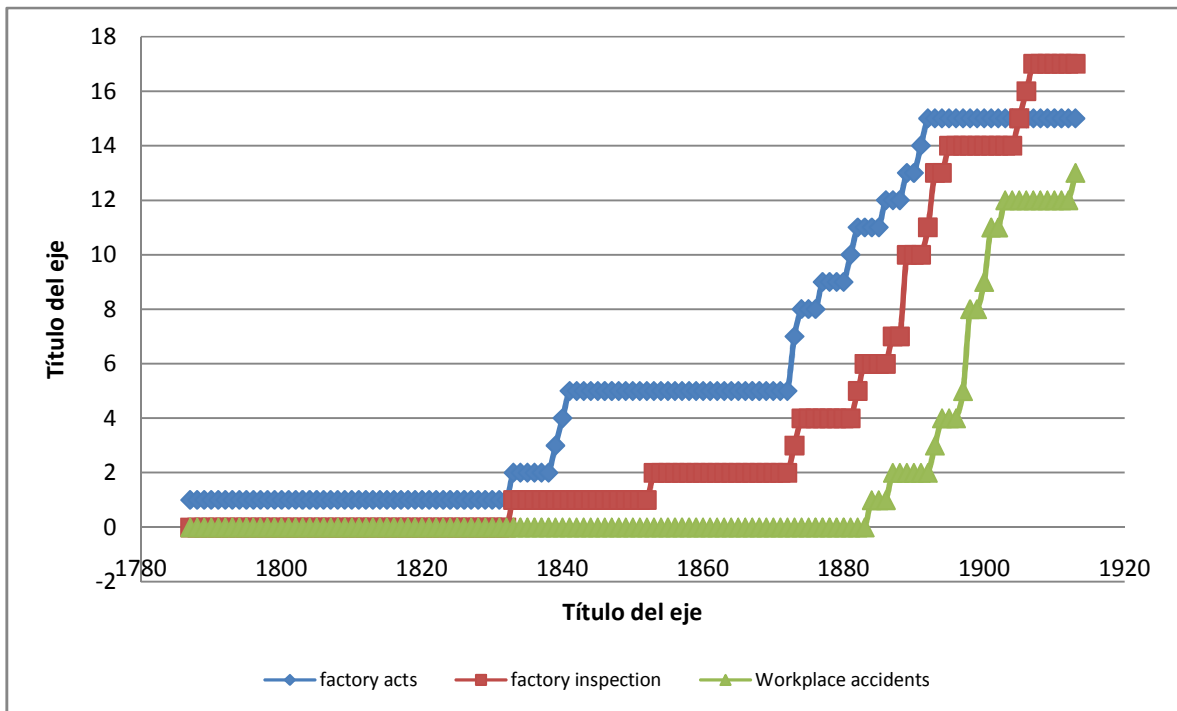
labour market regulation. I try to decompose the effect of GDP per capita into income effects, effects of industrialization and urbanization and the effect on state capacity (the bureaucratic ability of the state to enforce legislation across all its territory), but cannot isolate the impact of those variables. Diffusion in itself was rarely important. Using Spain as a case study, I show the role of widespread ideas about the limits of the liberal civil law codes, the relative consensus in the dominant political parties about ‘social legislation’ but how the reform was delayed by several accidental circumstance (lack of government cohesion most of the times).

Legislation in Europe.

The discussion of social insurance and labour market legislation is somewhat confusing because many insurance programmes are re-distributive and tax-funded whilst many labour market regulations represent only a minimal cost in the government’s budget. There is no clear dividing line in the literature. Authors like Peter Lindert and students of the origins of the welfare state (Baldwin, 1990; Flora and Alber, 1985) focus exclusively on social insurance that is re-distributive (generally meaning universal). However, it is clear that social insurance programmes went hand in hand with other interventions in labour markets –safety legislation, banning of children work, etc- and in industrial relations –recognition of unions, bargaining institutions. This had led some authors to talk about a labour or social compact. For example, Djankov and co-authors consider the regulation of labour encompasses industrial relations, employment protection and social security legislation. Huberman and Lewchuk (2003) combine as well an analysis of the regulation of working conditions and social insurance. Since I am not directly interested in re-distribution here, I study both labour market legislation and social insurance.

In most countries, working conditions became regulated before the passing of social insurance. Led by the UK, many countries passed factory acts and established bodies of factory inspectors since the 1840s. This were sometimes limited to certain industries –like textiles in Britain until the 1870s or mining- but were later on extended to other industries. Most countries also put limits to the employment of women and children and limited night

work or long hours in certain industries. Workplace accidents' compensation and other forms of insurance only came in the late 19th century or the early 20th century. Graph 1 considers the diffusion curve of factory acts, factory inspection and workplace accident insurance in the Huberman-Lewchuk database.



GRAPH 1. Diffusion of policies in Europe, 1787-1913.

Source: Huberman-Lewchuck, Flora-Albers.

Moreover, legislation differed in the obligations imposed on employers and the tax base or in the resources channeled towards the enforcement of legislation. Workplace accidents, sickness or unemployment insurance varied on whether they were contributory – based on payments by workers- or universal, and within contributory insurance schemes, some were voluntary (as in Spain or France) and others were compulsory. In most cases, there was little re-distribution going on. If we consider detailed national histories, we see that in many instances final choices depended on national characteristics. The Scandinavian

countries were largely agrarian but were mass democracies, it was the peasant and farmers that pressed more strongly in favour of universal coverage (Baldwin, 1990, chapter 1). On the other hand, Bismarck for example targeted the policy to the urban working class, especially industrial workers, (Baldwin, 1990, chapter 1 ‘interlude’), and the pensions’ scheme derived from this objective was a contributory, non-progressive scheme. Table 1 gives a breakdown of some of the main social insurance policies showing the wide array of experiences in key aspects of some of the main social insurance policies (from Flora and Alber, 1985, p. 59). I follow their break down of programmes into voluntary or compulsory programmes, meaning employers’ were always liable to pay for some of the risk (accident, sickness, etc.) but that contributions to the insurance fund were voluntary or compulsory. The impacts on the probability for a worker of receiving compensation probably differed between the types of programmes. However, large employers and employers in particularly risky sectors had already implemented insurance funds funded with employers’ contributions, so in the case of accidents or sickness I do not expect that the type of policy has a large impact on compensation.

INSERT TABLE 1

Empirics. Testing for spillover effects from trade or intellectual influence.

In this section I use a discrete random-effects duration model to analyse the decision to adopt a particular policy (factory inspection, minimum age, workplace accidents, unemployment insurance, old age insurance) in a panel of 15 European countries between 1870 to 1913. My dependent variable takes value 0 in the years preceding the adoption of the policy and 1 in the year in which it was adopted (I leave for future research experimenting with specifications taking into account variations in the policy (voluntary-compulsory, universal-contributory). More specifically, I define a hazard function $\lambda (t)$ that describes the probability that a country i will adopt a policy in year t . Because I use yearly data, time is measured as a discrete variable. In general, it is considered discrete duration models are equivalent to grouped continuous duration data (Beck, et al, 1998). The most typical discrete-time models in the literature are the logistic and clog-log models. I start with the logistic model in which the instantaneous probability of adopting a policy is:

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

where α_t is the baseline hazard, β is a set of parameters and X_{it} is a set of characteristics of country i in year t . My set of X-characteristics are taken from the secondary literature and reflect the main hypotheses put forward in the literature. I consciously avoid variables that are generally introduced in the panel regressions that cannot clearly be identified to a hypothesis (this includes variables like population size or the share of catholics or protestants). I take into account GDP per capita (yearly), openness (measured with the ratio of exports to GDP) (yearly), and a variable measuring the level of democratization (polityiv) (yearly). All those variables are tracked on a year to year basis so as to allow the use of random effects. The polityIV variable is a combined variable which measures the levels of autocracy (0 to 10) and democracy (0 to 10) and is computed by subtracting the level of autocracy to the level of democracy. Both the democracy and autocracy indices are based on weighted averages of the level of political participation and the existence of checks and balances to executive power.

I perform two different types of analysis. The first one is a logistic regression with clustered standard errors (to prevent group-level heteroskedasticity) with and without time dummies and spillovers. In a second specification I introduce random effects capture time invariant and fixed effects. In general that means we do not exploit so much the cross-sectional variation of the independent variables and use their changes over time. As a general result I show how in fact the correlation between trade and the passing of social legislation is not robust to the inclusion of country random effects (neither to the inclusion of country fixed effects). This result means that probably trade and openness are correlated with omitted domestic or regional variables. With some exceptions, I also show how the level of democratization is also not robust to taking into account the time-series variation in those variables and the inclusion of fixed and random effects. As a main conclusion, my results point at one general result from the political science literature: the adoption of programmes was highly idiosyncratic, spillover effects pop up sometimes, throwing positively and negatively signed coefficient, but most of the times they are not statistically significant. In general, GDP per capita matters, democratization is not a strong predictor of

labour market legislation and social insurance except in the case of unemployment insurance.

One tricky problem in all duration models is how to model the effect of the passing of time on the hazard rate. I follow Beck, Katz and Tucker (1998) and use time dummies to allow for duration dependence without imposing any functional form on the relationship of the hazard rate with dependence (BKT, 1998, p. 1269).² In addition, there is no obvious way to model policy spillovers. I take what I consider two natural solutions. I model spillovers for country i in time t firstly as the number of countries having passed the law before year t excluding country i . Secondly, I benefit from insights coming from the theory of legal origin which argues that legal families' long run histories are largely independent and model spillovers as the number of countries in i 's legal tradition having passed the law before year t . This assumes potential spillovers only exist within legal families. I include spillovers for the German legal family (Germany, Austria and Hungary), the Scandinavian family (Denmark, Sweden, Norway and Finland(?)) and the French origin family (France, Italy, Spain, Portugal, Belgium, the Netherlands, Russia (?)). Another obvious to test for spillovers is based on geographic proximity or ideological influence (leading country versus following countries). However, the latter are not clearly backed by theory, could be highly collinear with legal origin and have not been tested.

INSERT TABLE 2

INSERT TABLE 3

INSERT TABLE 4

Results in tables 2, 3 and 4 strongly suggest that panel data results for variables like openness and democratization could be determined by the correlation of those variables with omitted characteristics of countries. Exploiting the time series variation of those variables shows changes in democratization or in openness did not increase the likelihood of adopting a policy, with the only exception of unemployment relief in the case of

² Beck, Katz, and Tucker (1998). 'Taking time seriously: time-series-cross-section analysis with a binary dependent variable'. *American Journal of Political Science*, 42, 4, pp. 1260-1288.

democratization. Almost invariably, the regressions throw statistically insignificant, small coefficient with negative and positive signs. Only in the case of factory inspection does the log of “openness” (value of exports in current prices divided by the nominal GDP) throw a significant sign, and it is negative.

Moreover, policy spillovers did not intervene in the transmission of policies in the period. In almost all regressions, I do not find any effect of the number of countries having passed the policies or of spillovers within legal families. This is in agreement from what we know from the historical literature, which points at a far more convoluted process to guarantee the political support for government bills. For example, Stein Kuhnle argues how in the case of Norway a committee was appointed to study workers’ insurance in 1885, proposal for accident and sickness insurance were presented in 1890 and a proposal for old age insurance in 1892, all of them closer to the German model than to previous Danish legislation. Compulsory workplace accident insurance was passed in 1894. The government produced a bill for compulsory sickness insurance for large groups of workers in 1893 but it was rejected in parliament in the same year, and again in 1894, 1895, and 1896. The sickness insurance law was not passed in Norway until 1909, almost twenty years later than in Sweden or Denmark. The domestic support for the policy is what mattered rather than previous experiments in similar countries.

In most specifications, but especially in the random effects models, the strongest predictor of the passing of legislation is the GDP per capita. This could be interpreted in many ways. Firstly, it could be seen along with Peter Lindert as a pure income effect. Secondly, one could argue state capacity to implement and enforce policies might matter too and those are probably correlated with the level of development, and therefore with GDP per capita. Finally, GDP per capita is correlated with industrialization and urbanization and the concomitant social problems and greater levels of collective action. For example, Simon Deakin in his study of long term trends in labour law argues that it was the experience of industrialization not legal origin that caused the intervention of the British state in industrial labour markets (Deakin, 2008). In order to decompose the effect, table 8 presents logit regressions where I try to decompose the effect of GDP per capita. The

evidence is however mixed about the source of the ultimate effect, with sometimes revenue per capita lagged 5 years (from Dincecco, 2008) throwing a positive, significant effect and sometimes urbanization also being positively correlated with the probability of adopting a law.

INSERT TABLE 12

Case studies.

The case studies presented here intend to clarify several points:

1. Although there seems to be a clear developmental threshold to the passing of legislation, the national histories were highly idiosyncratic.
2. The passing of legislation depended on the balance of forces of political elites, with little impact of social democracy or working class voice (explains the lack of impact of democratization).
3. Social reform was rarely a top issue in the political debate (see for example Hay, 1983, p. 25).³

Denmark

According to Baldwin, the passing of social reform in the Scandinavian countries can hardly be described as an achievement of the left. Instead, he argues it was in most cases, and this in turn determined its comprehensiveness and level of protection and subsidy. Generally, the main political conflict occurred between the rising agricultural middle class and the declining urban elites, with the social democrats as secondary actors and in some instances opposing some of the characteristics of the final reforms. It was the farmers' interests that determined the final shape of the 1891 Danish old age pension law, and especially its being non-contributory, universal and tax-funded (generally with indirect taxes as it is the case today). In fact, the law used some of the characteristics of late developing countries (taxation of consumption and lack of sufficient and well-trained bureaucracies) to dismiss the contributory German model. The debate on the Danish pension system coincided with other divisive issues like tariffs and taxation, in fact the

³ Hay, J. R. (1983), *The origins of the Liberal welfare reforms 1906-1914* (London, MacMillan), p. 25.

pensions law was passed at the same time as the new tax on beer and a reduction in the tariffs on sugar (agricultural interests in Denmark were free trade).

Evidence of the weak bargaining power of industrial workers, accident compensation on the other hand was voluntary, based on the voluntary payments of employers to a central insurance fund. The unstable balance between Liberal and conservatives obtained in the passing of old age pensions could not be maintained. Most rural workers and employers faced low risk workplace environments and saw no point in subsidizing workers in more dangerous industries. Large employers (generally, not in heavy industry) and agrarian liberals blocked any attempt to pass universal coverage. In Germany, in contrast, more numerous, politically powerful large employers were only happy to pool risks with less dangerous industries.

Spain 1880-1910

During the 19th century, episodes related to the liberal revolutions had brought about the alliance between the progressive politic groups and the working class in the main cities to defeat *absolutism*. In Barcelona, joint boards of workers and employers had been tried for some time to solve strikes. This was the case of the ultimately failed experience of the joint commission of textile workers and employers in Barcelona at the onset of the Espartero regency (1840).⁴ Similar experiments appeared during the Progressive Biennium (1854-55). During the First Republic (1873), there were boards of conciliation in Barcelona, Valencia, and Alcoy (Alicante). In a brief stint in government, lasting less than two months, the republican federalist Pi y Margall brought about a reformist agenda based on industrial tribunals to arbitrate on labour conflicts, and even projects to reduce the workday to nine hours, to establish a minimum wage of 6 *reales*, and laws prohibiting child labour and regulating women work in industry.⁵ But this experience was aborted by the collapse of the First Republic in July 1873.

⁴ Barnosell, Genis, *Origens del sindicalisme català* (Vic, 1999), pp. 169-186.

⁵ Hennessy, C.A.M., *The Federal Republic in Spain. Pi y Margall and the Federal Republican movement, 1868-1874* (Oxford, 1962), pp.200-201. The 'social' ideas of Pi y Margall collected in Molas, Isidre (ed.), *Ideario de Pi y Margall* (Barcelona, 1966), pp.68-75.

The Restoration of the monarchy in 1874 severely curtailed the political power enjoyed by Republicans. Their offices were closed, and authorities forbade republican meetings and the singing of *La Marselleise*. Repressed or silenced up to 1881, republicans were also internally divided among the ‘possibilist’ faction of Castelar, and the different groups of Pi i Margall, Salmerón, Figueras and Ruiz Zorrilla (all of them having been presidents during the revolutionary period). Furthermore, their electoral possibilities were severely limited by a restrictive electoral system based on single-member districts.⁶ The introduction of universal male suffrage in 1890 and the reduction of electoral fraud in the great cities made way for the participation of republicans in parliament but they never attained more than 10 per cent of the seats in the chamber.

The limited political power of Republicans contrasts sharply with the wide majorities obtained by the dominant parties. The restrictive electoral system was coupled with the practice of *encasillado*, through which liberals and conservatives agreed the deputies to be elected in most electoral districts. This made sure large government majorities were obtained, while a pact between Liberals and Conservatives also guaranteed both parties took turns in power. Therefore, the problem for governments was not building majorities with the minor parties, but rather disciplining their own large majority. Divided among different political factions and lacking internal discipline, the government had substantially less control over the members of its majority than what is common nowadays.

In this context, parliamentary or senate initiatives necessarily fell on the government and depended on internal developments within the dominant parties.⁷ The first important and finally aborted step in the direction of reform was taken in the early 1880s by the government headed by Posada Herrera, belonging to the left of the Liberals (Dynastic Left). It lasted less than 4 months after it was unable to pass a law on universal suffrage. In 1883,

⁶ The 1878 electoral law established a system of election based mainly on single-member districts and about 20 multi-member districts in the big cities. A restrictive electoral system assured that Conservatives and Liberals remained the two dominant parties and reduced pluralism in Parliament. Universal male suffrage was granted in 1890.

⁷ By this I mean “the action” putting the process of legislating in motion. For instance, Aragón, Manuel, “La iniciativa legislativa,” *Revista de la Facultad de Derecho de la Universidad Complutense* (1986-87), pp.75-98.

its Interior minister, Segismundo Moret, a man of the 1869 Revolution and an *institucionista*, passed a Royal Decree creating the *Comisión de Reformas Sociales* (Social Reforms Commission). This body was devoted to the study, as it was defined at the time, “of all issues related to the welfare and advance of the working classes in agriculture and industry and affecting the relationship between capital and labour.”⁸ In spite of the symbolic importance of the Commission, the truth was that it obtained very little political support. Azcárate, a member of the *Comisión*, blamed “the apathy of the government” and “the lack of means,” a “budget without a single *peseta* to start collecting statistics on labour,”⁹ as the main causes making the project fail. The Commission could not gather the funds to publish the famous enquiry of 1884-1885 until 1889.¹⁰ Even after the agency was re-organised in May 1890 (shortly after the 1st of May), its bills were turned down in parliament, for instance the 1893 bill on joint committees of capital and labour to solve strikes or the one on Sunday rest.¹¹ Others, like the bill on labour contracts, never reached the political debate.

It is necessary to wait until the political crisis brought about by the Cuba war in 1898 to see further movements in the direction of reform. This first legislative effort corresponded to the Conservative party in which some internal currents favoured a shift towards reform. In 1890 after the successful first May Day, Cánovas del Castillo, leader of the Conservative party, had delivered a speech in the Ateneo de Madrid entitled “The labour question and its new character.” In the same year, another Conservative notable, Salvador Bermúdez Castro (Marquis of Lema) gave a speech with the title “The social question and political traditions” in front of the same audience. Adolfo Buylla considered

⁸ Palacio Morena, Juan Ignacio, *La institucionalización de la reforma social en España (1883-1924). La Comisión y el Instituto de Reformas Sociales* (Madrid, 1988), p.25. The most frequently cited contributions to the literature on the *Comisión* are: Castillo, Santiago, “El reformismo en la Restauración: del Congreso Sociológico de Valencia a la Comisión de Reformas Sociales,” *Estudios de Historia Social*, number 30 (July-September 1984), pp.21-78; Castillo, “Introducción,” in *Reformas Sociales. Información oral y escrita* (Madrid, 1985 [1889-1893]); Calle Velasco, M. Dolores, “Comisión de Reformas Sociales, de la represión al análisis de la conflictividad social,” *Studia Historica*, volume 2, number 4 (1984); Elorza, A. and M. C. Iglesias, *Burgueses y proletarios. Clase obrera y reforma social en la Restauración (1884-1889)* (Barcelona, 1973).

⁹ Quoted in Buylla, Posada, Morote, *El Instituto del Trabajo*, p.183.

¹⁰ The petitions for funds from the members of the *Comisión* to the Minister of Interior in Palacio Morena, *La institucionalización*, pp.42-44.

¹¹ Zancada, *El obrero en España*, p.215. The project was ordered through a Royal decree in 1883 and finalised in 1884.

the first speech, by Cánovas del Castillo, an example of what he defined as state socialism or conservative socialism, a tradition he also identified with the academic Eduardo Sanz y Escartín.¹² Acknowledging the multiple meanings that socialism (*socialismo*) had in the Spanish debate, Buylla identified state socialism with Bismarck, and defined it as “the economic school that, aware that the distribution of wealth is unfair and sympathetic towards the state of the labouring classes, opposes firmly all violent and revolutionary solutions.” Harsh opposition to radical politics, he went on, was also coupled with “the belief that the state is able to introduce reforms advancing the welfare of the working classes, gradually and not threatening the present order.”¹³

In addition to the authoritarian connection with Bismarck, social Catholicism and the encyclical *Rerum Novarum* was essential ingredient of the first Conservative reforms.¹⁴ Characteristically, the first bill proposed by Cánovas was the Sunday rest law in the early 1890s, which attracted obvious support from the Catholics. In the Senate, the debate brought the law closer to the reactionary Catholics and away from the original contents devised by the *Comisión de Reformas Sociales*.¹⁵ Evidence of the lack of political will and support for the project, the law was not passed, while instead two laws drawn up to repress anarchism were made effective in 1894 and 1896.¹⁶

A series of profound political developments suddenly changed the political context in the late 1890s. Most important of all was the so-called “Regenerationist” movement, which gained momentum during the Cuba war with the United States in 1898. Headed by another *institucionista*, Joaquín Costa, “regenerationism” in fact included a myriad of sometimes contradictory perspectives on the economic and political state of Spain. Classic themes of the regenerationist literature were the backwardness of the Spanish economy (especially in agriculture), and the need to moralise and modernise a passive, illegitimate,

¹² Buylla, *Economía*, p.153. As well in Botella, *El socialismo*, pp.346-347. Another definition (“legal socialism”) is given Pereira, Luis, “Socialismo jurídico,” in Galán Eguizábal, Félix and Francisco Nuñez Tomás, *Anuario obrero. 1915*. (Madrid, 1916), pp.9-13.

¹³ Buylla, *Economía*, pp.153-154.

¹⁴ Montero, *El primer catolicismo social*, pp.82-83

¹⁵ Montero, Feliciano, “La polémica sobre el intervencionismo y la primera legislación obrera en España. 1890-1900. 2a parte: el debate político-parlamentario,” *Revista de Trabajo*, number 61-62 (1981), pp.59-65.

¹⁶ Zancada, *El obrero en España*, p. 215.

and fraudulent liberal state unable to address the most pressing problems of the country.¹⁷ Moreover, it affirmed the need for the state to overcome the liberal revolution, which had ended with the liberal reforms of the 1880s (universal male suffrage, the associations' law of 1887, homogenisation of the administrative and taxation system), and led to a more active role of the state in the economy.¹⁸ Characteristic as well were the appeals to increase the supply of state-funded, free secular schools, which for instance contradicted with their appeals to reign in public expenditure and government deficits. A book by Macías Cavea advocated it was necessary that the state improve its administration and bureaucracy, decentralise administration towards the province and the municipality, and introduce social reforms to solve labour unrest. In the latter case, regenerationists approached social Catholicism, for instance affirming that “in order to avert *destructive* socialism (his emphasis) (...) there is no other way, in the moulds of the current public law in Europe, but to adopt what the great archbishop of Westminster (*sic*) called constructive socialism, or Christian socialism (...).”¹⁹ However, regenerationism did not push for a democratic agenda and, instead, fantasised about a ‘benevolent’ dictator or authoritarian president, to the point of affirming, like Macías Picavea did, that “in government we need Bismarcks, with grafts from (*injertos de*) Saint Francis of Assisi (*sic*).”²⁰ In fact, the ideas put forward in the period have the flavour of a “revolution from above,” as politicians associated with the movement like Antonio Maura put it,²¹ and were an effort to implement the movement's idea of “making the monarchy national” and solving the crisis of legitimacy of the state.²²

Regenerationism gained momentum in the midst of political crisis and gained influence across the political spectrum. Nevertheless, it was from conservative ranks that

¹⁷ Maurice, Jacques and Carlos Serrano, *Joaquín Costa: crisis de la Restauración y populismo (1875-1911)* (Madrid, 1977), pp.27-30. Examples of regenerationist literature are: Mallada, Lucas, *Los males de la patria* (Madrid, Alianza Editorial, 1969); Macías Picavea, R., *El problema nacional. Hechos, causas remedios* (Madrid: Seminarios y Ediciones, 1972).

¹⁸ This went hand in hand with developments in political economy, Pan-Montojo, Juan “El atraso económico y la regeneración,” in Pan-Montojo (ed.), *Más se perdió en Cuba. España, 1898 y la crisis de fin de siglo* (Madrid, 1998), pp.261-335.

¹⁹ Quote is from Joaquín Costa in Maurice and Serrano, *Joaquín Costa*, p.84.

²⁰ *Ibid.*, p.31.

²¹ Cabrera, Mercedes, “El conservadurismo maurista en la Restauración. Los límites de la ‘Revolución desde arriba’,” in J.L. García Delgado (ed.), *La España de la Restauración. Política, economía, legislación y cultura* (Madrid, 1985), pp.55-71.

²² Maurice and Serrano, *Joaquín Costa*, p.30.

this programme was pushed forward. In August 1897, the Conservative leader Antonio Cánovas del Castillo was shot to death by an Italian anarchist paid by Cuban exiles,²³ paving the way for the arrival of a new generation of Conservative politicians, some of them with typically regenerationist objectives. This was especially the case of Antonio Maura, who probably entered in contact with the regenerationist literature when, earlier in his political career, he was associated with Germán Gamazo, an important political figure of the Liberal party.²⁴ First as Minister of Interior (*Gobernación*) and later on as president, Maura sponsored three typical regenerationist projects such as a new electoral law, the law on the merchant navy, and the finally aborted law on administrative decentralisation.²⁵ Another regenerationist project, the reduction of government deficit and the first efforts to rationalise the tax system were also tried by Fernández Villaverde, finance minister during the Silvela-Polavieja government, who favoured intervention in labour matters. Member of the *Comisión de Reformas Sociales*, in 1900 Fernández Villaverde delivered a moderately reformist speech at the Academy of Jurisprudence of Madrid entitled “Industrial combinations and workers’ strikes from the point of view of the law.”²⁶ Fernández Villaverde also became one of the leading voices in the elaboration by the *Comisión* of the 1901 bill on strikes.

In this context, the Silvela- General Polavieja government, with Eduardo Dato as Interior minister, introduced the first reforms in 1900: the accidents law, which established employers’ liability for workplace accidents, and the law regulating children and women’s work. This legislation perfectly defined conservative interventionism. In the case of the accidents’ law, although there had been a bill drafted by the *Comisión de Reformas Sociales*, Eduardo Dato later related the passing of the workplace accidents’ law to the 1884 law passed in Germany by Bismarck.²⁷ The project had a clear social catholic leaning as a priest was allowed to sit in the boards that were created to supervise the implementation of workplace safety regulations (*juntas de reformas sociales*).

²³ Eisdale, Charles J., *Spain in the Liberal Age. From Constitution to Civil War, 1808-1939* (Oxford, 2000), p.192.

²⁴ Tusell, Javier, *Antonio Maura. Una biografía política* (Madrid, 1994), pp.49-50.

²⁵ On the latter, Tusell, Javier, *La reforma de la administración local en España (1900-1936)* (Madrid: Instituto de Estudios Administrativos, 1973), pp.89-128.

²⁶ Gascón Marín, *Los sindicatos*, tome 1, p.100.

²⁷ Eduardo Dato, DSC 28th February 1902, number 131, p.3809.

There is no evidence that the accidents law found much opposition in Parliament, with its discussion taking place in the midst of the debate on the budget in late 1899 and early 1900. This led the liberal notable Count Romanones to remark that Dato was trying to pass “a fundamental law” as if it was a minor vote approving the building of a provincial road.²⁸ The law was discussed on the 17 January with an amendment by Gumersindo de Azcárate, which was accepted by the parliamentary commission. This in turn led to the creation of a mixed commission of parliament deputies and senators adopting a final text to be passed in the Senate. Práxedes Zancada, writing in 1902, perceived that “based on generous motives, (the law) did not find opposition in the chambers (and) (...) was enthusiastically welcomed by public opinion.”²⁹

Because the textile industry employed mainly women and children, the law regulating female and child work found more opposition. Employers responded late to the passing of the law in the senate, which was sent to congress on the 19th December 1899. Through its deputies (Sallarés, Ferrer i Vidal, Sala i Argemí, Sedó), the *Fomento del Trabajo Nacional* (the main Catalan employers’ association) managed the suspension of the debate for two weeks until employers could write their reports and send them to the parliamentary commission.³⁰ There was also an amendment to the bill put forward by Sedó, one of the largest cotton textile employers, accepted by the commission but voted out later on.³¹ In spite of those efforts, the original bill was not modified in any substantial way.

In 1901, a new liberal government (headed by Sagasta) submitted a new bill on strikes, with Alfonso González at the Minister of Interior. Based on a restrictive versions of the strike bill elaborated by the *Comisión* by the likes of Sanz Escartín, Fernández Villaverde, the *institucionista* economist Piernas Hurtado, and Moreno Rodríguez, the law defended the right to strike in the preamble but limited it by stipulating the cases of illegal

²⁸ Conde Romanones, DSC 17th January 1900, numer 107, p.3568.

²⁹ Zancada, *El obrero*, p.218.

³⁰ Borrás Llop, “Actitudes patronales,” pp.636-637. Excerpts of the report were published in *La Veü de Catalunya* during January 1900.

³¹ DSC 22nd January, number 111, appendix 8.

strikes in the following articles (based on article 556 of the Criminal Law code).³² Among the most polemic points of the law was its treatment of the coercion of strikers to non-union workers or the right of employers to lay off union workers and employ only non-union workers. The labour movement's opposition to the law was warranted by the restrictive interpretation of all these issues.³³ A parliamentary commission presided by Gumersindo de Azcárate changed the bill substantially by easing most of the restrictions, especially the ones referring to the distinction between legal and illegal strikes.

The constitution of these parliamentary commissions helps understand the internal workings of legislative work in the Restoration parliament. Generally, commissions reflected the political composition of parliament but reformers, and most notably the republican Azcárate, were able to sit and even preside the parliamentary commissions on labour issues. This guaranteed that the commission presented a bill equally or more progressive than the original purposes of the government or the senate.³⁴ In turn, it diminished the chances of the bill being passed in a notably more conservative parliament, divided among the issue reform/abstention in labour matters, with little room for middle ground solutions.³⁵ This is what happened in the case of the 1901 strike law, which by late 1902 had not been discussed in parliament and had few chances of being passed.

³² Article 556 penalising combinations of workers aimed at altering the 'normal' levels of wages and hours had been not used since 1882 (Pablo Iglesias, DSC 19th October 1910, number 45, p.1226), and as such was recognised by the Supreme Court in early 20th century. Probably, the reason for this were the difficulties in gathering evidence to prosecute strikers rather than judiciary's progressivism.

³³ Canalejas' foreword, p.CLVI, in Buylla, Posada, Morote, *El Instituto del Trabajo*.

³⁴ On the election of commissions Pons y Umbert, Adolfo, *Organización y funcionamiento de las Cortes según las Constituciones españolas* (Madrid, 1992 [1906]), pp.712-714. It says little about the selection process of members from the different parties. One author has argued that generally representation from all political groups was warranted by an 'implicit' rule guaranteeing the representation of all parties: Martorell Linares, Miguel, "Gobierno y parlamento: las reglas del juego," pp.215-221, in Cabrera, Mercedes (ed.), *Con luz y taquígrafos. El Parlamento en la Restauración (1913-1923)* (Madrid, 1998). Even if the selection rule more or less maintains the composition of the Parliament, self-selection assures members of the commission are preference outliers. However the direction of the effect in the case of social reforms is in principle ambiguous. In practice however commissions' preferences were biased towards more reform with respect to a notably more 'conservative' parliament. On committee (commissions) power, see for instance Shepsle, Kenneth A. and Barry R. Weingast, "The institutional foundations of committee power," *American Political Science Review*, 81 (March 1987), pp.85-104; a survey of the literature in Peter C. Ordeshook, "The spatial analysis of elections and committees: four decades of research," in Mueller, Dennis C. (ed.), *Perspectives on public choice. A handbook* (Cambridge, 1997), chapter 12.

³⁵ The only contrary case was the coalition between conservative's reformism and social Catholicism, that could even incorporate reactionary Catholics (like in the case of the Sunday rest law or votes on laws like the one limiting the workday for women).

In 1902, the *cuestión social* was at the centre of the political debate. In early 1902 another bill creating conciliation boards of employers and workers entered the process of parliamentary discussion. The parliamentary commission again contained representatives of all political parties. Among them there were republican reformers such as Melquíades Álvarez, conservatives like Isasa or an anti-reform liberal such as López Puigcerver.³⁶ Shortly after the general strike of Barcelona, Canalejas, from the Ministry of Agriculture, Industry, and Trade, tried to pass his project, for which he had been advised by the University of Oviedo professors Buylla and Posada, to create an institute devoted to the study of the condition of the working classes and the elaboration of legislation (*Instituto de Trabajo*).³⁷ Canalejas tried to obtain the maximum political support by contacting the conservative Dato, the republican Azcárate and the socialist Iglesias, to whom he even proposed the directorship of the Institute. In this case, the parliamentary commission, headed by the liberal Alvarado and including Gumersindo de Azcárate, did not change the original bill much and was submitted for vote with the only opposition of the conservative member of the commission, Eugenio Silvela, who opposed some of the articles of the law.

In the midst of the political debate after the general strike and of the crisis of the second Sagasta government, a crisis Canalejas' entry did not solve, the bill did not raise much interest in the chamber, but was mentioned frequently and discussed ardently in other ongoing debates. During the debate, it was the Conservative Romero Robledo who proposed an amendment to the bill and led much of the discussion, along with Maura and Silvela. However, later on, in a strategic move not even understood by his contemporaries, Romero Robledo finally withdrew all his amendments and the law was passed thanks to the votes of his parliamentary group on the 7th May 1902.³⁸ This helped overcoming the opposition from inside the liberals' ranks, who were profoundly divided by the law. Liberals like Moret and López Puigcerver had expressed their opposition to the project in the parliamentary debate.

³⁶ DSC 22nd February 1902, number 126, p.3661. Profiles of parliamentarians and senators in Dodero Vázquez, J.F., *Las últimas cortes de la Regencia* (Madrid, 1902)

³⁷ The *Instituto* was to depend from the Ministry of Agriculture, with a budget 170,000 *pesetas*, in order to increase the efficiency of the institution Canalejas warranted the permanence of elected officials (traditionally, government officials were aligned to political parties and lost their post when their party lost the election).

³⁸ Buylla, Posada, Morote, *El Instituto del Trabajo*, pp.177-183.

In 1903 a new general election organised by Antonio Maura as Minister of Interior led to a new conservative majority in Parliament with Silvela as president. In April 1903 a royal decree created the *Instituto de Reformas Sociales* (IRS), which, being based on the *Instituto del Trabajo* project, was transferred to the Ministry of Interior (but Maura was not behind the project). Furthermore, compared to the original project, the government now limited the number of representatives elected by employers and workers and instead increased the number of members appointed by the government (12 for workers, 12 for employers, 30 for government). In spite of the unilateral decision by the government to push forward a ‘conservative’ and loyal institute, the government through a royal decree elected a rather pluralistic list of members.³⁹ In a concession to reformists, Gumersindo de Azcárate was called to be the president of the *Instituto*. Other elected members had previously been at the *Comisión de Reformas Sociales* –the most notable figures being Moret and Fernández Villaverde. The list also included the republican and reformist Melquíades Álvarez, the economist José María Piernas Hurtado, linked to the reformist *Institución de Libre Enseñanza*, and José Maluquer y Salvador, from social catholic circles.⁴⁰ It was clear that the royal decree creating the *Instituto de Reformas Sociales* had been a move to control the original Canalejas bill (still in the Senate for approval).

The fall of the Silvela-Maura government in July 1903 triggered a more purely reformist, if weaker, government with Fernández Villaverde as president and García Álix as minister of Interior. The summer of 1903 had witnessed an increase in strikes and industrial conflict. With the prisons full of trade unionists, one of the first decisions of the new minister was to give amnesty to arrested workers. Later on, García Alix agreed with Azcárate to submit, along with the bill on strikes, bills on conciliation boards and industrial tribunals, plus another one regulating apprenticeship.⁴¹ However, none of these gathered enough political support. In the case of strikes, the law was first submitted to the Senate, which after approving it, passed it on to the Parliament much later on the 14th of October

³⁹ Royal Decree 13 May 1903.

⁴⁰ Palacio Morena, *La institucionalización*, p.66.

⁴¹ Buireu Guarro, Jorge, *Antonio García Álix: un ministro del regeneracionismo (1852-1911)* (Madrid, 1990), page ¿???

1904. The Villaverde government, however, unable to pass the budget for 1904, had fallen in late 1903.

The next parliamentary attempts to pass legislation corresponded to the period of Count Romanones as Minister of Interior in the liberal government of 1906, which on the 27 January of 1906 presented the bills on strikes and boards of conciliation. However, by that time the political debate on the *ley de jurisdicciones* (law of jurisdictions, a severe limitation of the freedom of press and reunion) was about the start, with a famous campaign led by republicans and other minor groups to obstruct the normal functioning of the parliament to delay the final vote of the chamber.⁴²

It was another conservative government that finally passed the laws on strikes, on boards of conciliation and arbitration, and on industrial tribunals. Paradoxically, this happened during the ‘long government’ of Antonio Maura with the hard-liner Juan de la Cierva at the Interior Ministry. In spite of de la Cierva and Maura’s sheer lack of reformist credentials, it was their government that was pushing more decisively for reform, backed by a cohesive majority in Parliament. It was de la Cierva who allowed the IRS to work more actively, doubling its budget from 150,000 to 290,000 pesetas in 1908 and further to 314,000 pesetas in 1909. Through a series of royal orders in early 1907, the factory inspectors’ service was also organised. He also allowed the IRS to intervene in the most important strikes of the period 1907-9 (a period however of low strike activity).⁴³

The parliamentary commission for the bill on strikes was led by two reformers: Gumersindo de Azcárate as president and Gabriel Maura Gamazo as secretary.⁴⁴ Another member, Alvarado, representing the Liberal party, had been in the 1902 strike law

⁴² The practice was called *obstruccionismo*. Posada, Adolfo, “Obstruccionismo”, *Enciclopedia Juridica Española*, volume XIII, pp.749-752, citing famous cases of parliamentary obstruction: the 1893 debate on municipal elections, the Maura law of 1907 on the local administrative system or the 1916-17 financial reforms of the liberal Finance minister Santiago Alba, page 751.

⁴³ Cierva, Juan de la, *Notas de mi vida* (Madrid, 1955), written in 1932, p. 119.

⁴⁴ Maura Gamazo, son of Antonio Maura, also sponsored the more conciliatory policy of the prefect of Barcelona, Ángel Ossorio, a fact de la Cierva resented, *ibid.*, p.101, p.131-135.

commission.⁴⁵ Moreover, this same commission also started drawing up the bill on industrial tribunals.⁴⁶ The strike law was voted on the 7th March 1909, with the *canalejista* Luis Morote willing to eliminate any restriction on the right to strike.⁴⁷ Remembering his participation on the 1902 campaign for the *Instituto del Trabajo* and the resistances it found, a suspicious Morote remarked in the parliamentary debate: “it is remarkable how things have changed! Today, on the benches of the parliamentary commission, presiding a commission of a reactionary and conservative government, sits Mr. Azcárate, who represents the radical extreme of Spanish politics (referring to republicans), (...) defending the right to strike. Heading the chamber (referring to the Conservative reformist Eduardo Dato), there is a distinguished man who agrees on everything with the presidency of the commission, as everyone else does; and Mr. Moret applauded the words just pronounced by Mr. Azcárate; he who once belonged to that distinguished school of individualists that some time ago were the glory of the Spanish democracy (referring to his participation in the revolution of 1869).”⁴⁸ Clearly, in spite of Morote’s ironies, a consensus had been reached to pass relatively restrictive and conservative labour laws.

The strike laws of Maura’s ‘long government’ established mechanisms to settle strikes in a less acrimonious way. Industrial tribunals had jurisdiction over labour contracts and were designed to settle minor disputes avoiding costly strikes or inefficient ordinary tribunals. Furthermore, the law on conciliation boards allowed the local boards of social reforms (*juntas locales de reformas sociales*, established by the 1900 accidents law) to arrange the settlement of strikes if the contending parties accepted to do so. The laws officially recognised unions by allowing their participation in mixed institutions with representatives of employers, authorities and workers. The strike law of 1909 explicitly recognised the right of workers to strike, while at the same time put a limit on employers

⁴⁵ DSC 30th March 1907, number 172, p.5562. On the 5th November 1908, two members of the Commission were changed but not Azcárate, Maura Gamazo or Alvarado.

⁴⁶ DSC 1907, number 180, p.5597.

⁴⁷ Luis Morote was a journalist linked to Canalejas, he wrote one of the most important regenerationist texts *La moral de la derrota* (Madrid, 1900), in 1901 he wrote a series of influential articles criticising the living and working conditions of Catalan company towns (the series “Feudalismo en las fábricas”), in 1902 he had an active participation in the *Instituto de Trabajo* project. Pérez Garzón, J.S., *Luis Morote. La problemática de un republicano (1862-1923)* (Madrid, 1976).

⁴⁸ Luis Morote, DSC 17th March 1909, number 107, p.3174.

and workers ability to coerce each other. Public order consideration and anti-terrorist legislation, however, kept the legal position of unions in a shady area.

Conclusion

This paper uses both aggregate and case-study evidence to show that several commonly held hypotheses on the rise of the welfare state in Europe are not robust. Exploiting both cross section and time series changes in some of the key variables, I show how in general neither democratization nor openness played an important role in the expansion of labour market regulations and insurance policies. My regressions clearly point at the existence of a developmental threshold to the passing of social reform, but beyond a certain point national trajectories do not correspond with economic and political fundamentals. Rather, as the case studies show, complex balances of power between political elites explain the passing of policies and the gaps and fundamental differences among policies in the same country. Moreover, my regressions lend little support to the existence of policy spillovers: countries passed legislation at roughly the same time because they were similar, not because the adoption of one policy affected countries in another. My results also give little support to the effect of legal tradition on the passing of legislation.

Table 1. Core social insurance laws in Europe before 1913

	Accidents		Sickness		Old age		Unemployment	
	Voluntary	Compulsory	Voluntary	Compulsory	Voluntary	Compulsory	Voluntary	Compulsory
Austria		1887		1888				
Belgium	1903		1894		1900		1907	
Denmark	1898		1892			1891	1907	
Finland		1895						
France	1898		1898		1900?	1910?	1905?	1914?
Germany		1884		1883		1889		
Italy		1898	1886		1898			
Netherlands		1901		1913		1913		
Norway		1894		1909			1906	
Russia								
Spain	1900							
Sweden	1901		1891			1913		1913
Switzerland		1911	1911					
UK	1906			1911		1908		1911

Table 2. Logit regression (clustered errors in parentheses)

	Factory inspection	Factory inspection	Factory inspection	Factory inspection	Minimum age	Minimum age	Minimum age	Minimum age
Constant or initial Baseline hazard	-39.9*** (17.61)	-47.51* (29.21)	-51.24 (31.75)	-103.5** (43.1)	-33.56** (14.05)	-41.49 (25.03)	-39.51 (28.6)	-10.61 (31)
Ln (GDP)	4.54*** (1.51)	5.33 (3.48)	6.1 (3.77)	12.53** (5.03)	3.8** (1.62)	4.77 (2.93)	4.57 (3.38)	1.24 (3.64)
Ln(open)	-1.38** (0.63)	-1.68 (1.38)	-1.3 (1.62)	-2.93 (2.16)	-0.463 (0.7)	-0.12 (1.22)	0.014 (1.48)	2.08 (1.64)
Polity iv	-0.06 (0.05)	-0.1 (-0.9)	-0.02 (0.13)	-0.07 (0.13)	-0.178 (0.11)	-0.22 (0.13)	-0.21 (0.15)	0.02 (0.18)
Spillover effects	No	No	Yes	Yes	No	No	Yes	Yes
All			-1.32*** (0.44)				-0.25 (0.17)	
German				-1.34 (1.42)				2.16** (1.05)
Scandinavian				-0.26 (0.85)				-0.02 (0.22)
French				-2.02** (0.82)				-0.77** (0.31)
Time dummies	No	Yes	Yes	Yes	No	Yes	Yes	Yes
N	171	171	171	171	246	246	246	246
countries	10	10	10	10	11	11	11	11
Log L	-36.21	-29	-24.6	-21.15	-35.36	-30.7	-30.24	24
Pseudo R Sq	0.05	0.21	0.33	0.42	0.09	0.2	0.22	0.3

Table 3. Logit regressions (clustered errors in parentheses)

	Accidents compensation	Accidents compensation	Accident compensation	Accident compensation
Constant or initial Baseline hazard	-27.7* (15.12)	-36.6* (18.7)	-33.89* (17.9)	-31.04 (19.9)
Ln (GDP)	2.93 (1.81)	3.87* (2.23)	3.57* (2.13)	3.19 (2.38)
Ln(open)	-1 (0.65)	-1.15 (0.85)	-1.04 (0.85)	-1.01 (0.92)
Polity iv	-0.04 (0.09)	-0.09 (0.102)	-0.08 (0.1)	-0.05 (0.12)
Spillover effects	No	No	Yes	Y
All			-0.17 (0.22)	
German				0.22 (0.57)
Scandinavian				0.35 (0.38)
French				-0.11 (0.21)
Time dummies	No	Yes	Yes	Yes
N	346	346	346	346
countries	15	15	15	15
Log L	-55.76	-46.5	-46.2	-45.6
Pseudo R Sq	0.05	0.21	0.21	0.22

Table 6. Logistic regressions (clustered errors in parentheses)

	Unemp	Unemp	Unemp	Old age	Old age	Old age	Old age
Constant or initial Baseline hazard	-8.88 (11.99)	-4.08 (14.98)	-14.34 (11.42)	-22.91* (13.07)	-20.2** (9.5)	-18.6* (9.52)	-21.5** (10.7)
Ln (GDP)	0.54 (1.44)	-0.11 (1.78)	1.13 (1.37)	2.43** (1.05)	1.87* (1.14)	1.71 (1.18)	2.07 (1.29)
Ln(open)	0.64 (0.77)	0.72 (0.92)	0.53 (0.71)	0.063 (0.45)	0.13 (0.45)	0.16 (0.45)	0.06 (0.56)
Polity iv	0.29* (0.12)	0.28** (0.13)	0.32 (0.16)	-0.02 (0.07)	-0.022 (0.07)	-0.014 (0.076)	-0.02 (0.07)
Spillover effects	No	Yes	Yes	No	No	Yes	Yes
All		0.35* (0.18)				1.08 (0.71)	
German							
Scandinavian			1.33* (0.81)				0.85 (0.57)
French			0.7 (0.77)				0.27 (0.69)
Time dummies	No	No	No	No	Yes D18961900 significant	Yes D18961900 significant	Yes D18961900 significant
N	507	507	507	444	444	444	444
countries	15	15	15	15	15	15	15
Log L	-22.67	-21.5	-21.8	-37.15	-31.71	-33.29	-32.97
Pseudo R Sq	0.19	0.23	0.22	0.07	0.16	0.17	0.18

Table 5. Random effects logistic regressions. Logit coefficients (not marginal effects or odd ratios)

	Factory inspection	Factory inspection	Factory inspection	Factory inspection	Minimum age children	Minimum age children	Minimum age children
Baseline hazard Constant or in 1870-1875	-39.91 (22.15)	-67.49 (47.16)	-50.94 (31.18)	-109.67 (50.8)	-33.57* (18.01)	-33.85** (17.23)	-26.87 (20.3)
ln(GDPcap)	4.55* (2.65)	7.86 (5.7)	6.11* (3.75)	13.44** (6.31)	3.8* (2.12)	4.56* (2.59)	3 (2.4)
ln(openness)	-1.39 (1.08)	-2.41 (1.95)	-1.3 (1.43)	-3* (1.81)	-0.46 (0.93)	0.01 (1.18)	-0.04 (1.04)
Polity IV	-0.06 (0.1)	-0.18 (0.2)	-0.02 (0.14)	-0.05 (0.17)	-0.18 (0.13)	-0.21 (0.14)	-0.12 (0.15)
Countries having passed the law ALL			-1.32** (0.54)			0.18 (0.25)	
With German law tradition				-0.95 (1.88)			2.16** (1.05)
Scandinavian				-0.16 (0.79)			-0.02 (0.47)
French				-2.1** (1.06)			-0.78 (0.45)
Time dummies	No	Yes D18911895 D19061910 significant	Yes D18911895 D19061910 significant	Yes D18911895 D19061910 significant	No	Yes D19011905 D19061910 significant	Yes D19011905 D19061910 significant
Random effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log Likelihood	-36.21	-28	-24.05	-20.33	-35.6	-30.1	-27.09
N	171	171	171	171	252	252	252
Countries	10	10	10	10	11	11	11

Note: * significant at the 10 per cent level, ** 5 per cent.

Table 6. Random effects logistics regressions. Social insurance programmes.

	Workplace accident	Workplace accident	Workplace accidents	Workplace accidents	Sickness insurance	Sickness insurance	Sickness insurance	Sickness insurance
Baseline hazard Constant or in 1870s	-27.68 (13.56)	-37.11** (16.5)	-34.04** (16.5)	-31.59* (17.53)	-23.15* (12.61)	-43.71 (27.43)	-24.77* (15.42)	
ln(GDPcap)	2.93* (1.61)	3.89** (1.93)	3.56* (1.94)	3.21 (2.06)	2.47 (1.5)	4.69 (3.22)	2.5 (1.81)	
ln(openness)	-1 (0.73)	-1.17 (0.83)	-1.03 (0.83)	-1.038 (0.9)	-0.35 (0.65)	-1.14 (1.13)	-0.52 (0.82)	
Polity IV	-0.04 (0.08)	-0.1 (0.08)	-0.08 (0.83)	-0.054 (0.1)	-0.06 (0.09)	-0.16 (0.13)	-0.07 (0.1)	
Spillovers								
Countries having passed the law ALL			-0.22 (0.24)				-2.7*** (0.83)	
With German law tradition				0.2 (0.65)				
Scandinavian				0.34 (0.45)				
French				-0.12 (0.28)				
Time dummies	No	Yes D18961900 D19011905 D19051910 D19111913 significant	Yes D18961900 D19011905 D19051910 D19111913 significant	Yes D18961900 D19011905 D19051910 D19111913 significant	No	Yes D18911895 D19111913 significant	Yes All except D19011905 significant	
Random effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Log Likelihood	-55.8	-46.35	-45.9	-45.7	-50.04	-42.59	-33.41	
N countries	346 15	346 15	346 15	346 15	363 15	363 15	363 15	

Table 7. Random effects logistic regressions.

	Unemployment insurance	Unemployment insurance	Unemployment insurance	Old age	Old age	Old age	Old age
Baseline hazard Constant or in 1870s	-8.88 (16.34)	-42.89 (61.46)	-14.34 (17.49)	- 22.91*** (13.07)	- 23.27* (13.5)	-20.42 (12.53)	-29.28*** (14.66)
ln(GDPcap)	0.54 (1.9)	3.85 (6.95)	1.13 (2.01)	2.43 (1.57)	2.46 (1.63)	2.01 (1.51)	3.09* (1.73)
ln(openness)	0.64 (1.23)	3.05 (5.71)	0.53 (1.21)	0.06 (0.66)	0.07 (0.2)	0.12 (0.62)	-0.38 (0.79)
Polity IV	0.29** (0.14)	1.14 (0.94)	0.32** (0.15)	-0.02 (0.08)	-0.03 (0.08)	-0.024 (0.08)	-0.02 (0.08)
Spillovers							
Countries having passed the law ALL		1.48 (1.98)				0.312* (0.173)	
Within German law tradition							--
Scandinavian			1.33 (0.91)				0.85 (1.21)
French			0.7 (0.87)				0.48 (0.42)
Time dummies	No	No	No	No	Yes	Yes None significant	Yes None significant
Random effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log Likelihood	-22.67	-20.97	-21.8	-37.15	-35.02	-33.46	-34.35
N countries	507 15	507 15	507 15	444 15	444 15	444 15	444 15

Table 8. Logit regressions. Only coefficients on relevant variables reported

	Accident comp	Accident comp	Accident comp	Inspection	Inspection	Inspection	Minimum age	Minimum age	Minimum age
Ln(GDP cap)	3.87** (2.23)			5.33 (3.48)			4.77 (2.97)		
Ln(urbanshare)		1.32** (0.54)			-1.36 (0.98)			0.14 (0.95)	
Ln(revenue per capita (-5))			0.74 (0.5)			-0.21 (0.53)			1.85*** (0.56)
Clustered std errors	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes