The Origin of the Majoritarian Welfare State: Majoritarian electoral rules, interest organizations and introduction of major social policy laws from 1859 to 2002

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Magnus Bergli Rasmussen
University of South-Eastern Norway
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The Origin of the Majoritarian Welfare State

Majoritarian electoral rules, interest organizations and introduction of major social policy laws from 1859 to 2002

Magnus Rasmussen[†]

[†] Department of Political Science, Aarhus University

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Abstract

This paper presents a novel argument on how governments under majoritarian electoral rules are more sensitive to interest group pressure, allowing trade unions to influence social policy to a greater degree than under proportional representation. Social policy development is therefore linked to pro-welfare groups' organizational capacity under majoritarian rules. This explains how majoritarian states can end up having encompassing welfare states. This is tested using a new dataset on welfare state risk coverage. With data from 1859 and up to 2002 for 99 countries, it greatly expands upon existing datasets. The results clearly show that the previous documented negative effect of majoritarian rules is completely reversed by the presence of strong trade unions, whereas unions have no moderating influence on the effect of proportional systems. As expected, the effect of trade union organization is stronger in majoritarian systems relative to proportional systems.

1. Introduction

Starting with the first major social policy laws in the late 19th century, the sum of risks covered by welfare state programs have seen exalted progress (Flora, Alber, & others, 1983; International Labor Office, 2010). In 1871 no country in the world had introduced state programs to cover the most pertinent social risks such as risk for accident or old age with state legislation. 100 years later this number had risen by 61, and in 2000 it was 82[1]. In short, a revolution in risk coverage had taken place. It has been argued that one primary explanation of this major trend change is the adoption of proportional electoral systems (PR). Starting with the innovative work of Person and Tabellini (2004) and Iversen & Soskice (2006), a vast literature has now been written on how proportional electoral systems facilitate welfare state growth. This literature has also produced convincing evidence for the claim that PR-systems have higher redistribution and more universal policies than Majoritarian systems (e.g. Alesina & Glaeser, 2004; Austen-Smith, 2000; Cusack, Iversen, & Soskice, 2010; Funk & Gathmann, 2010; Iversen & Soskice, 2015; Lizzeri & Persico, 2001; Persson, Roland, & Tabellini, 2007; Rickard, 2009; Rodden, 2009), with some exceptions (e.g. Aidt, Dutta, & Loukoianova, 2006). Below I document that encompassing risk coverage is not uncommon in majoritarian systems, but that variation in coverage is much larger between Majoritarian countries compared to PR systems. Some majoritarian systems even have risk coverage equal to what is common under PR. This raises two questions. If Majoritarian systems are generally inhospitable ground for welfare state growth, how can states with these systems still enact encompassing welfare states on equal terms with PR countries? And related, how is it that countries with Majoritarian rules are more diverse in risk coverage compared to PR countries?

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[1] A welfare state covering basic risks is defined as a welfare state having legislated major programs for both old-age, accident, maternity and sickness is coded as having basic risk coverage.

This paper presents a novel argument on how encompassing welfare states can come to be in Majoritarian electoral systems. It is argued that the presence of encompassing risk coverage in Majoritarian systems can be accounted for by the general fact that interest groups gain more influence in Majoritarian contrary to PR. A result of elections tending to be more contested and concentrated to a set of specific undecided districts in the former, allowing interests groups to threaten or hurt the sitting government into giving policy-submissions (Cox, 1997; Rogowski, 1987; Vernby, 2007). This lowers the costs of collective action for interest organizations that need only target pivotal districts, and makes the incumbent more sensitive to pressure. This is not the case in PR systems, here elections depend on national support and a one percent drop in voter support is unlikely to decide elections (Persson, Roland, & Tabellini, 2000).

The major implication from this argument is simple. As extra-parliamentary interest coalitions with pro-welfare preferences gains power (such as trade unions or urban workers), Majoritarian systems should produce social policies on equal terms as PR systems. Focusing on trade unions as the primary pro-welfare interest groups, I expect to find that unions have greater policy influence in Majoritarian systems in comparison to PR, and that they significantly moderate the negative effect of Majoritarian systems on social policy expansion. As social policy development in Majoritarian systems depends on the relative power of anti- or pro-welfare groups, and this relationship varies over time and between countries, variation in risk coverage should be greater for countries with Majoritarian rules than PR.

The argument is tested on novel data capturing risk coverage through national welfare state programs for 99 to 28 countries from 1859 to 2002 using the SPAW-database. First I confirm the previous

finding that PR systems have, on average, a higher degree of risk coverage. Second, simple descriptive analysis confirms that variation in risk coverage is greater in countries with Majoritarian rules than those with PR. Third, as unions become stronger, the negative effect of Majoritarian systems is reduced to a point where the effect of a shift from Majoritarian to PR would not result in any significant change on the extent of risk coverage. Fifth, additional expectations from the argument, such as rural interest organizations delaying welfare growth in Majoritarian contrary to PR systems, also finds support.

The article makes three main contributions. First, by testing the effect of electoral systems on a new data over a much longer time period than has previously been done, I confirm the aforementioned findings: that PR has more encompassing welfare states and cast doubt on recent studies that finds a negative or no effect (e.g. Aidt et al., 2006; Lupu & Pontusson, 2011). Second, it shows how the unexplained rise of welfare state development in Majoritarian countries follows from the fact that Majoritarian rules allow interest groups greater policy influence than PR. This finding further highlights how the previous literature on electoral rules has tended to overlooked how the function of political institutions is highly dependent on the power of extra-parliamentary interest organization. Instead, focus has been on how party-coalitions explain differences in policy outcomes between countries with PR rules (e.g. Iversen & Soskice, 2015; Manow, 2009). This coalition-literature overlooks the fact that the major difference in risk coverage is not between countries with PR, but between countries with Majoritarian rules. Furthermore, I find that this difference is mostly explained by variation in extra-parliamentary interest organizations, not intra-parliamentary coalitions as claimed by Iversen and Soskice (2015). Instead, by taking into account the resource differences between pro and anti-welfare groups, we can get a better understanding of why some Majoritarian countries could experience no

growth in risk coverage at all, whereas others could develop encompassing risk coverage. Third, this has implications for our expectations concerning the effects of Majoritarian systems in the future. As pro-welfare groups such as trade unions have been on the decline (Ebbinghaus, 2003; Wallerstein & Western, 2000), we should expect especially Majoritarian countries to experience declining coverage and an overall reduction in welfare state generosity.

2. Electoral systems and interest organization

PR systems have been at the forefront of political economy explanations of welfare state development in recent years. There are several different arguments connecting PR to welfare state expansion, but here I will focus on the two most commonly cited arguments. In the Iversen & Soskice (2006) story, left-parties can only credibly commit not to pocket the middle classes as well as the rich in PR. Middle class voters will therefore prefer right to left governments in Majoritarian systems, resulting in left governments being more common in PR-systems, increasing the degree of redistribution under PR compared to Majoritarian rules.

Person & Tabellini (2004), on the other hand, argue that MAJ systems will foster more (geographically) targeted benefits instead of universal benefits, as re-election chances of politicians are usually dependent on a few pivotal districts. This is in contrast to PR systems, where, depending on the size of the electoral districts and leveling seat rules, one percent increased vote share counts equally between districts for re-election chances. PR should therefore spur parties to increase the sum of public goods instead of targeted benefits.

What these arguments have in common is that they explain how PR should foster more generous, universal and generally larger welfare states than Majoritarian rules. At the same time, they fail to specify how equally encompassing welfare states can arise under Majoritarian rules, and why it is that Majoritarian are less homogenous than PR countries.

2.1 Majoritarian systems and susceptibility to interest organizations

One factor that has gone unnoticed in the welfare state literature is how the power of interests groups to pressure governments is dependent on the electoral system. Why this is, follows from two features of Majoritarian systems; that elections tend to be decided by a set of pivotal districts, and that elections in these districts tend to be more contested than in proportional systems. As highlighted by (Rogowski, 1987, p. 208) work on trade barriers, Majoritarian systems allow geographically concentrated interest groups to more easily lobby or pressure individual candidates in exposed (and small) districts, to protect their industries. Vernby (2007), in explaining why strikes are more common in Majoritarian systems, reasons that the pay offs are higher for the strikes and the consequences more dear for the government, as elections tend to be more contested in Majoritarian systems. In these instances, a shift in one to three percent vote share could sink the incumbent government.

Combining on their arguments, I propose a theory of welfare state expansion that highlights how Majoritarian systems afford trade unions greater policy influence than PR systems. I assume two extra-parliamentary interest group coalitions, distinguishable by their preferences for or against increases in welfare coverage, with benefits for one group incurring costs on the latter. Both groups respond to costs by punishing the incumbent government –hold rallies, strikes or withdraw support in the form of endorsements or funds for local campaigns. Voters are assumed to primarily act in a retrospective

fashion, and incumbent parties care about re-election. Voters will therefore punish or reward governments based on their economic record in the previous term, and governments will attempt to redress these issued before the election.

In Majoritarian elections, most districts are usually uncontested, with the election focusing on winning a specific set of undecided districts. Under the first past the post rules, elections in undecided districts will be highly competitive, and one percentage vote loss can possibly spell election disaster. This has two consequences, one for interest organizations and one for the incumbent government. Incumbent governments will try to appease interest groups that can possibly threaten their re-election chances in these districts. Interest organizations need fewer resources to effectively pressure the government, as they only need to target the incumbent government's weak points – the undecided districts. This opens the board for extra-parliamentary pro-welfare coalitions – I will focus on trade unions - to pressure governments into concessions. Interest organizations will not find the same opportunities in PR systems. Here elections are less contested; a one percent vote gain is unlikely to decide national elections. All else being equal, the marginal gains for an interest group swaying 1 percent of the voters will therefore be smaller under PR compared to Majoritarian rules. Elections in PR systems is also not decided by elections in specific districts, and votes not resulting in district mandates tends to be compensated with extra mandates on the national level (Cox, 1997; Persson et al., 2000; Rodden, 2010). Illustrated by the fact that PR systems have a lower disproportionality between vote share and seat share (Gallagher, 1991; Lijphart, 2012) The end result is that interest organizations, and unions in particular, must focus their resources on swaying election outcomes in the whole country, not just one or a set of districts.

Electoral systems do not only influence the sensitivity of incumbent to pressure, but also the capability and resources needed for unions to influence politics. In pressuring incumbent governments, unions have several tools at their disposal. Unions can threaten to carry out mass-mobilization in the form of strikes, protests and rallies (Boix, 2010; Lindvall, 2013; Pontusson, 2013). All of these require a level of funds and ability to coordinate, but the relative costs and level of coordination needed is shaped by the electoral rules. Especially important is the pivotal districts. With the election hinging on a set of specific constituencies, unions need only target these areas, reducing the cost of union action as they no longer need to carry out mass-strikes around the nation. The primary gain from this is the reduction in collective coordination problems, and a reduction strike funds and members needed to go on strike[2]. Consequently, Majoritarian rules offers smaller coordination problems and "low-cost" strikes compared to PR.

The incumbent government has three options when faced by unions threatening to strike; two options end in governments promising social policies, either to appease unions or retrospective voters, and only one in where the government decides not to respond in a way that results in policy-changes.

In the first option, the government decides to appease the unions, promising policy spoils. In these instances, the government can either target benefits directly to unions, introducing employment subsidies or social policies that only benefit union constituencies (for example job subsidies or pension policies targeted to specific areas such as miners pensions), or they can legislate benefits that also benefit non-union voters. As the electoral gains from the later outweigh the targeted option (that only

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[2] The implication is of course that unions can operate in majoritarian systems without needing a strong national organization, low centralization of authority and have smaller need for a large, national, strike found.

benefits unions), governments should respond to union demands by introducing social policies that also cover non-unionists. This explains how union pressure for targeted benefits for themselves can end up promoting national policies.

If the sitting-government decided that it has little interest in appeasing unions, and unions decide to strike, the government still needs to deal with retrospective voters that would blame the government for bad economic management as result of the strike (Vernby, 2007). The sitting government will therefore have an incentive to introduce social policies for the electorate to compensate for the harm ensured by union mobilization. Increased industrial action should therefore be translated into social policy expansion as the incumbent tries to mitigate the costs of action by the unions.

In sum, independent whether the government decides to appease the unions or the voters, one should expect non-targeted social policies to be most likely outcome of union threats or the decisions by unions to carry out such threats (strike). We should therefore observe that union threats, in itself, translate into policy concessions, and if threats are not enough, that strikes also results in policy concessions, even if the reason in the latter case is quite different from the government's point of view. This is of relevance to expectations on government partisanship. If giving in to some pro-welfare groups - such as unions - is costly for some governments' (for ideological reasons or because the party entertains connections to employers), they will still have incentives to deal with the electoral consequences of industrial action. One option is to give in to union demands, but implement national policies instead of targeted union goods, and claim that government is not catering to union interests. Alternatively, the government can let the strike happen and then subsequently compensate voters. Regardless, as governments can introduce national instead of union targeted benefits as a response to

union pressure, partisanship should not be decisive for whether the government decides to compensate or not.

The government final option is to decide that it can survive union lead strikes, and refuse to introduce policies for either the unions or the electorate. What factors are likely to influence governments' decisions to ride the storm? Within the model here proposed, the decisive factor is the power-balance between the pro- and anti-welfare coalitions. Even if the incumbent would like to appease both groups, benefiting one coalition will incur costs on the other. Costs that the latter would demand be compensated. These costs would again have to be compensated, and so on. To illustrate, if the anti-welfare coalition consists self-employed farmers or landlords. A government introducing unemployment benefits to compensate unions will end up increasing the wage costs of the landlords. The unemployment benefits act as a reservation wage, and founding either by contributions or taxes would hit the farmers either as employers or as tax-payers. This means that giving in to union demands would only result in costs for the rural groups. If the government were to try to appease the rural coalition by, for example, introducing trade barriers to protect rural producers, this would increase the bread prices for urban consumers. Any compensatory schemes introduced to the rural coalition would therefore also have to take into account the negative effects of granting benefits to urban coalition, leading to a vicious circle of ever increasing expenditure as gains and costs that must be compensated.

In order to escape such vicious circles, governments will instead opt to please one coalition. The decisive factor here is which coalition can exert the greatest electoral damage. If the anti-welfare group can exert even greater costs, the incumbent should decide to go with this coalition. The opposite holds when the pro-welfare coalition has the upper hand. The power-balance between anti-welfare and pro-

welfare coalitions is therefore the deciding factor in explains policy development over time and between countries in Majoritarian systems and relative to PR systems.

Overall, expectations from this argument are pretty straightforward. When the power-balance tips in favor of the anti-welfare coalition, Majoritarian systems should have lower encompassing coverage than PR-systems, if the power balance shifts enough for the pro-welfare coalition to have the upper hand, Majoritarian systems should see equal or even higher policy expansions. The argument also gives predictions concerning the efficiency of interest organizations in shaping policies. Interest groups should have a greater say in Majoritarian systems compared to PR systems. That is, interest organizations, such as unions, should find it easier to shape policy in Majoritarian countries.

3. Risk coverage

In order to test these predictions I focus on the extent of risk coverage. In *Encompassing welfare states*, all risk forms, from life-course risks to labor market and the risk of childrearing are covered (Old-age, accident risk, sickness, maternity and unemployment and family allowance). In coding the number of risks covered I only code a risk as covered if it protects at least one major social group[3]. Special programs, only applicable to minor occupational groups, are not coded. Therefore, even if Belgium introduced family allowance for civil servants in 1919, Belgium is not coded as protecting against the risk of childrearing before in 1930. Note, these classifications diverge in many instances with those from "Social Security Programs throughout the World" (SSPTW) which has been the primary source of previous studies (e.g. Collier & Messick, 1975; Hicks, Misra, & Ng, 1995), as I consistently consider

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[3] The following Social/Occupational groups are considered: A) Agricultural workers ; B) Industrial/production workers ; C) Small firms (workers in); D) Self-Employed; E) Students; F) Employers; G) Temporary and/or casual workers; H) Family workers and/or domestic workers

legislation enacted in colonies as the date of first enactment. Generally speaking, it is unclear what criterion has been applied by the SSPTW, and the dates given in later editions tend to diverge from earlier editions. I also do not consider laws only covering special groups, such as civil servants, as the first major law, even if this seems to be the case for some of SSPTW classifications. Using this strategy, the first old-age legislation in UK would have been in 1835, with the civil servant pension, and not 1911. The immediate face value of such a coding is highly unconvincing as most researchers agree on the fact that the welfare state breakthrough took place when non-state actors became covered (Baldwin, 1990; Esping-Andersen, 1990; Flora & Heidenheimer, 1981; Korpi, 1983, 1989; Mares & Carnes, 2009), and I therefore opt for this alternative classification scheme.

An important source of difference between this dataset and others is how I deal with federal states. Social policy legislation might be absent at the federal level, but be prevalent at the state-level. It is not clear how previous databases have solved this problem. I have consistently chosen only to use federal legislation, meaning that state or provincial legislation is ignored. This creates bias in that federal states with highly local arrangements, such as Switzerland, appear less encompassing than they are. However, this is also the case for several unitary states, such as Norway, where local pensions covered most of the population before a national pension system was put in place in 1936. It is therefore not entirely certain that the bias only impacts federal states, seeing as also unitary states had encompassing local or regional initiatives.

Another common source of disagreement regarding what is to be considered the first year of legislation, is often a result of the fact that previous studies do not separate benefits in kind systems from transfer programs. To take a common mistake, Hicks, Misra, and Ng (1995, p. 337) classifies New

Zealand as having an unemployment program in 1930. Unfortunately, closer inspection with their sources shows this program to be an unemployment relief program, where unemployed workers were given public work in exchange for basic assistance. Even if one accepts this as an unemployment program, benefits were not made in payments, but instead in kind. New Zealand did not introduce a transfer system until 1938.

A similar source of confusion results from the arbitrary treatment of compulsory vs voluntary insurance. For example, the above mentioned authors date the first program in Denmark in 1907 with the introduction of a voluntary insurance scheme, whereas the first data given for Norway is 1938, coinciding with the introduction of a compulsory program. This scoring would have been acceptable had it not been that Norway introduced a voluntary system in 1906, leaving the reader unsure as to what criteria was used to code Norway as covered in 1936 and not 1906. To amend such ad hoc scoring I have made no distinction between compulsory or voluntary coverage, but I have ignored voluntary coverage programs without some form of state subsidies.

The primary sources have been the excellent Legislative series (1919-1990) published by the International Labour Organization (ILO). The legislative series translate nearly all labor market legislation on a yearly basis. Surprisingly, none of the major datasets on social policy have used the legislative series as a source of social policy legislation. For countries not tracked by the legislative series I have used several different sources, but the legislative series remain the primary source. In the case of disagreement, the legislative series takes precedence. Starting in 1907, I use the Labor Monthly Published by the American Department of Labor for information on legislative enactments up to 1919. I have also used various oversight reports compiled by the ILO on members and non-member states on social legislation. From 1937 up to 2000 I also draw on the "Social Security Programs throughout

the World" (SSPTW) published by the American department of labor, to track aspects of generosity such as requirements and duration of benefits. For the post 1970-period ILO Social Security Inquiry (SSI), Working Conditions Laws Database (TRAVAIL) and the database of national labor, social security and related human rights legislation (NATLEX) have been used to track legislative changes, and corroborate SSPTW information. For a complete oversight over all the individual sources please see the codebook[4].

4. Historical development of basic and encompassing risk coverage in Majoritarian and proportional electoral systems

As already outlined in the introduction, the 20th century was the scene for a massive expansion of risk coverage. To what extent did country differences of encompassing risk coverage follow electoral rules? Figure 1 shows the average number of programs for all countries and disaggregated for Majoritarian and PR systems over time. The long term trend is quite clear; PR systems at nearly all points in time had a higher number of programs than Majoritarian systems.
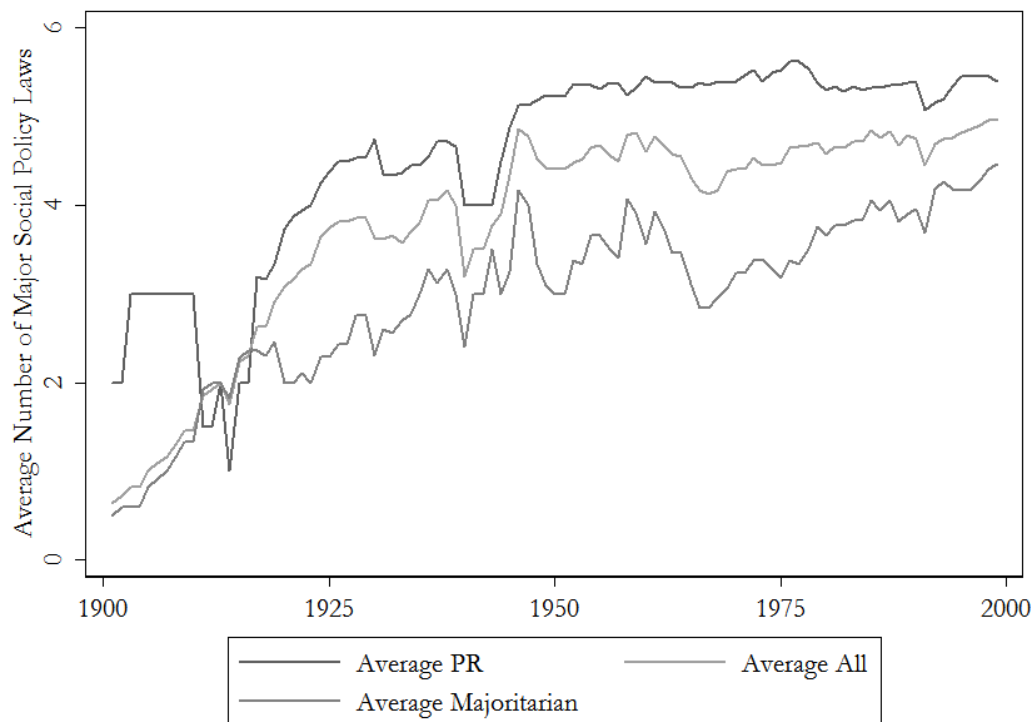
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[4] REMOVED LINK

Figure 1 Differences in average number of social policy programs between electoral systems

At the same time, these data also show how social policies, if to a lower extent than PR systems, was also enacted in Majoritarian countries. Figure 2 and 3 shows the distribution of observations in Majoritarian and PR systems in the SPAW-database. Looking at the average distribution in Majoritarian compared to PR systems reveals one interesting finding: whereas most countries with PR rules tend to have encompassing coverage, there is considerable greater variation among Majoritarian countries. The most common category is no program at all, but there is quite a lot of diversity between those with programs. Most pertinent is the fact that 15 percent of observations within Majoritarian systems have encompassing coverage, with the other half of observations falling somewhere in between. This is

captured by the relative higher standard deviation of about three programs for Majoritarian compared to one program in PR countries.

The fact that Majoritarian systems have a higher degree of within variation can signify that there is process within this category that pulls in different directions. Whereas the PR-effect seems to be more unifying, pushing countries in the same direction, the effect of Majoritarian electoral rules is more diffuse. As argued above, this is what we would expect if the effect of Majoritarian systems is dependent on the organizational power of anti and pro-welfare interest organizations.
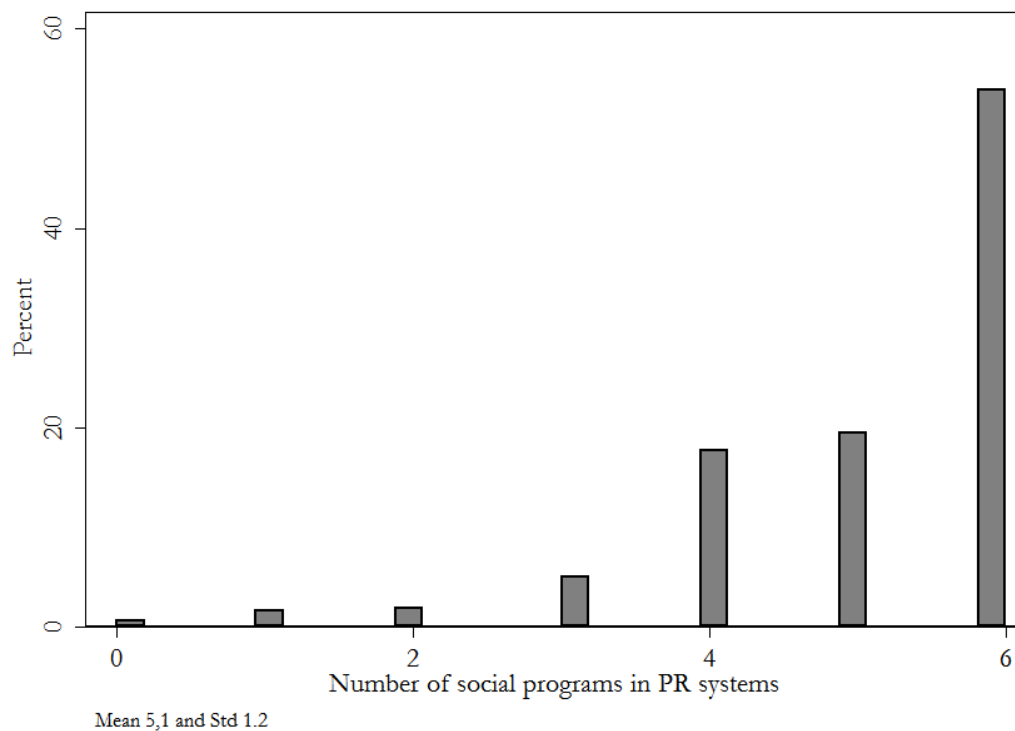

Mean 5,1 and Std 1.2

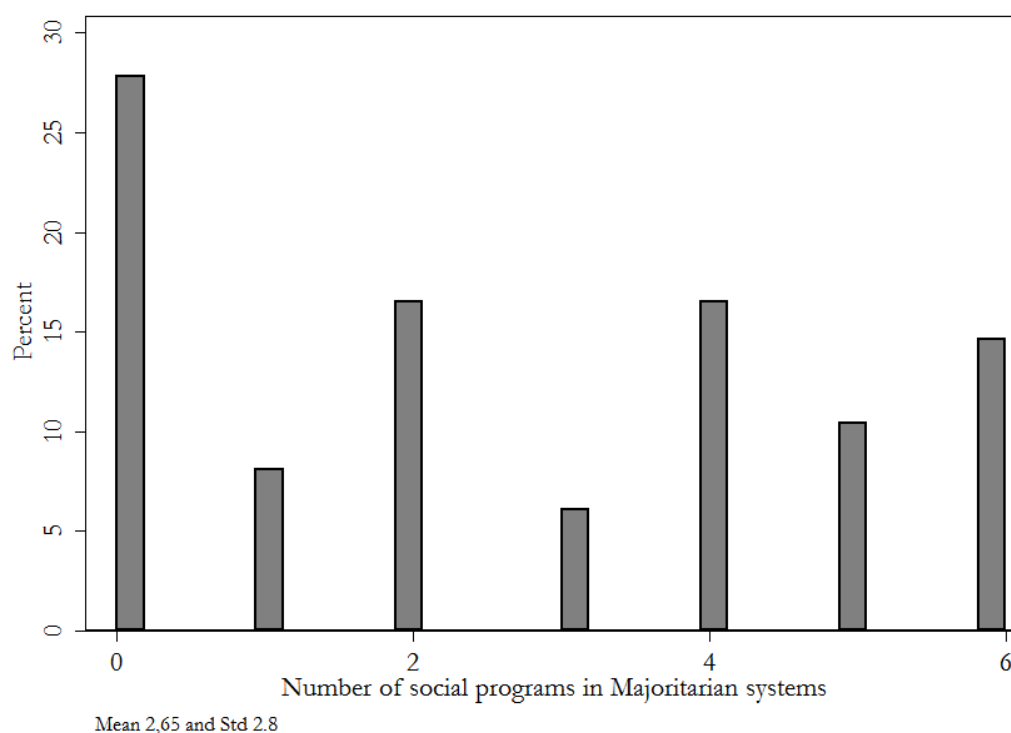**Figure 2. Distribution of observations in PR systems**

Figure 3. Distribution of observations in Majoritarian systems

5. Empirical Investigation

In this section I use Poisson regression on the number of enacted major social policy laws from 1859 to 2002 in order to test whether the influence of extra-parliamentary groups was stronger under majoritarian rules, and whether Majoritarian systems have a positive effect of welfare expansion when pro-welfare coalitions are stronger than anti-coalitions.

The dependent variable in these regressions is the degree of encompassing risk coverage; going from 0 to 6 depending on the number of programs legislated[5]. Since the dependent variable is a count measure, ordinary least squares (OLS), estimates can be biased, inconsistent, and inefficient as it does not take

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[5] A country-year with a missing observation on any of the major laws is dropped from the regression.

into account that the dependent variable can only take on 6 values. In the cases, the literature suggests Poisson regression as a remedy (King, 1988). Poisson regression assumes that the variance is equal to the mean; the dependent variable has a mean of 2.5 and the variance is 5.1, nearly double the mean. This is not surprising, as overdispersion is likely to occur as a result of unobserved heterogeneity, a common problem in country-year studies spanning several regions (Green, Kim, & Yoon, 2001). I therefore test how sensitive my results are to this assumption by allowing for overdispersion using a negative binominal model[6].

For electoral rules I use Schjolset's (2008, pp. 135–142) classification and data. I recode her categorizations into dummy variables. Schjolset also distinguish between semi-PR systems. As the theory makes no clear specification for these regimes, I have opted for a conservative approach, creating dummy variables for both Semi-PR and full PR systems with Majoritarian as reference category.

 I focused on trade unions as the most decisive pro-welfare interest group in the theory section; I therefore use unions to test whether pro-welfare interest groups have a stronger policy influence in Majoritarian compared to proportional systems. Trade union organization strength is measured as the percentage of wage and salaried employees unionized, with data from Rasmussen (2015).

Previous test of the relationship between electoral rules and welfare state development have tended to exclude controls for constitutional differences such as parliamentarianism and federalism (e.g. Iversen

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[6] There exists several different types of count models, but I opt to focus on Poisson and negative binominal. As it is not clear why the process going from 0 to 1 should have inherently different causal dynamics from 1 to 2 or 2 to 3 I do not present a Zero-inflated Poisson regression - that estimate separate regressions for countries going from 0 to 1 and for those going from 1 and upwards. Using this model I find no substantial differences. Alternatively, Zero-truncated Poisson regression – dropping all observations without at least one program- shows no substantial difference from the reported results.

& Soskice, 2006, p. 175). As constitutional rules tend to come in packages (Lijphart, 2012), an effect of electoral systems might be capturing the effect of federalism as nearly no country has a federal state structure and PR. Therefore, I include a set of dummies for both parliamentarianism and federalism, with classifications and data from Schjolset (2008).

I follow (Flora & Heidenheimer, 1981) in controlling for sosio-economic development (Population[log], GDP[log], GPD growth, and Urbanization). I also include (Boix, Miller, & Rosato, 2012) measure of democracy in order to control for regimes differences, and a time-invariant measure of ethnic fractionalization (Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003).

To deal with country-level heteroscedasticity, I run all regressions with Huber sandwich standard errors. The data-series presented in figure 2 shows clear time dependence and periodic shifts in means, issues that can lead to biased estimates and smaller standard errors. I use various techniques to correct for this: a common year-trend, and decade dummies. Both trends and decade dummies are appropriate given the increasing trend of coverage seen in section 3, and how expansions seems to take place at specific time periods such as 1920. Omitted variable bias is a serious concern in country-level analysis spanning all regions of the world. Therefore, in order to capture un-measured country and region factors such as national culture or colonial heritage or legal systems I include a full set of country dummies.

The sample size varies with the inclusion of variables. For the electoral rules variables I have data for the whole period (1859-2002) for 99 countries, but for union density time-series data is only available for 28 countries. Even if restricted in space, both samples go back to the 1859 ending in 2002.

5.1 Electoral systems and encompassing welfare states

Table 1 presents the results for electoral rules on the number of major-social policy laws from 1860 to 2000 for 99 countries using Poisson regression. The reference category is a country with Majoritarian, presidential and unitary institutions. The results support the general expectations in the literature. Proportional representation is significantly correlated with a higher number of major social policy laws. These effects are robust over all the various model specifications even if the PR-effect is reduced in model 5 when controls for both periods and country factors are entered at the same time. These findings rule out worries that the positive effect of PR is a result of stable national factors determining countries to adopt social policies and PR, or that PR was introduced in periods where social legislation was most likely to be enacted.

Table 1. Poisson analysis of major social policy laws (1860-2000)

	(1)	(2)	(3)	(4)	(5)	(6)
	Poisson	Poisson	Poisson	Poisson	Poisson	Poisson
Semi-PR	0.6***	0.2***	0.2***	0.3***	0.2***	0.2***
	(16.88)	(10.64)	(8.81)	(4.70)	(4.77)	(10.79)
PR	0.7***	0.4***	0.4***	0.7***	0.2***	0.3***
	(31.05)	(23.91)	(18.79)	(12.46)	(4.99)	(18.44)
Semi-Parl.	0.2***	0.2***	0.2***	-0.2***	-0.0004	0.2***
	(13.76)	(10.53)	(9.01)	(-3.37)	(-0.01)	(10.43)
Parliamentary	0.2***	0.2***	0.2***	-0.2**	-0.1***	0.1***
	(9.88)	(10.60)	(8.85)	(-2.59)	(-4.20)	(6.66)
Hybrid.	0.07***	-0.01	-0.05**	-0.02	0.01	-0.06***
	(3.88)	(-0.78)	(-2.97)	(-0.45)	(0.52)	(-4.85)
Federal	-0.09***	-0.2***	-0.2***	-0.2*	0.02	-0.2***
	(-3.78)	(-8.07)	(-7.56)	(-2.09)	(0.57)	(-11.78)
Population (log)		0.04***	0.04***	0.2***	0.6***	0.05***
		(7.73)	(6.52)	(6.09)	(18.65)	(9.29)
Urbanization		0.005***	0.005***	-0.009***	-0.0004	0.006***
		(8.27)	(7.61)	(-8.97)	(-0.53)	(12.20)
GDP (log)		0.02	-0.1***	-0.4***	0.04	-0.04**
		(1.81)	(-6.23)	(-15.51)	(1.91)	(-2.65)
GDP growth		0.004***	0.005***	0.002	0.0006	0.00008
		(3.77)	(4.74)	(1.95)	(1.05)	(0.09)
Democracy (BMR)		0.4***	0.4***	0.5***	0.2***	0.2***
		(12.05)	(10.68)	(11.86)	(7.74)	(6.75)
Ethnic fract.						-0.1***
						(-3.38)
Time Trend	No	Yes	Yes	Yes	Yes	Yes
Region Effects	No	No	Yes	No	No	Yes
Country Effects	No	No	No	Yes	Yes	No
Period Effects	No	No	No	No	Yes	Yes
Observations	3773	3186	3171	3171	3171	3171

t statistics in parentheses. .* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Reference category is a Majoritarian, presidential unitary state. Constant, time trends, country effects, period effects, country trends excluded for readability. Calculated with Huber sandwich standard errors.

Figure 4 represents the predicted number of major social policies enacted for the three electoral systems, holding all other variables at their observed mean using model 4. This model includes country dummies, meaning that estimates refer to within-country change. Interestingly enough, the effect of going from a Majoritarian to a proportional system increase the number of predicted programs from 2.1 to 4.3 (*t*-values of 29 and 41 respectively), with the predicted rate of programs being about 2 times

higher in a PR system than in a Majoritarian. As the mean change in number of major social programs observed in this sample is 0.04, a change in electoral rules has a profound effect on risk coverage.

Overall, encompassing risk coverage has been significantly shaped by electoral rules. These results clearly show that increasing the sample in both time and space, or controlling for constitutional structures does not disconfirm previous findings.
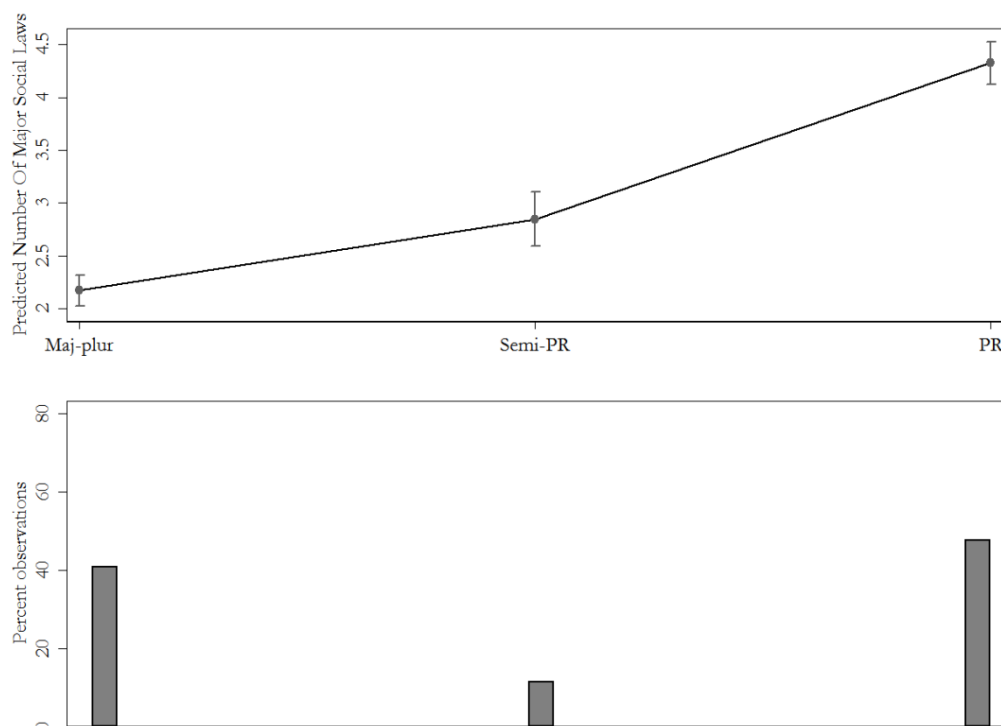

Figure 4 Adjusted Predictions of Institutional Rules on number of major welfare laws with 95% CI and distribution of observations presented below the point estimates.

5.2 Electoral rules and interest organizations

I now turn to test whether electoral systems influenced pro-welfare interest organizations ability to introduce social policy and vice versa in the time period 1860 to 2000. Model 1 in table 1 tests whether the effect of trade union organization is dependent on electoral systems and vice versa by creating interaction terms between the electoral system dummies and the trade union variable. The estimated effects are all in the expected direction, and the interaction terms are all significant. The union density coefficient shows the effect of trade union organization under Majoritarian rules. We see that this effect is highly significant and positive, whereas the interaction-terms for union density in PR and Semi-PR systems are both negative. In order to test the robustness of these findings I include controls for constitutional structures that might co-vary with electoral systems (model 2), democracy and left partisanship (model 3), a general time trend (model 4), country fixed effects and a time trend (model 5), country and period dummies (model 6), country dummies and country time trends (model 7), and a negative binominal model with fixed effects. The interaction between union density and electoral systems are remarkably robust, with only the Semi-PR category becoming insignificant in model 7, the latter reflecting the few observations of Semi-PR systems in the sample.

In order to illustrate the how the effect of union organization is dependent on electoral rules, figure 5 shows that the predicted marginal effect of union density is indeed higher under Majoritarian rules (t-value 5.70), negative in semi-PR before becoming insignificant but positive under PR rules (t-value 0.61), and minuscule compared to the point estimate under Majoritarian rules. The marginal effect of union density is actually 25 times larger under Majoritarian rules than PR. This is what we would expect if incumbent governments are more sensitive to union pressure compared to their counterparts under PR rules.

Figure 6 tests the symmetrical relationship; whether union organization shapes the effect of electoral systems. To make the figure more presentable - and since few observations fall within this category - I have dropped Semi-PR systems. Figure 6 shows how, at low levels of union density, Majoritarian rules have a significant negative effect compared to PR systems. This negative effect turns positive and significant above 30 % union density, whereas the effect of PR remains unaffected to changes in union density[7]. These results go a long way in confirming that social policy expansion in Majoritarian systems depend on union organizations, and that when unions have reached moderate level of strength (above 30 density) unions can effectively push for social policy legislation, such as was done in the UK at the turn of the 19th century. The complete lack of a union effect in PR systems is also what we would expect from the argument here presented, as governments in PR-systems are less sensitive to extra-parliamentary interest organizations. These results are replicated using panel-corrected standard errors OLS-regression with Ar(1) correction instead of the count-model design (Results reported in the Appendix).

In sum, these results clearly indicate that interest organizations have more influence under Majoritarian rules than PR, and that the negative effect of Majoritarian systems disappears as pro-welfare interest groups become strong enough too credible threaten governments to give policy submissions.

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[7] The results are from a negative binominal model that is structurally similar to model 8 in table 2 expect that it also includes decade dummies. The effects are robust to dropping country dummies completely or replace them with region dummies, and only the size of the coefficient is dependent on the inclusion of decade dummies. Excluding these only increases the effect. As the maximum level of density is 69,1 in majoritarian countries (83 in PR) I have restricted the figure to 70 % union density.

Table 2. Poisson and Negative binominal analysis of major social policy laws (1860-2000)

	(1) Poisson	(2) Poisson	(3) Poisson	(4) Poisson	(5) Poisson	(6) Poisson	(7) Poisson	(8) NBR
Semi-PR	0.4***	0.3***	0.8***	0.4***	0.7***	0.5***	0.4	0.7***
	(3.70)	(3.96)	(9.97)	(5.56)	(3.56)	(5.22)	(1.89)	(3.56)
PR	0.8***	0.7***	0.7***	0.5***	0.5***	0.2**	0.5***	0.5***
	(12.36)	(12.37)	(11.77)	(8.92)	(7.67)	(3.14)	(7.63)	(7.67)
Union density	0.01***	0.02***	0.01***	0.01***	0.02***	0.007***	0.02***	0.02***
	(8.18)	(10.11)	(9.17)	(7.87)	(13.89)	(6.56)	(14.25)	(13.89)
Union*Semi-PR	-0.001	-0.008**	-0.02***	-0.01***	-0.03***	-0.01***	-0.01*	-0.03***
	(-0.45)	(-2.92)	(-6.65)	(-6.86)	(-5.35)	(-5.25)	(-2.01)	(-5.35)
Union*PR	-0.01***	-0.02***	-0.02***	-0.01***	-0.02***	-0.007***	-0.01***	-0.02***
	(-7.79)	(-10.57)	(-10.35)	(-8.30)	(-11.42)	(-5.88)	(-10.30)	(-11.42)
Population (log)	0.01	0.03***	-0.03**	0.004	0.6***	0.6***	1.1***	0.6***
	(1.81)	(3.72)	(-3.21)	(0.49)	(8.25)	(12.03)	(7.35)	(8.25)
Urbanization	0.004***	0.004***	0.009***	0.004***	-0.003**	0.0002	-0.001	-0.003**
	(8.85)	(7.54)	(12.11)	(4.82)	(-2.67)	(0.22)	(-1.02)	(-2.67)
GDP (log)	0.08***	0.1***	0.06**	-0.2***	-0.3***	0.1***	-0.2***	-0.3***
	(6.27)	(6.88)	(2.95)	(-5.44)	(-7.98)	(4.39)	(-4.18)	(-7.98)
GDP growth	0.003*	0.002	0.004**	0.003**	0.0002	0.0002	-0.0004	0.0002
	(2.34)	(1.73)	(3.04)	(2.62)	(0.20)	(0.20)	(-0.40)	(0.20)
Semi-Pres.		0.2***	0.2***	0.3***	0.004	0.10**	-0.07	0.004
		(7.23)	(6.16)	(8.66)	(0.07)	(3.05)	(-0.91)	(0.07)
Parliamentary		0.10***	0.02	0.3***	0.2*	0.06	-0.1	0.2*
		(3.39)	(0.46)	(6.92)	(2.38)	(1.73)	(-1.56)	(2.38)
Hybrid		-0.002	-0.1***	-0.08***	-0.04*	-0.04*	-0.2***	-0.04*
		(-0.16)	(-9.66)	(-5.55)	(-2.01)	(-2.25)	(-4.35)	(-2.01)
Federal		-0.4***	-0.4***	-0.3***	-0.1***	-0.02	-0.2***	-0.1***
		(-13.15)	(-15.66)	(-12.54)	(-4.67)	(-1.32)	(-5.38)	(-4.67)
Left executive			0.008	-0.010	-0.008	-0.02*	0.007	-0.008
			(0.64)	(-0.79)	(-0.87)	(-2.54)	(0.76)	(-0.87)
Democracy			0.007	0.03	0.06	0.02	0.09	0.06
			(0.07)	(0.36)	(0.55)	(0.27)	(1.20)	(0.55)
Time Trend	No	No	No	Yes	Yes	No	No	Yes
Country Effects	No	No	No	No	Yes	Yes	Yes	Yes
Period Effects	No	No	No	No	No	Yes	No	No
Country-Trends	No	No	No	No	No	No	Yes	No
Observations	1572	1570	1278	1278	1278	1278	1278	1278

t statistics in parentheses. Reference category is a Majoritarian, presidential unitary state. Constant, time trends, country effects, period effects, country trends excluded for readability. Calculated with Huber sandwich standard errors. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Model 8 is estimated with Negative binominal regression.
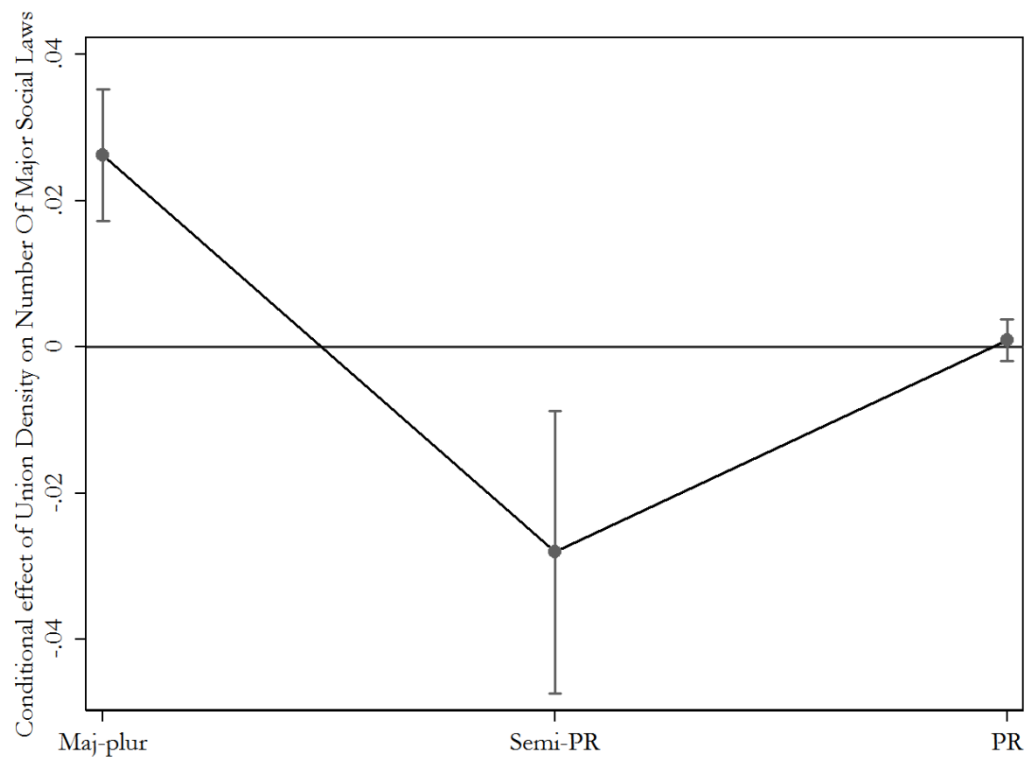
Figure 5. Conditional marginal effect of union density on the number of major social laws with 95% ci.
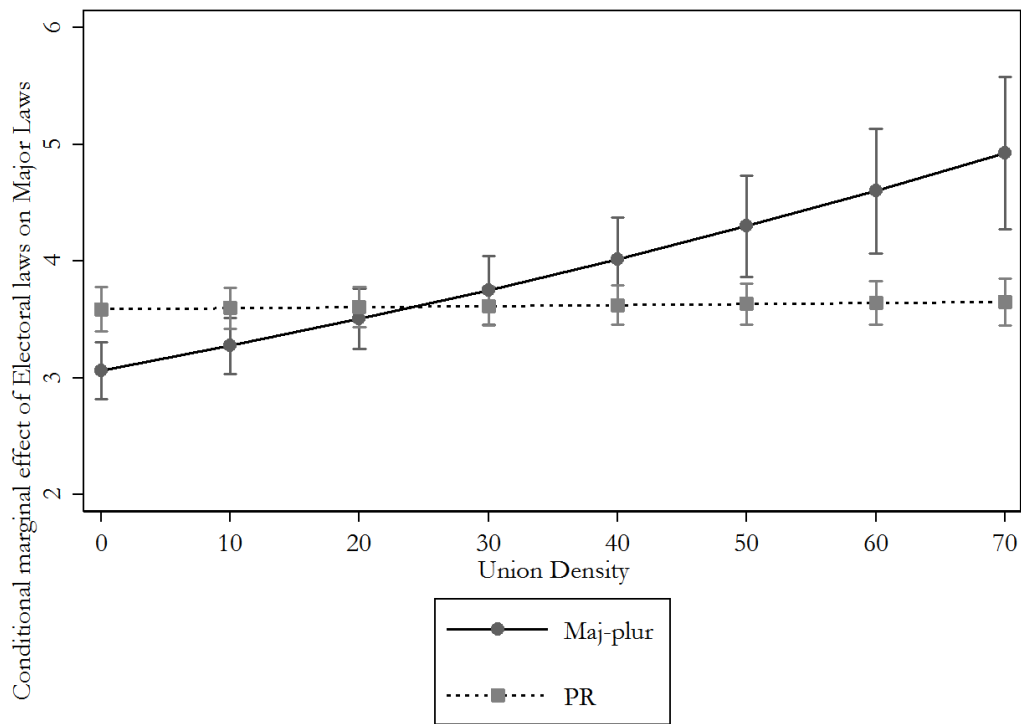
Figure 6. Conditional marginal effect of union density on the number of major social laws with 95% ci.

5.3 Additional evidence

I now turn to testing additional expectations from the argument. As elaborated above, if incumbent governments are sensitive to union pressures under Majoritarian rules, the same should also hold for anti-welfare interest organizations. Most early welfare benefits tended to benefit skilled urban workers, at the expense of rural interest (landlords, family farmers and estate owners), meaning that the latter had strong interests in confining welfare state growth (Ansell & Samuels, 2014; Mares, 2003)[8]. It might also be that the trade union effect documented above is a result of unions being more organized in PR, and therefore have an effect in all PR systems. This is a legitimate worry, as PR systems have 16 %

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[8] This point is more fully explored in Knutsen & Rasmussen (2015).

higher union density than majoritarian systems. If one could document a similar effect of rural organization, this would ameliorate such worries. I therefore include a measure of rural interest influence, measured as the percent of GDP originating from agriculture. At higher levels, rural interests are expected to have greater resources and impact on politics. If an imperfect measure - having data on the political power of agriculture groups would be a more preferable measure - it is better than the alternative measure of people employed in agriculture. Shares employed in agriculture is closer to measuring the structure of farm ownership, and is highly dependent on how self-employed and family workers are treated in national census-classifications (see Flora et al., 1983). I therefore opt for using agriculture's share of GDP as the next best thing. Figure 7-8 shows how Majoritarian systems have a positive effect on social expansion as agriculture's share of GDP declines, and the results show that the marginal effect of the agriculture's share variable is 41 times larger under Majoritarian rules than PR[9]. The power of anti-welfare coalitions was detrimental to welfare state growth, but only in Majoritarian systems, whereas they were unable to restrict growth under PR.

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[9] This is done running a model structurally similar to that used to produce figure 5-6, except that agriculture's share of GDP has been interacted with the electoral rules dummies
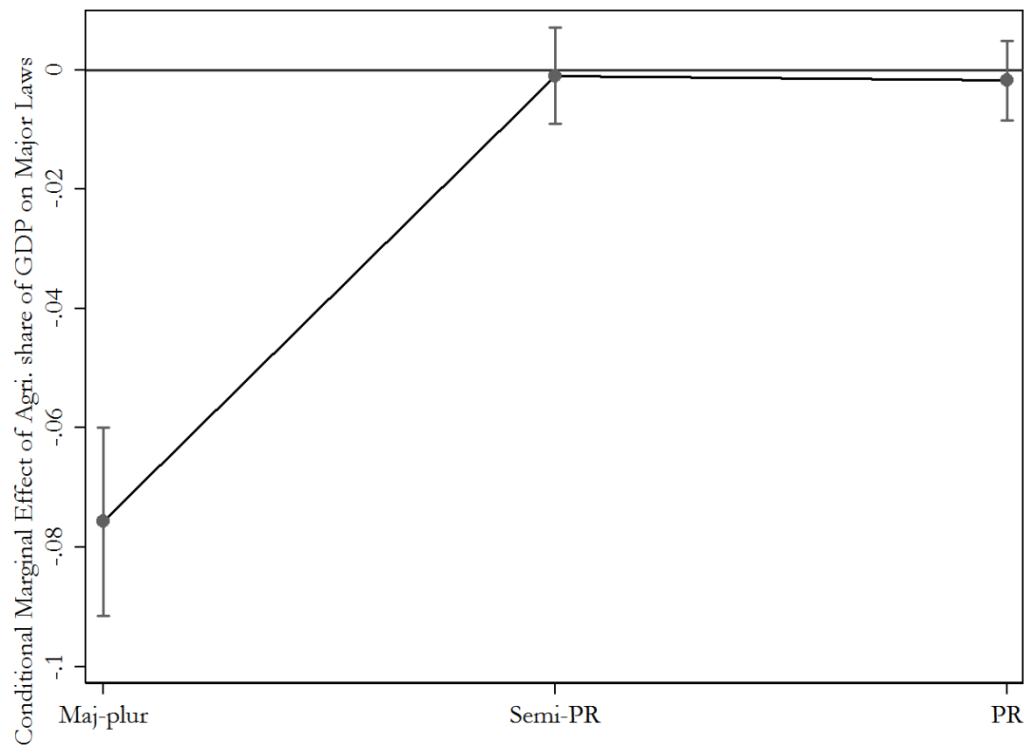
Figure 7. Conditional marginal effect of agricultural share of GDP on the number of major social laws with 95% ci.
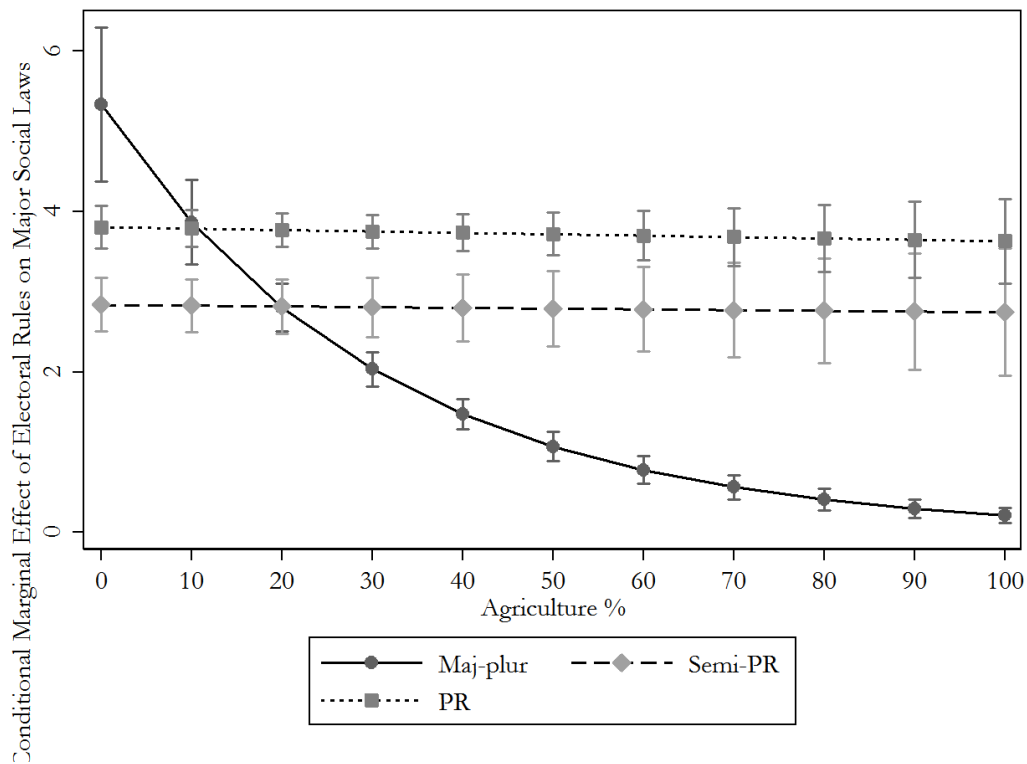
Figure 8. Conditional marginal effect of electoral rules on the number of major social laws with 95% CI.

Above I have argued, following Vernby (2007), that incumbent governments under Majoritarian should be more sensitive to union militancy, as one percent decline in voter support in pivotal districts could sink the government. Therefore, I test whether governments responds to industrial conflict, compensating retrospective voters with introduction of social policies. Again the results (Appendix) show that various measures of industrial unrest are correlated with expansion of social policies under Majoritarian systems, whereas the effect is negligible or insignificant under PR. This indicates that governments under Majoritarian rules are more sensitive to union pressure, having to compensate voters even if they decide to renegade on union pressure.

Another worry might be that PR-countries tend to have corporative institutions, making unions have a consistent effect over all PR-systems independent of their unionization level. Unfortunately, no corporatism measure exists over the time period here studied. I therefore use a second best option, an indicator of industrial unionism, with data for 22 countries from 1870 to 2010 from Rasmussen (2015). A variable that is highly correlated with PR (correlation coefficient of 0.69) The results (presented in the Appendix) shows that when controlling for industrial unionism, the marginal effect of trade union density is significant positive under Majoritarian rules marginal effect (marginal effect of 0.27 and t-value of 7.64), and relatively minuscule and non-significant under PR-rules (marginal effect of 0.008 and t-value of 1.57).

6. Conclusion

This paper has investigated how even Majoritarian systems, which are known for their welfare retarding effect, can become welfare states. This investigation is undertaken using a new dataset. The results confirm that, on average, countries with PR enacted more major social laws than Majoritarian systems. At the same time, this difference is reversed in the presence of strong unions, and unions have a significantly stronger effect in Majoritarian systems. This is what we would expect if the theory here proposed is correct: that incumbent candidates in Majoritarian are more sensitive to interest group pressures than candidates in PR systems. This finding goes a long way in illustrating how encompassing welfare states can arise in non-nurturing institutional ground. This is a correction to previous literature where the focus has been on how PR enables welfare state growth, while ignoring the equally interesting question of how social policies come to be in Majoritarian systems.

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Appendix 1: Descriptive statistics for model 4 in table 2.

Table A1. Descriptive statistics for sample used to produce Figure 5 to 6

|	Mean	St.d.	Min	Max
PR	1.27543	.9217839	0	2
Union Density	33.84902	18.36547	0	80.8
Parliamentary	1.309077	.7503143	0	2
Federalism	.586072	.8543188	0	2
Left Executive	.2621283	.4399642	0	1
Population (log)	9.532206	1.305694	6.566672	12.53692
Urbanization	54.84542	19.94361	10.2	97.18106
GDP (log)	9.187526	.64438	7.403911	10.44478
Economic Growth	2.737741	4.499958	-14.37861	65.93448
Democracy	.9898279	.1003821	0	1
Observations	1278			

Appendix 2: Reproducing Table 2 with Panel-corrected standard errors and Ar(1) correction

OLS estimates with Panel-Corrected standard-errors for major social policy laws (1860-2000)

	(1) xtpcse1	(2) xtpcse2	(3) xtpcse3	(4) xtpcse4	(5) xtpcse5	(6) xtpcse6	(7) xtpcse7
Semi-PR	0.09	-0.07	0.7	-0.2	0.6	1.8***	0.7
	(0.38)	(-0.30)	(1.69)	(-0.54)	(1.62)	(6.53)	(1.37)
PR	0.8***	0.7***	0.8***	0.2	0.5***	0.5***	0.5***
	(7.72)	(6.67)	(6.56)	(1.61)	(5.11)	(4.94)	(4.61)
Union density	0.02***	0.02***	0.02***	0.01***	0.03***	0.02***	0.03***
	(4.78)	(4.76)	(4.74)	(3.66)	(6.75)	(4.70)	(8.01)
Union*Semi-PR	0.008	0.005	0.002	0.001	-0.02*	-0.04***	-0.02
	(1.17)	(0.87)	(0.14)	(0.09)	(-2.08)	(-5.21)	(-1.47)
Union*PR	-0.004	-0.005	-0.002	-0.0005	-0.01***	-0.009*	-0.01**
	(-1.14)	(-1.53)	(-0.37)	(-0.13)	(-3.34)	(-2.27)	(-2.90)
Population (log)	-0.09**	0.01	-0.06	-0.02	-0.007	0.9***	0.8
	(-2.64)	(0.28)	(-1.04)	(-0.30)	(-0.03)	(5.34)	(1.33)
Urbanization	0.03***	0.03***	0.03***	0.003	-0.0008	0.009*	0.0008
	(8.59)	(8.73)	(8.30)	(0.90)	(-0.20)	(2.38)	(0.17)
GDP (log)	0.2*	0.2*	0.2	-0.7***	-0.8***	0.2	-0.6***
	(1.96)	(2.29)	(1.70)	(-6.21)	(-6.14)	(1.50)	(-4.21)
GDP growth	-0.0002	-0.0006	0.0001	0.003*	0.003*	0.0003	0.002
	(-0.11)	(-0.47)	(0.07)	(1.99)	(2.08)	(0.21)	(1.41)
Semi-Pres.		0.3**	0.2	0.9***	-0.1	-0.06	0.08
		(3.27)	(1.67)	(6.47)	(-0.70)	(-0.38)	(0.31)
Parliamentary		0.05	-0.2	1.0***	0.1	-0.1	-0.06
		(0.45)	(-1.34)	(6.95)	(0.55)	(-0.63)	(-0.24)
Hybrid		-0.2	-0.3*	-0.4**	-0.1	-0.1	-0.3
		(-1.31)	(-2.57)	(-2.83)	(-0.78)	(-0.68)	(-1.62)
Federal		-1.1***	-1.4***	-1.0***	-0.4	-0.2	-0.7*
		(-7.28)	(-8.98)	(-6.59)	(-1.52)	(-0.77)	(-2.21)
Left executive			-0.006	-0.02	-0.01	-0.008	-0.01
			(-0.25)	(-0.79)	(-0.50)	(-0.36)	(-0.43)
Democracy			0.2	0.07	0.2	0.06	0.09
			(0.95)	(0.39)	(0.93)	(0.29)	(0.37)
Time Trend	No	No	No	Yes	Yes	No	No
Country Dummies	No	No	No	No	Yes	Yes	Yes
Period Dummies	No	No	No	No	No	Yes	No
Observations	1572	1570	1278	1278	1278	1278	1278

t statistics in parentheses. Reference category is a majoritarian, presidential unitary state. Constant, country effects, excluded for redability.* *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001

Appendix 3: Effect of strikes on enactment of social policy laws conditioned on electoral system
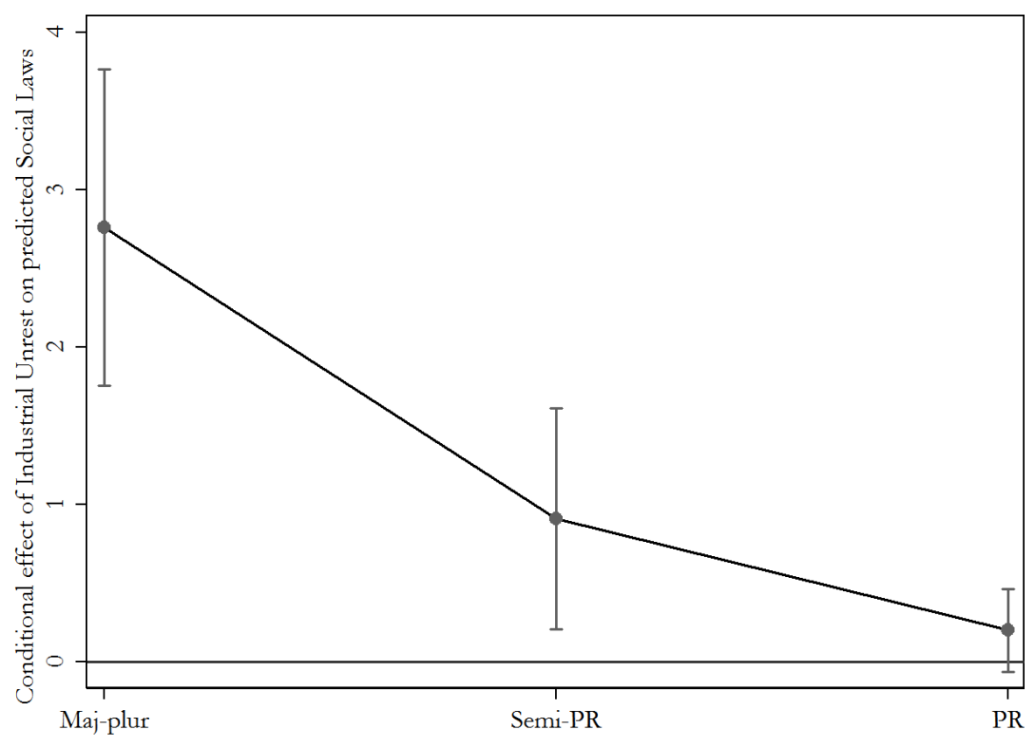
Appendix A4: marginal effect of trade union density controlling for industrial unionism.

OLS estimates with Panel-Corrected standard-errors for major social policy laws (1860-2000)

	(1) XTPCSE
Semi-PR	-15.1***
	(-15.00)
PR	0.7***
	(9.34)
Union density	0.03***
	(11.50)
Union*Semi-PR	-0.03***
	(-9.07)
Union*PR	-0.02***
	(-10.73)
General unionism	0.10**
	(2.82)
Industrial unionism	0.2***
	(4.55)
Population (logged)	1.3***
	(12.23)
Urbanization	0.003***
	(3.44)
GDP/capita (logged)	-0.2***
	(-7.51)
Economic Growth	0.002
	(1.61)
Country Dummies	Yes
Observations	1012

t statistics in parentheses. Reference category is a majoritarian state. Constant, country effects, excluded for redability.* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.*

On constructing the industrial unionism measure from Rasmussen (2015):

I start with Cusack et al (2007) measure of industrial unionism and make their dummy variable time-variant, and introduce a third category, intermediate union structure, to measure whether national union movements are is something in between craft to industrial unionism, but where there still exist a clear craft presence. A strong presence of general unionism is coded as intermediate. Countries are coded as having industrial unionism when main confederations are organized around sectors or industry and aim to organize workers on an industry or sector basis. The introduction of a temporal dimension into this variable is paramount, as no country started with industrial unionism. Instead, industrial unions developed from craft-unionism during the early part of the 20th century(Marks 1989). In order to do so I used the various country-chapters in (Ebbinghaus and Visser 2000), the tables and descriptions reported in (Crouch 1993).

The following countries are coded as primarily having *craft* unions:

Australia, Canada, Denmark, Ireland, Japan, Spain, Portugal, New Zealand, United Kingdom (intermediate from 1960), USA.

The following countries are coded as having primarily *industrial* unions:

Austria (intermediate 1900-1918), Belgium (intermediate 1900-1920), Finland (intermediate 1950-1959) Germany (intermediate 1900-1918), Italy (Craft up to 1919) Netherlands (intermediate 1910-1920), Norway (craft up to 1919), Sweden (intermediate 1920-1929), Switzerland (Craft up to 1910),

France is coded craft up to 1962, intermediate to 1972 and industrial unionism thereafter