Majoritarian systems, rural groups, and (arrested) welfare state development /
Carl Henrik Knutsen, Magnus Bergli Rasmussen

Majoritarian systems, rural groups, and (arrested) welfare state development

Carl Henrik Knutsen[*] and Magnus Bergli Rasmussen[†]

* Professor, Department of Political Science, University of Oslo

[†] Senior Researcher, Institute for Social Research (ISF), Oslo

Abstract

While some scholars suggest that rural groups contribute to welfare state expansion, we highlight their incentives to restrain it. The ability of rural groups to achieve this preference hinges on their power resources, but also the electoral system. We propose that in majoritarian systems, rural groups can often veto welfare legislation. In proportional systems this is less feasible, even for resource-rich groups. Instead, agrarian groups sometimes accept welfare legislation for other policy-concessions in post-electoral bargaining. We illustrate the argument with British and Norwegian historical experiences, but test implications by using panel data from up to 96 democracies. We find evidence suggesting that resourceful agrarian groups effectively arrest welfare state development in majoritarian systems, but not in proportional. As expected, the electoral system matters less for welfare state expansion when agrarian groups are weak. The results are robust to using alternative estimators, measures, samples and model specifications.

Keywords: Welfare state development; Social policy programs; Electoral systems; Proportional representation; Plural-majoritarian systems

Contact: Carl Henrik Knutsen, Department of Political Science, University of Oslo, Moltke Moes vei 31, 0851 Oslo, Norway. Telephone: 004722854244. E-mail: c.h.knutsen@stv.uio.no

1. Introduction

We address how rural groups, which often have strong interests in slowing down welfare state expansion, can either hinder new welfare laws *or* shape the structure of such legislation when enacted, contingent on the power resources they hold and the electoral system in place. In majoritarian systems, relatively resourceful rural groups can more easily win majorities when electorally strong, or pressure candidates in undecided districts to work against welfare legislation. Under PR, even resourceful rural groups may have to settle for post-electoral bargaining with urban groups, entailing new welfare legislation. In brief, pre-coalition bargaining in majoritarian systems enables rural groups to more effectively veto policies and maintain the *status quo* (limited welfare state) than post-election bargaining under PR. Moreover, stronger over-representation of rural groups in many majoritarian systems with high malapportionment further increases the influence of rural groups. Admittedly, this stylized argument masks nuances in electoral system design and heterogeneous actors subsumed under the heading of "rural groups". Despite this, we find surprisingly clear patterns in the data in line with this argument.

Before proceeding, we make two clarifications. First, our argument, following in the tradition of Flora and Horkheimer (1981), pertains to the likelihood of introducing national-level welfare legislation in key areas of risk. Hence, our notion of welfare state extension is broad, considering the existence or non-existence of major programs. We do not directly engage with how the interaction between resourceful rural groups and electoral system influences the specific make-up and evolution of welfare programs (e.g., Esping-Andersen 1990). Hence, we do not address the expansion or retrenchment of welfare services or spending in countries that already have major, national programs in place.[1]

1

Second, we must clarify the relevance, and limitations, of our notion of "rural groups". This definition encompasses (quite distinct and heterogeneous categories of) citizens located in rural areas. While families in rural areas are predominantly tied to some form of agricultural production—indeed, given their strong correspondence in most countries, we use "rural" and "agrarian" groups interchangeably—our definition still covers elites, such as landlords, middle classes, such as family farmers, as well as poor peasants. Admittedly, these different sub-groups often hold quite distinct preferences over issues such as taxation or landholding. Still, one commonality is their lack of strong exposure to "modern-industrial" labor market risks (Baldwin 1990; Mares 2003; Esping-Andersen 1990). This is partially a result of unemployment being more prevalent in urban and industrial centers,[2] but also reflects that the rural economy has historically fashioned alternative ways of dealing with labor risks (Polanyi (2001: 49–50; Kim 2010), and continues to do so in many countries. Their lower exposure to several types of labor market risks means that these actors are likely to view nationwide social policies as subsidies—which they would likely contribute to finance through various forms of taxation—for the urban and industrial classes.

While extant studies have suggested that rural interests helped bring about encompassing welfare arrangements in particular contexts, often drawing on historical developments in Scandinavian countries (Esping-Andersen, 1990; Manow, 2009), we thus highlight that rural interests often oppose welfare state expansion. Yet, we do agree with these extant studies that rural interests are important for understanding and explaining variation in welfare policy enactment. Despite industrialization, agrarian groups remained sizeable long into the 20th century even in OECD countries (and remain sizeable in other democracies today), and the literature on interest-group politics highlights the capacities of rural interests to organize and realize their policy preferences even when moderately sized (e.g., Acemoglu and Robinson,

2

2001). But, such capacities may critically depend on the institutional framework (Thies and Porsche, 2007), including, as we highlight, the electoral system.

We thus contribute to bridge two literatures—on welfare state development *and* on the effects of electoral institutions. In the latter, different studies (e.g., Iversen and Soskice, 2006; Persson and Tabellini, 2004; Rogowski, 1987) propose that majoritarian systems reduce public spending and concentrate resources to local interest groups. We detail how majoritarian systems, more specifically, help *rural interests* in affecting welfare policy expansion—both historically (mainly developed democracies) and currently (mainly less developed democracies). Primarily, we highlight how the *combination* of relatively strong rural groups and a particular electoral system arrest welfare state development. So, while components of our argument, be it on how rural groups influence welfare state development or how electoral rules influence policy making, have been highlighted in previous studies (e.g., Manow 2009), no study has—to our knowledge—systematically investigated how the interaction between the strength rural groups and electoral rules affect welfare state development.

We employ a cross-section time series dataset on *major* welfare state programs in six policy areas. The most comprehensive analyses cover 96 democracies, following the operational threshold set by Schølset (2008), from whom we gather electoral system data, for counting a country as democratic.[3] The time series extend from 1871−2002. We find robust support for our main hypothesis—the negative effect of resourceful rural groups on welfare state expansion is more pronounced under majoritarian systems than under PR.

We start by reviewing relevant studies on features of electoral systems. Thereafter, we elaborate on our argument, and illustrate it by discussing historical experiences from Great Britain and Norway. Next, we present our data and discuss operationalization and design. Before concluding, we present the empirical analysis.

3

2. Electoral systems, political dynamics, and policy outcomes

Electoral systems matter for which groups are represented in legislatures (Lijphart, 2012), and shape the incentives of elected politicians (Persson and Tabellini, 2004). We briefly review findings of direct relevance to our argument, focusing on distinctions between majoritarian and PR systems.

First, majoritarian systems typically reduce the number of effective parties relative to PR. This strengthens incentives for various groups, such as business or agricultural interests, to join under larger, loosely knit parties (Martin and Swank 2008). Second, fewer effective legislative parties promotes single-party majority governments in majoritarian systems, whereas coalition governments are more common under PR (Powell, 2000). Third, with some caveats related to geographical distribution of voters, a marginal change in vote share has larger ramifications for legislative seats in majoritarian systems (Powell, 2000). Thus, majoritarian systems often have sharper electoral competition than PR (Kayser and Lindstät 2015), which increases the sensitivity of parties and (exposed) candidates to voters' demands. Candidates and parties turn particularly responsive when voters organize around clearly formulated interests (Rogowski, 1987). Further, majoritarian elections often hinge on a few undecided districts, allowing well-organized interests to target a few (highly responsive) candidates for policy concessions.

These differences have important policy consequences. Persson and Tabellini (2003) highlight how accountability and responsiveness properties of majoritarian systems allow voters to constrain corruption, while Rogowski and colleagues (e.g., Rogowski and Kayser, 2002) propose that this feature reduces inflation. This responsiveness aspect may also influence policy-making in other areas. Rogowski (1987) highlights how PR is conducive to free-trade policies, whereas, under majoritarian rules, geographically concentrated producer interests

4

can more easily lobby or pressure individual candidates in exposed districts for protectionist measures (see also Ehrlich 2007; Rickard 2010). Further, majoritarian rules alter the composition of public spending away from universal programs towards targeted, narrow programs and projects, and PR yields higher overall spending. Persson and Tabellini (2004) suggest that the latter pattern stems from PR inducing coalition government, where all partners push their pet policies, whereas Iversen and Soskice (2006) highlight that PR facilitates center-left governing coalitions, and thereby increased redistribution.

3. Theory

Our argument specifies how the reviewed features of electoral systems moderate the influence of strong rural interests on welfare state expansion. One key difference between PR and majoritarian systems is the timing of when political coalitions are built, with actors relying on pre-election coalitions under majoritarian rules and post-election bargaining between smaller parties in PR systems. Why is it more difficult for those demanding the introduction of welfare programs to win out under majoritarian systems by forging pre-election bargains with opponents of such legislation, notably rural groups? In essence, the pre-coalition bargaining features of majoritarian systems allows for greater veto power to coherent groups (such as farmer's organizations) situated in key electoral districts. Hence, any policy deviation from the *status quo* (such as introducing new welfare programs) is less likely if these groups find the current situation preferable. Moreover, the typically higher malapportionment found in majoritarian systems, skewed towards overrepresentation of rural districts, helps compound the relative power of rural groups.

We expand on this argument below by separately treating the majoritarian and PR contexts, and use historical experiences from Great Britain and Norway—two cases that we know fairly well and that are well-documented—to illustrate the proposed mechanisms. Britain

5

maintained its majoritarian system over the whole period under study, while Norway changed to PR in 1919. Given their structural conditions (e.g., higher industrialization and urbanization in Britain), rural groups should perhaps have been a more successful in restraining welfare state expansion in Norway than in Britain. Still, over time, the welfare state expanded more in Norway, though mostly after the switch to PR. Yet, we underscore that we only consider these as two illustrative cases that allow us to better clarify and concretize our argument; they do not represent a systematic test. But, before we discuss these cases, let us elaborate on another building-block of our argument, namely the preferences and power resources of rural groups.

Which policies would rural groups implement if they could pick freely? While there is certainly a heterogeneity of actors, with diverging preferences, within such groups, preferences are presumably fairly congruent and clear in some policy areas such as agricultural subsidies and food import tariffs (Acemoglu and Robinson, 2001).[4] And, even though rural groups, especially family farmers, have been considered decisive in bringing about encompassing welfare states, notably in Scandinavia (Esping-Andersen, 1990; Manow, 2009), we argue that major rural actors—including landlords, estate farmers, smallholders and even family farmers—often have common incentives to restrain welfare expansion.

First, employment risks associated with industrialization are higher in urban professions than rural, meaning that rural tax-payers end up subsidizing programs they don't need (Mares, 2003). Second, social policies reduce costs of unemployment in urban professions, and could thus increase urban migration. This, over time, reduces labor supply for rural employers, giving well-off rural groups particularly strong reasons to resist unemployment benefits (Edling, 2006). Landlords and estate farmers, but also family farmers, have often advocated that unemployment should be handled *within* the peasant economy, with the landlord finding other tasks or feeding workers in low-production periods (Mares, 2003, 74; 94–95). Third, the

6

employer–employee distinction is blurred in the agrarian sector. Interchangeably taking on roles of self-employed and employer, even (rural) wage workers are, in many contexts, unlikely beneficiaries of welfare legislation. Instead, they often have to pay for its introduction, particularly since the main income source, land, is easily taxed (e.g., Ansell and Samuels, 2014, 38–39). There can certainly be differences in the preferences of, say, landowners and rural workers regarding welfare state expansion in many contexts, and *if* these differences are very important (with, e.g., rural workers advocating for unemployment benefits) this should make it harder to find empirical support for our hypotheses. Yet, for the reasons outlined above, we expect rural groups to, in many contexts, work together against welfare expansion.

Still, having clear *preferences* alone is insufficient for obtaining one's ideal policy; one also needs the *capacity* to affect decision-making. In democracies, key power resources include number of voters that can be mobilized. Economic resources also count, for instance because they enable effective lobbying. Further, individual actors with common goals must overcome collective action problems, and well-developed organizations are key in this regard.

Admittedly, maintaining a coherent and effective organization can be inversely related to the number of people organizing (while presumably positively related to disposable economic resources). Earlier work has highlighted how smaller, more concentrated groups of agricultural producers can more easily organize to achieve policy goals pertaining to agricultural subsidies, price regulations, and tariffs (Swinnen 2010). Hence, while both numbers and organization capacity count, there may be trade-offs between the two. Nonetheless, enacting or blocking welfare policies—large-scale policy initiatives that are often high on the political agenda—through the electoral channel is a different political undertaking than, say, effectively lobbying politicians to increase food subsidies. To affect

7

welfare policies, numbers and concentration of voters at Election Day count, and although a larger sector may mean less coherent organizations, we surmise that increased size typically increases the influence that agricultural interests have on issues of major welfare reform.

In sum, when rural interests have sufficient power resources they can more easily hinder the expansion of welfare programs preferred by various urban actors (see Ansell and Samuels, 2014). Yet, electoral rules are critical for transforming votes and resources into political clout, and ultimately policies. Specifically, we expect otherwise resourceful rural groups to be more capable of arresting welfare state expansion under majoritarian systems. We start by discussing these systems, before turning to PR systems.

We noted how politicians in majoritarian systems are particularly sensitive to organized interests and voters in competitive districts, and they prioritize "cheap" districts with few voters per delegate. Malapportionment has been much higher under majoritarian rules than under proportional.[5] After industrialization and urbanization from the mid-19th century, many majoritarian countries have had far more rural districts and representatives than the populations of these areas imply under proportionality (Rodden, 2010). Rotten boroughs and mandate distributions benefiting rural areas have made electoral success more likely for rural groups in majoritarian systems.

Indeed, even without electoral majorities, rural groups should have strong political influence in majoritarian systems. Elections often hinge on a few undecided districts (Persson et al., 2000), allowing well-organized groups to target candidates running there, e.g. by threatening to withdraw support if the government promotes "undersirable" policies. And, agricultural interests have historically often had well-structured and effective organizations (Acemoglu and Robinson, 2001). Additionally, electoral districts typically have much lower magnitude in

majoritarian systems, linking delegates to specific, concentrated producer interests (Rickard 2010). Hence, delegates representing small rural districts are often strong advocates of their constituents' preferences,[6] whereas in PR systems delegates typically represent districts including both urban and rural areas *and* delegates are relatively more responsive to the leadership of (stronger) national-level parties.

To illustrate the logic of our argument, we briefly discuss how the British majoritarian system may contribute to explain one interesting puzzle in early welfare state development. Given its comparatively high scores on several factors predicting welfare state expansion (income, industrialization, urbanization, union organization), why did Great Britain not enact more major welfare programs earlier than it did? The absence of major British welfare programs during the 19th and early 20th century—except for an employer liability scheme for industrial accidents—cobbled with structural factors facilitating welfare development require explanation.[7] The traditional explanation has been a strong liberal tradition (Rimlinger, 1971), and Britain—even after the agricultural sector diminished as a political force—maintained less generous and encompassing welfare programs than many other Western European countries. This is reflected in the classification of the British welfare state as "liberal" (Esping-Andersen, 1990). But, we also note that liberals introduced the first major social policy schemes in Britain, and tried (unsuccessfully) to tax the rural elite (Packer, 2001, 62–63). Hence, Britain did have liberal politicians whose ideological positions were compatible with limited social regulation and collecting the requisite taxes to fund such schemes around the turn of century.

We surmise that the electoral system helped rural elites to restrain tax growth and block welfare legislation. The infamous Rotten Boroughs disappeared with the 1832 Reform Act. Later Reform Acts of 1867, 1884, and the Redistribution of Seats Act of 1885, further expanded the franchise and evened out vote-seat share discrepancies between constituencies.

9

Still, rural interests, notably the Gentry, were prominent in Parliament for decades. While only around 11% of British GDP came from agriculture at the time, the 1885 election was the first where MPs related to commerce and industry outnumbered those related to the landed aristocracy (Searle, 2005, 138). Before 1885, Wright (1970) notes that "Calne (Wiltshire) had one seat for 5000 population; Liverpool had one seat for 185,000. A county division of Lancashire, industrial in character, had one seat for 150,000, whilst a rural borough in the south-west had one seat for 12,000". While boroughs with populations below 15,000 ceased to exist with the 1885 act, districts with 15,000 had one MP, just as those with 50,000; and, the larger urban areas only had two. This helped ensure overrepresentation of rural interests, which, together with Conservative Party domination of the House of Lords and government, allowed them to stave off welfare expansion for yet some years, during which various programs were enacted in less industrialized countries. We are not claiming that the (comparatively) small group of British landowners monopolized political power in this rapidly industrializing country. Throughout the 19th century, conflicts between landed interests and increasingly resourceful urban industrialists characterized British politics, with varying outcomes. Still, British agricultural interests remained quite effective in maneuvering the country's majoritarian electoral system, and Britain kept its limited welfare model, which aim was to only "aid the most impoverished" (Baldwin 1990: 100), until the early 20th century.[8]

PR systems have less overrepresentation of rural interests (Rodden, 2010) and typically weaker links of responsiveness (e.g., Vernby, 2007), thereby mitigating the effective veto power of rural groups. Thus, we expect that rural groups more often have to "accept" the introduction of welfare legislation in democracies with PR systems.

10

To elaborate, PR systems typically lack pivotal districts, and have weaker rural bias in their votes-to-seats distributions. It is difficult for any single group to obtain electoral majorities, and coalition governments or minority governments seeking *ad hoc* support from different parliamentary constellations prevail (Powell, 2000). This is amplified by the "Duvergerian" mechanisms inducing higher party system fragmentation under PR. Rural interests are usually represented within larger (liberal or conservative) parties under majoritarian systems, but often form separate party-organization under PR.[9]

Under majoritarian rules, relatively few pivotal districts combined with steeper vote-seat mapping increase incumbents' sensitivity to pressure. This allows agrarian interest groups to influence policy through the mechanisms sketched above, even without organizing separate political parties. In contrast, PR systems more likely lead to the loss of *de facto* veto power.

Inter-party bargaining may, however, provide rural interests—often organized in a distinct, moderately sized party—with *partial* success under PR. The political dynamics of PR systems induce parties representing rural groups to enter negotiations with other parties, such as social democratic parties representing urban workers or liberals representing urban middle classes. Since an urban-urban coalition could give both welfare state expansion *and* absence of tariffs and agricultural subsidies (the "worst-case scenario"), rural groups have strong incentives to enter such negotiations. Indeed, rural groups might even concede certain types of welfare expansions—while avoiding others such as expensive unemployment programs—and bargain for compensatory payments.[10] Even if we expect differences in the *specific bargains* struck between rural interests and, for example, urban middle classes/liberals or, alternatively, urban workers/social democrats, we nonetheless expect *more frequent* enactment of welfare programs as one end-result. Thus, PR systems should more often observe welfare program

11

expansions than majoritarian systems, at least as long as the agricultural sector is fairly sizeable.

Norway in the decades prior to WWII illustrates how agrarian interests must accept some degree of welfare expansion under PR, but also how they *sometimes* can make effective bargains to maintain their favored policy in other areas. Early 20th century Norway was a late industrializer and poor agrarian society. Norway is particularly interesting since it changed from a majoritarian to proportional system in 1920. At the time, about 34% of GDP came from agriculture. The Liberal Party, with strong ties to the agricultural interests, held the prime minister for most years since independence from Sweden in 1905. By 1920, rural and majoritarian Norway was the only Scandinavian country without a national old-age pension program.

The Liberal Party was weakened in 1920, when the agrarian interests broke out and formed the Farmer Party with the introduction of PR. The breakthrough for old-age pensions came 3 years later when a conservative-led government, with social democratic support, pushed through Norway's first such system. The reform was never implemented, however, much because of the economic crisis of the late 1920s (Seip, 1994). The implementation of old-age pensions came far later, in 1936, after rural interests were sufficiently displaced by the extended economic crisis of the 1930s to agree to social policies in exchange for other policies. This culminated in the 1935 Crisis Agreement ("Kriseforliket"); social democrats traded support for agricultural subsidies and tariffs against the farmers' support for a social democratic government and social policy measures (Rokkan, 1987, 77).

Unemployment insurance followed a different trajectory. Norway introduced a voluntary insurance scheme in 1906, but only after the rural coalition blocked reform initiatives in 1902-1904, and severely circumscribed the program. Although the Liberal Party supported the

12

initiative, delegates representing farmer interests voted against their own party's recommendation. The party was effectively split during the 1902-1904 debates between representatives from urban and industrial areas and those representing rural constituencies. The ensuing system of 1906 put the main cost of the program on the municipalities, with extra transfers to rural and agrarian municipalities (Edling, 2006, 106). This shielded rural interests from the costs of industrial worker joblessness, and worked against urban migration. Then, in 1920, the switch to PR mitigated the veto-power of the agrarian interests, and contributed to them subsequently entering into bargaining on welfare state expansion. However, when compulsory unemployment insurance was suggested, it proved too big a pill to swallow. The Farmer Party voted against the proposed legislation in 1937, but the Social Democrats still succeeded in passing the reform with support of (what remained of) the Liberal Party. Rural interests were unable to stop the compulsory coverage unemployment program under PR.

The Norwegian case thus illustrates our more general argument; a switch to PR reduces the effective veto power of rural interests, and opens up for welfare state expansion—sometimes despite direct opposition from rural interest groups, and sometimes with the "support" of these groups in exchange for considerable policy concessions.

While suggestive, the British and Norwegian cases do *not* provide confirmatory evidence for our argument. The differential policy positions taken by rural elites could, e.g., stem from differences in rural ownership structure (Ansell and Samuels 2014); in 1900 only 12 percent of holdings were "family farms" in Britain compared to 74 in Norway. The more egalitarian rural sector in Norway may have made welfare programs more easily acceptable. We also discussed the relevance of the strong liberal tradition in British culture and politics, a tradition that may have blocked welfare state development. There were also other potentially relevant

13

differences between the countries at the time, for example in population size and colonial power status. Further, one can find cases that do not follow the predicted pattern, such as Denmark where the pro-agrarian Liberal Party engineered the establishment of welfare schemes before the adoption of PR (Nørgaard 2000).

Thus, we turn to more comprehensive large-n tests to assess the general applicability of the argument. If rural interests have incentives to block welfare state expansion, the electoral system mechanisms highlighted should generate a similar pattern in, e.g., young African or Asian democracies today.

The two first (naïve) hypotheses that we test are:

H1) PR systems increase the number of major welfare programs enacted relative to majoritarian systems.

H2) A more sizeable agricultural sector reduces the number of major welfare programs enacted.

The above argument assumes that members of rural groups have the ability to meaningfully vote, meaning that our argument is restricted to fairly democratic systems, *and* that these voters are numerous in relative terms. Further, their leverage may only be sufficient when they remain a fairly important part of the economy. As the relative size of the agricultural sector declines, so does their voting numbers and financial resources compared to other groups. We therefore expect the difference in welfare state extension between majoritarian and PR systems to be substantial only when the agricultural sector is fairly sizeable. The difference should disappear when the agricultural sector dwindles below a level where it turns politically negligible (under any electoral system). This leads to our main hypothesis:

H3) The effect of a more sizeable agricultural sector on the number of major welfare programs enacted is larger under majoritarian systems than under PR.

4. Data and empirical design

We run negative binomial models on how extensively the welfare state covers different areas of risks, using data on the number of major welfare state transfer programs enacted. These models cover 96 democracies, with maximum time series from 1871−2002 (Appendix Table A.I lists observations).[11] The extensive sample allows accounting for country- and time-fixed effects on welfare-state characteristics. Country-fixed effects help us to separate effects of the electoral system from those of other (fairly fixed) factors, such as "national norms and values". The time-fixed effects help us account for, e.g., the gradual weakening of agricultural interest groups in many countries over the last two centuries. We return to particular specifications below, but first present our measures.

For the dependent variables, we employ data from our recently collected Social Policies around the World (SPaW) dataset. The main measure incorporates data on *major* welfare programs in six areas: *old-age pensions; unemployment benefits; maternity benefits; family allowances; work injury benefits; sickness benefits*. Appendix B provides specifics on sources and coding rules, and closer discussions on reliability and validity. In brief, validity is enhanced through careful cross-checking of sources. Numerous sources were employed, although the main source is the ILO Legislative series (1919-). The existence of a program is, for practical purposes and possibility of cross-country comparisons, coded using *de jure* criteria. To distinguish major- from minor programs, we only count programs where *at least* one of the following larger groups is covered: industrial/production workers; small-firm workers; self-employed; agricultural workers; students; employers; temporary/casual workers; family/domestic workers. Further, we only code programs regulated trough national

15

legislation, and strictly means-tested programs based on any *property* criteria are not considered.

We employ a count variable on major programs in the six policy areas. The average country-year observation has 4.1 programs and the standard deviation is 2.1. Figure 1 maps the about 3000 country-year observations entering our baseline Model 2, Table 1.[12] Welfare laws differ according to financing system, benefit rates, etc. Hence, ours is a crude measure of welfare state extensiveness. But, it has the clear benefit of being comprehensive and allowing for comparisons across different spatial and temporal contexts. We also test alternative measures on more limited samples, including coverage rates for unemployment and pension schemes in OECD countries.
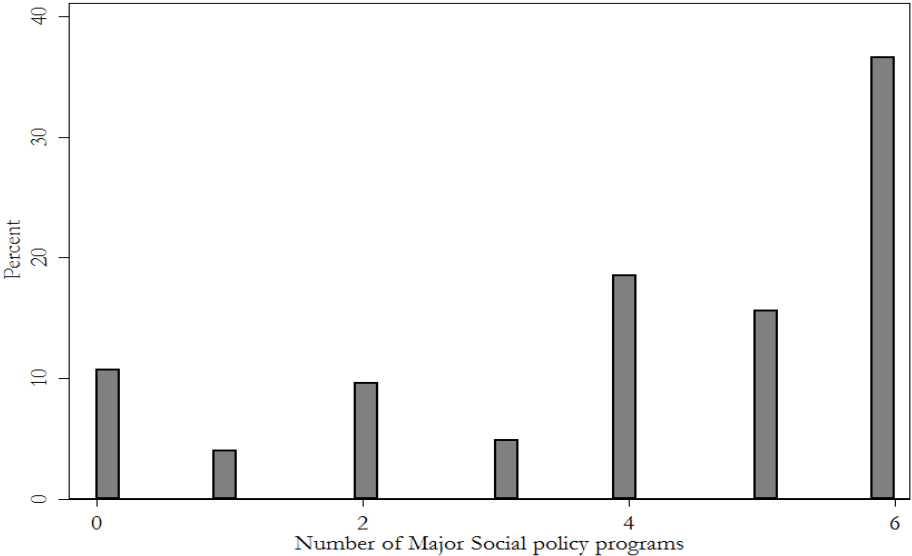

Figure 1: Number of major social laws (old-age; unemployment; maternity; family allowances; work injury; sickness) for observations entering Model 2, Table 1.

To measure the power resources of rural groups, we mainly use agricultural income as share of GDP (ASG), from Miller (2015). The mean in our sample is 31%, the standard deviation is 22%, and minimum and maximum scores are 0 and 93%, respectively. Thus, we follow Dovring (1956) in assuming that the strength of agricultural interests follows their economic

position. As ASG declines, the relative bargaining power of these groups tends to decline. This measure is not ideal. It does not capture the organizational characteristics pertaining to rural groups, which, as discussed, may contribute to *attenuate* our results. Yet, we used what data is available on historical agricultural organization (Flores, 1971) to code share of organized workers in the agricultural sector in 1896 and 1925. The correlation between this measure and ASG is decent (0.54; 27 obs.). Further, the correlation between our measure and Banks' (2008) measure on share employed in agriculture is very high (.98). ASG has the advantage that data exist over the entire period of inquiry, and it should at least capture the key power resources voters and economic resources available. We conduct robustness tests using data on urbanization—the other relevant measure we know of with extensive coverage—as an alternative proxy on strength of rural groups.

We use the electoral system coding from Schjølset (2008, 135–142),with time series from the 19th century. Schjølset's classification is tri-partite, distinguishing between plurality/majoritarian, mixed/semi-PR, and "full" PR systems. As our theory only refers to the PR−majoritarian distinction, we create a dummy coding PR systems as 1, and other systems as 0. To ensure that our placement of the "hybrid category" does not drive results, we test models employing separate dummy variables for mixed/semi-PR and PR.

Our dependent variable is a count variable; the distribution of programs is discrete and limited to non-negative values. The dispersion on our dependent variable is highly right-skewed (when measured in changes). Because of these characteristics, OLS will give biased and inefficient estimates. Count models are constructed to remedy this. Since we find significant over-dispersion in our sample, we opt for negative binomial- rather than Poisson regression (which assumes the variance is equal to the mean).

17

Both the enactments of social policy laws and shifts in electoral systems have followed periodic patterns. Thus, our benchmark includes decade-fixed effects. Variations in electoral systems, agricultural production and welfare laws may also stem from (fairly) stable cross-country differences in geographical location, soil and climatic characteristics, religious affiliation, or other slow-changing cultural features. We include country dummies to control for such differences. Yet, given the limited number of within-country changes on the electoral system dummy (16 in our benchmark sample), we probe specifications excluding country-fixed effects.[13] We further control for log GDP per capita (from Bolt and van Zanden, 2013), for example because richer countries have more resources available for running major welfare programs. We control for trade openness (imports+exports/GDP; from Barbieri et al. 2008)) to account for open economies potentially influencing welfare states (Mares 2003). Finally, we include a lagged dependent variable (LDV), as past number of welfare programs is a strong predictor of current programs.

5. Results

In Appendix A2, we present specifications including the PR dummy and ASG, but without their interaction. These specifications show support for our "naïve" Hypotheses 1 and 2. PR systems are clearly associated with more welfare programs, and there is a negative and highly significant relationship between ASG and programs. Nonetheless, our argument suggests that these tests are miss-specified. We expect the effect of the electoral system on welfare state scope to depend on the clout of agricultural interests. Likewise, the negative relationship between ASG and welfare state extension should be weaker in PR systems than in majoritarian.

Table 1: Negative binomial regressions with number of major social laws as dependent variable

	(1)	(2)	(3)	(4)

	No country-FE	Benchmark	Excl. when max (six) programs in *t-1*	Benchmark + extra controls
	b/(t)	b/(t)	b/(t)	b/(t)
PR	-0.0378***	-0.0787**	-0.160**	-0.136***
	(-6.36)	(-2.79)	(-3.04)	(-3.72)
Agricultural Income/GDP	-0.00200***	-0.00555***	-0.00437***	-0.00812***
	(-7.74)	(-7.69)	(-5.24)	(-5.25)
PR*Agricultural Income/GDP	0.00188***	0.00582***	0.00538***	0.00571***
	(8.32)	(8.93)	(6.28)	(5.93)
Lagged Dependent Variable	0.281***	0.269***	0.306***	0.204***
	(64.57)	(19.10)	(18.61)	(12.73)
GDP/capita (log)	-0.0640***	-0.0733***	0.00880	-0.0859**
	(-10.60)	(-4.43)	(0.33)	(-2.83)
Trade Openness	-0.00382	-0.00238	-0.0130	0.0927***
	(-0.40)	(-0.13)	(-0.22)	(5.28)
Family Farms				-0.00296***
				(-7.32)
Union Density				-0.000268
				(-0.99)
Democracy (BMR)				-0.230**
				(-3.28)
Population (log)				0.221***
				(6.23)
Government Spending/GDP				1.35e-08*
				(2.31)
Country Dummies	No	Yes	Yes	Yes
Decade Dummies	Yes	Yes	Yes	Yes
Observations	3084	3084	1995	1287
Countries	101	101	89	47
Max time series	1870-2002	1870-2002	1870-2002	1951-2002
Pseudo R^2	0.299	0.303	0.337	0.198
AIC	9596.8	9741.5	5661.5	4442.0

*p<0.05, **p<0.01, ***p<0.001. Calculated with Huber sandwich standard errors.

Table 1 thus presents results from models including the multiplicative interaction term (PR*ASG). Model 1 allows for cross-country comparisons by omitting country dummies. Model 2, our benchmark, includes country dummies. These interaction models report clear support for Hypothesis 3; the estimated impact of majoritarian systems in restraining the welfare state is stronger where agrarian interests have more resources. The interaction term is highly significant, with t>8 both when excluding and including country dummies.

19

Indeed, the interaction pattern is more marked when accounting for country-fixed effects in Model 2. Figure 2 plots predicted number of major laws for PR and plural-majoritarian systems, respectively, across ASG. Our argument did not suggest that the PR–plural-majoritarian distinction should matter much for welfare law enactment where agricultural interests are negligible. Then again, different interaction models produce mixed results for the PR term, which can be interpreted as estimating the effect when there is no agricultural production. In Model 2, PR actually has a negative relationship with welfare programs in this context. But, there is no clear difference between PR and majoritarian systems when agricultural income makes up a modest share of GDP; the 95% confidence intervals overlap, and the hypothetical "average" observation is predicted to have just above 4 laws when agriculture makes up 10% of income (Britain around 1900). As the agricultural sector further increases, the difference between the electoral systems turns clear. When ASG is around 30%, PR systems have about ½ additional law, and confidence intervals do not overlap. When the agricultural share of income is 50%, majoritarian systems have one less law than PR systems. Whereas predicted number of laws responds strongly to ASG in majoritarian systems, PR systems consistently have around 4 laws.
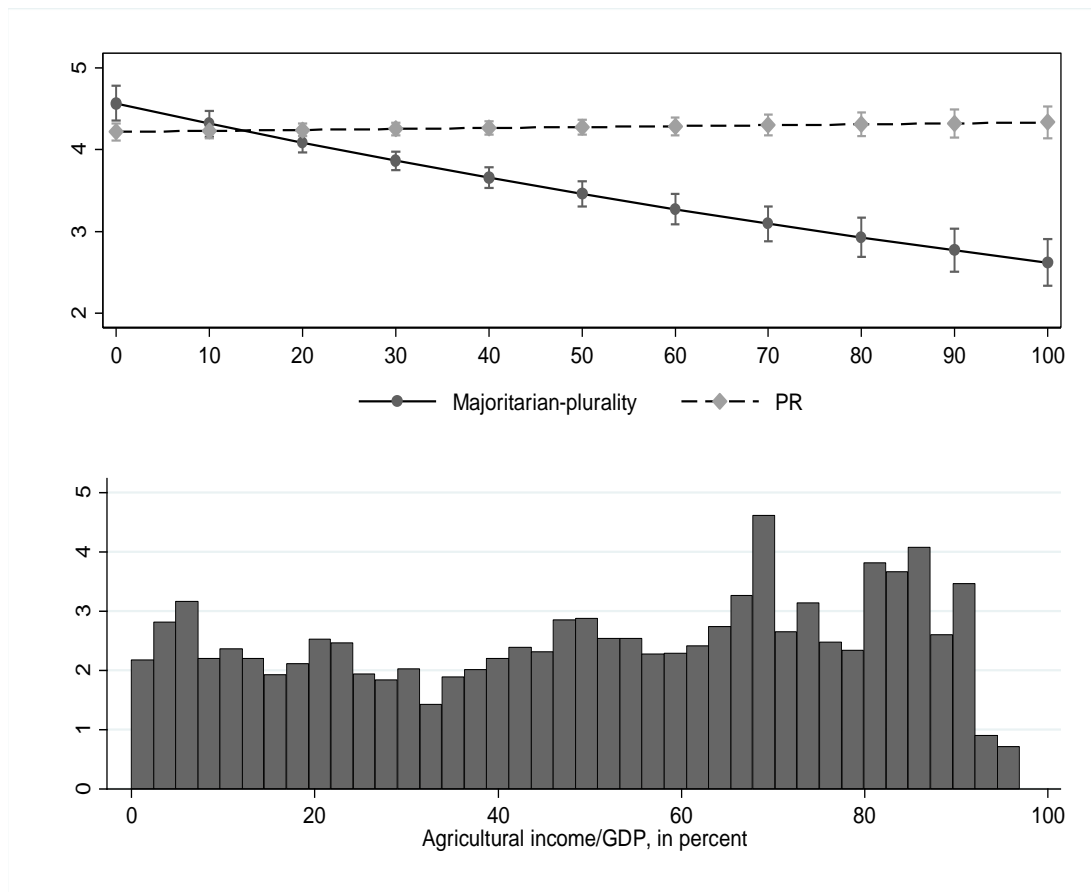
Figure 2. Top: Predicted number major social laws (with 95% CIs), by electoral system, over agricultural income/GDP. Based on Model 2, Table 1, with all other covariates at means. Bottom: Distribution for agricultural income/GDP.

We conducted several robustness tests, and while point estimates vary the hypothesized interaction pattern persists. Model 3, Table 1 shows that results remain stable when excluding observations with the maximum number of programs (six) in *t-1*. There are actually no instances of programs being closed down in our sample, but Model 3 thus tells us that findings are not simply an artifact of certain countries attaining the maximum score early on and remaining in that state due to path dependence. Model 4, Table 1 accounts for the possibility that differential ownership structures could lead agricultural groups to take different positions to welfare expansion by controlling for share of family farms, using updated data from Vanhanen (1977). Model 4 also controls for union density (Rasmussen, 2016), democracy (Boix et al., 2012), population size (logged; Bolt and van Zanden, 2013),

21

and total government spending/GDP (Banks, 2008). Results are stable to including these controls.

More generally, results are robust to varying the control variable specification (Appendix A4). The interaction pattern remains clear when excluding the LDV or when controlling for alternative institutional features that may affect welfare state expansion and correlate with electoral system and agricultural income such as federalism and parliamentarism. Results hold up also when adding *v2psprlnks* from V-Dem, capturing programmatic vs. clientelistic linkages between parties and voters (Coppedge et al. 2018). More general trends in economic development, rather than strength of rural interests, could interact with electoral system in affecting welfare state development. This is a relevant concern since ASG and GDP per capita correlate by .85. We tested several models adding an interaction between GDP per capita and electoral system. Our main result remains robust, whereas the interaction between income and electoral system is not.

Further tests, displayed in Appendix A3, show that the interaction pattern is robust also to other specification choices, including in a Logit specification with adoption of (at least) one new program (in a year) as dependent variable. Neither are results driven by us combining semi-PR with majoritarian systems. When we include dummies for both Semi-PR and full PR (majoritarian is reference category), and interact both with ASG, both interaction terms are positive and highly significant. Next, we tested another proxy of rural strength, namely urbanization. In one way, urbanization is an even broader measure than ASG, since it incorporates the size of non-agricultural rural groups. The welfare-state enhancing effect of PR is less prominent in urbanized societies than in rural. Our findings are also reproduced when using alternative welfare measures (Appendix A6). Specifically, we tested coverage rates for old-age pensions, unemployment, sickness and accident benefits from Korpi and

22

Palme (2007). We are left with about 250 observations from 21 OECD countries measured each fifth year. Despite this, our main findings hold for pensions, accident, and unemployment coverage. For sickness insurance coverage, the coefficient is insignificant but in the expected direction.

Other tests suggest that the hypothesized pattern persists in quite different samples (Appendix A5). One concern is that the results stem from including less democratic regimes—Schjølset uses an inclusive operationalization of democracies when coding electoral systems (Polity≥3). But, results are retained using a higher (≥6) Polity threshold or the Boix, Miller, and Rosato (2012) coding of democracy to restrict the sample. Further, when we split samples according to median score on the family farms measure in 1871, the theorized interaction holds up in societies with egalitarian- *and* inegalitarian land-ownership structures. To test whether other differences in agricultural production related to temperature and crops affect the relationship, we added a control for wheat production, and ran split-sample tests on low- and high-wheat producers. Despite the much lower number of observations—the wheat production data start in 1961—the interaction is robust. Further, the main findings are retained when we consider samples only including "old", industrialized OECD countries *or* only non-OECD countries. Likewise, we find indications of the interaction both in the "historical" part of the time series (pre-1960; see Appendix A3) as well as in more recent years (post-1945). In sum, the theorized interaction is recovered in quite different historical and geographic contexts.

6. Conclusion

We have argued that rural groups have incentives to slow down welfare state expansion. In some contexts—for instance when they can draw on substantial economic resources and command numerous voters—rural groups have a fair shot at succeeding with this goal. Yet, success is also dependent on the institutional framework in which these groups operate. More

23

specifically, rural groups are more likely to succeed in transforming their power resources into restraining welfare state expansion under majoritarian electoral rules. We find robust evidence supporting the contention that rural group strength has a negative effect on welfare state expansion, but that this effect is moderated by the electoral system.

Our argument suggests that the following mechanisms may be important for explaining the differential development of welfare states: In PR systems, rural groups lack veto power over government policy, having to resort to the second-best option of bargaining with either urban liberals or social democrats and accept the introduction of social policies in exchange for other policy achievements. In majoritarian systems, political power is tilted in favor of rural groups, allowing veto power over welfare legislation. Only when the agrarian power base is "broken" by large-scale industrialization and urbanization will majoritarian systems tend to experience encompassing welfare states.

To further assess our argument, future research could conduct deeper, process-tracing case studies, examining the relevance of the proposed mechanisms in more detail. Further, the logic of our argument can be generalized to other policy goals of salience to rural interest groups. Hence, future research could use our set-up to assess evidence on other domestic and foreign policy issues.

25

REFERENCES

Acemoglu, Daron and James A. Robinson (2001) Inefficient redistribution. *American Political Science Review* 95(3): 649–661.

Ansell, Ben W., and David J. Samuels (2014) *Inequality and Democratization*. Cambridge: Cambridge University Press.

Banks, Arthur S. (2008) Cross-national time-series data archive: User's manual. Center for Comparative Political Research, State University of New York at Binghamton.

Barbieri, Katherine, Omar M.G. Keshk and Brian Pollins (2008) Correlates of War Project Trade Data Set Codebook, Version 2.0. Online: http://correlatesofwar.org.

Boix, Carles Michael Miller and Sebastian Rosato (2012) A complete data set of political regimes, 1800–2007. *Comparative Political Studies* 46(12): 1523–1554.

Bolt, J., and van Zanden, J.L. (2013) The First Update of the Maddison Project: Re-Estimating Growth Before 1820. Maddison Project Working Paper 4.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Agnes Cornell, Sirianne Dahlum, Haakon Gjerløw, Adam Glynn, Allen Hicken, Joshua Krusell, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Moa Olin, Pamela Paxton, Dan Pemstein, Josefine Pernes, Johannes von Römer, Brigitte Seim, Rachel Sigman, Jeffrey Staton, Natalia Stepanova, Aksel Sundström, Eitan Tzelgov, Yi-ting Wang, Tore Wig, Steven Wilson and Daniel Ziblatt (2018) *V-Dem Dataset v.8*. Varieties of Democracy Project.

Dovring, Folke (1956) *Land and labor in Europe, 1900-1950: A Comparative Survey of Recent Agrarian History*. Amsterdam: Martinus Nijhoff.

Edling, Nils (2006) Limited Universalism: Unemployment insurance in Northern Europe 1900-2000. In Niels F. Christiansen, Klaus Petersen, Nils Edling, and Per Haave (Eds.), *The Nordic Model of Welfare: A Historical Reappraisal*. Copenhagen: Museum Tusculanum Press, 99–143.

Ehrlich, Sean D. (2007) Access to protection: Domestic institutions and trade policy in democracies. *International Organization* 61(3): 571–605.

Esping-Andersen, Gøsta (1990) *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.

Flores, Xavier (1971) *Agricultural organizations and economic and social development in rural areas*. Geneva: International Labor Office.

Iversen, Torben and David Soskice (2006) Electoral institutions and the politics of coalitions: Why some democracies redistribute more than others. *American Political Science Review* 100(2): 165–181.

Kayser, Mark A. and René Lindstädt (2015) A cross-national measure of electoral competitiveness. *Political Analysis* 23(2): 242-253.

Kim, W. (2010) Unemployment Risks and the Origins of Unemployment Compensation. *Studies in Comparative International Development* 45(1): 57-82.

Korpi, Walter and Joakim Palme (2007) The Social Citizenship Indicator Program (SCIP), Swedish Institute for Social Research, Stockholm University.

Lijphart, Arend (2012) *Patterns of democracy: Government forms and performance in thirty-six countries*. New Haven: Yale University Press.

Manow, Philip (2009) Electoral rules, class coalitions and welfare state regimes, or how to explain Esping-Andersen with Stein Rokkan. *Socio-Economic Review* 7(1): 101–121.

Mares, Isabela (2003) *The politics of social risk: Business and welfare state development*. Cambridge: Cambridge University Press.

Martin, Cathie Jo and Duane Swank (2008) The Political Origins of Coordinated Capitalism: Business Organizations, Party Systems, and State Structure in the Age of Innocence. *American Political Science Review* 102(2): 181–198.

Miller, Michael K. (2015) Democratic pieces: Autocratic elections and democratic development since 1815. *British Journal of Political Science* 45(3): 501–530.

Nørgaard, Asbjørn S. (2000) Party Politics and the Organization of the Danish Welfare State, 1890–1920: The Bourgeois Roots of the Modern Welfare State. *Scandinavian Political Studies* 23(3): 183–215.

Olper, Alessandro and Valentina Raimondi (2013) Electoral rules, forms of government and redistributive policy: Evidence from agriculture and food policies. *Journal of Comparative Economics* 41(1): 141–158.

Packer, Ian (2001) *Lloyd George, liberalism and the land: The land issue and party politics in England, 1906-1914*. Woodbridge: The Boydell Press.

Persson, Torsten and Guido Tabellini (2003) *The Economic Effects of Constitutions*. Cambridge, Ma.: MIT Press.

27

Persson, Torsten and Guido Tabellini (2004) Constitutions and economic policy. *Journal of Economic Perspectives* 18(1): 75–98.

Piore Michael J. (1987) Historical perspectives and the interpretation of unemployment. *Journal of Economic Literature* 25(4): 1834-1850.

Polanyi Karl (2001[1944]) *The great transformation: The political and economic origins of our time*. Boston: Beacon.

Powell, Guy B. (2000) *Elections as Instruments of Democracy: Majoritarian and Proportional Visions*. New Haven: Yale University Press.

Rasmussen, Magnus B. (2016) How organized labor shaped the origin and structure of the regulatory revolution 1870-2000. Aarhus: Aarhus University. PhD Thesis.

Richter, Thomas, and Viola Lucas (2016) User Manual for the GSRE 1.0 - Global State Revenues and Expenditures Dataset, Hamburg: GIGA.

Rickard, Stephanie J. (2010) Democratic differences: Electoral institutions and compliance with GATT/WTO agreements. *European Journal of International Relations* 16(4): 711–729.

Rimlinger, G.V. (1971) *Welfare policy and industrialization in Europe, America, and Russia*. New York: John Wiley and Sons.

Rodden, Jonathan (2010) The geographic distribution of political preferences. *Annual Review of Political Science* 13: 321–340.

Rogowski, Ronald (1987) Trade and the variety of democratic institutions. *International Organization* 41(2):203–223.

Rogowski, Ronald and Kayser, Mark A. (2002) Majoritarian electoral systems and consumer power: price-level evidence from the OECD countries. *American Journal of Political Science*, 46(3):526–539.

Rokkan, Stein (1987) *Stat, Nasjon og Klasse*. Oslo: Universitetsforlaget.

Schjølset, Anita (2008) Institutional Variance of the Democratic Peace, 1816-2002. University of Southern California. PhD Thesis.

Searle, G.R. (2005*). A New England? Peace and War, 1886-1918*. Oxford: Oxford University Press.

Seip, Anne-Lise (1994) *Veiene til velferdsstaten: norsk sosialpolitikk 1920-1975*. Oslo: Gyldendal.

Swinnen, Johan F.M. (2010) The Political Economy of Agricultural and Food Policies: Recent Contributions, New Insights, and Areas for Further Research. *Applied Economic Perspectives and Policy* 31(1): 33–58.

Thies, Cameron G. and Schuyler Porche (2007) The Political Economy of Agricultural Protection. *Journal of Politics* 69(1): 116–127.

Vanhanen, Tatu (1977) *Political and Social Structures: European Countries, 1850-1974.* Ann Arbor: Published for [the] Finnish Political Science Association by University Microfilms International.

Vernby, Kåre (2007) Strikes are more common in countries with majoritarian electoral systems. *Public Choice* 132(1-2): 65–84.

Wright, D.G. (1970) *Democracy and Reform, 1815-1885*. New York: Routledge.

[1] Still, we test more fine-grained measures of program coverage in Appendix A7 on a sample of OECD countries, and find similar – though less robust – patterns as in our main analysis.

[2] Piore (1987) even argues that unemployment did not exist as a concept before industrial society.

[3] Schjølset (2008) counts as democracies countries scoring ≥3 on Polity2 (ranging from -10–10). This index includes indicators pertaining to three dimensions: competition in leadership selection; right to participate in leader-selection processes; and, institutional constraints on the executive. Countries that drop below 3 on Polity2 therefore exit our sample. We use stricter criteria for counting countries as democratic in additional tests, and results are robust.

[4] If our argument holds more generally, agricultural import tariffs, for example, should be higher under majoritarian systems when rural interest groups are fairly strong. When running fixed effects models on taxes on international trade, we find a resembling interaction pattern to that on welfare policies (Appendix A7).

[5] Using the malapportionment measure (*v3elmalalc*) from "Historical V-Dem" (see Coppedge et al., 2018), we find that the mean score for majoritarian systems was much higher than for PR (about one standard deviation, across the full, 19th century sample, higher).

[6] One caveat is that, in many majoritarian-system countries, small rural districts may vote for Conservative or Agrarian parties with overwhelming margins, which should weaken incentives to cater to these "safe-seat" constituencies.

[7] Austria-Hungary, Italy and France had enacted two major programs (in areas covered by our data), and Germany four.

[8] When the breakthrough finally came, the landed elite was "attacked on all fronts". The liberal government of 1906, with its "people budget", aimed to redistribute from landed elites

30

to urban and rural tenants' with several proposals, including new tax rules, redistributive land-arrangements and social policies. Landlords in the House of Lords blocked property taxes targeted to rural elites, and land-reforms were mostly ineffectual (Packer 2001, 62–63), but they had to concede on social policy. From 1906-1911, liberal governments, supported by labor representatives, enacted programs covering old-age pensions and sickness unemployment.

[9] The actions of the Norwegian agrarian organization (Norsk Landmandsforbund) are illustrative (Rokkan, 1987). Established in 1896, it was among the strongest interest organizations in Norway. Under majoritarian rules, farmers focused on influencing the two main parties, the Conservative- (Høyre) and Liberal Party (Venstre). This strategy was abandoned in 1920, coinciding with Norway introducing a PR system and the creation of the Farmer Party.

[10] This could contribute to Olper & Raimondi's (2013) findings that reform into PR increases agricultural subsidies. However, these authors do not investigate the interaction between electoral system and strength of agricultural interests.

[11] Appendices are in the Online Supplementary Material: INSERT LINK.

[12] One concern is that this variable is trending, and we deal with potential non-stationarity by estimating models with lagged dependent variables. We also estimate logit models on probability of adopting at least one new program.

[13] The fixed-effects results are robust to omitting any particular country from the sample.

Carl Henrik Knutsen is Professor of Political Science at the University of Oslo. His work centers on the economic effects of political regimes and institutions, the determinants of regime change, and measurement of institutions and regimes.

Magnus Bergli Rasmussen is Senior Researcher at the Institute for Social Research, Oslo. His work centers on comparative and historical labor market- and welfare state development.