Distribution of political rents and voter support: some evidence on farm subsidies and electoral performance of a peasant party in Poland

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Abstract

Political parties can be assumed to engage in redistributive programmes in order to gain or maintain voter support. In this paper we look at what happens to support from the electorate once the rents that were previously endogenously created become exogenous and a party loses the possibility to target its core voters. Our example comes from Poland, where the national farm policy has been replaced by the Europe's Common Agricultural Policy (CAP). As a result, the Polish Peasant Party (PSL) had very limited possibility to decide on the size and allocation of financial transfers directed to farmers. Using a unique dataset on more than one million beneficiaries of CAP payments, we calculate various measures of inequality of rent distribution at the local level in 2014 and find that during the 2015 elections PSL performed relatively better in municipalities where the distribution of farm subsidies was more unequal.

Keywords: farm subsidies, voter support, peasant party, Poland

1. Introduction

Following the argument advanced by Tullock (1983), it is now quite common to assume that state involvement in redistribution is driven by the political process and that the decision to support one group or another should be seen as a response to political pressure. In line with this logic, an extensive strand of research has convincingly shown that government intervention could be explained by political-support motive (Hillman, 1982). According to this view, rent creation and rent assignment can provide tangible political benefits in the form of votes of those supported by public policies. Put differently, political capital can be made out of the demand for redistribution when grievance of those unhappy with the current allocation of resources can be addressed through some kind of state intervention.[1]

[1] One can refer here also to a related literature on political business cycles (originating with the work by Nordhaus, 1975; and MacRae, 1977; for a review of the existing evidence see, for example, De Haan and Klomp, 2013) or consult studies on vote buying (Lindbeck and Weibull, 1987; Schaffer, 2007; Collier and Vicente, 2012; Aidt et

In this paper we would like to address a related but distinct issue. More specifically, we ask the question about what happens to voter support once the rents remain intact (in fact, they even increase and the increase is quite substantial) but political actors can no longer influence them. In other words, we examine a situation in which the rents that were previously endogenously created become exogenous.

To the best of our knowledge, this scenario has not been subjected to a closer empirical scrutiny. Indeed, the overwhelming majority of existing literature seeks to assess the political impact of the introduction or removal of this or that redistributive programme (see, for example, Manacorda et al., 2011; Pop-Eleches and Pop-Eleches, 2012; Chen, 2013; Blattman et al., 2018). In addition, while the received studies often investigate the impact of redistribution on voter support by comparing voting behaviour of those who received a subsidy with those who did not, our focus is on the extent to which the change in voter support depends on the distribution of rents among those who receive them. This brings us close to the literature which tries to establish the relationship between economic inequality and (support for) redistribution (Meltzer and Richard, 1981; Iversen and Soskice, 2006; McCarty and Pontusson, 2012; Scheve and Stasavage, 2017; Gimpelson and Treisman, 2018; OECD, 2021). That said, we are not aware of any study that would investigate the potential impact of political rents on election outcomes by focusing on the distribution of subsidies targeting a specific group of voters.

In our empirical analysis we look at rents provided by agricultural policy, which has been often presented as a classic example of a policy that generates special benefits for special groups (Tullock, 1981; Persson and Tabellini, 2000; Furtom et al., 2009).[2] Our example comes from Poland, a country where agricultural sector has been an important source of employment and where agrarian party played an important role on the political scene. The country's agricultural policy experienced a radical shift with the accession to the European Union (in May 2004). Most importantly given our focus, membership in the EU was tantamount to the adoption of the Common Agricultural Policy (CAP). This, in turn, largely ruled out the possibility of domestic political actors to influence the amount and allocation of subsidies offered to a farming population. Drawing on a unique database on individual beneficiaries of CAP payments in 2014, we examine whether the distribution of these payments at the local level may have had any impact on voter support for the agrarian Polish Peasant Party (PSL), which was in charge

al., 2020). All these works postulate that governments will try to intervene in the economy in pre-election periods to increase their support.

[2] It might be noted, however, that some authors argue that treating all agricultural subsidies as political rents is unjustified (see, for example, Czyżewski et al., 2017).

of the Ministry of Agriculture and Rural Development in the period 2007-2015. Our focus is on the 2015 elections, in which the party secured only 5.13% of votes, its worst result in any post-1989 elections. In particular, we look at whether this decline in support depended to any extent on the distribution of agricultural subsidies. By adopting this focus we clearly differ from the vast literature interested in various impacts of CAP payments. While the latter have been extensively studied, the existing work has mostly focused on the impact of CAP payments on land rents (e.g. Michałek and Ciaian, 2014), technical efficiency (e.g. Martinez Cillero et al., 2018), farm size inequality (e.g. Piet et al., 2012), or rural labour market (e.g. Hennessy and Rehman, 2008). In contrast, we are not aware of any study that would analyse the impact of CAP payments on electoral outcomes.

The relationship in question is not obvious. On the one hand, one could hypothesise that the disapproval for a governing party not being able to correct the rent allocation will be stronger if rents are unequally distributed. Hence, one would expect PSL to suffer from greater losses in electorate in municipalities where the distribution of farm subsidies was more unequal and where relative deprivation was potentially more salient. On the other hand though, increase in amounts paid to farmers in subsidies might have offset the potential negative impact of rising inequality. Viewed from this perspective, the distribution of payments to agricultural producers should not have significant impact on support for the PSL. Last but not least, to the extent PSL aligned itself with recipients of largest subsidies and became the party representing mainly their interests, one could expect that its support might have been positively related to the level of payments' concentration. Our results tend to support the latter hypothesis.

The paper is structured as follows. In the next section we briefly present the background information that sets the context for our analysis and helps to motivate our research question. Section 3 presents our data set and empirical strategy that we adopt, whereas the next section reports our results. Finally, the last section discusses our findings and concludes.

2. Motivation and background

Poland, which is the focus of this study, seems to provide a natural context for investigating the importance of the distribution of agricultural subsidies for electoral outcomes. The reason is threefold. First, according to Eurostat data, the country has the second highest number of farms in the EU (around 1.4 million) and the fourth highest share of people employed in agriculture (around 10%). As a result, agricultural electorate accounts for a non-trivial share of the total electorate. Second, and relatedly, Poland is one of the few countries in the EU where the party with a clearly defined rural-agricultural electoral constituency, the Polish Peasant Party (PSL), has played a fairly significant role on the national political scene. In fact, except for being a junior coalition partner in the government in 2007-2015, the party participated in the governments led by the communist successor SLD between 1993-1997 and 2001-2003. Third, in recent years the country experienced quite a radical change in the way agricultural policy was formulated. Namely, rents provided to a farming population, which used to be endogenous, became largely exogenous.

Indeed, with the accession to the EU, in May 2004, Poland has been embraced by the Europe's Common Agricultural Policy (CAP). This has had several important consequences but given our focus one of them seems to be the most important. More specifically, joining the EU meant that Poland, as every other Member State, had to abandon the possibility to create its own agricultural support policies. This is not to say that national resources have not been involved in the process of financing agricultural and rural development. However, this mostly took the form of co-financing EU programmes (Wilkin, 2014). Furthermore, while the CAP does provide Member States with some flexibility to allow them to address specific problems, the main decisions on support programmes, on the criteria governing eligibility for subsidies, and on the level of support were largely shifted to the competences of officials in the European institutions. To be sure, each of these elements is subject to negotiation with the Member States. However, once approved, support programmes are not easily changed and manipulating with the amount and assignment of subsidies, especially in response to electoral cycle, is not possible.

Interestingly, and also importantly given our focus, the fact that the national authorities had to relinquish their ability to shape agricultural policy did not mean a lower level of support directed at the agricultural sector. To the contrary, and what makes our example a particularly interesting case, EU membership has meant a significant increase in financial resources directed towards rural areas and the agri-food sector in particular. For example, according to Nurzyńska (2006), in the first two years of EU membership the funds directed to the agricultural sector were twice as high as before accession. In the subsequent years, these funds were even larger. For example, Poczta (2020) reports that in the period 2001-2003 the average subsidies to the sector amounted to 1 billion PLN, while the average for the period 2004-2018 amounted to 15 billion PLN. Overall, between 2004 and 2019, Poland received more than 56 billion EUR from the CAP budget, including financial resources for rural development (Nurzyńska, 2020).[3] The vast majority of these funds went to support farmers' incomes (a large share took the form of flat-rate area payments paid for eligible agricultural land). In fact, the share of subsidies in agricultural incomes increased, on average, from 9% in 2001-2003 to 49% in 2004-2018 (Poczta, 2020).

Against this background, it is interesting to observe that the peasant party suffered in 2015 a big defeat. As mentioned earlier, it barely crossed the 5% electoral threshold. This result was much worse than that recorded in 2001, 2005, 2007 or 2011 when PSL obtained 9%, 7%, 8.9% and 8.4%, respectively. This can also be seen in the absolute number of votes which declined from 1.4 million in 2007 (1.2 million in 2011) to 0.78 million in 2015. At first, this may look rather surprising. After all PSL's traditional core base has always been the rural-agricultural electorate (Zarycki, 1997) and the party was for a long time perceived as a class-based organisation representing the interest of agrarian population.[4] As argued above, the level of support directed towards rural areas in 2015 was incomparably higher than before, if only in 2007. The same is true for farmers' income. And yet the rural population (farmers as well) has supported the agrarian party less and less over time (Bański et al., 2018; Halamska, 2020).

A common explanation for the poor performance of PSL in the 2015 elections is that the public was tired and increasingly critical of the governance by the then PO/PSL coalition that ruled Poland for eight years (Jasiewicz and Jasiewicz-Betkiewicz, 2016). At the same time, Law and Justice party managed to successfully appeal to rural voters becoming the preferred option in many rural constituencies (Bański et al., 2018). Some commentators attribute the decline in support for PSL precisely to the improved standard of living in the countryside after joining the EU, claiming that the need for a party to represent the interests of this segment of the population has naturally diminished (Halamska, 2020). Still another argument points to the significant change that has taken place in the occupational structure of rural residents and, in particular, the decline in the share of farmers and the growth of the middle class.

Our aim is not to disprove these explanations but to complement them with a focus that has not been given sufficient attention, namely on the distribution of CAP payments. The point that we would like to make is that the undeniable increase in living standards might have been accompanied by greater income disparity. What follows is that a declining support for the party

[3] Importantly, according to many commentators such a level of support would not be sustained by national budget alone.

[4] Only recently there have been some efforts to transform it into a centrist party with a much broader electoral base and a stronger support in urban centres (Szczerbiak, 2020).

may have been driven by the intolerance for inequality (for an early exposition of this point see, for example, Hirschman, 1973), or by the fact that PSL might have become a party gaining support primarily from those who receive relatively high agricultural subsidies. Please note that there are good reasons to believe that CAP payments has indeed contributed to rising inequalities among farmers.

To see this, one can recall that in 2005 the percentage of total amount of direct payments that went to the smallest farms (receiving less than 5 000 EUR) was about 80%. In 2015, in turn, the respective share was already under 50% (European Commission, 2016). Put differently, over time a growing share of subsidies went to larger farms. The reason for that was the gradual transformation of the agrarian structure, namely middle-size and smaller farms (below 10 ha) exiting the sector and farms over 20 ha growing in size (Poczta, 2020).[5] Regardless of the underlying cause, however, the outcome was a growing diversification of the farming population.

This view is consistent with other observations that the literature has made. For example, Jędrzejczak and Pękasiewicz (2017; 2018) document quite substantial income inequality for farmers' households in Polish macro-regions and provide evidence that income inequality among farmers increased over time. In addition, when answering the question of what did European integration give the Polish rural areas, Gorlach and Nowak (2010) note that European funds primarily strengthen the production potential of larger farms. Similarly, it has been argued that accession to the EU has significantly increased the diversification within the group of farmers and consequently contributed to an increased differentiation of farmers' interests, expectations and forms of manifesting them (Gorlach, 2009; Foryś, 2022). Excessive concentration of farm payments or the fact that they may contribute to an increase in income inequality among farmers has been also recognised in other Member States (Allanson and Rocchi, 2013; Matthews, 2019; Ciliberti et al., 2022).[6]

This may be driven by the very nature of some subsidies – including the largest instrument in the CAP, direct payments – which implies increasing inequalities even if the farm structure remains the same. To see this, compare the situation of two farmers one of whom has five

[5] According to the data from the Agency for Restructuring and Modernisation of Agriculture (ARiMR), following the accession to the EU, a gradual but steady increase in the average farm size could have been observed. Between 2006 and 2015 the average farm size went up from 9.5 ha to 10.5 ha. Detailed data can be accessed at https://www.gov.pl/web/arimr/srednia-powierzchnia-gospodarstwa2.

[6] However, studies showing that farm subsidies help to reduce income inequalities should also be recognized (Moreddu, 2011; El Benni and Finger, 2013; Severini and Tantari, 2013; Piet and Desjeux, 2021).

hectares and the other has one hectare. Let us assume that they can earn 5 units and 1 unit, respectively. Therefore, before any state intervention the distance between these farmers, as measured by income, is 4 units. Now let us assume that the EU pays each of them direct payments and that the latter take the form of a flat rate per hectare, as it is in Poland. Suppose the subsidy is equal to one unit per hectare. The farmer with a larger farm will receive 5 units, while the farmer with a smaller farm will get 1 unit. In consequence, the distance in income between the two will get bigger and will now be 8 units (four units due to productive activities and four units because of subsidies). To the extent farmers, especially those at the bottom of the distribution, dislike inequality they would demand additional subsidies to improve their position, not necessarily in absolute terms but in terms of relative poverty. As we argued earlier, however, PSL which was in charge of agricultural affairs, could not do this under the umbrella of agricultural policy as it was not possible within the CAP.

Finally, there is yet another reason for why the inequality among farmers might have increased and this has to do with the fact that farmers differed in how they used the subsidies. For example, not all farmers have taken the opportunity to modernise their farms to the same extent. Consequently, access to CAP payments might have contributed to more dispersed earnings as some beneficiaries used them to improve their productivity and some others did not. This argument shows that inequality among farmers might have increased even if the allocation of total subsidies was aimed to help those at the bottom of the distribution.

Therefore, to the extent that farmers at the bottom of the rent distribution dislike being relatively deprived, it is plausible to assume that, once dark clouds started to gather over PSL, the party was more likely to lose votes of those getting relatively small subsidies and retaining the support of those receiving relatively high subsidies. Below we aim at testing this hypothesis with data.

3. Data

Our analysis uses the following data. Information on the distribution of agricultural subsidies comes from the website operated by the Polish Ministry of Agriculture and Rural Development (https://beneficjenciwpr.minrol.gov.pl/). The website presents information about all individual beneficiaries of the European Union’s Common Agricultural Policy. As our aim is to explain the changes in support for PSL between the 2015 and 2011 elections, we focus on CAP payments data from 2014.[7] In total we have approximately 1.4 million individual observations. Our focus is on total payments received (i.e. on the sum of all payments listed in Annex I to Regulation (EC) 73/2009 of the Council).[8]

These data allow us to construct various measures capturing the extent to which farm payments are (un)equally distributed. This is important as most of the papers concerned with inequalities in rural areas used land-Gini index (see, for example, Deininger and Squire, 1998; and numerous literature that followed the suit). While this approach seems to provide a natural way of investigating inequality-related issues, the index has several shortcomings (for instance, we may observe the same Gini index for two regions even though they have different land distribution). It might be important therefore to use also other measures. Our data allows us for example to calculate income support shares i.e. the share of support granted to a given population group such as top 1%; top 10% or bottom 10% (see, for example, Piketty, 2014; or Bauluz et al., 2020 for the work on land distribution) or other commonly used measures such as Theil index, Atkinson index or the coefficient of variation (Davies et al., 2017). All inequality measures are calculated at the municipality level. This is the lowest tier of local government (corresponding to Eurostat LAU unit). Given that we analyse rents going to the agricultural sector, our focus is on rural municipalities. In our dataset we have 1169 municipalities, which account for 77% of all rural municipalities in Poland.[9]

The data on election results come from the National Electoral Commission (https://pkw.gov.pl/). These data provide information on party support and voter turnout in each municipality. Finally, all the data on socio-economic characteristics at the municipality level come from the Local Data Bank prepared by Statistics Poland (https://bdl.stat.gov.pl/bdl/start). Unless stated otherwise, these data are for 2014 and thus capture the situation prior to the 2015 elections. Additional data come for the agricultural census conducted in 2010.

Our empirical strategy aims to estimate the impact of various measures of inequality on changes in support for PSL between the 2015 and 2011 elections. In order to achieve that, we estimate various OLS models with fixed effects at regional level. Depending on the specification we

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[7] This is also the earliest year made available by the Ministry of Agriculture and Rural Development. This is also why we cannot exploit changes in the CAP payments' distribution in our empirical strategy.

[8] This annex can be found here: https://beneficjenciwpr.minrol.gov.pl/filenames

[9] Some data was lost due to the fact that we were not always able to clearly link the data on individual beneficiaries to a specific municipality. The reason for that was: 1) some rural municipalities in different parts of the country have the same name; or 2) some rural municipalities have the same name as urban municipalities. The raw data that we used provided us only with the name of the municipality and the zip-code. The two were sometimes insufficient to unambiguously identify the place of residence of a given beneficiary. Whenever there were doubts concerning the latter, we removed the given municipality from the analysis.

either use voivodship-level or county-level fixed effects. According to Eurostat nomenclature the former are NUTS-2 units, whereas the latter used to be identified as LAU-1 units. In a second step we check if our results change once we control for additional covariates, capturing various issues that could be related to both the distribution of subsidies and the support for the agrarian party.

4. Results

We start by showing some descriptive statistics illustrating the distribution of farm payments in 2014 at the municipality level. In order to get some insights on whether or not unequal distribution of farm subsidies might have affected voter support for PSL, we create a variable measuring the change in support for the party between 2015 and 2011 and divide our sample into two equal subgroups: one with all municipalities where the change in support was above or equal to the median, and one with municipalities where the change was lower than the median. The relevant results are reported in Table 1 below.

Table 1. Distribution of total CAP payments among individual farmers in 2014 - descriptive statistics

	(1) Whole sample	(2) PSL_{2015}-PSL_{2011} >=median	(3) PSL_{2015}-PSL_{2011} <median	(4) Diff: (2)-(3)
No. of beneficiaries (log)	6.12	5.89	6.35	-0.46***
Mean payment (log)	9.60	9.65	9.55	0.09***
Median payment (log)	8.73	8.65	8.80	-0.16***
q75_q25	4.14	4.56	3.73	0.83***
q90_q10	16.96	19.71	14.20	5.51***
q99_q01	181.28	222.34	140.21	82.13***
Gini index	0.63	0.66	0.60	0.06***
Standard dev. of logs	1.06	1.11	1.00	0.10***
Theil index	1.16	1.27	1.05	0.22***
Share of payments to top 1% beneficiaries	24.01	25.34	22.72	2.62***
Share of payments to top 5% beneficiaries	43.75	46.89	40.61	6.27***
Share of payments to top 10% beneficiaries	54.43	57.88	50.98	6.90***
Share of payments to top 25% beneficiaries	72.10	74.90	69.29	5.60***

*Source: Own elaboration based on data from the Ministry of Agriculture and Rural Development. 1168 rural municipalities included. Note: In column (2) we look at municipalities in which the change in electoral support for PSL between 2015 and 2011 elections was above the median change. In column (3), we look at municipalities in which the change in electoral support for PSL between 2015 and 2011 elections was below the median change. In column (4) we report the difference between column (2) and column (3) and indicate the significance of t tests on the equality of means reported in columns (2) and (3). *** denote significance at 1% level. Variables denoted as 'qX_qY' refer to different percentile ratios as indicated by X and Y.*

As shown, in municipalities in which the electoral performance of PSL was relatively better (i.e. the party managed to improve its result over time; or the decrease in support was relatively mild) farm subsidies seem to be more concentrated than in municipalities in which PSL suffered more severe losses (compare columns (2) and (3)). Interestingly, this portrayal looks very consistent and does not depend on the inequality measure that we look at. In addition, we get a very similar picture when, instead of looking at total CAP payments, we look only at single area payments (i.e. direct payments to land).[10] This, in turn, suggests that the distribution of agricultural subsidies might have indeed played a role in shaping support for PSL at the local level. Below we investigate this issue in more detail using econometric methods.

We start by showing the results of a simple OLS model of the following form:

$$\Delta PSLsupport_{2015-2011,i} = \alpha + \beta inequality_{2014,i} + \delta PSLsupport_{2001,i} + \gamma X_{2010,i} + \mu_i + \varepsilon_i$$

where the dependent variable measures the change in support for PSL between the 2015 and 2011 elections in a municipality i and the key independent variable, $inequality_i$, captures the distribution of agricultural subsidies at the municipality level (as explained above, depending on a specification we use different inequality measures). Our models include also a variable which captures the potential for popular support for PSL. In order to achieve that, we look at the party's results in the 2001 elections ($PSL_{2001,i}$). In these elections PSL recorded its best performance in the XXIst century (8.98%). In addition, we control for regional level fixed effects μ_i. In different specifications we also control for a range of factors that might potentially be responsible for variation in support for the agrarian party (captured in vector X_i). These controls are introduced below. Results of our OLS models are presented in Table 2.

Table 2. OLS results – all payments summed together

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Gini index			90percentile-10percentile ratio			Top 10% share		
inequality	0.0843***	0.0648***	0.0604**	0.0004**	0.0004*	0.0003*	0.0006***	0.0004**	0.0004**
	(0.0234)	(0.023)	(0.024)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
PSL_{2001}	- 0.212***	-0.156***	-0.153***	-0.220***	-0.160***	-0.155***	-0.188***	-0.156***	-0.153***
	(0.017)	(0.019)	(0.019)	(0.017)	(0.019)	(0.019)	(0.018)	(0.019)	(0.019)
Regional FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Additional covariates1	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Additional covariates2	No	No	Yes	No	No	Yes	No	No	Yes
No of obs.	1168	1159	1159	1168	1159	1159	1168	1159	1159
R-squared	0.25	0.27	0.27	0.25	0.27	0.27	0.25	0.27	0.27

*Note: Standard errors in parentheses. ***, **, * denote 1%, 5% and 10% significance levels respectively. All inequality measures calculated for individual farmers only. Additional covariates 1 include the logged number of CAP beneficiaries, voter turnout in the 2015 elections, and the share of agricultural land in total area based on the 2010 agricultural census. Additional covariates 2 include all covariates in group 1 plus the logged distance to regional capital in km, the logged number of NGOs, the logged number of companies, and the net migration to urban areas.*

[10] These additional statistics are not shown for brevity reasons but can be obtained from the authors upon request.

Columns (1)-(3) report the findings for the inequality measure being Gini index. Columns (4)-(6) use the quantile ratio between the 90th percentile and the 10th percentile, whereas columns (7)-(9) use the top 10% share (i.e. the share of subsidies going to the top decile of the distribution). In columns (1), (4), and (7) the set of covariates includes only the key variable of interest (*inequality*) and the support for PSL in 2001. In other columns we add some controls. The first set of controls includes the number of beneficiaries and the share of agricultural land in total area, thus capturing the relative importance of agricultural sector for the local economy. One can argue that both these variables are likely to confound our baseline results as they can affect both the distribution of subsidies and support for agrarian party). In addition, we control for the voter turnout. The second set of controls additionally includes the following variables: the number of non-governmental organizations per 10000 inhabitants, (the log of) the distance to urban centres, (the log of) the number of firms and the balance of rural-urban migration. All these variables aim at capturing the potential that farm workers can find jobs outside agricultural sector, which can translate both into the support for PSL and the distribution of CAP payments. As shown in Table 2, our results are extremely stable and suggest that PSL performed better in municipalities in which CAP payments were more concentrated. According to the discussion presented above, this may suggest that the party was more successful in retaining electoral support by responding to the interests of farmers with relatively higher subsidies.

Interestingly, these findings appear to hold also for the next elections. More specifically, when we look at PSL's support between 2015 and 2019 as the dependent variable, we consistently find that where subsidies were more unequally distributed the relative performance of the party was better. The relevant results (from OLS models) are shown in Table 3.

Table 3. OLS results – all subsidies summed together; change in support for PSL between the 2019 and 2015 elections

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Gini index			90percentile-10percentile ratio			Top 10% share		
inequality	0.045***	0.044***	0.034**	0.0005*	0.0004*	0.00034	0.00028**	0.00031***	0.00023*
	0.014	0.015	0.015	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
PSL_{2015}	-0.608***	-0.619***	-0.608***	-0.612***	-0.622***	-0.609***	-0.610***	-0.620***	-0.608***
	0.025	0.026	0.025	0.025	0.026	0.025	0.025		
Regional FE	Yes	yes	yes	Yes	Yes	Yes	Yes	yes	Yes
Additional covariates1	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Additional covariates2	No	No	Yes	No	No	Yes	No	No	Yes
No of obs.	1168	1168	1168	1168	1168	1168	1168	1168	1168
R-squared	0.74	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75

*Source: Own elaboration based on data from the Ministry of Agriculture and Rural Development. Note:***, **, * denote significance level at 1%, 5% and 10% respectively. All inequality measures calculated for individual farmers only. In all models standard errors are clustered at county (powiat) level. Additional covariates 1 include the logged number of CAP beneficiaries, voter turnout in the 2015 elections, and the share of agricultural land in total area based on the 2010 agricultural census.*

Additional covariates 2 include all covariates in group 1 plus the logged distance to regional capital in km, the logged number of NGOs, the logged number of companies, and the net migration to urban areas.

To test the robustness of these findings and to get further insights into the relationship in question we did the following. First, we checked whether our results remain the same once we additionally control for the distribution of land. This was done in order to take into account the argument that what we are capturing is not the effect of the distribution of subsidies but the effect of the distribution of land. Indeed, an important element in CAP payments are flat-rate payments per hectare. To address this issue, we checked if our findings are the same once we control for the share of households with more than 15 hectares (as captured by the 2010 agricultural census). Alternatively we controlled for the share of farms larger than 100 ha, or for the share of land cultivated by farms larger than 100 ha. Our findings (not shown) are robust to this check.

Second, we investigated potential heterogeneity effect presented in columns (4)-(6). In order to do so, we checked if our findings change once we shift from looking at the ratio between 90th percentile to 50th percentile to looking at the ration between 50th percentile to 10th percentile. Interestingly, only the former variable has a statistically significant and positive coefficient. The latter variable, in turn, is not statistically significant. This suggests that what seems to matter here is the difference between those at the top of the distribution and those below the median and not the difference between the median beneficiary and those at the bottom of the distribution.

Third, we checked what happens to our results once we take as our key independent variable the share of subsidies received by the bottom 25 percent of farmers. Here, and in line with the previous findings, the coefficient is consistently negative and statistically significant.

Discussion and conclusions

It is widely assumed that the introduction (elimination) of a support programme for a particular group of voters may provide tangible gains (losses) in electoral outcomes for a party that has chosen to do so. In this paper we try to further contribute to this line of reasoning by providing an answer to a related but distinct question. Namely, our focus is on what happens to party support once the rents remain in place (in value terms they even quite substantially increase) but the party loses the ability to influence their size and assignment. As a result it can no longer try to correct the distribution of these rents to address potential grievances among its core electorate.

Our specific example comes from Poland and the focus is on electoral support for the Polish Peasant Party, which was in government between 2007 and 2015, and in the 2015 elections recorded its worst electoral result. We investigate to what extent the decrease in the support could be related to the distribution of CAP payments. Please note that the party has had very little room for manoeuvre to affect the distribution of rents going to the farming population, its core voters. Using a unique database on individual beneficiaries of CAP payments in 2014, we show that the discontent with how the party performed while being in government was stronger in municipalities where the distribution of farm payments was more equal. This, in turn, may suggest that the party has become aligned with farmers receiving relatively large subsidies.

This is result is interesting as it suggests several areas for further inquiries. Firstly, it suggests that, as a consequence of the shift in a regime governing rent creation and rent assignment, inequalities that may have initially been a natural foundation for the peasant party to build its political position, have become quite a threat to it. It would be worth studying to what extent this effect is only transitory and voters with relatively small subsidies may return to the party being disappointed by other political alternatives or whether this has created a permanent shift in agricultural electorate away from the agrarian party. To be clear, it would not be correct to claim on the basis of our analysis that the distribution of agricultural subsidies dominates over other factors affecting support for the peasant party under study. That said, our findings seem to suggest that issues related to the distribution of farm payments might be perceived as a kind of transmitter of the discontent triggered by other factors (lack of political interest, decrease in agricultural prices, etc.).

Secondly, it will be interesting to study what was the political response of the party to this state of affairs. For example, it would be interesting to investigate its stance on the issue of ‘renationalisation of the CAP’, which recurs from time to time in the EU. Our results suggest that PSL might want to rebuild its support among farmers with relatively smaller subsidies by advocating for an increase in the role of national budgets in shaping member state’s agricultural policies.

Thirdly, it would be very interesting to see if and to what extent the distribution of agricultural subsidies has left its mark on the distribution of votes in other EU countries. While Member States differ with respect to specific programmes/type of payments used, pursuing analyses for other geographical contexts along the lines suggested in the presented paper is definitely worth giving a try.

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