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Social capital and members' loyalty in agricultural producer organizations in Poland

Abstract. The aim of the paper is to explain the importance of social capital for the survival and growth of producer organizations in agriculture. Our main research question concerns the underlying causes of lack of loyalty of growers-members to producer organizations. We link the problem of outside individual sales to deficits in necessary formal institutions safeguarding against member disloyalty. To assess the scale of the problem and to identify ways to counter this opportunistic behaviour, we use data from direct interviews with CEOs of 65 fruit and vegetable producer organizations (POs). We proved that in the smallest POs the occurrence of opportunism was completely eliminated by informal institutions related to bonding social capital. Conversely, in larger POs weak bridging-type relationships proved insufficient to build trust - producers were highly susceptible to outside incentives. Moreover, the use of formal institutions to protect from opportunism turned out to be surprisingly low in medium and large entities.

Key words: producer organizations, social capital, loyalty, opportunism

Introduction

Cooperation between farmers is often seen as a necessary condition to improve their bargaining power, particularly with respect to the downstream purchasers and upstream suppliers (Fałkowski and Ciaian, 2016, p. 12). The positive impact of producer organizations (POs) on farmers' position towards their contractors is most often based on the assumption that collective action allows farmers to exploit economies of scale and reduce transaction costs in marketing their output (Hendrikse and Bijman, 2002, p. 105). Given the low level of agricultural market organization in Poland, measures encouraging farmers to set up POs have been an important element of all programs supporting rural development. The effects of these measures however have been at most moderate. Despite the relatively large number of established POs, they have brought together few. More worryingly, the majority of these entities did not operate on the

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market for longer than the support period (Chlebicka and Pietrzak, 2018, pp. 13–14; Krzyżanowska, Parzonko i Siczko, 2020, pp. 61–64).

There is a variety of underlying causes of the weak position of farmers' organizations in Poland that can be identified inside POs, as well as in their interactions with the sectoral settings or among macroeconomic pressures. The researchers highlight that POs operate like cooperatives – they are the result of a bottom-up initiative of farmers working together, are controlled by farmers and operate to guarantee the benefits for their members. Numerous studies underline the importance of social factors determining the success of farmers' cooperation. There is a consensus that cooperatives are organizations based on social capital which is essential for collaboration to take place and be sustained (Valentinov, 2004, p. 5; Pietrzak, 2019, p. 252). Yet, there still appears to be little research on the social aspects of farmers' joint efforts in Poland. Previous empirical research in this field has looked at the importance of social capital at the formation stage of POs and proved that farmers' social capital is crucial at the initial stage of cooperation (Chlebicka et al., 2017, p. 85). However, little is still known about the importance of farmers' social capital in the context of sustaining cooperation and the survival of POs in the market. In the following study, we try to fill this gap at least to some extent.

The aim of the paper is twofold. First of all, we attempt to explain the importance of social capital for the survival and growth of producer organizations in Poland. Secondly, we address the topic of the opportunistic behaviour of members of POs and the ways that POs use to safeguard against it. Our main research question concerns the underlying causes of the lack of loyalty among members of producer organizations. We link the problem of farmers-members' lack of loyalty to the POs, to deficits in the right mix of bonding and bridging social capital and the lack of necessary formal institutions safeguarding against member disloyalty. The structure of the paper corresponds to the outlined objectives – in the first part we conduct a literature review related to the links between social capital and producer organizations, in the second part we provide an overview of the development of POs in Poland and in the last part we present the results of our primary research followed by discussion and conclusions drawn from the data analysis.

Material and methods

To investigate the problems outlined in the introduction, we used data from direct interviews with CEOs of 65 fruit and vegetable POs that were conducted in 2019 and 2020. The sample constituted 30% of the population of 215 POs in the fruit and vegetable sector in Poland¹. Descriptive statistics were used to analyse the data.

¹ The data collected within the study was a part of the project financed by the European Commission aiming at finding the best ways for producers' organizations to be formed, carry out their activities and be supported. For more information on the project see the final report available online <https://op.europa.eu/en/publication-detail/-/publication/2c31a562-eef5-11e9-a32c-01aa75ed71a1/language-en> (access: 20.12.2022).

The surveyed POs were registered in the Mazowieckie and Łódzkie provinces in Poland and associated 1,365 producers, mainly fruit growers. The surveyed entities accounted for 60% of POs located in the Mazowieckie and Łódzkie provinces. The choice of provinces for the study was purposive – against the background of the country, these regions are characterized by a high concentration of fruit and vegetable production. The average number of a PO's members was 21, with a median of 10 growers. The area cultivated by growers-members totaled 12,700 ha. The production profile showed a strong product specialisation in apple production, four entities specialised in tomato, and two in mushroom production. Most of the organizations in the sample were established between 2009 and 2013 and the average period of operation on the market was 8 years. All these entities had the status of a recognised producer organization². In terms of a legal form, limited liability companies constituted the majority (53), although 12 cooperatives were also present in the sample.

POs marketed products for about PLN 536 million in 2019, of which about 70% were sales of products produced by POs members and the remaining 30% of the value was generated by sales of products bought from non-associated producers. The average level of sales per PO was PLN 8.2 million. Sales ranged between approximately PLN 200,000 and PLN 39 million, and half of the entities sold for more than PLN 6.2 million. Overall, fresh produce sales accounted for 83% of sales. For the remaining part of sales, deliveries of products to processing plants accounted for 16%.

Literature review

It is impossible to disagree with the Granovetter's statement, that all economic activities are embedded in social structures (1985, p. 481). However, traditional economics neglects social factors, and it is only the concept of social capital that offers an opportunity to incorporate them into economic analysis. In the literature, we can find at least a few definitions of social capital. Since in this paper we are mainly interested in the micro perspective, the definition of social capital proposed by Bourdieu (1986, pp. 241–258) is worth referring to. It regards social capital as a resource resulting from the existence and use by individuals of a network of social relationships from which an organization and its members can benefit.

A popular division of social capital draws on bonding and bridging social capital (Burt, 2005, pp. 36–40). The first is responsible for creating solidarity within a community or organization. It thus creates conditions conducive to the emergence of trust and norms of reciprocity. At the same time bonding capital forms protective mechanisms against behaviour that violates the group rules – it increases members' commitment to collective goals and facilitates knowledge sharing. It is worth emphasising at this point, however, that in addition to these benefits, the presence of this type of social capital may be

² Recognition by national authorities involves the fulfillment of certain criteria, including primarily an annual turnover of 500,000 PLN marketable production and at least 5 individual growers-members all of whom are separate legal entities. Recognition entails the eligibility of PO for support instruments under the Common Agricultural Policy.

associated with significant costs, related to the closure of the group to the outside world and the difficulty in making changes necessary for development (Gargiulo and Benassi, 2000, pp. 183–185). It can also be associated with the dark side of social capital - amoral familism, understood as trusting only one's own, acting ethically only towards one's family (closed circle), and at the same time acting according to the principle of maximizing the immediate material benefits of one's family (Fukuyama, 2000, p. 15). As far as bridging social capital is concerned, it makes it possible to establish contacts outside the organization. Thus, its high level is conducive to increasing the adaptability of the group, maintaining openness to a diversity of perspectives, as well as access to new information and innovation (Tsai and Ghoshal, 1998, p. 464). However, this type of social capital may be associated with incentives that distract from the group's goals and bridging type relationships may be insufficient to build trust (Adler and Kwon, 2002, pp. 17–40).

We already have some understanding on social capital in POs in Poland coming from empirical studies. Some authors suggest that the group's social structure exerts a strong influence on mechanisms that aim at sustaining cooperation or the process of group formation. In particular, Banaszak and Beckmann (2010, pp. 55–70) documented that in groups based on friendship networks, imposing sanctions on members not complying with general rules is quite difficult. Banaszak (2008, pp. 73–86) provided evidence that leaders of POs often knew members before the group was established. Fałkowski, Chlebicka and Łopaciuk-Gonczaryk (2017, p. 104) observed that having a family member or a friend was decisive for joining the PO. The authors also found that the family based POs had fewer members compared to other POs. Chlebicka and Pietrzak (2018, p. 20) indicated that the positive effects of bonding capital, largely based on the family, are questionable for the long-term cooperation of farmers.

Based on the observations outlined above, we take a closer look at existing POs with reference to the problem of lack of loyalty of POs' members that manifests in engaging in individual sales outside the PO and thus breaking the obligations to the PO. The importance of member loyalty and commitment to the co-operative has been already recognised in the academic literature for some time. Member commitment has a vital role in the formation and development of co-operatives as it measures how well a co-operative is able to differentiate itself from an investor-owned firm (Fulton and Adamowicz, 1993, p. 39). Member commitment has been defined as the preference of cooperative members to patronize a co-operative even when the co-operative's price or services is not as good as those provided by investor-owned firm (Fulton, 1999, p. 423).

In this context, individual members' sales outside the PO should be seen as opportunistic behaviour and one may wonder why such a behaviour occurs. Based on New Institutional Economics theory we assume that contract defaults arise when monitoring and sanctioning mechanisms are ineffective (Williamson, 1985). These mechanisms are both formal and informal. Social capital is precisely understood as informal ways of dealing with the problem of opportunism. In our analysis, we also consider the institutions of selection as an important means of protection from opportunism (for a robust literature review on protection mechanisms see: Wathne and Heide, 2000, pp. 36–51). We

further consider what mechanisms of safeguarding against the opportunism of members are used by POs and what are the drivers of such protection. Based on previous studies we suspect that institutions sustaining farmers' cooperation in relatively smaller groups will be based on bonding social capital and have an informal character. At the same time, we assume that as the PO grows in terms of its membership, bonding capital is being replaced by bridging capital and interpersonal contacts are being substituted by formalisation.

Empirical study results

Producer organizations under the study were involved in marketing fruit and vegetables and needed a minimum level of production to be successful and the best possible projections of anticipated volumes to plan their activities. A PO does not own agricultural land and does not carry out agricultural production and it is through membership agreements that it can fulfill its contracts for the sale of agricultural products to the downstream purchasers. Generally, growers-members should market 100% of their production through the PO, although there may be some exceptions to this rule. To ensure effective deliveries and regulate other aspects of cooperation with growers, all the entities surveyed signed up membership agreements with their members. The most important categories of membership agreement – producer rights and obligations, are presented in Table 1. A grower can only be a member of one PO in order to sell products that are in line with the offerings of the PO. On the other hand, a PO may sell products from producers who are not its members provided that more than half of PO's sales revenue comes from the sale of products delivered by its members.

Table 1. Rights and duties of the PO member under the membership agreement

Rights of the PO member	Obligations of the PO member
receiving payment for products delivered to the PO in a specified way	membership of a single fruit and vegetable producer group
use of machinery, equipment, infrastructure and other means of production, which are common assets of the organization	commitment to market a defined volume of product through the PO
use of assistance to supply the necessary inputs for production	compliance with the quality requirements for products supplied to the PO
control over the activities of the PO	compliance with established methods of cultivation and environmental protection
participating in training courses and other services delivered by the organization	submission of documents to the PO for statistical purposes
co-decision-making for decisions beyond day-to-day management	payment of dues for services provided by the group to the member in the manner adopted by the PO
termination of the membership in writing	making contributions to the operating fund

Source: own elaboration based on interviews.

The membership contracts of all the entities examined specified the volume of production supplied – the fruit growers indicated to market all production, a defined volume of product, or production from a set number of hectares. All of the agreements described how settlements were to be made for the produce and how dues were to be paid for the services provided by the PO. The members were obliged to comply with the common rules on growing methods and environmental protection established in the production plans, guidelines of the POs on cultivation methods and environmental protection. They also committed themselves to supplying fruit and vegetables in accordance with the accepted quality standards provided for all members. In addition, the producers were obliged to submit data on their holdings, in particular on the area under cultivation and yields of the different varieties of fruit and vegetables, as well as the volume of sales and prices obtained for fruit and vegetables that were the subject of direct sales carried out individually by growers.

The signing of membership agreements between the PO and the producer-member is a legal requirement for becoming a recognized PO. However, according to interviews, fulfilling the obligation to sell the entire production of a specific product through PO has not always actually occurred. In fact, it appeared that selling activity of members outside the group (against the obligations to PO) was a significant problem affecting just over half of the cases (51%).

Interestingly, the frequency of this problem varied by the number of members in the PO (Table 2). Considering the distribution of surveyed POs by number of members, we separated the sample into three categories by membership size (5-9, 10-19 and more than 20 members)³. Individual sales against member obligations to PO did not occur in the smallest POs, while being common in entities with a medium number of members and rather frequent in the largest POs (Table 2).

Table 2. Outside sales in POs according to their size of membership

Number of POs	Number of members in a PO		
	5–9	10–19	20 and more
Total number of POs surveyed	20	24	21
Number of POs declaring a problem with individual sales of members	0	21	12
% of POs declaring a problem with individual sales of members	0	87%	57%

Source: own elaboration based on interviews.

³ An extensive literature review on size of membership of POs and the rationale to use size categories applied in the text, may be found in: Chlebicka, A., Pietrzak, M. (2018). Size of Membership and Survival Patterns of Producers' Organizations in Agriculture-Social Aspects Based on Evidence from Poland. *Sustainability* 10 (7), 2293. DOI: <https://doi.org/10.3390/su10072293>

As previously explained, we assume that for the smallest organizations, bonding capital will dominate, while as the group grows and its membership base increases, bridging capital will become more relevant. As the PO grows in terms of its membership, bonding capital is being replaced by bridging capital and interpersonal contacts are being substituted by formalisation. Consequently, we examined the extent to which POs use formal means of sanctions, monitoring, and selection. Formal sanctions were present in the form of financial fines or exclusion from the group in the past. As far as formal monitoring arrangements are concerned, various forms of ongoing reporting systems on farm production data (from simple reports to complex IT systems) were taken into account. As for the formal method of selection, we considered a mandatory "trial period" understood as the period of time of cooperation of the producer with the PO on a supplier basis before becoming a member of the PO.

As shown in Table 3, the most commonly used solution to prevent opportunistic behaviour was a trial period implemented by almost 30% of POs. A similar number of groups introduced formal monitoring. Sanctioning arrangements were used by very few groups – only two entities decided to terminate cooperation with disloyal producers in the past. Sanctions in the form of financial penalties were included in membership agreements but were not enforced.

Table 3. Number of POs using formal institutions protecting from member opportunism

Formal institutions against opportunism	Number of POs	% of POs in the sample
Sanctions: financial fines used in the past	0	0
Sanctions: ceasing co-operation in the past as a result of member opportunism	2	3
Monitoring: production reporting system	17	26
Selection: "trial period"	19	29
More than one mechanism at the same time	11	17

Source: own elaboration based on interviews.

In line with the literature review we assumed that informal institutions related to bonding capital are not effective in protecting from member opportunism in larger organizations. In larger POs, informal institutions should be replaced by formalised mechanisms to secure the survival and growth of the organization in the long term. However, according to the data presented in Table 4, these mechanisms have not yet been commonly implemented. It applies in particular to medium sized producer organizations. In medium and large POs, the use of formal institutions to protect from opportunism turned out to be low, especially in POs with a number of members between 10 and 19. Formal institutions to safeguard against opportunism were much more prevalent in the largest organizations. More importantly, the formal solutions were effective –

respondents from POs using more than one formal solution to protect from opportunism did not declare problems with members' lack of loyalty to the PO. On the other hand, the smallest POs had virtually no formal mechanisms in place to regulate cooperation to counter member disloyalty. Given the fact that the smallest entities did not report problems with sales outside the POs, we can assume that the informal safety mechanisms related to social bonding capital were effectively in place.

Table 4. Number of POs using formal institutions protecting from opportunism in POs according to their size of membership

Formal institutions against opportunism	Number of members in a PO		
	5–9	10–19	20 and more
Sanctions: financial fines used in the past	0	0	0
Sanctions: ceasing co-operation in the past	0	0	2
Monitoring: production reporting system	0	4	13
Selection: "trial period"	3	5	11
More than one mechanism at the same time	0	3	8

Source: own elaboration based on interviews.

The reasons for the failure to put in place formal mechanisms to safeguard against opportunism are complex. An important reason mentioned by respondents during the interviews was the low level of generalised trust, the conviction that everyone does it so there is no point in fighting. Another problem pointed out by interviewees was the lack of trust in public institutions expressed as a lack of trust in the courts in asserting one's rights and prolonged court proceedings. On the other hand, in the authors' opinion, the introduction of formal sanctioning and monitoring rules may have been hampered by the managers' excessive leniency towards colleagues. The introduction of formalised mechanisms to safeguard against member opportunism can be also interpreted as a sign of the lack of professionalisation of the management.

Conclusions

An unfavorable situation is emerging with regard to the development prospects of producer organizations in Poland. The results of the research confirm that factors of a social nature may become a significant barrier to the further growth of the already functioning POs. About half of the surveyed 65 producer organizations in the fruit and vegetable market reported problems with members' loyalty. This problem mainly affected entities with a membership size of 10-19 producers and groups with a membership of 20 and more producers. Based on previous studies we conjectured that institutions sustaining farmers' cooperation in relatively smaller groups would be based on bonding social capital and have an informal character. Using empirical data we proved that in the smallest POs the occurrence of opportunism in the form of selling products outside the group was completely eliminated by effective informal institutions related to bonding social capital.

At the same time, we presumed that as the PO grows in terms of its membership, bonding capital would be replaced by bridging capital and interpersonal contacts would be substituted by formalisation. According to the results of our study, it turned out that in larger groups, weak bridging-type relationships proved insufficient to build trust - producers were highly susceptible to incentives that distracted them from achieving common goals. In larger POs bridging-type social capital appeared to carry the negative consequence of using contacts outside the organization to the detriment of the POs. Moreover, the use of formal institutions to protect from opportunism turned out to be surprisingly low. Formal institutions to safeguard against opportunism were more prevalent in the largest organizations.

It can therefore be concluded that the problem of lack of member loyalty is most threatening for medium-sized entities, where the informal institutions associated with bonding capital are no longer in place or are not effective and formalised mechanisms to safeguard against member opportunism, necessary to secure its survival in the long term have not yet been developed. Lack of awareness on the part of managers or their reluctance to introduce formalisation in regulating the rules of cooperation with PO members may lead to a crisis of loss of a reliable membership base, and thus may result in limited opportunities for development or even pose the risk of closure of the PO. We believe that a perspective on the social determinants of the development of POs in Poland is crucial to understand the failures of the efforts made so far with regard to programs promoting these entities and may become useful in designing more effective policy measures.

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