

Analysis of the structure and spatial diversity of co-operatives in Poland active after 1990

Iwona Foryś¹

Abstract

The aim of the paper is comparison activity of cooperatives in Poland after the political changes. The research is aimed at answering the question whether there have been significant changes in the number of active cooperatives, their industry structure and the domination of particular industries in the spatial layout. The study used multidimensional analysis methods as well as methods for assessing the stability of structures. Results of studies: As a result of the study on the number of active housing co-operatives in the subsequent years 1975–2017, it was shown that in 1990, when political transformation took place in Poland, it cannot be said that the popularity of housing co-operatives decreased. The number of active co-operatives followed a growing trend throughout the period under review. Only in 1986 and 2002 can a lower dynamics be observed in this trend. It has been shown that the dominant sector of activity of co-operatives is housing, food trade and agricultural processing. In addition, the largest number of co-operatives is located in the Mazowieckie and Wielkopolskie Voivodeships, while in the latter case the tendency is growing. The research is based on information concerning all 12,754 national economy entities were registered in the Polish business register REGON kept by the Central Statistical Office (as on 30 April 2017) with the legal form of co-operatives.

Keywords: *co-operatives, legal form of economic activity, structure stability*

JEL Classification: *R31, C38*

1. Introduction

A co-operative is a form of joint action of individual entities, which has been popular since the 18th century. It promotes the cooperation of dispersed entities in a joint project in order to achieve benefits for all participants. In Polish law, a co-operative is defined as a voluntary association of an unlimited number of persons, with variable staff and a variable share fund which, in the interests of the members, manages a joint economic activity and may also conduct social and educational activities.

Foryś (2011, 2017) demonstrated that the main idea of co-operatives was distorted in Poland in the years of the planned economy. In this context, it was only political changes and economic changes after 1990 that could change the attitude of society towards co-operatives. The legal form of running - business, badly associated in the previous political system, should expire in a new system (see, e.g. Batóg and Foryś, 2018). However, even superficial analyses indicate that this is still a popular form of activity in Poland. Hence, the research question concerning the activity of co-operatives after 1990. Have the political changes limited the activity of co-operatives in particular groups of economic activity, or are there areas in which co-operatives are no longer popular? Additionally, the problem of spatial location of active co-operatives in Poland can be considered.

¹ University of Szczecin, Faculty of Economics and Management, Institute of Econometrics and Statistics, 64 Mickiewicza St., 71-101 Szczecin, iwona.forys@usz.edu.pl.

The main research objective is to compare the activity of co-operatives in Poland after political changes. The survey aims to answer the question whether there have been significant changes in the number of active co-operatives in the spatial layout, their industry structure. Basic statistics analysis methods were used in the study, as well methods for assessing the stability of structures and dynamic models.

Data from the public statistics resource of the REGON system were used in the study. The information for 12,754 active co-operatives includes (as of 30 April 2017): date of establishment and commencement of activity, section of the classification of economic activity, number of employees and the gmina where the head office of the co-operative is located.

2. Literature review

Cooperation in economic, scientific and social initiatives (see, e.g. Aiken, Cornforth and Spear, 2009) aims at achieving higher benefits than individual action (see, e.g. Kaiser, 2002). This form of joint action is co-operative activity. Its place in the economy became the subject of lively discussion in post-communist countries after 1990.

In his research, Hunt (1992) emphasized that these are not profit-oriented organizations, but a joint action for co-operative members. They are organizations open to people, to local activities, not to the concentration of capital. Co-operatives primarily use local sources of supply, human resources, in line with the idea of sustainable development. The co-operative principles underline the openness of these organizations, without any discrimination, voluntary affiliation and co-decision-making.

In the world there are organizations that cultivate co-operative principles, such as the International co-operative Alliance (ICA), the largest and oldest non-governmental organization founded in 1895, representing more than one billion co-operative members, or co-operatives Europe – the main European co-operative organization since 2006. The latter in 2013 took steps to support the potential of co-operatives to create smart growth and to promote the idea of co-operative activity. Financial support for the development of this type of activity is particularly important, especially in developing countries with a high level of income inequality among households. More than 300 of the world's largest co-operatives have an annual turnover of more than \$2.5 trillion and more than 250 million people earn their livelihoods through co-operatives (ICA COOP, 2013).

Since its inception, the co-operative movement has focused on agricultural production, crafts, food industry, housing, savings and credit unions, and over time also social and educational activities. In the past centuries, cooperativeness evolved and adapted to the realities of a modern market economy, preserving the principles inherent in this legal and organizational form to the present day.

In Poland co-operatives flourished the most after regaining independence in 1918 when all forms of co-operatives were established, including housing co-operatives offering flats for the poorer population, which could not afford to buy privately owned apartments.

In the years 1918–1939, registry courts in Poland recorded about 12,000–16,000 active co-operatives, on the basis of the Act on co-operatives passed on 29 October 1920 which was considered one of the best and most modern in Europe in those years. It is estimated that before the outbreak of World War II, every fifth citizen of the Republic of Poland was a member of a co-operative, in retail trade the share of co-operatives reached up to 5%, in the purchase of agricultural products up to 12%, and 20% of savings deposits were placed in co-operative banks and credit unions (according to the Central Statistical Office).

After the end of the Second World War, the co-operative movement was incorporated into the idea of the new system and, as a result, it was deprived of its fundamental principles: self-government and independence. The co-operative movement and co-operatives were dependent on political decisions and central authorities. It was only after 1980 that the co-operative movement in Poland began to regain independence, but with simultaneous limitation of financial support from the state. The problem continued to worsen in the 1990s (Brzozowska-Wabik, 2013), in the period of investment regression, liquidation of State Farms (PGR) and growing competition from other market forms of economic activity. The area of co-operative activity which did not find its place in the new reality, were, *inter alia*, housing co-operatives, which from investment became entities managing the possessed resources. In addition, these resources are increasingly less frequently owned by the co-operatives themselves (Foryś, 2017).

Today, the global co-operative movement has its supporters, especially in the case of agricultural production and craft co-operatives (Becker and Dietz, 2004), as well as in underdeveloped countries (King and Ortmann, 2007). Attention is paid to innovative organizational solutions, improved profitability of production, cheaper direct marketing. This form of action guarantees co-operatives direct access to the customer and avoids monopolistic lowering of prices below production costs by large corporate distributors. On the other hand, it guarantees the supply of competitive, high-quality products (Bijman and Hendrikse, 2008). It also allows the implementation of innovative sales techniques directly by the producer, while maintaining the benefits of proximity to the markets. Similarly, in many countries co-operative construction (for rent) remains popular due to the competitive quality of housing and lower maintenance costs (e.g. Germany, Scandinavia).

Borzoga and Spear observed that the problem of continued low popularity of this form of economic and social activity remains in post-communist countries where co-operative ideas have been distorted. Hence, the research topic undertaken in the study is important in the context of co-operative perspectives in Poland.

3. Data

The data used in the study refer to 12,754 active co-operatives in Poland as on April 30th 2017, registered in the REGON system in the years 1975–2017. In the first step, an analysis of the surveyed entities was made with regard to two key parameters: the section of the classification

of economic activity (PKD) and the location of the seat of the co-operative. Since in almost all cases the year (date) of formation of the co-operative coincides with the date of commencement of the activity, the first one was accepted for the study.

Analysing the years 1975–2017, one can observe a growing trend in the number of active co-operatives, while the dynamics of this growth in individual years is variable (Fig. 1).

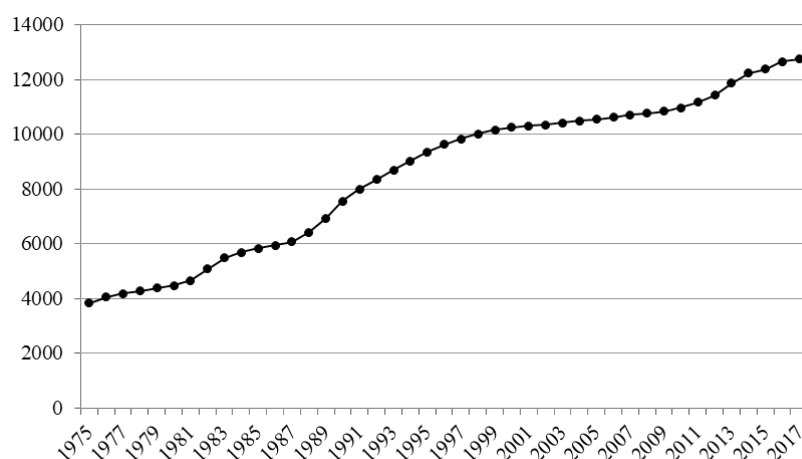


Fig. 1. Dynamics of the number of active co-operatives in Poland in the years 1975–2017

In particular groups of co-operatives, due to the number of employees, the discussed trend was diversified (Tab. 1).

Table 1. Dynamics of the number of active co-operatives in Poland including the number of employees in 1975–2017

Years/Stratum Number of employers	S1 not specified	S2 0–9	S3 10–49	S4 50–249	S5 250 and more	Total
1975–1986	0	2 475	2 135	1 203	128	5 941
1987–2002	0	648	3 594	158	7	4 407
2003–2017	434	166	1 792	13	1	2 406
1975–2017	434	3 289	7 521	1 374	136	12 754

In Poland there are most active medium-sized and small co-operatives employing up to 49 people. These two groups account for 84.76% of the total number of co-operatives between 1975 and 2017. The largest number of co-operatives was established and operated in 1987–2001, in the group employing 10–49 employees, i.e. in the period of political transformations in Poland.

In the next step, an attempt was made to assess the spatial diversity of the dynamics of co-operative activity in Poland, broken down by voivodeships (Tab. 2).

Table 2. Spatial structure of active co-operatives in Poland in 1975–2017* (%)

Voivodeship	1975–1986	1987–2002	2003–2017	1975–2017
Dolnośląskie	6.5	8.7	5.0	7.0
Kujawsko-Pomorskie	5.0	6.0	5.2	5.4
Lubelskie	7.3	7.3	5.2	6.9
Lubuskie	2.5	2.6	3.3	2.7
Łódzkie	6.5	3.9	6.9	5.7
Małopolskie	7.8	5.4	5.4	6.5
Mazowieckie	16.9	22.6	13.4	18.2
Opolskie	3.5	2.1	3.9	3.1
Podkarpackie	5.5	3.7	5.2	4.8
Podlaskie	3.6	1.8	2.9	2.9
Pomorskie	4.9	5.6	4.3	5.0
Śląskie	7.7	5.6	7.5	6.9
Świętokrzyskie	2.9	1.9	2.4	2.4
Warmińsko-Mazurskie	3.3	4.8	6.1	4.3
Wielkopolskie	11.2	10.1	20.3	12.6
Zachodniopomorskie	4.8	8.1	3.2	5.7
Polska	100.0	100.0	100.0	100.0

* – for 4 months

In the years 1975–2017, the largest number of the surveyed co-operatives operated in the Mazowieckie (18.2%) and Wielkopolskie (12.6%) Voivodeships with the oldest tradition in the history of co-operative activity). However, in the Wielkopolskie Voivodeship in the years 2003–2017 this share was twice as high as in the previous period, which proves the strengthening of this form of economic activity, while in the Mazowieckie Voivodeship the tendency is opposite. The lowest co-operative activity is reported by entities in the Lubuskie and Świętokrzyskie Voivodeships.

Then the measure of structure differentiation (V_3) was used for the data contained in Table 2, proposed by M. Walesiak (Walesiak, 1983). For the three sub-periods analysed, the indicator values are very close to zero (1.6E-01 and 2.1E-01, respectively), which indicates that the spatial structure of co-operatives is not diversified in the analysed sub-periods.

The analysis is complemented by co-operative activity in particular industries. The NACE sectional breakdown (Tab.3) has been used for this purpose. Definitely, most of the surveyed co-operatives conduct business activity in the area of real estate market (36.6%) – these are mainly housing co-operatives. The second significant area is wholesale and retail trade; repair

of motor vehicles and motorcycles (18.1%) – these are mainly Społem consumers' co-operatives. Other industries are represented on a much smaller scale.

Table 3. Structure of active co-operatives according to NACE code in Poland in the years 1975–2017* (%)

NACE codes	Type of business	1975–1990	1991–2002	2003–2017	1975–2017
A	Agriculture, forestry and fishing	15.6	4.1	9.2	11.9
C	Manufacturing	8.2	1.9	8.1	6.7
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	20.2	5.1	26.6	18.1
K	Financial and insurance activities	7.6	1.5	1.4	5.1
L	Real estate activities	33.1	69.7	8.5	36.6
	Other	15.3	17.7	46.2	21.6
	Total	100	100	100	100

However, the Spearman's rank correlation does not confirm the strong relationships between the surveyed variables: voivodeship, industry, number of employees and year of establishment. The determined coefficients have different characters but all of them are close to zero.

4. Models of the dynamics of the number of active housing association in spatial arrangement

Preliminary results (Fig. 1) indicate an increase in the number of housing association in the analysed period and division into sub-periods, however, the data contained in Table 2 (and Appendix) suggest variable dynamics in individual voivodships and division into three sub-periods: 1976–1990, 1991–2002 and 2003–2016. The first year was omitted, in which the number of active housing association in all voivodships lags several times from the other years and incomplete 2017 (4 months). For these sub-periods, the parameters of the trend function were estimated, the table below presents the grouping of voivodships due to similar trends in the number of active housing association (Table 4).

In all voivodships, a decrease in the number of cooperatives after 1990 and in the years 2003–2016 (except for the Mazowieckie Voivodship) can be noticed. On the other hand, different trends in the two groups are in the years 1976–1990, which is the result of historical events. Further research, difficult due to long ranks, should focus on seeking cause and effect relationships of observed trends.

Table 4. Spatial dynamics of active co-operatives in Poland in the years 1976–2016

Group	Voivodeship	1976–1990	1991–2002	2003–2016
I	Lubuskie, Łódzkie, Opolskie, Świętokrzyskie, Podkarpackie	constant	decrease	increase
II	Mazowieckie	increase	decrease	decrease
III	Dolnośląskie, Kujawsko-Pomorskie, Lubelskie, Małopolskie, Podlaskie, Pomorskie, Śląskie, Warmińsko-Mazurskie, Wielkopolskie, Zachodniopomorskie	increase	decrease	increase

Conclusions

The analysis of empirical data does not confirm that in 1990 there was a clear shift away from the co-operative form of running a business despite the fact that it was the year of significant political and economic changes in Poland. According to the authors referred to in the article, the image of co-operatives, which has been distorted over the years of the central economy, should discourage entities to conduct business activity in this form. The conducted empirical study does not confirm this assumption in the next periods. The values of differentiation of structures are very close to zero, which indicates that the spatial structure of co-operatives is not diversified in the analysed sub-periods.

The obtained results are noteworthy for the dynamic growth of the number of housing co-operatives in the whole period under review, with two moments of slowdown in the growth rate in 1990 and 2002. They are related to the general economic situation in the country rather than to political changes. The Spearman's rank correlation does not confirm the strong relationships between voivodeship, industry, number of employees and year of establishment.

Housing co-operatives (section L) have a very strong share in co-operative ventures. Although they build new flats to a limited extent in the growing competition of developers, their role is still significant in the area of managing these resources. An equally interesting conclusion is the concentration of co-operative undertakings in two voivodeships: Mazowieckie and Wielkopolskie, which may be related to the historical attachment to this form of management. In addition, the concentration of co-operative industries in each of these voivodeships indicates this. To sum up, we can state that despite numerous other forms of conducting business activity, there are still areas in Poland in which co-operatives find their place. However, there are also economic sectors in which the share of co-operatives is negligible, e.g. sector B or O (Tab. 3).

The important role and merits of co-operatives have been recognized by including (at the request of Germany) co-operatives in the UNESCO List of the Intangible Cultural Heritage of Humanity. By contributing to a fairer development of globalization processes, co-operatives contribute to reducing inequalities and discrimination with regard to economy, gender, race,

religion or political orientation. The research on co-operatives should therefore be continued, especially for future law regulation and for government policy in local economics area and activities based on local social initiatives. The results of the similar research are also the subject of continuous interest of co-operative international organizations.

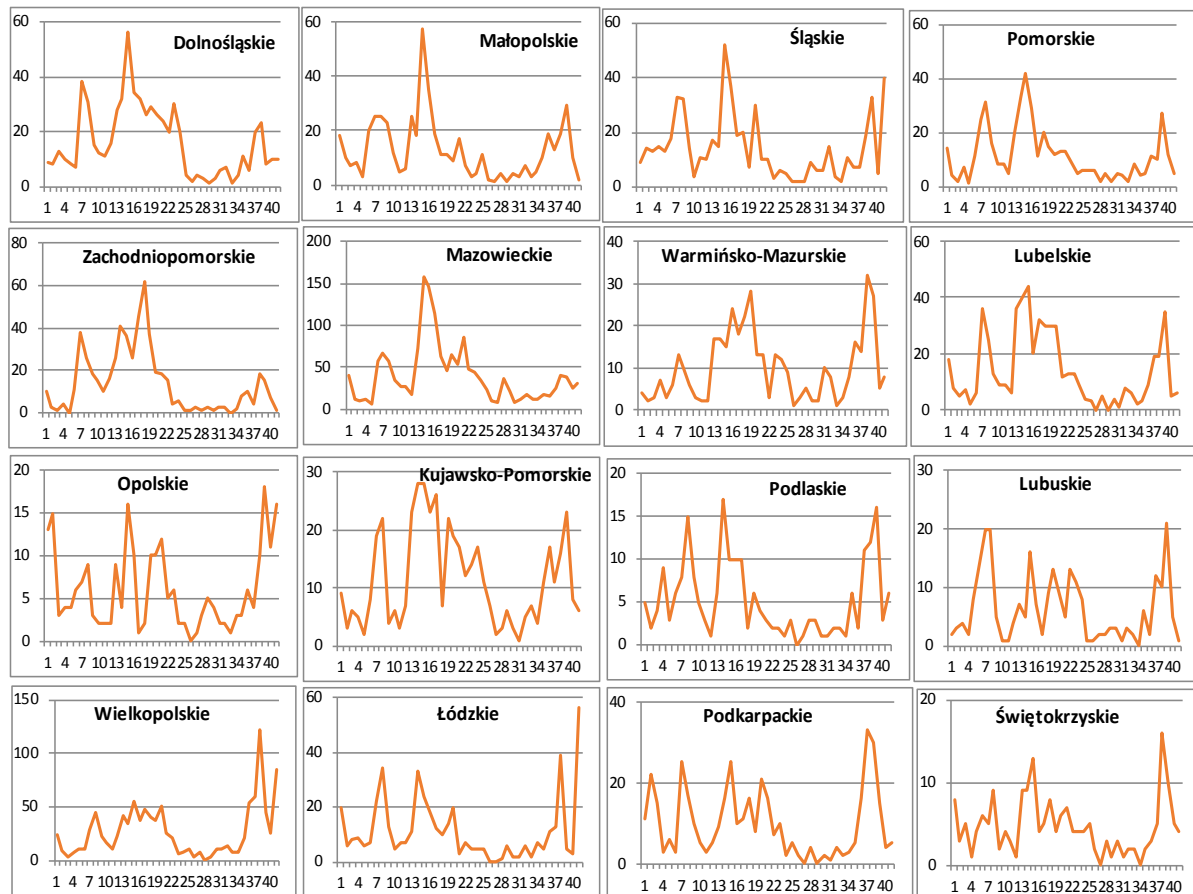
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APPENDIX

Fig. 1. Spatial dynamics of active co-operatives in Poland in the years 1975–2017*



* – for 4 months