

The Development of the Cooperative Banking Sector in Selected Central and Eastern European Countries

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Abstract

The study assesses the development of the cooperative banking sector in selected Central and Eastern European (CEE) countries against the average statistics of the segment in those countries. It also compares it to the largest European cooperative banking group in Germany. The article presents the results of an analysis of the cooperative banking sectors between 2016 and 2021 in Poland, Bulgaria, Romania, Hungary and Germany, all of which are members of the European Association of Cooperative Banks (EACB). The selection criterion was based on the availability of detailed data on cooperative banks published by the EACB on a temporal and spatial basis.

The empirical basis for the issues addressed in the article is a review of the reference literature and the comparative analysis of the development of the cooperative banking sector using a synthetic development indicator for the period 2016–2021.

According to the theoretical and empirical analysis, Romania demonstrates the lowest level of development of the cooperative banking segment. In turn, the Polish and Bulgarian cooperative banking sectors represents a higher level of development than the Romanian one. Hungary has reached the highest level of development in the group of Central and Eastern European countries. While comparing the CEE countries to the German cooperative banking sector, their development was almost one and a half times lower and, in the case of Romania, three times lower.

Keywords: cooperative banks, development, the Central and Eastern European countries, synthetic development indicator

JEL: G21, R11



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Received: 23.03.2023. Verified: 1.08.2023. Accepted: 23.01.2024

Introduction

Over the years, cooperative banks in Europe have not only undergone changes, but many of them have even started to depart from cooperative principles. They are now displaying considerable diversity regarding their activities both in the banking service market and in the internal organisational structures they have established. There have been disparities in the organisation and the operating principles of cooperative banking structures taking shape in various European countries, following both the laws and the regulations in force in those countries, as well as the market strategy chosen by their owners and their management (Siudek 2007, p. 36).

The development of the cooperative banking sector, which is part of the banking system, is important both in the context of the development of the financial system as a whole and its relationship to economic growth. Theory and empirical research generally show that financial development can either stimulate or inhibit economic growth. However, it is much less common to encounter views that the above categories are not causally related to each other (Ramey and Ramey 1994, pp. 1–2; Kulawik 2007, p. 17; Dabusinskas, Kulikov, and Randveer 2013, pp. 4–5; Kata and Chmiel 2019, p. 80). Thus, banking activities contribute to socio-economic development, which becomes particularly important in the context of the role of cooperative banks in the banking system as local financial institutions (Giagnocavo, Gerez, and Sforzi 2012, p. 285). Their locations, mainly in rural areas, contribute to local economic development and help reduce financial exclusion by offering products and services to people of low material status. Van and Linh (2019, p. 10) stated that financial inclusion plays a significant role in economic development, especially in terms of GDP growth and reducing inequality and poverty in any country.

Banking sector development has been addressed in both the domestic and foreign literature. The review of the works published demonstrates that most authors present the results of analyses that refer to the entire banking sector and, most often, that of Western European countries. There is a lack of studies that compare the development of the cooperative banking sector, particularly in Central and Eastern Europe (CEE). The topics covered in the article, including the author's selection of diagnostic features of the synthetic indicator of the development of the cooperative banking sector, constitute the added value of the analysis of the development of financial institutions.

Characteristics of the cooperative banking systems in selected CEEan countries

The Hungarian savings cooperative banking system is based on a two-tier arrangement with a separate central institution. For years, those local institutions were engaged in deposit and credit activities. Between 1990 and 2004, intensive consolidation began, as a result of which, the number of savings cooperatives fell from 260 to 156 (i.e., by 40%). Attempts were made to improve the difficult situation of cooperative banks during the economic transition period, such as the establishment of the National Cooperative Banking Institution Protection Fund (OTIVA). The next step in the reform of the sector was marked by the adoption of the ‘Act on the Integration of Credit Cooperatives and Amendments to the Economic Acts’ (‘Act on Cooperative Banks’) in 2013. That reform established 12 regional cooperatives in 2018 and their further merger with the national Takarékbank. In addition to serving as the central bank for the affiliated local savings cooperatives, it also acted as an apex bank (Gal and Kovacs 2018, pp. 40–41; BS.net 2021). Unfortunately, those measures failed to result in any significant consolidation of the cooperative banking sector. It was exacerbated by the competitiveness of commercial banks (Kovacs 2020, p. 205), which was reflected in the dynamically decreasing number of those banks. In addition, the integration of the Hungarian banking system, which began in 2019 and involves the construction of a bank holding company that will be the second largest bank in Hungary, has led to the disappearance of typical cooperative banks. In effect, the number of institutions based on cooperative values and principles has been reduced to two (Bareith, Tatay, and Varga 2022, pp. 7–8).

Table 1. Number of cooperative banks and their branches in Hungary, 2016–2021

Years	2016	2017	2018	2019	2020	2021
Number of cooperative banks*	65	19	19	4	4	3
Number of branches	1,491	1,144	1,019	859	724	700

* There are discrepancies regarding the number of banks in different sources.

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

The cooperative banks in Romania are categorised as non-bank financial institutions and are referred to as credit cooperatives (Pirvu and Banica 2016, p. 363). Should they meet the capital requirements on their own, they can operate as commercial banking institutions. There was a revival of the sector of cooperative credit institutions in Romania in the 1990s. Those cooperatives were not required to possess a banking licence or

meet capital requirements. In consequence, credit cooperatives were formed that were weak in terms of capital and staff (Gostomski 2012, p. 51).

Currently, the Romanian cooperative banking sector is a two-tier structure. It consists of cooperative banks, which function as regional universal banks, and the central financial institution, Banca Centrala Cooperatista CREDITCOOP. That institution encompasses all the cooperative banks and wields supervisory and control functions regarding the regional cooperative banks. Furthermore, it provides them with technical support and represents the common interests of the cooperative sector in legislative initiatives.

The characteristic feature of the Romanian cooperative banking sector is its highly centralised nature, which means that cooperative banks meet capital and liquidity requirements as a group rather than as individual entities. Unlike commercial banks, which operate as individual institutions, cooperative banks affiliated with CREDITCOOP operate as a federation. Banca Centrala Cooperatista is the guarantor of all liabilities, ensures the liquidity and the capital adequacy of each affiliated bank, and, if need be, provides financial support (World Bank Group 2020, p. 43). Since 1999, the number of cooperative banks in Romania has significantly decreased, from 565 to the current 34. However, strong consolidation is restricted by law, as the CREDITCOOP federation must include at least 30 banks (World Bank Group 2020, p. 43).

Table 2. Number of cooperative banks and their branches in Romania, 2016–2021

Years	2016	2017	2018	2019	2020	2021
Number of cooperative banks	41	41	40	38	36	34
Number of branches	744	744	738	740	732	727

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

The history of the cooperative banking sector in Bulgaria dates back to the early 20th century, with the first Bulgarian cooperative bank established in 1910. During World War 2 and throughout the Communist era, the sector remained under complete control of the state. It was not until the political transition and the economic transformation that the current cooperative banking sector was founded. It now consists of:

- The Central Cooperative Bank (CCB);
- The Agriculture Credit Cooperatives (ACCs).

The CCB was established in 1991 on the joint initiative of the Central Cooperative Union, regional cooperative unions, and more than 1,100 cooperative organisations. Its main

initial mission was to develop the cooperative system in Bulgaria. Over time, however, the CCB has changed its business model, moving towards becoming a universal commercial bank while maintaining offers aimed at customers related to agriculture or agri-food processing. Rather than being an association of local cooperative banks, the bank is a separate institution with numerous subsidiaries that operate commercially (Cotugno and Stefanelli 2016, p. 260; Central Cooperative Bank 2021).

Agricultural credit cooperatives, whose activities are based on cooperative principles and relevant legal acts, constitute Another separate part of the cooperative banking sector in Bulgaria. Those cooperatives are located in rural, sparsely populated areas which lack other financial service facilities. The number of institutions in the cooperative banking sector in Bulgaria is presented in Table 3.

Table 3. Number of cooperative banks and their branches in Bulgaria, 2016–2021

Years	2016	2017	2018	2019	2020	2021
Number of cooperative banks	–	–	–	–	–	–
Number of branches	306	310	308	304	297	294

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

Like other EU countries, the Polish cooperative banking sector operates within a two-tier organisational structure. The core of the sector comprises approximately 500 local cooperative banks connected to two affiliating banks (three cooperative banks operate independently):

- Bank BPS plc,
- SGB-Bank plc.

Affiliating banks perform numerous activities for and on behalf of cooperative banks, such as running bank accounts and interbank settlements, calculating and maintaining mandatory reserves, standardising and developing IT and telecommunications systems, as well as conducting marketing campaigns. Following the implementation of new EU and national regulations on prudential and liquidity standards, in 2015, cooperative and affiliating banks established two new organisational units in the form of cooperatives, i.e., Institutional Protection Systems (IPs). Their primary task is to guarantee the solvency and liquidity of each and every participant in the System (Informacje KZBS, n.d.).

The reform of the political, social and economic systems, initiated between 1989 and 1990, yielded changes to the structure of banking cooperatives. There was an increase in the autonomy of individual banks, enabling them to broaden

the scope and focus of their activities. The following years saw the restructuring of the cooperative banking sector followed by strong consolidation (Pawlik et al. 2021, pp. 52–53). There was also a change in their organisational structure, from a three-tier to a two-tier structure, as well as in the number of cooperative banks, from 1,663 in 1993 to 511 in 2021.

Table 4. Number of cooperative banks and their branches in Poland, 2016–2021

Years	2016	2017	2018	2019	2020	2021
Number of cooperative banks	558	553	549	538	530	511
Number of branches	4,602	4,505	4,415	4,262	3,954	3,805

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

The cooperative banking sector in Germany is one of the largest of its kind in Europe. It operates within a single association (BVR) and has two tiers. The first tier comprises autonomous primary cooperatives (urban people’s banks and rural Raiffeisen banks), the former postal savings and loan associations (now PSD), Sparda Banken (former railway workers’ associations), and cooperative church banks. Cooperative banks provide services mainly in rural areas and small towns, while their presence in large urban areas is insignificant.

The second tier is the central bank, with its subsidiaries offering a variety of specialised financial services (Golec 2021, pp. 68–69). The central bank of the cooperative banks in Germany (DZ Bank) is of universal character and offers a wide range of financial services, e.g., insurance, participation units in investment funds, leasing, and factoring transactions. In addition, the bank is an IT infrastructure provider and acts as a process centre/data warehouse. DZ Bank, through the institutions that comprise the DZ Group, provides cooperative banks with a full range of banking, insurance, investment and mortgage services (Lepczyński and Gostomski 2018, p. 32; DZ Bank Group 2021, p. 11). The potential of the German cooperative banking segment is evidenced by the data in Table 5.

Table 5. Number of cooperative banks and their branches in Germany, 2016–2021

Years	2016	2017	2018	2019	2020	2021
Number of cooperative banks	972	915	875	841	814	772
Number of branches	11,787	11,108	10,520	9,344	8,544	8,074

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

The number of cooperative banks and their facilities experienced a steady decline between 2016 and 2021, just like in the other countries.

Multi-factor assessment of the development of the cooperative banking sector – the research method

The concept of financial development can be understood and presented in a number of ways. In its narrow sense, it refers to the reduction of transaction costs (the sum of the costs actually incurred and the time taken to complete financial transactions). In a broader sense, financial development is the long-term growth and improvement of financial markets, institutions and instruments to raise the efficiency of their functioning or application, and increase the volume of financial transactions (Kawa 2002, p. 130; Svirydzienka 2016, p. 4). The broader view of financial development linked to financial institutions constitutes the basis for further considerations.

Cooperative banks constitute a part of the banking sector, which, in turn, is a part of the financial market. Hence, the methodology for the development of the cooperative banking sector will be based on the concept of financial sector development, i.e., the development of the financial market and financial institutions (Sahay et al. 2015, p. 75; Gospodarchuk and Zeleneva 2022, p. 3; Khan 2022, p. 3). The level of development of each aspect is measured in three areas: access, depth (size), and efficiency (effectiveness)¹. Khan (2022, p. 3) and Sayah et al. (2015, p. 75) proposed the following indicators to determine the level of financial development: the depth (size) of financial institutions, access to financial institutions, the efficiency of financial institutions, the development of financial institutions, the depth (size) of financial markets, access to financial markets, the efficiency of financial markets, the development of financial markets, and an overall indicator of financial development based on all the aspects above. Thus, the set of indicators makes it possible to measure both the level of development of financial markets and that of the financial institutions (Jankovic and Gligoric 2017, p. 103; Cave, Chaudhuri, and Kumbhakar 2020, pp. 1514–1515; Trinugroho et al. 2021, pp. 2–3; Gospodarchuk and Zeleneva 2022, p. 3). Nichkasova, Shmarlouskaya, and Sadvokassova (2022, p. 914) noted that the development of the financial institutions sector tends to be measured with banking sector development indicators due to the availability of statistical data. In addition, there are methods of multi-factor analysis used in comparative analyses of the level of development of complex phenomena (Kata and Chmiel 2019, p. 88).

¹ These three components (sub-indicators) constitute the Financial Development Indicator, a measure of the development of financial institutions and financial markets, for which values are calculated basing on a set of selected sub-indicators. That is the measure proposed by the IMF (more in Development of the Financial System... 2015, pp. 32–35).

This study used a development template method from which the synthetic development indicator of the cooperative banking sector SWR_{CB} was calculated for selected CEE countries. Additionally, the average value of that measure was calculated for the countries included in the study. Developing the algorithm for the SWR_{CB} indicator imitated the measure of the level of development of the financial system proposed by the IMF, referred to as the Financial Development Indicator. That method belongs to the group of linear ordering techniques whose purpose is to order objects from the best to the worst, with the ordering criterion being the level of a complex phenomenon (Kowalewski 2003, p. 287). This method makes it possible not only to establish the rating of objects but also to assess the scale of differentiation of the phenomenon (Kata and Zaręba 2011, p. 174; Kata and Chmiel 2019, p. 88). The development of the cooperative banking sector was assessed through the prism of two groups of characteristics (Table 6).

Table 6. Sub-indicators used in the algorithm for the synthetic indicator of the development of a given country's cooperative banking sector

Area of the analysis	Variable/characteristic	Character of the variable
Size/ availability	x_1 – assets of cooperative banks in relation to GDP (%)	stimulant
	x_2 – assets of cooperative banks per 1 employee of the sector	stimulant
	x_3 – number of bank employees per 100 thousand inhabitants	stimulant
	x_4 – number of banking institutions per 100 thousand inhabitants	stimulant
	x_5 – number of ATMs per 100 thousand inhabitants	stimulant
Effectiveness and stability	x_6 – indicator of credits/deposits	nominant
	x_7 – indicator of costs/incomes	destimulant
	x_8 – share of customer credits (of non-financial sector) in total assets	stimulant
	x_9 – share of customer deposits (of non-financial sector) in total assets	stimulant
	x_{10} – financial result per employee in thousands of euros	stimulant

Source: own compilation based on: Kata and Zaręba 2011, p. 174; Kata and Chmiel 2019, p. 88; Paluch, Cymanow, and Cymanow-Sosin 2022, pp. 51–54.

There is a set of diagnostic features that characterise particular areas of cooperative banking activities. The selection of variables was conditioned by the availability of statistical data and based on a substantive criterion that considers the purpose and the subject of the study, as well as the time unit for which the study was conducted. Another important aspect of the analysis was the adoption of diagnostic variables that are reliable, accurate, comparable, relevant and complete (Młodak 2006, p. 55; Paluch, Cymanow, and Cymanow-Sosin 2022, pp. 52–53).

The first group of characteristics includes variables that pertain to the size of the banking sector and the availability of banking services to the country's population; the second group includes characteristics that represent the banking sector's economic efficiency and financial stability. The set of diagnostic variables can influence the development of the cooperative banking sector to different degrees and in different directions. Therefore, the following characteristics are distinguished: stimulants, nominants, and destimulants. Stimulants are the variables for which higher values in the studied objects are considered desirable from the perspective of the phenomenon in question, in contrast to destimulants, for which a decrease is seen as a positive trend. In the case of nominants, deviations in values in the object studied from the values (or a specified range of values) regarded as the most favourable are undesirable from the perspective of the phenomenon under consideration (Nowak 1997, pp. 117–118).

In the development template method, the values of the variables are assumed to be standardised. Standardising the variables usually involves transforming (stimulating) destimulants and nominants into stimulants (Młodak 2006, p. 60). Transforming the destimulant value (x_7) into stimulants for each year and for each country involved, subtracting this value from 100, which had been arbitrarily acknowledged. Nominants were also converted to stimulants. Again, 100 was assumed to be the desired value from which (x_6) for each year and each country was subtracted and further multiplied by -1 .

The next stage involved determining the development template x_w , i.e., the abstract object with the best values for a given characteristic, which served as the reference point while examining the similarity of objects (countries). The maximum value for each variable x_{ij} was assumed as the template for that variable. The diagnostic traits were then standardised to unify the variables and to move their values to the interval (0; 1), in accordance with formula (1):

$$z_{ijt} = \frac{x_{ijt}}{\max_{j,t}(x_{ijt})}, \quad (1)$$

where: x_{ijt} denotes the value of stimulant i (for $i = 1, 2, \dots, n$) in country j ($j = 1, 2, \dots, 5$) in year t , while z_{ijt} denotes the values of the subsequent stimulants standardised.

The final step was to determine for each object (i-country) a synthetic indicator of the development of the cooperative banking sector SWR_{CB} , i.e., development measure (2):

$$SWR_{CBj} = \frac{\sum_{j=1}^k z_{ij}}{10}. \quad (2)$$

It was assumed that all sub-measures that influence the development of the cooperative banking sector have the same weight, i.e. they have the same impact on the level of the complex phenomenon (Młodak 2006, p. 60; Kata and Chmiel 2019, p. 90).

Presentation of the findings

One of the criteria for assessing the development of the cooperative banking sector is the number of banks. It depends on the importance of the sector in the banking system and the size of the financial market in the country, which, in turn, is determined by the population and the area. In that context, what is worth noting is the accessibility of services. Therefore, the important measure will not only be the total number of cooperative banks, but also the number of branches, ATMs, and employees per 100,000 inhabitants (Table 7).

Table 7. Number of bank branches, ATMs, and employees per 100,000 inhabitants, 2016–2021

Countries/year	2016	2017	2018	2019	2020	2021
Number of branches per 100,000 inhabitants						
Romania	3.8	3.8	3.8	3.8	3.8	3.8
Bulgaria	4.3	4.4	4.4	4.3	4.3	4.3
Poland	12.1	11.9	11.6	11.2	10.4	10.1
Hungary	15.2	11.7	10.4	8.8	7.4	7.2
Germany	14.3	13.4	12.7	11.2	10.3	9.7
Number of ATMs per 100,000 inhabitants						
Romania	no data	no data	no data	no data	no data	no data
Bulgaria	7.7	8	8.1	8.4	8.1	8.2
Poland	10.2	10.2	10.7	no data	9.5	no data
Hungary	10.3	10.2	9.8	9.4	8.9	7.8
Germany	22.7	22.2	21.8	21.3	20.8	19.6
Number of employees in cooperative banks per 100,000 inhabitants						
Romania	10.2	9.9	9.6	9.4	9.2	8.9
Bulgaria	29.5	27.7	28	24.9	24.2	23.5
Poland	82.8	81.9	81.6	79.2	75.2	75.4
Hungary	83.9	68.5	75.4	67	51.5	44.0
Germany	220.7	214.4	210.2	209.8	207.2	205.1

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021; Reports of the World Bank, 2016–2021.

The European Association of Cooperative Banks data demonstrate that, between 2016 and 2021, Poland was the CEE leader regarding the number of cooperative banks, branches, ATMs, and employment in the sector. However, what is worth noting is the position of the Hungarian cooperative sector in 2016, whose performance then was comparable to that of the Polish cooperative banks. Hungary experienced the largest decrease in the indicators due to the transformation of the cooperative banking sector and the strong consolidation. In fact, all countries experienced a reduction in branches and the number of employees as a result of both technological progress towards virtualising customer service and expanding services in the electronic distribution channel. In the European Union, Germany ranks the highest in terms of the number of cooperative banks and their branches; however, regarding the number of branches per 100,000 inhabitants, the differences are much less significant, with figures similar to those for Poland. When juxtaposed with the number of ATMs, it may indicate a much greater use of the electronic channel in customer contact than in the other countries.

Another indicator of the development level of the cooperative banking sector, and its size in particular, is the ratio of assets to GDP and per employee (Table 8).

Table 8. The size of the assets of the cooperative bank sector, 2016–2021

Assets of the cooperative bank sector in relation to GDP (in %)						
Countries/year	2016	2017	2018	2019	2020	2021
Poland	8.4	8.9	8.4	8.8	9.1	8.9
Bulgaria	5.2	5.2	5.1	5.0	5.5	5.3
Romania	0.14	0.14	0.13	0.13	0.14	0.14
Hungary	6.2	5.8	5.7	5.3	7.2	7.3
Germany	38	38	38.4	39.8	43.3	43.5
Assets of the cooperative banking sector per employee in thousands of euros						
Poland	1,137	1,336	1,366	1,571	1,684	1,802
Bulgaria	1,207	1,413	1,462	1,796	2,025	2,334
Romania	122	134	151	169	184	202
Hungary	877	1,107	1,057	1,191	1,998	2,611
Germany	6,689	7,014	7,420	7,940	8,564	9,181

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021; Eurostat, n.d.

The volume of assets in Poland and Bulgaria has experienced a marginal increase, while Hungary experienced the highest dynamics. By contrast, those values considerably diverge, even by several times, from the asset size of the German cooperative banking

group. Among the CEE countries analysed, Poland recorded the highest values for the ratio of assets to GDP, the highest economic potential, and the largest financial market in this region. Romania, on the other hand, ranked the lowest. However, a higher asset/GDP ratio is not necessarily beneficial for the financial stability and development of the cooperative banking sector. Banking sectors with substantial assets are often strongly correlated with the presence of large financial institutions, which can, in turn, generate much higher risk levels regarding financial systems. Bulgaria and Hungary had the highest dynamics of changes in the ratio of assets to employment.

The efficiency of the banking institutions is usually assessed on the basis of financial ratios. The following measures were chosen for the analysis: Costs/Incomes (C/I) and financial results per employee (Table 9).

Table 9. Financial efficiency of the cooperative banking sector, 2016–2021

Cost/income ratio in %						
Countries/year	2016	2017	2018	2019	2020	2021
Romania	99.2	96.9	96.8	96.7	95.6	94.0
Bulgaria	60.1	59.5	72.3	71.5	66.1	79.8
Poland	70.0	65.8	69.8	66.6	74.8	72.5
Hungary	85.3	84.1	85.4	94.0	96.8	92.5
Germany	67.0	65.3	69.5	62.2	65.4	64.6
Financial result per employee in thousands of euros						
Romania	1.5	4.0	4.0	5.0	8.0	5.9
Bulgaria	66	92	86	103	59	80.4
Poland	47	55	37	54	39	59
Hungary	-60.7	-59	63	34	10	39.8
Germany	324	343	310	404	292	439

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

Romania was characterised by the highest C/I ratio – above 94%, which was similar to the value achieved by Hungary between 2019 and 2021. In Poland and Bulgaria, the Cost/Income ratio ranged from 60% to 80%, while in Germany, it did not exceed 70%. The increase in that parameter is not favourable as it may indicate unprofitable operations. It may also be related to consolidation in the sector, which took place with varying intensity in the individual countries of the CEE region. A decrease, on the other hand, indicates an increase in the profitability of operations and a decrease in operating costs. Analysis of the financial results of individual countries shows that Germany was by far more efficient (even several times)

regarding labour productivity and the scale of output. By contrast, the highest dynamics of change in that measure were observed in Hungary and Romania. Poland and Bulgaria experienced a decline in that parameter in 2020 (like Germany). It should also be acknowledged that the financial situation of not only cooperative banks but of the banking sector as a whole was affected by the COVID-19 pandemic, which is particularly evident in those countries whose potential of cooperative banking groups is larger (i.e., Germany, Poland, and Bulgaria).

Another important factor for the stability of the banking sector, which also demonstrates the efficiency of the banks in their financial intermediation function, is the ratio of credits to deposits and their share in total assets (Table 10).

Table 10. Credit/deposit ratio and share of credits vs. total assets in cooperative banks, 2016–2021

Credit/deposit ratio in %						
Countries/year	2016	2017	2018	2019	2020	2021
Romania	97.1	97.3	100	94.8	88.6	86.7
Bulgaria	48.4	45.5	45	52	43.2	43.5
Poland	71.9	66.5	66.8	63.3	55.7	45.4
Hungary	69.6	58.6	73.1	92.2	87.3	89.0
Germany	94.7	95.1	94.4	95.9	94.9	95.8
Share of customer credits (non-financial sector) in total assets in %						
Romania	69.4	70.1	73.4	71.7	66.9	66.5
Bulgaria	43.4	40.9	40.2	46.3	38.5	39.1
Poland	49.7	41.6	46.6	43.7	38.3	40.0
Hungary	48.3	45.7	51.3	53.5	79.4	81.2
Germany	60.3	61.3	61.5	61.0	60.3	60.3
Share of customer deposits (non-financial sector) in total assets in %						
Romania	71.4	72.0	73.4	75.6	75.5	76.7
Bulgaria	89.7	89.8	89.3	88.9	88.9	89.9
Poland	69.1	62.6	69.7	69.0	70.6	88.1
Hungary	69.4	78.1	70.1	58.0	90.9	91.2
Germany	63.7	64.4	65.1	63.6	63.6	62.9

Source: compilation based on the Annual Reports of the European Association of Cooperative Banks, 2016–2021.

Germany had the highest credit/deposit ratio, of approximately 96%. The other countries showed significant fluctuations. For example, Poland experienced a decrease from 71.9% to 45.4%, while Hungary saw an increase from 69.6% to 89%. Such a distribution

of results demonstrates that cooperative banks finance credit with their own financial resources rather than reporting the need for external financing, as it may pose a higher risk. When credits exceed deposits, financing with the funds from the banking system generates extra risk. The share of deposits in assets is higher than that for credits in all the countries. The most similar and stable magnitudes of those ratios can be observed in Germany. By contrast, in Bulgaria and Poland, there is a clear predominance on the deposit side, which may indicate the over-liquidity of the cooperative banking sector. Hungary has experienced a significant increase in the share of deposits and credits in total assets.

All the variables relating to the size, accessibility, efficiency and stability of the cooperative banking sector were standardised according to the methodology adopted. A synthetic development indicator was then calculated for each country (Chart 1).

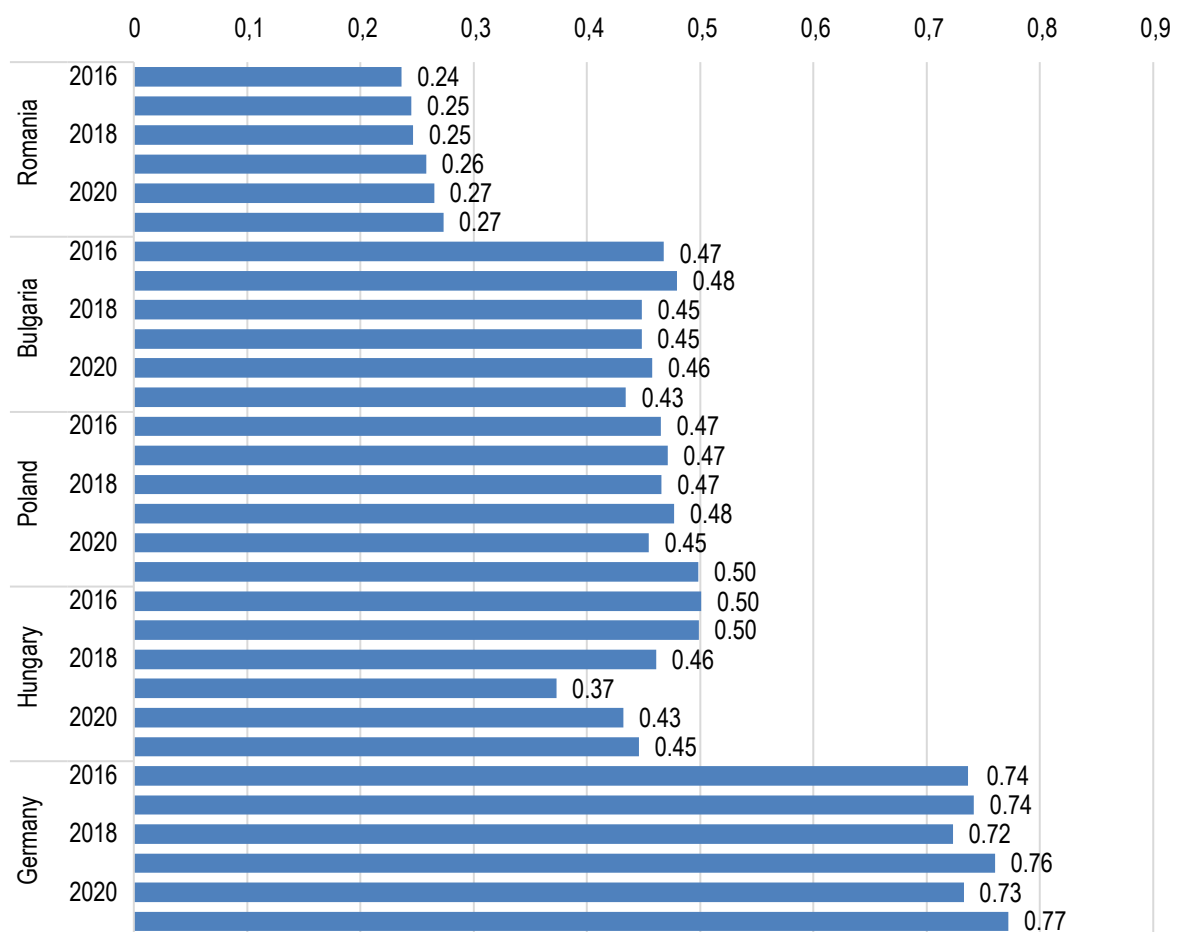


Chart 1. Synthetic development indicator of the cooperative banking sector (SWRGB) of CEE countries compared to Germany, 2016–2021

Source: own study.

Analysis of the synthetic indicator of the development of the cooperative banking sector $SWRGB$ between 2016 and 2021 shows that the highest results were in Germany, ranging from 0.72 to 0.77. Among CEE countries, the indicator was lowest in Romania. In turn, the Polish and Bulgarian results reached similar levels, within the range of 0.43 to 0.48. Comparing the two countries shows that Bulgaria experienced the highest value in 2017, while in Poland, it occurred in 2019. On the other hand, Hungary saw the opposite trend, with the highest values recorded between 2016 and 2017, with the lowest in 2019. Taking the results obtained in Germany as the reference (template), the SWR_{CB} in Romania was about three times lower. Bulgaria and Poland, on the other hand, achieved fairly stable indicator values, as did Germany, while the distance between those countries was the smallest. Hungary, on the other hand, was characterised by a highly dynamic $SWRGB$, ranging from 0.50 to 0.38.

Summary of the research findings

The multi-factor analysis of the development of the cooperative banking sector shows that the differences between the EEC countries are not significant. The lowest level of development was recorded in Romania. The results obtained by Poland and Bulgaria indicate a higher level of development of this sector than in Romania. Hungary, on the other hand, was characterised by the highest dynamics of change and a deterioration in the synthetic indicator in recent years. Those results also reflect the peculiarities of changes and positions of the cooperative banking sector in the individual EEC countries. The distance of these countries compared to Germany is not significant, approximately one and a half times as high. Only Romania was much higher – nearly three times as high.

Conclusion

The presented characteristics of the cooperative banks, as well as the results of the research, not only diagnose the current state of affairs but, above all, exemplify the process and the pace of development of the sector in terms of geography and time. In turn, comparing the diagnostic features that depict the individual areas of activity of those cooperative banks with one of the largest cooperative groups in Europe illustrates their position in the European banking market. Hence, it can be concluded that CEE cooperative banks have undergone a dramatic change associated with the systemic transformation, which helped narrow the gap in their development compared to the cooperative sector in Germany.

The changes referred to the internal structure of the sector, its business models, and regulations, resulting in numerous instances of consolidation. Some common features of the cooperative banks in the CEE region of the 1990s include their fragmented internal structures, problems with capital requirements, and low profitability. The restructuring that occurred in all CEE countries significantly reduced the number of banks, branches and, consequently, the number of employees, which is demonstrated by the sub-studies in the areas of availability and size. It was further underpinned by the desire to reduce the cost of the banking activities stemming from the decline in interest margins due to the long-lasting low interest rates. All those changes led to an improvement in the economic situation of the sector. However, the detailed analysis of the parameters in the areas of efficiency and financial stability showed that the cooperative banking sectors in the individual CEE countries have improved their financial performance at a variety of rates and to a variety of extents. It must be borne in mind, however, that the cooperative banks had a substantial deposit base, allowing them to secure refinancing regardless of the international situation in the money and capital markets.

Acknowledgements

The article was written within the research project “Innovation in the cooperative banking sector and reduction of social exclusion”, funded by the Minister of Education and Science program entitled “Science for Society” (contract no. NdS/550697/2022/2022).

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Rozwój sektora banków spółdzielczych w wybranych krajach Europy Środkowej i Wschodniej

Celem opracowania jest ocena rozwoju sektora banków spółdzielczych w wybranych krajach Europy Środkowej i Wschodniej na tle przeciętnych statystyk segmentu w tych krajach i w odniesieniu do największej europejskiej spółdzielczej grupy bankowej w Niemczech. W niniejszym artykule zaprezentowano wyniki analizy sektora banków spółdzielczych w następujących krajach: Polsce, Bułgarii, Rumunii i na Węgrzech oraz w Niemczech, które są członkami Europejskiego Stowarzyszenia Banków Spółdzielczych (EACB). Kryterium doboru wynikało z dostępności szczegółowych danych dotyczących banków spółdzielczych, publikowanych przez EACB w ujęciu czasowym i przestrzennym. Okres analiz obejmował lata 2016–2021.

Podstawą empiryczną problematyki poruszanej w artykule jest przegląd literatury przedmiotu oraz analiza porównawcza rozwoju sektora banków spółdzielczych z wykorzystaniem syntetycznego wskaźnika rozwoju we wskazanych krajach w latach 2016–2021.

Analizy teoretyczna i empiryczna wskazują, że Rumunię cechuje najniższy poziom rozwoju segmentu bankowości spółdzielczej. Natomiast polski i bułgarski spółdzielczy sektor bankowy rozwijały się na podobnym poziomie. Największą dynamiką zmian w tej grupie krajów Europy Środkowej i Wschodniej wyróżniały się Węgry. Porównując te kraje do niemieckiego sektora banków spółdzielczych, należy zauważyć, że ich poziom rozwoju był prawie półtora raza niższy, a w przypadku Rumunii nawet trzykrotnie niższy w latach 2016–2021.

Słowa kluczowe: banki spółdzielcze, rozwój, kraje Europy Środkowej i Wschodniej, syntetyczny wskaźnik rozwoju