# ANNALS OF THE POLISH ASSOCIATION OF AGRICULTURAL AND AGRIBUSINESS ECONOMISTS

received: 22.07.2019 acceptance: 11.08.2019 published: 20.09.2019 JEL codes: D22, G21 Annals PAAAE • 2019 • Vol. XXI • No. (3)

DOI: 10.5604/01.3001.0013.3536

#### RYSZARD KATA

University of Rzeszów, Poland

# ECONOMIC AND FINANCIAL EFFICIENCY AS A DEVELOPMENT CHALLENGE FOR COOPERATIVE BANKS IN POLAND

Key words: cooperative banks, financial efficiency, economic efficiency

ABSTRACT. In paper the economic and financial efficiency of cooperative banks in Poland in 2004-2018 was assessed. It was developed and the efficiency gap ratio, which determines the efficiency gap of cooperative banks towards commercial banks in particular areas of banking activity, was applied. It was shown that the effectiveness of cooperative banks compared to commercial banks is gradually deteriorating, which was already visible from 2013. Negative trends mainly concern the return on assets and the return on equity, the ability to transform deposits into loans to customers and the quality of the loan portfolio. It was found that the deterioration of economic and financial efficiency of cooperative banks occurred primarily in 2015-2018, in conditions of a good macroeconomic situation in Poland. This means that the reasons for the weakening of cooperative bank efficiency are internal sources, i.e. the model of a bank's operation and the organization and rules of functioning of cooperative bank associations. The reversal of these negative trends is a prerequisite for the sustainable development of cooperative banks and requires changes in their business model and strengthening intra-group integration. This will reduce the operating costs of banks and achieve economies of scale.

## **INTRODUCTION**

Cooperative banking in Poland plays a significant role for local and regional communities and the economy. Cooperative banks are often the only supplier of financial services, including bank loans, in low-urbanised, mainly rural areas. Commercial banks do not carry out their activities through traditional banks in such areas, which means financial exclusion for many of their inhabitants. In their activities, cooperative banks, which are local financial institutions, take relationships established along with local the social and economic environment into account [Kata 2010]. They obtain knowledge on their clients which exceeds knowledge obtained from financial statements and the register of current operations. This, as well as the flexibility of activity and possibility to take all decisions in a situation where operational activities are conducted, allows them to finance clients who are not of interest to commercial banks.

In an era of globalisation and liberalisation of financial markets, as well as increasing competition in the banking sector, even local banks must be financially efficient and have

a competitive advantage in the market, which requires substantial investment in technological progress. Irrespective of the place of residence, clients expect banking services to be at a high level, also in terms of technology and premises. The survival, growth and development of the banking business is contingent on achieving appropriate parameters of profitability, liquidity, loan portfolio quality, etc. This, in turn, is the foundation of the implementation of strategic objectives for internal stakeholders (building bank value, satisfactory profits and dividends, stable workplaces and remunerations), as well as for external stakeholders (e.g. the provision of specific services to clients, the local community, local governments, etc.).

Commercial banking is going in the direction of consolidation, increasing their share in technology and decreasing employment, delivering diversified services by means of electronic communication and the standardisation of services and methods of loan risk assessment, that is transaction banking. Unidirectional changes in the sector of large banks create opportunities for cooperative banks. Numerous clients, not only from local environments, need banking based on relationships with bank employees, access to traditional banks, services adjusted to the specificity and needs of local clients as well as co-participation of a given bank in solving local and regional problems. The stakeholders of cooperative banks expect community financial institutions operating on the basis of a good market strategy and modern technologies [Banasiak 2018]. The condition for the success of such a development path is economic and financial efficiency, which is a sign of successful competition with commercial banks.

The aim of this article is to assess the economic and financial efficiency of cooperative banks in Poland (in sectoral terms). The long temporal scope of research, covering the period from 2004 to 2018 (15 years), allowed for the establishment of relatively permanent changes (trends) in the shaping of cooperative bank efficiency. The analysis of results of cooperative banks in comparison with commercial banks functioning in the same microeconomic and social conditions allowed to conduct an objective assessment of their economic and financial efficiency. Empirical materials for the research were statistical data of the banking sector and reports on the situation of banks published by the Financial Supervisory Commission.

Research concerning efficiency in the economy is mainly related to the optimisation of resource allocation. In literature, there are references to technical efficiency in which, as Michael Farrell [1957] claims, the efficiency of unit activities corresponds with the processing of investments into effects. In the case of banks, which are intermediaries that use financial assets, the efficiency of activities is inextricably linked to financial results. Therefore, it is reflected in financial efficiency. Efficiency is assessed on the basis of analyses of financial statements and financial ratios of a given bank. Jacek Kulawik [2008] regards financial efficiency as an expected (most often by owners) level of implementing an enterprise's monetary aims, with particular favouring of value maximisation, usually reflected by the maximisation of benefits of the engagement of equity in assets, expressed in absolute numbers (profit, income, etc.), as well as in relative figures, that is ratios. Economic efficiency, in turn, is the relation of a given effect (e.g. profit) to a given production ratio (e.g. workload) or the relation of effects to production factors. Both financial efficiency and economic efficiency of banks will be analysed herein.

The financial and economic efficiency of banks will be expressed by means of different measures (%, PLN) with different scopes of variation. For the needs of comparative analysis of cooperative banks with commercial banks, a separate measure has been proposed, as it allows to reduce particular variables to a common denominator and uniform range of variation. This measure was defined as the efficiency gap ratio of cooperative banks in relation to commercial banks (EG<sub>COOPBy</sub>). It illustrates the difference between the value of a given economic and financial ratio  $Y_i$  (e.g. ROA) in the sector of cooperative banks and commercial banks. If the gap ratio amounts to 0 it means that, in a given year, (*t*) ROA in the sector of cooperative banks was the same as in the sector of commercial banks. If EG<sub>CoopBy</sub> > 0, it means that ROA in the sector of cooperative banks was higher than in the sector of commercial banks. Therefore, there is a positive efficiency gap indicating the efficiency advantage of cooperative banks in relation to commercial banks. EG<sub>CoopBy</sub> ratio was established in accordance with the following formula:

$$EG_{CoopBy} = \frac{(Y_{iCoopBt} - Y_{iComBt})}{Y_{iComBt}}$$
<sup>(1)</sup>

or

$$EG_{CoopBy} = \frac{(Y_{iCoopBt} - Y_{iComBt})}{Y_{iComBt}} \quad x (-1)$$
<sup>2)</sup>

where:  $Y_{i\text{CoopB}t}$  – is the measure of efficiency *i* of cooperative banks for year *t* and  $Y_{i\text{ComB}t}$  – means the measure of efficiency *i* of commercial banks for year *t*.

The first formula was applied to variables  $Y_i$ , which, in terms of general economic and financial efficiency, are stimulants, that is their increase fosters an increase in bank efficiency (e.g. ROA and ROE). The second formula was applied to variables, which, in terms of bank economics and financial efficiency, are destimulants, that is their increase is not beneficial and their decrease is beneficial (cost income ratio (C/I)).

## RESEARCH RESULTS AND THEIR ANALYSIS

At the end of December 2018, 549 cooperative banks were operating in Poland, out of which 349 cooperative banks were associated in Bank Polskiej Spółdzielczości SA, in Warsaw,, and 196 cooperative banks were associated in SGB-Bank SA in Poznań. 4 banks operated beyond associations. Among all cooperative banks, 504 banks were participants of so-called Institutional Protection Schemes (*IPS*) established by both associations (BPS and SGB). 45 cooperative banks operated beyond IPS. The financial situation of cooperative banks, at the end of 2018, was very diversified. Generally, it was stable, as the sector as a whole shows a high capital adequacy ratio (17.7%) and good liquidity (at the end of 2018 all cooperative banks met the liquidity coverage ratio (LCR<sup>1</sup>)) [KNF 2019].

<sup>&</sup>lt;sup>1</sup> LCR (Liquidity Coverage Ratio) – in accordance with the sort-term liquidity requirement, banks must hold high-quality liquid assets in order to cover the expected outflow of deposits for 30 days.

However, the number of banks covered by recovery procedure programmes increased, in the years 2015-2018, from 38 to 43 cooperative banks. Problems with efficiency and financial stability are faced, first and foremost, by banks which have not been accepted by IPS. Furthermore, in a report on the stability of the banking sector, the Supreme Chamber of Control points out low efficiency relating to the business model of the sector of cooperative banks, which is a challenge for the profitability of cooperative banks. The poor quality of the loan portfolio in this sector is also alarming [NIK 2018].

The efficiency of activities of cooperative banks is a big research problem, as it affects their competitive position and presence in the market. The negative efficiency of banks is linked to losses and may lead to their bankruptcy [Siudek, Drabarczyk 2015]. The bankruptcy of Spółdzielczy Bank Rzemiosła i Rolnictwa (SK Bank) in Wołomin in 2015, as well as the bankruptcy of 2 cooperative banks (between the end of 2015 and Q2 of 2019) and the acquisition of 13 cooperative banks by other cooperative banks due to their bad financial situation [KNF 2019] proves that such a risk is real and can lead to huge problems, also in the case of the whole cooperative banking<sup>2</sup> sector.

Cooperative banks are local stakeholder-based financial institutions established in order to provide financial services for particular sectors and communities, as well as improve financial access in selected (rural, peripheral) areas [Anguren, Sevillano 2011]. While fulfilling their roles for local environments and stakeholders, who are not their owners, such banks should not yield under the pressure of increasing short-term financial results or pursue the maximisation of profits as their primary objective. Nonetheless, they are obliged to ensure deposit safety, access to the financing of entities which are or could be financially excluded and financial services adjusted to the needs of local environments. Therefore, one should look at their activities from a broader perspective than through the prism of financial efficiency. Nevertheless, without appropriately high financial efficiency, such banks will not be able to fulfil roles ascribed to stakeholder-based institutions or implement a sustainable development model which is most adequate for them, as it combines the objectives of mercantilism with social responsibility [Kata 2018].

The analysis of key economic and financial ratios of cooperative banks, in the years 2004-2018, in comparison with commercial banks (Table 1), illustrates problems which are faced by cooperative banking in Poland in terms of efficiency. They are as follows:

- 1. A decreasing net interest margin (the relation of income on interest to the average of assets), which, in the case of an increase of the interest income share in total operational income of cooperative banks (from 56.6% in 2004 to 75.3% in 2018), causes a decrease in bank profits.
- 2. Low cost efficiency measured by means of the C/I ratio. This situation arises mainly from the fact that cooperative banks constitute 41.9% of all banks in Poland and the share of cooperative banks in employment amounts to 19.1% (2018), in the market of loans for clients it amounts to 6.9% and in the deposit market it amounts to 10.1% [FSC 2019]. Moreover, the majority of cooperative banks implement IT solutions on their own and, in the whole sector, the mechanisms of cost sharing by means of

<sup>&</sup>lt;sup>2</sup> The loss of SK Bank (PLN 1.628 billion) was three times higher than the total net result of other cooperative banks in 2015.

| Year | NIM<br>Net interest<br>margin |      | C/I<br>Cost to income<br>ratio |      | ROA*<br>Return on<br>assets |      | ROE*<br>Return on<br>equity |      | NPL<br>Non-performing<br>loan ratio (non-<br>financial sector) |      |
|------|-------------------------------|------|--------------------------------|------|-----------------------------|------|-----------------------------|------|----------------------------------------------------------------|------|
|      |                               |      |                                |      |                             |      |                             |      |                                                                |      |
|      | CB                            | CMB  | CB                             | CMB  | CB                          | CMB  | CB                          | CMB  | CB                                                             | CMB  |
|      | %                             |      |                                |      |                             |      |                             |      |                                                                |      |
| 2004 | 5.9                           | 3.1  | 71.6                           | 64.6 | 1.8                         | 1.4  | 18.3                        | 17.1 | 5.5                                                            | 15.6 |
| 2005 | 5.6                           | 3.2  | 72.2                           | 60.6 | 1.6                         | 1.6  | 17.6                        | 20.8 | 4.9                                                            | 11.5 |
| 2006 | 4.8                           | 3.3  | 72.9                           | 57.4 | 1.4                         | 1.8  | 14.5                        | 23.1 | 4.0                                                            | 7.6  |
| 2007 | 4.8                           | 3.1  | 69.2                           | 54.6 | 1.5                         | 1.8  | 17.2                        | 22.9 | 3.0                                                            | 5.4  |
| 2008 | 5.2                           | 3.1  | 66.0                           | 53.1 | 1.7                         | 1.6  | 19.3                        | 21.2 | 2.8                                                            | 5.2  |
| 2009 | 4.2                           | 2.5  | 71.4                           | 52.6 | 1.2                         | 0.8  | 12.7                        | 11.2 | 4.3                                                            | 7.9  |
| 2010 | 4.4                           | 3.2  | 69.3                           | 50.6 | 1.1                         | 1.1  | 10.5                        | 10.2 | 5.3                                                            | 8.8  |
| 2011 | 4.6                           | 3.2  | 66.9                           | 49.1 | 1.2                         | 1.3  | 11.6                        | 12.7 | 5.7                                                            | 8.3  |
| 2012 | 4.3                           | 3.1  | 65.8                           | 49.2 | 1.2                         | 1.2  | 11.2                        | 11.2 | 6.3                                                            | 8.5  |
| 2013 | 3.7                           | 2.8  | 70.8                           | 50.9 | 0.8                         | 1.1  | 7.8                         | 10.2 | 6.5                                                            | 8.7  |
| 2014 | 3.4                           | 2.5  | 68.9                           | 48.8 | 0.8                         | 1.1  | 7.5                         | 10.3 | 6.4                                                            | 8.1  |
| 2015 | 3.17                          | 2.50 | 75.2                           | 56.7 | 0.5                         | 0.9  | 5.0                         | 7.7  | 6.7                                                            | 7.6  |
| 2016 | 3.02                          | 2.54 | 70.1                           | 54.0 | 0.51                        | 0.86 | 5.3                         | 7.72 | 7.8                                                            | 7.0  |
| 2017 | 3.06                          | 2.69 | 66.0                           | 54.4 | 0.51                        | 0.80 | 5.2                         | 7.04 | 8.5                                                            | 6.8  |
| 2018 | 2.96                          | 2.59 | 67.9                           | 53.8 | 0.47                        | 0.83 | 5.1                         | 7.21 | 9.0                                                            | 6.9  |

Table 1. Economic and financial efficiency of cooperative banks (CB) compared to commercial banks (CMB) in 2004-2018

\* The BS profitability ratios for 2015 do not include losses resulting from the bankruptcy of SK Bank Source: own calculations based on Financial Supervisory Commission data from 2004-2018 [KNF 2019]

integration of so-called activity supporting functions (e.g. risk assessment and related reporting) are missing. All this leads to the fact that, in the whole examined period (2004-2018), the relation of costs of activities to the cooperative bank revenue generated was significantly higher than in commercial banks.

3. Gradually decreasing profitability of assets and equity. The decrease has been observed since 2013 in the whole banking sector in Poland, but in the sector of cooperative banks it is faster and is reaching towards a lower level than in the case of the commercial bank sector. It should be emphasised that the profitability of cooperative banks decreased in spite of the fact that the economy was booming (in the years 2013-2018 the cumulative actual growth of GDP amounted to 23.6%). In the case of recession, cooperative banks, particularly ones operating on a smaller scale and holding relatively small capital and assets, can face problems connected with keeping up with technological changes in banking and maintaining competitiveness.

4. An increase of the risk of loan activities caused by the expansion of cooperative banks on local markets and an increase in the share of enterprises in their loan portfolio. There is also the risk of concentration in certain loan market segments (e.g. loans for developers). As a result, since 2015, the percentage of non-performing loans increased and reached a level of 9% in 2018. It was affected by a deteriorating quality of loans for enterprises (increase of non-performing loan ratio in the years 2015-2018 from 11.9% to 18%) and loans for individual entrepreneurs (increase in the ratio from 9.5% to 12.7%).

In 2018, cooperative banks did not demonstrate an advantage in relation to commercial banks in the case of any analysed ratios, apart from the interest margin (table 1). Since 2016, the quality of the loan portfolio of cooperative banks was worse than the portfolio of commercial banks for the first time in two decades. Since 2013, cooperative banks indicate lower profitability of capital and assets and, therefore, have worse results than commercial banks in areas in which they used to have better results (in the years 2004-2005 and 2008-2010, that is in the period of the global financial crisis).

In the years 2004-2018, the efficiency gap ratio (EG<sub>CoopBy</sub>) for analysed financial parameters moved downwards (Figure 1). Cooperative banks attained continuously worse results in the scope of economic and financial efficiency in relation to commercial banks, as well as in fields in which they were more efficient for many years. This concerns the quality of the loan portfolio and interest margin. However, the decrease of the interest margin in cooperative banks cannot be clearly assessed. In their case, a high margin implemented for many years was a kind of pension due to a monopolist position in local markets. The acquisition of local clients by commercial banks by means of developing electronic channels of access to services, as well as decreasing interest rates forced a reduction of the interest margin in cooperative banks to a similar level found in the commercial sector. This allows cooperative banks to offer financial services at competitive price conditions. However, the scale of margin reduction, which took place in the years 2013-2018, was not beneficial for their profitability.

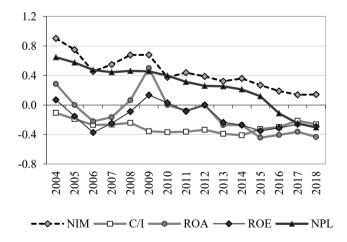


Figure 1. Efficiency gap ratio of cooperative banks in relation to commercial banks (EG<sub>CQOPBy</sub>) in reference to selected financial ratios in 2004-2018

Source: own calculations based on Financial Supervisory Commission data from 2004-2018 [KNF 2019] Analysis of further measures of cooperative bank activity efficiency in comparison with commercial banks (Table 2) points out the following facts:

- 1. In the sector of cooperative banks, there is a large and permanent surplus of deposits over loans of the non-financial sector. Such a situation is natural for local banks, but the scale of client deposit overhang, not covered by client loans, is extremely high in the Polish sector of cooperative banks and, what is worse, in 2013-2018 it increased (Table 2). This surplus is allocated for low-interest deposits in associating banks or debt instruments. In the case of low interest rates (of a central bank or market interest rates), these operations do not ensure profitability. Large deposit overhang means small loan demand in local financial markets and insufficient activities of cooperative banks in this area.
- 2. Cooperative banks demonstrate low labour force efficiency expressed by means of volume of total assets and net profit per employee (Table 2). Lower efficiency of employment is a characteristic feature of local banks in comparison with commercial banks operating in a wide financial market. However, the scale of difference between

| Year | Loans/deposits<br>of clients [%] |       | Assets per<br>employee<br>[mln PLN] |      | Net profit per<br>employee<br>[thous. PLN] |       | Staff costs/<br>operating costs<br>[%] |      | Non-interest<br>result/assets<br>[%] |      |
|------|----------------------------------|-------|-------------------------------------|------|--------------------------------------------|-------|----------------------------------------|------|--------------------------------------|------|
|      | CB                               | CMB   | CB                                  | CMB  | CB                                         | CMB   | CB                                     | CMB  | CB                                   | CMB  |
| 2004 | 78.8                             | 74.4  | 1.0                                 | 4.2  | 17.3                                       | 55.9  | 72.8                                   | 53.0 | 2.62                                 | 2.9  |
| 2005 | 73.5                             | 78.8  | 1.2                                 | 4.4  | 18.1                                       | 69.0  | 72.6                                   | 54.3 | 2.08                                 | 2.24 |
| 2006 | 70.5                             | 86.7  | 1.5                                 | 5.0  | 17.4                                       | 79.0  | 72.7                                   | 54.9 | 1.85                                 | 2.12 |
| 2007 | 75.7                             | 102.5 | 1.7                                 | 5.4  | 23.1                                       | 84.2  | 72.6                                   | 55.0 | 1.71                                 | 2.39 |
| 2008 | 77.8                             | 121.0 | 1.8                                 | 7.1  | 28.8                                       | 91.7  | 72.1                                   | 54.3 | 1.60                                 | 1.79 |
| 2009 | 79.2                             | 112.9 | 2.0                                 | 6.9  | 22.1                                       | 55.8  | 71.7                                   | 53.0 | 1.62                                 | 2.02 |
| 2010 | 73.6                             | 114.1 | 2.2                                 | 7.5  | 23.1                                       | 74.1  | 71.5                                   | 54.9 | 1.54                                 | 1.97 |
| 2011 | 73.8                             | 117.4 | 2.4                                 | 8.4  | 27.6                                       | 101.9 | 70.2                                   | 53.4 | 1.42                                 | 1.76 |
| 2012 | 73.2                             | 115.1 | 2.6                                 | 8.8  | 29.6                                       | 102.0 | 69.8                                   | 53.7 | 1.33                                 | 1.81 |
| 2013 | 69.6                             | 111.0 | 2.9                                 | 9.3  | 22.6                                       | 101.9 | 69.7                                   | 54.0 | 1.18                                 | 1.6  |
| 2014 | 70.2                             | 107.9 | 3.2                                 | 10.4 | 23.1                                       | 110.2 | 69.3                                   | 53.6 | 1.10                                 | 1.41 |
| 2015 | 70.4                             | 104.9 | 3.4                                 | 10.5 | 14.5                                       | 90.4  | 64.1                                   | 51.1 | 1.06                                 | 1.35 |
| 2016 | 63.4                             | 100.3 | 3.8                                 | 11.3 | 18.1                                       | 97.3  | 67.5                                   | 47.2 | 1.03                                 | 1.34 |
| 2017 | 60.4                             | 100.1 | 4.2                                 | 12.0 | 20.0                                       | 98.2  | 68.8                                   | 46.7 | 0.96                                 | 1.12 |
| 2018 | 57.4                             | 97.9  | 4.5                                 | 12.8 | 20.1                                       | 104.9 | 67.6                                   | 47.0 | 0.88                                 | 0.95 |

Table 2. Selected measures of efficiency of cooperative banks (CB) compared to commercial banks (CMB) in 2004-2018

Source: own calculations based on Financial Supervisory Commission data from 2004-2018 [KNF 2019]

the sector of cooperative banks and commercial banks (3-4 times bigger) and the fact that this gap is increasing are a sign of decrease in the competitiveness of cooperative banks.

- 3. The next problem is an increase of the share of fixed costs in the structure of costs. A significant part of these costs are employee remuneration and social insurance constituting more than two thirds of the costs of operation in cooperative banks in 2018 and 47% in commercial banks (Table 2). High staff costs contribute to the fact that cooperative bank investment in new technologies are small, thus weakening their competitiveness, and is a development barrier, as it reduces their ability to generate profits.
- 4. The relation of non-interest income (i.e. due to commission, earnings per share, shares, financial operations and currency exchange) to assets reflects the lower efficiency of cooperative bank activity in the market in relation to commercial banks.

The analysis of  $EG_{CoopBy}$ , for the above-mentioned measures of bank activity efficiency, indicates that cooperative banks had worse results than commercial banks in almost all areas, in the years 2004-2018. In the case of cooperative banks, the efficiency gap became bigger, mainly in the scope of the relation of loans to deposits. A similar tendency was true in the case of profit per employee and share of personnel costs in the costs of activities (Figure 2). A slightly smaller efficiency gap in relation to commercial banks was also observed in the case of assets per employee and non-interest income in relation to assets (Figure 2). The last tendency proves that cooperative banks are looking for new sources of profit by means of extending the range of financial services, but also incur charges and commission for clients.

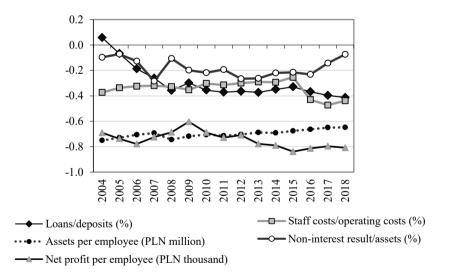


Figure 2. Efficiency gap ratio of cooperative banks in relation to commercial banks (EGCoopBy) in reference to selected measures of efficiency of operation in 2004-2018

Source: own calculations based on Financial Super-visory Commission data from 2004-2018 [KNF 2019]

## SUMMARY

In the leading sectors of cooperative banking in Europe, the profitability of activities, which is higher than in the case of commercial banks, is based on a large client database, relationships with shareholders and the good organisation of business as part of cooperative banking groups (joint back-office processes, unification of technological equipment, etc.). In Poland, in turn, between the year 2015 and Q1 of 2018, cooperative banks lost 52,000 clients with bank loans (i.e. 5.8%) and the number of shareholders decreased between the year 2012 and 2018 by 11% [KNF 2019]. There are also no joint solutions which would allow to reduce banking activity costs.

The main advantage of cooperative banks are their relationships and flexibility due to the local character of their activities. However, each local financial institution must cope with professional risk management and operational cost optimisation. In present regulatory, technological and market circumstances, a single cooperative bank is doomed to fail without stronger interference inside associations aiming at sharing costs and functions.

The worsening economic and financial efficiency of cooperative banks, visible particularly in the years 2013-2018, poses a serious threat to their development. It also impedes undertaking activities for the benefit of the local environment and stakeholders of banks inherent to the mission of cooperative banking. Without the maintenance of high economic and financial efficiency, cooperative banks will not be able to cope with technological challenges relating to cyber-security and client remote access to banking services, as well as increasing regulatory obligations. They will also not be able to improve the quality of technical infrastructure or product range, which is necessary in order to compete for new young clients. The future of the sector depends on whether managers of cooperative banks will be ready to change the business model defining a uniform local bank functioning standard as part of associations and undertake joint activities in the scope of technical infrastructure, product offer, marketing and operational activity support. Such activities can lead to a reduction of bank operating costs, the improvement of competitiveness of the service offer and a decrease in business risk, which will contribute to an increase in economic and financial efficiency. It is a condition for the sustainable and stable development of banks and the whole sector.

#### BIBLIOGRAPHY

Banasiak Andrzej. 2018. Bankowość spółdzielcza – perspektywa Europejska (Cooperative banking – European perspective). Warszawa: ZBP, https://konferencje.alebank.pl/wp-content/.../14.40--A-Banasiak-BS-w-Europie-08B.pdf, access: 08.07.2019.

- Farrell Michael James. 1957. The measurement of productive efficiency. *Journal of the Royal Statistical Society* 120: 253-290.
- Kata Ryszard. 2010. Znaczenie banków lokalnych w dostępie rolników do kredytów bankowych (The importance of local banks in the access of farmers to bank loans). *Roczniki Nauk Rolniczych. Seria G* 97 (4): 95-104.
- Kata Ryszard. 2018. Mikroekonomiczny model działalności banków spółdzielczych w Polsce dylematy wyboru (Microeconomic model of cooperative banks activity in Poland dilemmas of choice). *Polityki Europejskie, Finanse i Marketing* 19 (68): 62-72.

- KNF (Komisja Nadzoru Finansowego, Financial Supervisory Commission FSC). 2019. Informacja o sytuacji banków spółdzielczych i zrzeszających w 2018 r. (Information on the situation of cooperative and associating banks in 2018). Warszawa: KNF.
- Kulawik Jacek (ed.). 2008. Analiza efektywności ekonomicznej i finansowej przedsiębiorstw rolnych powstałych na bazie majątku WRSP (Analysis of economic and financial efficiency of agricultural enterprises created on the basis of WRSP assets), Warszawa: IERiGŻ-PIB.
- Martín Rebeca Anguren, José Manuel Marqués Sevillano. 2011. Cooperative and savings banks in Europe: Nature, challenges and perspectives. *Estabilidad Financiera* 20: 25-44.
- NIK (Najwyższa Izba Kontroli, Supreme Chamber Office SCO). 2018. Zapewnienie stabilności sektora bankowego (Ensuring the stability of the banking sector). Warszawa: NIK, https://www. nik.gov.pl/kontrole/P/17/014/KBF, access: 10.07.2019.
- Siudek Tomasz, Katarzyna Grabarczyk. 2015. Efektywność działania wybranych banków spółdzielczych (na przykładzie województwa mazowieckiego) (The efficiency of selected cooperative banks (for example of Masovian Voivodeship). Zeszyty Naukowe SGGW w Warszawie. Ekonomika i Organizacja Gospodarki Żywnościowej 110: 53-65.

\*\*\*

## EFEKTYWNOŚĆ EKONOMICZNO-FINANSOWA JAKO WYZWANIE ROZWOJOWE DLA BANKÓW SPÓŁDZIELCZYCH W POLSCE

Słowa kluczowe: banki spółdzielcze, efektywność finansowa, efektywność ekonomiczna

#### ABSTRAKT

W artykule dokonano oceny efektywności ekonomiczno-finansowej banków spółdzielczych w Polsce w latach 2004-2018. Opracowano i zastosowano współczynnik luki efektywności, który określa dystans efektywnościowy banków spółdzielczych względem banków komercyjnych, w poszczególnych obszarach działalności bankowej. Wykazano, że efektywność banków spółdzielczych w porównaniu do banków komercyjnych sukcesywnie pogarsza się, co było już widoczne od 2013 roku. Negatywne tendencje dotyczą głównie rentowności aktywów i rentowności kapitału własnego banków, zdolności do transformacji depozytów w kredyty dla klientów oraz jakości portfela kredytowego. Ustalono, że pogorszenie efektywności ekonomiczno-finansowej banków spółdzielczych nastąpiło przede wszystkim w latach 2015-2018, a zatem warunkach dobrej koniunktury gospodarczej w Polsce. Oznacza to, że przyczyny osłabienia efektywności banków spółdzielczych mają źródła wewnętrzne, tj. model działania banków oraz organizacja i zasady funkcjonowania zrzeszeń banków spółdzielczych. Odwrócenie tych negatywnych trendów jest warunkiem zrównoważonego rozwoju banków spółdzielczych i wymaga zmian w ich modelu biznesowym oraz wzmocnienia integracji wewnątrz zrzeszeń. Pozwoli to na redukcję kosztów działania banków i uzyskanie efektów skali.

#### AUTHOR

RYSZARD KATA, DR HAB. PROF. UR ORCID: 0000-0001-6085-3935 University of Rzeszow Faculty of Economics 2 M. Ćwiklińskiej St., 35-601 Rzeszów, Poland