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# ATTEMPTED ASSESSMENT OF THE COLLABORATION BETWEEN COOPERATIVE BANKING SECTOR AND THE STATE ADMINISTRATION AND LOCAL SELF-GOVERNMENT INSTITUTIONS IN POLAND

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#### **Summary**

In this study, general financial characteristics of the cooperative banking sector in Poland in the years 2010–2018 were discussed, presenting the most important balance sheet data and profit and loss statement information. The focus was also on the analysis and assessment of the importance of state government and local self-government institutions (general government institutions) for cooperative and affiliating banks. An attempt was made to establish the relationship between the receivables of state government and local self-government institutions and the liabilities of these institutions, versus debt and capital instruments broken down into cooperative banks, affiliating banks, and the entire sector.

As a result of the conducted research, it was found that cooperative banks constitute the core of the cooperative banking sector, and that they achieve a better and more stable net financial result; moreover, they systematically increase their balance sheet total – even faster than commercial banks – as well as increasing the size and quality of receivables and maintaining good level of liabilities. Central and local government institutions, although they do not show a large share in the discussed financial figures in the cooperative banking sector, nevertheless play an important role primarily in cooperative banks, but also in affiliating banks.

## Keywords

cooperative banking sector  $\bullet$  central government and local self-government institutions  $\bullet$  analysis of deposits and loans

## 1. Introduction

The cooperative banking sector, consisting of cooperative and affiliating banks, constitutes an important segment of the banking system, fulfilling the mission of a financial group that provides services for the local community. The research subject in this study included the central government and local self-government institutions served by the cooperative banking sector in Poland.

The purpose of this article was to analyse and assess the impact of cooperative banking sector on the development of general government institutions, and their mutual

cooperation. The entire cooperative banking sector was adopted for research, consisting at the end of December 2018 of two affiliating banks and 549 cooperative banks [Information on the situation of cooperative and affiliating banks in 2018]. Guided by the adopted goal of the study, the following research questions were posed:

- 1. Are government institutions an important entity for the discussed banking sector?
- 2. Which characteristics/features have a positive impact on the significance of central and local government institutions for the functioning of the cooperative banking sector?

The subject of the study encompassed selected financial characteristics, such as receivables and liabilities, balance sheet total, equity capital and net financial result in the period 2010–2018 in the entire cooperative banking sector, considered as a homogeneous community of cooperative banks and the existing two affiliating banks, which in accordance with the Act on the functioning cooperative banks, their affiliation and affiliating banks perform not only banking activities specified in the Banking Law, but also other activities listed in Article 19.1 and 2 of this Act.

## 2. Identification and definition of cooperative banking sector, and of central and local government institutions

The banking system in Poland has not been given a uniform definition. Suffice it to quote several descriptions. For instance, W.L. Jaworski, M. Iwanicz-Drozdowska and A. Szelągowska state that the banking system includes the following groups of banks:

- central banks established on the basis of issuing banks,
- operational banks (deposit and loan and universal banks),
- specialized banks (investment banks, mortgage banks, municipal banks),
- savings banks,
- credit cooperatives [Iwanicz-Drozdowska et al. 2017].

M. Zaleska writes about the two-tier banking sector, in which the primary level is the financial security network, and the second consists of the banks [Zaleska (ed.) 2018].

S. Owsiak defines the banking system in a general way as a set of logically related organizational forms, legal acts, financial institutions and other elements enabling entities to establish financial relations both in the real economy sector and in the financial sector [Owsiak 2002].

In this study, the definition of the banking system showing specific groups of banks is most relevant in the context of the cooperative banking sector. Therefore, the group of banks consisting of affiliating banks, which are joint-stock companies, and the group of cooperative banks, which operate on the basis of both banking and cooperative law, are jointly considered to form the cooperative banking sector. A. Alińska also writes about cooperative banking groups regarding the cooperative banking sector in Europe [Szelagowska (ed.) 2012].

The general government sector as defined in the European System of National and Regional Accounts ESA'95 includes, among others:

- central government and local self-government units<sup>1</sup>, which administer and finance activities related to meeting the needs of society,
- non-profit institutions found to have legal personality, being other non-market producers,
- autonomous pension funds, if the general government sector is responsible for their management regarding the approval of contributions and benefits [General government sector statistics 2010].

In the reporting by the Office of the Polish Financial Supervision Authority, the following balance sheet items are included in the analysis of cooperative banking sector on the asset side:

- receivables from the financial sector,
- receivables from the non-financial sector.
- receivables from general (central and local) government.

On the liabilities side there are the equivalent elements of liabilities. Reports on the situation of banks, in their analyses of the budget sector's credit activity, distinguish between central government institutions, local self-government institutions, and social security funds.

## 3. Description of the cooperative banking sector in Poland

The cooperative banking sector in Poland has a permanent place in the banking system. Its share in the analysed years i.e. 2010–2018, measured by the balance sheet total, ranged from 8.2% in 2011 to 9.8% in 2017. The balance sheet total on the assets side consists primarily of receivables, debt and equity instruments as well as other components. Liabilities side includes debt, equity and other liabilities.

Cooperative banks play a key role in cooperative banking sector, whereas their distinguishing feature among other banks is their local nature and thus good customer knowledge. Taking into account the historical mission of cooperative banks expressed in the provision of high-quality financial services to the local client by supporting his economic, administrative, cultural, and consumer needs, local and regional governments, as well as other government and self-government institutions occupy a very important place in these banks. Nevertheless, one should not expect that this group of clients will necessarily be dominant in these banks, but it will be important, because of the possibility of cooperative banks performing other functions, which include, for example, financial education of the youngest clients, consulting through direct customer service, and supporting local community initiatives organized by local governments and other local bodies with the support of these banks.

Self-government institutions are the units, which constitute separate organisational entities, whose competences comprise only local sections of the economic area of the given country, excluding local departments of social security funds.

In order to determine the financial position of the sector in question, it is worth briefly analysing selected financial figures obtained from the balance sheet and profit and loss account (Tables 1 and 2).

**Table 1.** Characteristics of the cooperative banking sector in Poland in 2010-2018, taking into account central government and local self-government institutions. Dynamics: 2010 = 100%

Specification	2011	2012	2013	2014	2015	2016	2017	2018
Balance sheet total	110.1	120.2	134.2	140.6	145.0	164.2	179.9	189.0
Receivables	112.2	123.3	132.7	137.8	138.7	149.6	160.3	165.2
General government receivables <sup>2</sup>	125.7	140.2	139.0	154.7	157.5	174.2	200.9	266.7
Debt and equity instruments	99.9	102.8	146.4	159.3	178.2	236.6	280.7	313.4
Other assets	107.8	124.5	121.0	126.1	137.3	160.9	167.1	166.1
Liabilities	109.2	119.1	134.3	140.6	145.6	166.0	183.1	193.1
General government liabilities	96.0	103.5	107.9	106.0	110.1	137.9	148.0	143.8
Equity	112.0	126.2	133.4	143.9	143.9	150.5	160.8	166.0
Other liabilities	140.2	141.5	129.0	117.4	114.6	129.6	109.0	93.5

Source: Information on the situation of cooperative and affiliating banks for the years 2014–1918. Urząd Komisji Nadzoru Finansowego (Office of the Polish Financial Supervision Authority), Warsaw.

**Table 2.** Characteristics of cooperative banks (CB) and affiliating banks (AB) in Poland in the years 2010–2018, taking into account central government and local self-government institutions – percentage share

Specification	2010	2011	2012	2013	2014	2015	2016	2017	2018
Balance sheet total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
CB	73.0	73.9	74.1	74.6	77.3	77.5	76.3	75.1	76.0
AB	27.0	26.1	25.9	25.4	22.7	22.5	23.7	24.9	24.0
Receivables	78.0	79.6	80.1	77.2	76.6	74.7	71.2	69.6	68.2
СВ	66.7	67.4	67.4	66.2	66.2	64.9	62.2	61.1	60.4
AB	11.3	12.2	12.7	11.0	10.4	9.8	9.0	8.5	7.8
Including: general									
government receivables	4.7	5.4	5.5	5.0	5.2	5.1	5.0	5.3	6.5
CB	3.6	4.2	4.4	4.1	4.4	4.4	4.0	4.2	5.2
AB	1.1	1.2	1.1	0.9	0.8	0.7	1.0	1.1	1.4

<sup>&</sup>lt;sup>2</sup> i.e. from central government and local self-government institutions.

Debt and equity instruments CB AB	15.8	14.3	13.5	17.3	17.9	19.4	22.8	24.6	26.2
	2.2	2.5	2.5	4.6	7.2	8.6	10.5	10.5	12.0
	13.6	11.8	11.0	12.7	10.7	10.8	12.3	14.1	14.2
Liabilities	89.5	88.8	88.7	89.6	89.6	90.0	90.6	91.2	91.5
CB	64.2	64.6	64.8	65.7	68.2	68.6	68.1	67.4	68.5
AB	25.3	24.3	24.0	23.9	21.4	21.4	22.5	23.8	23.0
Including: general government liabilities CB AB	6.7 6.4 0.3	6.1 5.8 0.3	6.0 5.7 0.3	5.6 5.4 0.2	5.2 5.0 0.2	5.3 5.1 0.2	5.8 5.7 0.1	5.7 5.6 0.1	5.3 5.2 0.1
Equity	8.6	8.8	9.1	8.5	8.8	8.6	7.9	7.7	7.6
CB	7.6	7.7	7.9	7.6	7.9	7.7	7.0	6.8	6.8
AB	1.0	1.1	1.2	0.9	0.9	0.9	0.9	0.9	0.8

Source: as for Table 1, additional calculations by the author

When observing the size of the cooperative banks sector measured by the balance sheet total, we notice that this amount has been systematically increasing over the studied period. The observed increase in the balance sheet total for the cooperative banking sector is a multiple of 1.89; 1.96 for cooperative banks, and 1.68 for affiliating banks. In the same period, commercial banks increased their total assets and liabilities by a factor of 1.64. Despite the optimistic growth trend in the cooperative banking sector, the latter still remains a relatively small part of the Polish banking system in general. The share of the cooperative banking sector balance sheet total in the overall figure for the whole banking sector in 2010–2018 was less than 10%.

The cooperative banking sector financial result was interesting, as shown in Figure 1. It demonstrates that in some years, the affiliating banks incurred losses, which undoubtedly affected the entire sector. The losses occurred in 2013, 2014 and 2018. When observing the results of cooperative banks, it can be seen that seen as a whole (a group of 549 banks), each year they showed a positive financial result, which however differentiated in individual years.

In the banking sector, amounts such as receivables and liabilities always remain the most important financial characteristics. This is evidenced by the percentage shares of these amounts in the balance sheet total, as shown already in Table 2. The share of receivables in assets oscillates at a level from approx. 68% in 2018 to over 80%, which occurred in 2012. Debt has an even higher share in total liabilities, ranging from 88.7% in 2012 to 91.5% in 2018. The next important amount constituting cooperative banking sector assets consists of debt and capital instruments, whose share in the balance sheet total in the analysed years was from 13.5% in 2012, to as high as 26.2% in 2018, following a steady growth in subsequent years. Finally, we should not fail to mention equity, which in the cooperative banking sector accounted for 7.6% of total liabilities in 2018,

down from 9.0% in 2012. Unfortunately, in the years 2013 to 2018, the share of equity in the balance sheet total recorded a slow decline.

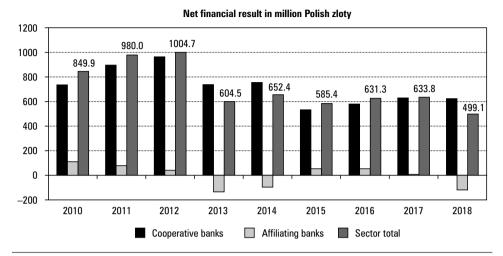


Fig. 1. Financial result of the cooperative banking sector in Poland in 2010–2018, in million Polish zloty

Another interesting aspect of the cooperative banking sector financial situation is the observation of different financial figures separately for cooperative and affiliating banks. Considering the number of cooperative banks constituting the cooperative banking sector, it is not surprising that their share in the discussed sector in all financial indices is definitely higher than that of affiliating banks, as shown in Table 2. Following the analysed volumes in a similar order as above, it can be stated that cooperative banks represent the balance sheet total in the range between 73% in 2010 and 76.3% in 2016, and that this percentage is stable; the remaining share, understandably, belongs to affiliating banks. In the case of liabilities, the share of cooperative banks in liabilities is slightly lower, ranging from 64.2% in 2010 to 68.6% in 2015. The equity of cooperative banks accounts for 7.9% in 2012, down to 6.8% in the last two examined years, i.e. 2017 and 2018.

# 4. Central government and local self-government institutions and an important entity in the functioning of cooperative banking sector

After conducting a general financial analysis of the cooperative banking sector in Poland in the years 2010–2018, it might seem that it is of little importance in the functioning and development of the segment in questions. It is known, however, that government and self-government institutions are traditionally the basic clients of cooperative banks in particular, and therefore they should not be overlooked in scientific research. Therefore, the question was asked whether there are correlations between specific

features that may have a positive impact on strengthening the cooperation between the banks and the entities in question. Initially, all financial figures referred to in this study were analysed, but after elimination, attention was focused on linking features 7, 8, 9 with features 19, 20, 21 and 107, 108 and 109, that is, respectively: receivables of central and local government from cooperative banks (feature 7), receivables of central and local government from affiliating banks (feature 8), total receivables of general government (feature 9), liabilities of general government from cooperative banks (feature 19), liabilities of general government from affiliating banks (feature 20), total liabilities of general government (feature 21), debt and capital instruments of cooperative banks (feature 108), debt and capital instruments of affiliating banks (feature 109), debt and capital instruments in total (feature 110). In the Excel spreadsheet, Pearson's r-correlation coefficients were calculated (Table 3).

Table 3. Results of examining correlations between the receivables from central government and local self-government institutions, and debt and capital instruments in the years 2010–2018

Pearson-r correlation coefficients	Receivables from general government to cooperative banks, feature 7	Receivables from general government to affiliating banks, feature 8	Total receivables from general government, feature 9	
Liabilities of general government in cooperative banks feature 19	0.839	0.836	0.863	
Liabilities of general government in affiliating banks, feature 20	-0.689	-0.655	-0.701	
Liabilities of general government total, feature 21	0.840	0.837	0.864	
Debt and capital instruments of cooperative banks, feature 108	0.925	0.784	0.917	
Debt and capital instruments of affiliating banks, feature 109	0.882	0.893	0.911	
Debt and capital instruments total, feature 110	0.925	0.844	0.933	

Source: as for Table 1, additional calculations by the author

In the examined period, the correlations between the examined features are strong, with the exception of feature 20, i.e. the liabilities of central and local government insti-

tutions from the affiliating banks, which is negatively correlated with the features of 7, 8 and 9, i.e. all receivables from central and local government institutions, which means that its increase causes a decrease in central and local government institutions liabilities of associating banks and vice versa.

In order to verify the research problem, the correlation was analysed using the Student's t-test of significance. In almost all cases, this correlation is at least statistically significant ( $p \le 0.05$ ) and even ( $p \le 0.01$ ). This means that the probability of error with such an inference is not greater than 0.05 or 0.01. The only exception is the connection between central and local government receivables of the affiliating banks with the liabilities of these banks, but also in this case, the correlation remains on the border of statistical significance.

### 5. Conclusions

The cooperative banking sector in Poland occupies an important place in the banking system, but nevertheless, in European context, it belongs to those groups that achieve an average market share in deposits and loans, at the end of December 2018 amounting to 10.1% in deposits and 6.9% in loans. Examples of countries with a much higher share of cooperative banking sector in the banking system in deposits and loans include: France (respectively – above 40% and around 40%), Germany (21.9% for both), and Finland (38.4% and 35.5 %) [Key Statistic 2018].

In the audited years, cooperative banking sector saw a systematic increase in the balance sheet total – namely, from PLN 96.4 billion in 2010 to PLN 182.1 billion in 2018. This amount was mainly influenced by receivables (on the assets side) and debt (on liabilities side). Central and local government institutions receivables, despite a small share in the balance sheet total, recorded the highest dynamics of 266.7% in 2018, as compared to 2010. General government liabilities increased by 66% in the studied period.

Considering the importance of receivables in the stable functioning of banks, attention should also be paid to the quality of these receivables, with particular emphasis on local self-governments. A review of the data contained in Table 4 indicates that were virtually no non-performing loans from local governments in the entire cooperative banking sector in the years 2014–2018. A completely different situation occurs in the non-financial sector, which according to the KNF (Polish Financial Supervision Authority) reporting consists of large enterprises, SMEs, individual entrepreneurs, private individuals, individual farmers and non-commercial institutions. The share of bad debt of these entities in the discussed period in cooperative banks ranged from 6.4% in 2014 to 9.0% in 2018, while in the associating banks these figures were, respectively, 23.4 and 24.4% in the first two years, then fell to 17.6 and 16.4% to rise to 23.1% in 2018.

**Table 4.** Volume and quality of receivables of cooperative banks and affiliating banks, according to the group of clients

Banks	2014	2015	2016	2017	2018				
Receivables from the non-financial sector in millions of Polish zloty									
Cooperative banks	55 620.6	59 234.3	61 555.0	5.0 63 946.5 65 506.3					
Affiliating banks	12 228.1	11 724.0	11 348.1	11 410.9	10 830.8				
Total	67 848.7	70 958.3	72 903.1	75 357.4	76 337.1				
Receiv	vables from self-§	government insti	tutions in millio	ns of Polish zloty	7				
Cooperative banks	5 962.0	6 174.1	63 14.0	7 194.7	9 541.8				
Affiliating banks	1 049.2	1 207.3	1 860.3	2 274.0	2 631.5				
Total	7 011.2	7381.4	8 174.3	9 468.7	12 173.3				
	Receivables from the non-financial sector in %								
Cooperative banks	90.3	90.6	90.7	89.9	87.3				
Affiliating banks	92.1	90.7	85.9	83.4	80.5				
	Receivables from self-government institutions in %								
Cooperative banks	9.7	9.4	9.3	10.1	12.7				
Affiliating banks	7.9	9.3	14.1	16.1	19.5				
Bad debt from the non-financial sector in %									
Cooperative banks	6.4	6.7	7.8	8.5	9.0				
Affiliating banks	23.4	24.4	17.6	16.4	23.1				
Receivables from self-government institutions in %									
Cooperative banks	0.0	0.0	0.1	0.1	0.0				
Affiliating banks	2.0	1.4	0.6	0.0	0.0				

Source: as for Table 1, additional calculations by the author

The analysis that we have carried out confirms the assumption that local government institutions are an important customer of cooperative banks, especially in the field of secure lending. Continued use of the potential and the strengths of these banks, i.e. their knowledge of local markets and provision of services to entities located therein, including local government units, may be an excellent model for their functioning in the future. The affiliating banks, which according to the conducted analysis, suffered losses in three years, should be more focused on apex services, i.e. the services rendered to cooperative banks, while limiting independent commercial activity.

#### References

Act on the functioning cooperative banks, their affiliation and affiliating banks – Ustawa z dnia 7 grudnia 2000 r. o funkcjonowaniu banków spółdzielczych, ich zrzeszaniu się i bankach zrzeszających. Załącznik do obwieszczenia Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 1 marca 2018 r. (poz. 613).

Alińska A. 2012. Specyfika działalności i wyniki finansowe sektora banków spółdzielczych w Europie. [W:] Szelągowska A., Współczesna bankowość spółdzielcza. CeDeWu, Warszawa, 39.

Banking Law – Ustawa z dnia 29 sierpnia 1997 r. – Prawo bankowe, na podstawie: tj. Dz. U. z 2018 r. poz. 2187, 2243, 2354, z 2019 r. poz. 326, 730, 875, 1074, 1358, 1495, 1501, 1520, 1622, 1649, 1667, 1696, 1751, 2020, 2070.

Information on the situation of cooperative and affiliating banks in 2018 – Informacja o sytuacji banków spółdzielczych i zrzeszających w 2018 r. 2019. Urząd Komisji Nadzoru Finansowego, Warszawa.

Iwanicz-Drozdowska M., Jaworski W.L., Szelągowska A. 2017. Bankowość. Instytucje. Operacje. Zarządzanie. Poltext, Warszawa, 18.

Key Statistic 2018. European Association of Co-Operative Banks.

Owsiak S. 2002. Podstawy nauki finansów. PWE, Warszawa.

Statystyka sektora instytucji rządowych i samorządowych. 2010. GUS, Warszawa.

Zaleska M. (red.). 2018. Świat bankowości. Difin, Warszawa, 15.

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