

*Ewa Miklaszewska**
*Krzysztof Kil***

THE ROLE OF DIVERSITY OF BANKING MODELS: POSITION AND PROSPECTS OF POLISH COOPERATIVE BANKS

1. INTRODUCTION

The deregulation of financial markets over the last two decades has dramatically influenced the scale and complexity of banking firms. In the pre-crisis period, universal bank strategies were largely directed towards expansion, while business models centered on operational efficiency accruing from new sources of profits and high leverage. The preferred bank business model was that of universal (conglomerate) banking, where bank expansion was based on non-interest income and non-depository funding (Allen et al., 2011) and the adoption of new models for conducting banking activities, based on product synergies, scale and scope benefits and global coverage (Demirguc-Kunt and Huizinga, 2009). The global financial crisis of 2008 highlighted the riskiness of that model and demonstrated that in many cases benefits from diversification from traditional banking have been overstated. With countless cases of nationalization or forced takeovers of failing banks, questions have been raised as to the proper size and scope of banking activities. Retail banking carried out by locally-based, small institutions, such as credit unions, mutual savings banks, building societies or cooperative banks,

* Ewa Miklaszewska is a Professor at Cracow University of Economics, Poland.

** Krzysztof Kil is an Assistant Professor at Cracow University of Economics, Poland.

for years has played an important role in local environments, enhancing bank reputation and trust. However, pre-crisis deregulation and the growing size and complexity of banking firms and post-crisis restructuring, based on massive public assistance aimed at stabilizing large banks, has created a hostile environment for locally based banks.

2. THE BANKING SECTOR IN POLAND: THE POSITION OF COOPERATIVE BANKS

Poland has a relatively low concentrated banking sector, with a traditional bank business model. Foreign capital dominates, but the Treasury is also an important shareholder. Polish private capital dominates in smaller banks and in the cooperative sector. Overall, the Polish banking sector in the post-crisis period is characterized by good performance as well as by solid fundamentals, as indicated in Table 1.

Table 1. Polish bank performance (%)

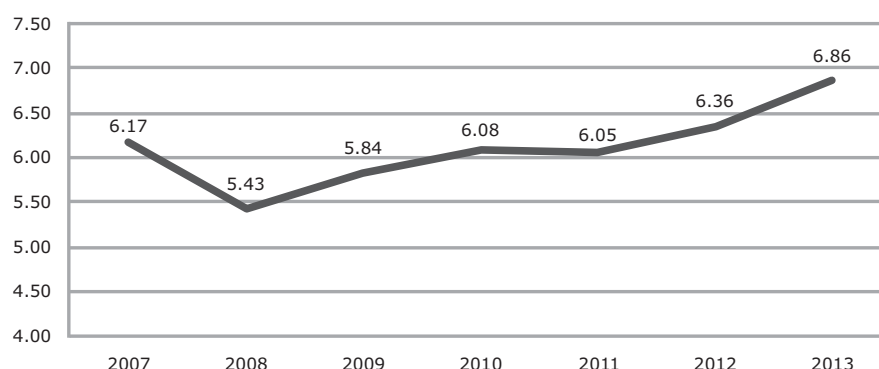
Banks/ year	ROA					ROE					C/I				
	2009	2010	2011	2012	2013*	2009	2010	2011	2012	2013*	2009	2010	2011	2012	2013*
Sector	0.81	1.03	1.26	1.22	1.14	8.37	10.21	12.64	11.19	10.4	54	52	51	51	53
Commercial	0.83	1.10	1.27	1.23	1.17	8.22	10.19	12.71	11.19	10.53	53	51	49	49	51
Cooperative	1.18	1.12	1.21	1.19	0.86	10.46	10.46	11.59	11.23	8.39	72	69	67	66	70

* Data for 30.09.2013.

Source: *Raport o sytuacji banków 2007–2011, 2012*, UKNF, Warszawa 2012 and 2013; *Informacja o sytuacji banków w okresie I–IX 2013 r.*, UKNF, Warszawa 2013.

Since 1989, Polish cooperative banks have undergone comprehensive restructuring in order to adapt to market economy rules, and later to adjust to EU requirements. This restructuring was painful – their number has plummeted from 1510 in 1995 to just 570 today (Szambelanczyk, 2006). On the whole, however, cooperative banks have benefited from the consolidation process and today serve over 10 million customers through a countrywide network of 4600 branches. Since Poland's accession to the European Union, cooperative banks have become an important channel through which money from the Common Budget is transferred to farmers and local authorities nationally (Siudek, 2010). Today cooperative banks represent 90% of the total number of banks, 25% of bank branches and 20% of employment, but only 6.86% of total banking assets (fig. 1).

Figure 1. Cooperative banks' market share (in total assets)



Source: own calculations based on KNF data.

They are small, locally based institutions: the majority (around 350 banks) have assets below 20 million Euro, and only 66 are relatively large, with assets above 50 million Euro. The cooperative sector follows a two-level model and in 2013 there were two cooperative networks, one headed by BPS SA (Bank Polskiej Spółdzielczości SA) with 363 banks; another by SGB-Bank (Spółdzielcza Grupa Bankowa) with 206 banks, and one cooperative bank which operated independently (Krakowski Bank Spółdzielczy). The mission of cooperative banks is to support their customers as well as members of local communities, as opposed to the profit-maximizing objectives of commercial banks, although their interest margin is higher than that of commercial banks (tab. 2).

Table 2. Net interest margin (net interest revenues /av. assets)

	2007	2008	2009	2010	2011	2012	2013
Sector	3,30	3,26	2,51	2,79	2,85	2,68	2,50
Commercial banks	3,20	3,15	2,32	2,83	2,89	2,64	2,49
Cooperative banks	4,77	5,20	4,08	4,11	4,28	4,31	3,50

Source: own calculations based on KNF data.

Among a number of locally active financial institutions, banking activities are conducted also by unregulated (till 2012) credit unions (SKOKs). Although SKOKs represent only 1.3% of the total assets of the banking sector, they have grown at a remarkable rate since their implementation in 1992. SKOKs operate among low income individuals, especially those who do not have accounts with other banks. In 2010, there were 61 SKOKs with 1800 branches, serving over 2 million customers (15% of Polish households). Their assets in June 2010 were over 4 billion US\$ (WB 2012). The Credit Union Act of 1995 defined SKOKs as self-regulatory organizations,

which gave them flexibility and low-cost advantage. The new Credit Union Act of 2009, implemented in October 2012, provided for external supervision and depositor protection, similar to the rest of the regulated banking institutions, both commercial and cooperative. This was a move in the right direction, as many surveys have indicated that many customers did not differentiate between self-regulated SKOKs and fully regulated cooperative and commercial banks (KNF, 2012b).

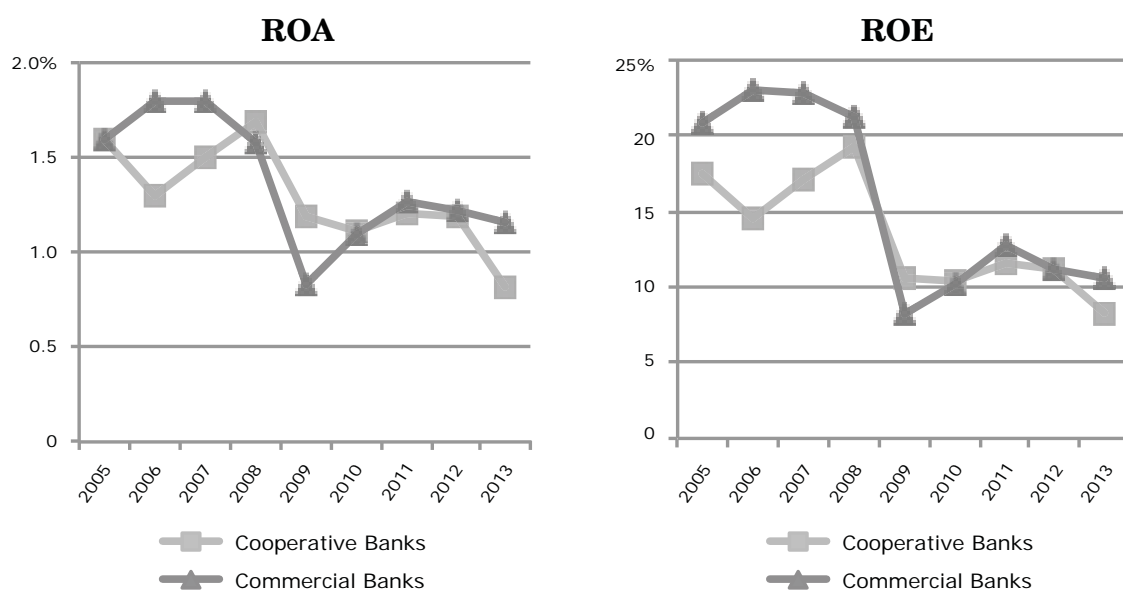
Poland's cooperative banks have a limited scale and scope of operations. At the end of 2011, loans constituted 55% of their assets (40% to households and micro enterprises and 15% to firms, mostly SMEs), followed by interbank loans (30%) placed in the associating banks. They financed 77% of their assets by deposits, mostly from households. The crisis changed their strategies, giving incentives for moving into more risky small enterprise financing (tab. 3), the area less attractive for commercial banks.

Table 3. Changes in loan structure of commercial and cooperative banks (%)

	Commercial banks			Cooperative banks		
	2008	2010	2011	2008	2010	2011
Households	55.7	62.0	61.8	74.7	70.5	67.1
Firms	40.2	31.3	30.0	19.8	22.1	24.1
Local and central governments	3.8	6.2	7.8	4.9	6.7	8.0
Others	0.3	0.5	0.4	0.6	0.7	0.8

Source: BFG, 2011.

Figure 2. Cooperative and commercial banks profitability



Source: Own calculations based on KNF.

The cooperative model has performed well in the post crisis period in a number of countries. In Poland, the cooperative banks, although less profitable in the pre-crisis booming years, have a similar (till recently) post-crisis performance to that of commercial banks (fig. 2). However, the cooperative sector is not homogenous, there are small banks which struggle to maintain the required capital and large banks, which could easily demutualise. Overall, the Polish cooperative sector in the post-crisis period is characterized by good performance and an important role in local SME financing.

Similar conclusions can be drawn when analyzing the cooperative bank soundness, based on the Z-score index of bank sensitivity to risk (default). The index is based on the volatility of returns and the lack of adequate capital as the main sources of risk (Lown et al., 2000) and is calculated as the sum of equity capital to assets ratio (CAR) and return on assets ratio (ROA), divided by the standard deviation of ROA. Thus the value of the Z-Score is determined by the level of capitalization and by the level and stability of profits, and can be interpreted as the distance from a default, measured by the standard deviation of profits. A high level in the Z-Score denotes bank stability, which means it has enough equity capital to cover potential losses.

$$Z - Score_t = \frac{ROA_t + CAR_t}{\sigma(ROA)}$$

ROA_t , CAR_t – Return on Assets and Capital to Assets Ratio for year t ;
 $\sigma(ROA)$ – standard deviation.

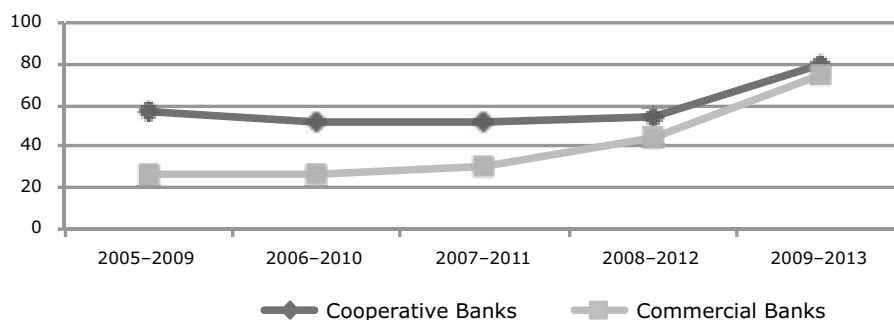
The 2008 crisis resulted in a lowering of the Z-score index for the entire banking sector, but more profoundly for the commercial banks (fig. 3A). Changes in the Z-score index for the cooperative banking sector were less dramatic and the values were higher than for commercial banks, demonstrating their stable position throughout the crisis. However, as fig. 3B demonstrates (for 3-year windows) this was a short term advantage, and in 2011–2013 the situation started to reverse.

When analyzing the subgroups within the cooperative banking sector, divided according to the asset size, we can observe that the smallest banks are the safest (fig. 4).

Among cooperative subgroups, the largest banks have a low ROA, but the highest ROE, and the smallest banks just the opposite, indicating that size matters in business decisions and profitability indicators (fig. 5). For large cooperative banks (assets over 200 m PLN) the crisis years turned out to be the most profitable, thanks to retaking some business and customers from commercial banks. Overall, the Polish cooperative sector in the post-crisis period is characterized by good

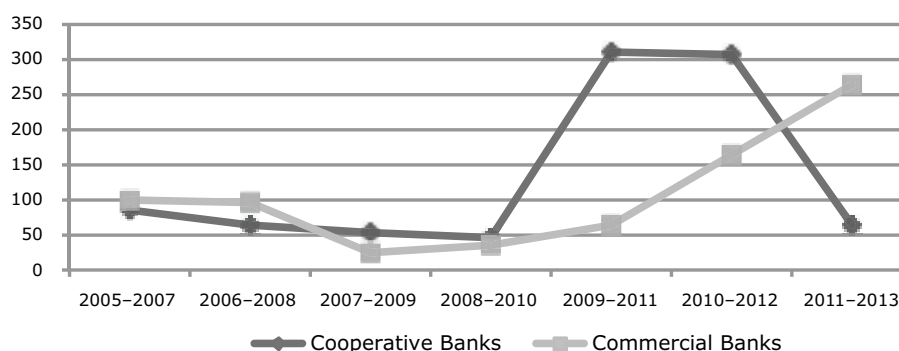
performance and important role in local SME financing, although with some challenges ahead.

Figure 3A. Z-score for commercial and cooperative banks in 5-year rolling windows



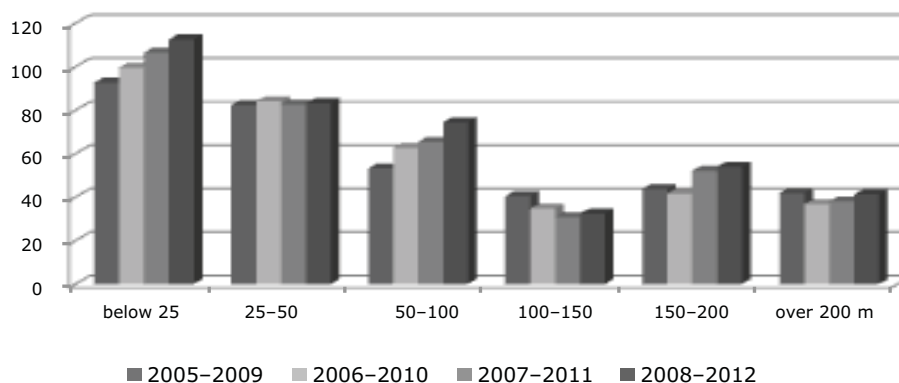
Source: Own calculations based on KNF.

Figure 3B. Z-score for commercial and cooperative banks in 3-year rolling windows



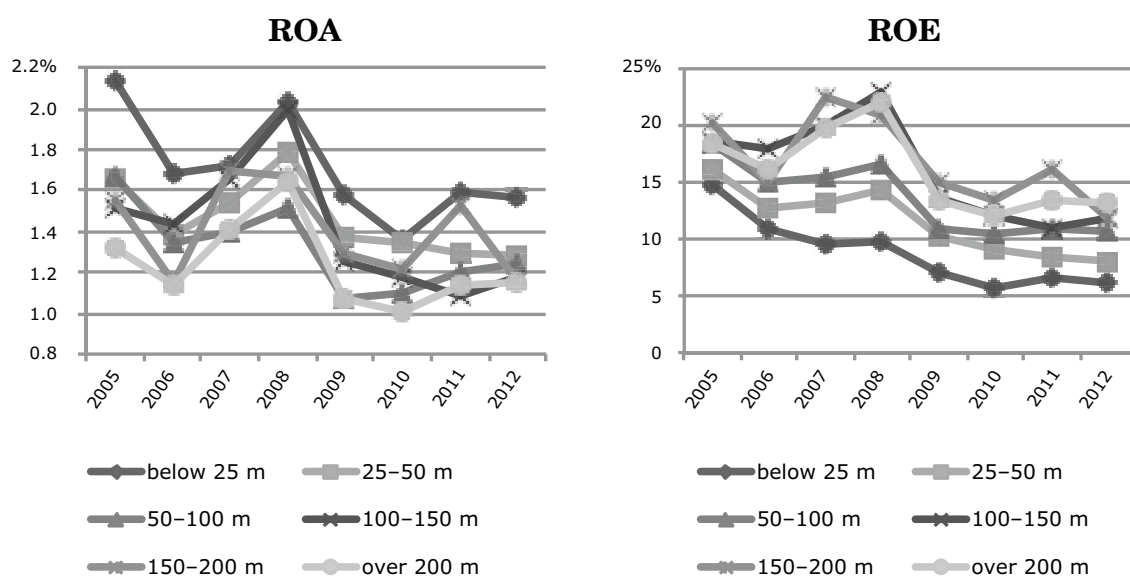
Source: Own calculations based on KNF.

Figure 4. Z-score for subgroups of cooperative banks



Source: Own calculations based on dataset obtained from KNF.

Figure 5. Cooperative banks profitability: comparison within the sector



Source: Own calculations based on dataset obtained from KNF.

3. THE CHALLENGES TO THE COOPERATIVE BANKING MODEL

The European Association of Cooperative Banks has pinpointed the following key cooperative values (Oliver Wyman, 2012): trust, governance, resilience (adapting to changing circumstances), proximity to customers, social commitment (supporting local customers) and solidarity: i.e. reinvesting capital at the local level. The financial crisis of 2007–2009 stressed their importance: throughout the crisis, local banks in many European countries had a superior performance than the big banks (Ayadi et al., 2010). Thus another challenge for the cooperative sector is not to lose identity in the form of operational independence and regional focus.

Cooperative banks in Europe form a mix of different business and associating (network) models and governance structure. Despite different organisational and ownership structures, they are well integrated and complementary to the European commercial banking sector. Cooperative bank governance models range from a centralized one, where member banks have delegated significant supervisory and decision taking power to a central entity (such as the Rabobank model) and, on the other extreme, a network model, where a central entity provides support and has an advisory role, but the decision making power rests with the member banks, such as in the Polish cooperative networks (Oliver Wyman, 2012). In the light of the recent liquidity regulation (CRD IV), an important feature is also the level of network cooperation between local, regional and central institutions. In some

countries networks have evolved into large complex conglomerates, with a strong reliance on a central institution. In networks with less formal organizational structures, such as the Polish one, there is a potential area of conflict between the bottom-up ownership and top-down authority, as growing centralization may worsen cooperative banks' identity and mission. In general, the Italian and Spanish models are considered less centralized than the Austrian, German, Dutch, Finnish and French ones (Ayadi et al., 2010, p. 20).

In the decentralized cooperative network model, intra-group protection schemes are advocated as a key factor in ensuring the overall resilience of cooperative groups. Protection schemes are administered by a central body which acts as an overseer. The Capital Requirements Directive (EC 2006/48) accepts cooperative networks as "Institutional Protection Schemes" (IPS) if they have a mutual support system. In this case, the network central institution may intermediate liquidity within the network, fulfilling the Directive's liquidity requirements (assigning a zero weight for intra-network exposures). This organisational innovation is intended to ensure the solvency and liquidity of a group of affiliated institutions (BIS, 2010). It entails all participants relinquishing to the central body of the IPS the capacity to determine and implement business strategies and internal risk control. The second pillar comprises the mutual liquidity and solvency pacts between the participating cooperative banks and the third pillar is a commitment to the stability of the agreements. These intra-group protection schemes (IPS) are advocated as a key factor in ensuring the overall resilience of cooperative groups, although they bring a significant degree of centralization and tighter cooperation within a group of affiliating banks. The evolution of the network structure is thus an important challenge for the Polish cooperative banks.

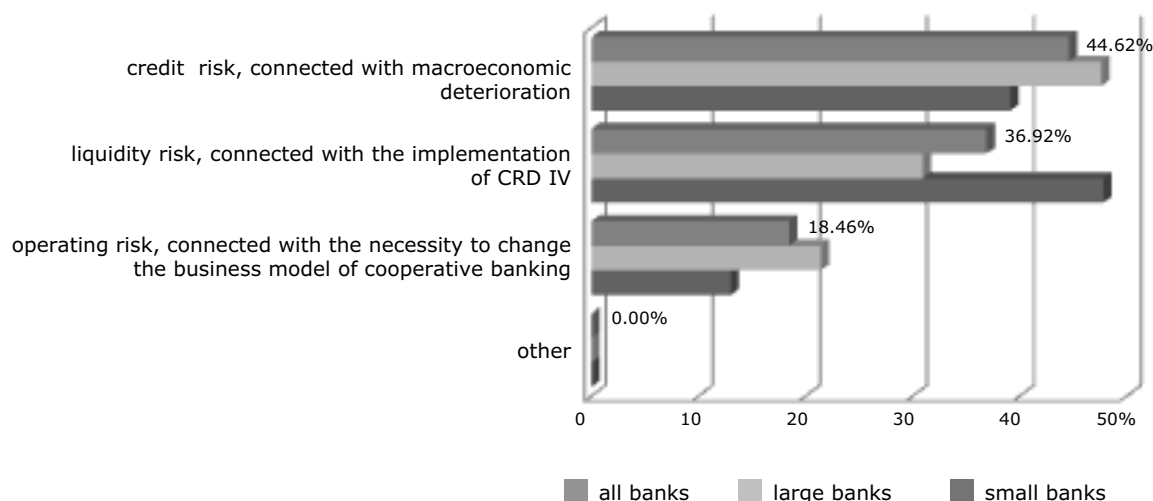
4. THE CHALLENGES FOR POLISH COOPERATIVE BANKS: THE RESULTS OF A 2013 BANK SURVEY

A report by Oliver Wyman, based on a cooperative bank global survey (Oliver Wyman Report, 2012), indicated key success factors for cooperative banks, such as efficiency, customer satisfaction and proper handling of regulations. A similar cooperative bank survey was conducted by the authors in the early months of 2013, with the aim of analyzing how the Polish cooperative banks understand the challenges ahead. The key answers are analyzed below, for the total group (62 banks) and for subsections of small (assets less than 100 m PLN) and large (assets above 100 m PLN) cooperative banks.

Both for the Polish cooperative banks and globally, the implementation of post-crisis regulations will impose considerable new costs concerning the quality of capital, higher capital requirements, the introduction of a leverage ratio and new

liquidity standards (McKinsey, 2011). In Poland, the biggest problem will be with the implementation of CRD IV liquidity requirements, particularly for the central associating banks (fig. 6).

Figure 6. Major risks for the cooperative banks



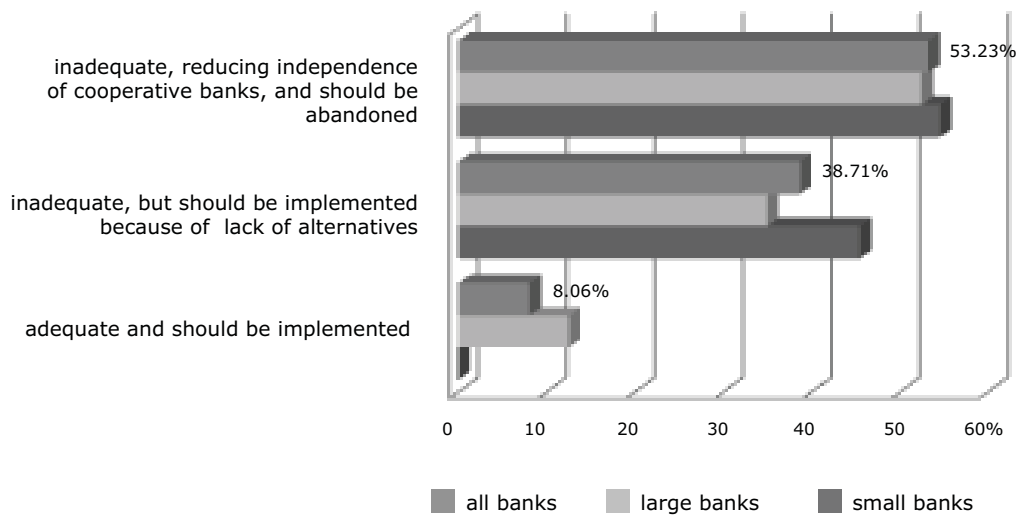
Source: Own research (cooperative bank survey, 2013).

In the Polish two level cooperative sector model, the subordinated cooperative banks have excess liquidity from local deposits, which they place in the associating banks, and 30% of their net interest income comes from interbank activities. However, those transactions are treated as interbank transactions and do not count as required liquidity for associating banks. Moreover, interbank deposits are not accepted in the CRD IV liquidity requirements. If associating banks start to take deposits directly from the market, they will be in direct competition with the subordinated banks, thereby risking problems with their owners. In the Polish model, associating banks coordinate and control subordinated banks, but at the same time are owned by them, which sometimes creates a stalemate.

The regulatory body (KNF) has suggested a compromise by implementing the Individual Protection Scheme (IPS), which is also advocated by the EU. However, there is a considerable resistance among most Polish cooperative banks to giving up their independence and the scheme is immensely unpopular (fig. 7).

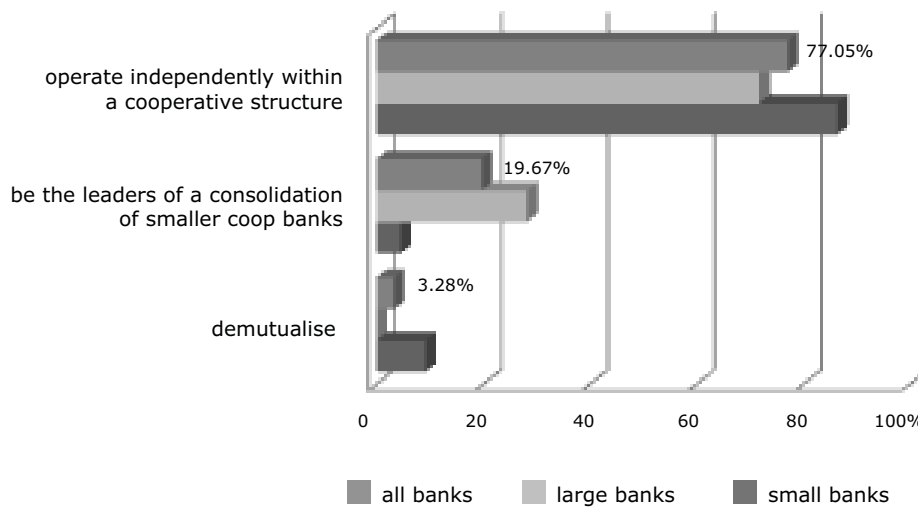
So far, it has not been the intention of the regulatory authorities to interfere directly with the cooperative banking structure, as was done in the 1994 and 2000. However, some actions could be advisable. Regulatory intervention may be aimed either at strengthening the position of “mother banks” for cooperative groups, or at encouraging the strongest cooperative banks to demutualise, or making the IPS obligatory only for small cooperative banks. However, these options have also been immensely unpopular in the bank survey, making any direct intervention difficult (fig. 8).

Figure 7. The attitude of cooperative banks to the IPS scheme



Source: Own research (cooperative bank survey, 2013).

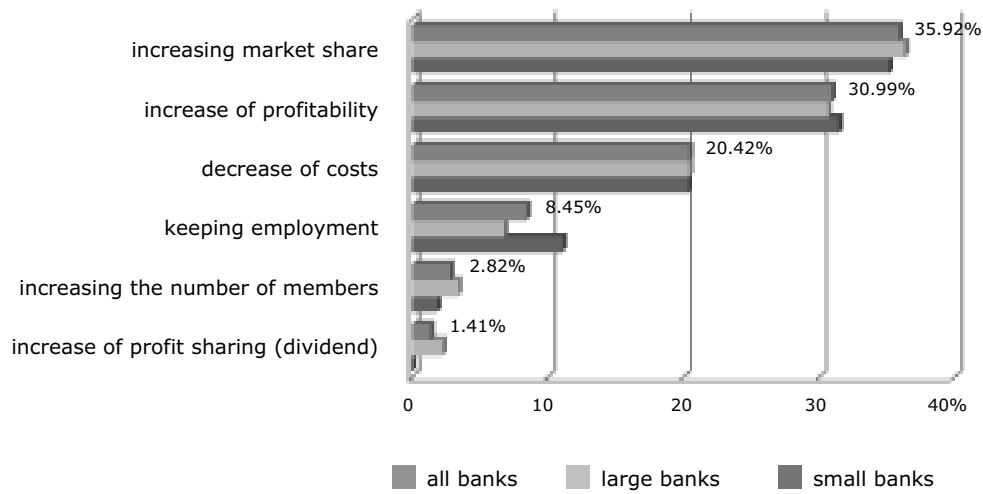
Figure 8. The optimal position of the largest cooperative banks



Source: Own research (cooperative bank survey, 2013).

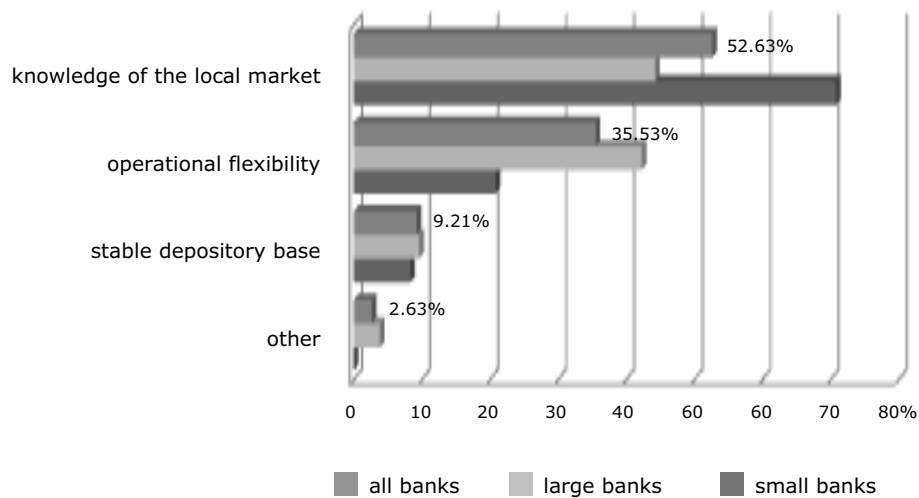
In the strategic part of the survey, cooperative banks seemed to be ready to gain from a favourable post-crisis environment, indicating a need for expansion and an increase in operational efficiency (fig. 9). On the other hand, they did not sense any fundamental change in their market position, as in the survey the majority of banks indicated that the cooperative banking share will increase in the long run only marginally, to 10%. Deep knowledge of the local market and operational flexibility were indicated (fig. 10) as major advantages of the cooperative model.

Figure 9. Cooperative banks' priorities



Source: Own research (cooperative bank survey, 2013).

Figure 10. Main advantages of the cooperative model



Source: Own research (cooperative bank survey, 2013).

5. CONCLUSIONS

The financial crisis has highlighted the advantages of alternative business models of banks, aimed not only at maximizing short-term profits but at the fulfillment of some social objectives. In particular, the crisis has stressed the important role and position of cooperative banking. Consequently, there is a growing recognition that an important factor for the construction of a healthy banking system is the existence of different forms of banks' activities: the coexistence of large global

corporations, imposing standards and technological progress, and a complementary role played by local and specialized banks, based on relationship banking.

The cooperative model has performed well in the post 2008 crisis period in a number of other countries. However, the implementation of post-crisis regulations will impose new considerable costs, concerning the quality of capital, higher capital requirements, the introduction of a leverage ratio and new liquidity standards (McKinsey, 2011). The data presented in the paper supports this assertion. The Polish cooperative banks, with their traditional business model, have come out of the 2008 crisis with a high Z-score and satisfactory profitability. However, these were short-term advantages. Today they face a necessity to restructure their network model and devise new strategies to answer the new challenges ahead.

Abstract

The global financial crisis of 2008 highlighted the riskiness of the pre-crisis bank model and demonstrated that in many cases the benefits of diversification from traditional banking have been overstated. With countless cases of nationalization or forced takeovers of failing banks, questions have been raised as to the proper size and scope of banking activities. Retail banking carried out by locally-based, small institutions, such as credit unions, mutual savings banks, building societies or cooperative banks, has for years played an important role in local environments, enhancing bank reputation and trust. The financial crisis has highlighted the advantages of alternative business models of banks, aimed not only at maximizing short-term profits but also at the fulfillment of some social objectives; thus the aim of the paper is to analyze the position and challenges for the cooperative banking sector, based on the Polish experience.

Key words: Polish cooperative banks, bank business model

References

- Allen, F., Back, T., Carletti, E., Lane, P.R., Schoenmaker, D. and Wagner, W. (2011): *Cross-border banking in Europe: Implications for financial stability and macroeconomic policies*, London, CEPR.
- Ayadi, R., Llewellyn, D.T., Schmidt, R.H., Arbak, E. and De Groen, W.P. (2010): *Investigating Diversity in the Banking Sector in Europe: Key Developments, Performance and Role of Cooperative Banks*, Brussels, CEPR.
- BFG (2010): J. Pruski, *Sytuacja finansowa sektora banków spółdzielczych w Polsce*, www.bfg.pl/sites/default/files/dokumenty/forum-liderow-bs.pdf.

- BIS (2010): *The Basel Committee's response to the financial crisis. Report to the G20*, Basel, http://ec.europa.eu/internal_market/consultations/2009/fin_supervision_may_en.htm.
- CEBS Annual Report (2010): www.eba.europa.eu.
- Demirgüç-Kunt, A. and Huizinga, H. (2009): *Bank activity and funding strategies: The impact on risk and return*, CEPR Discussion Paper 7170, London, www.cepr.org/pubs/dps/DP7170.asp.
- EACB (2011): *The Annual Report*, www.eurocoopbanks.coop.
- EU Commission (2012): *Commission proposes new ECB powers for banking supervision as part of a banking union*, http://ec.europa.eu/internal_market/finances/committees/index_en.htm.
- KNF (2012): *Raport o sytuacji banków w 2007–2011*, UKNF, Warszawa 2012.
- KNF (2012b): *Zaufanie do wybranych instytucji sektora finansowego*, March 2012. http://www.knf.gov.pl/Images/material_prasowy_Pentor_dla_KNF_tcm75-29870.pdf.
- KNF (2013): *Raport o sytuacji banków w 2012 r.*, UKNF, Warszawa 2013.
- KNF (2013): *Informacja o sytuacji banków w okresie I–IX 2013 r.*, UKNF, Warszawa 2013.
- KNF (2013): *Raport o sytuacji spółdzielczych kas oszczędnościowo-kredytowych w 2012 roku*, UKNF, Warszawa 2013.
- KPMG (Feb. 2013): *Evolving Banking Regulation*, www.kpmg.com.
- Lown, C., Osler, C., Stragan, P. and Sufi, A. (2000): *The changing landscape of the financial services industry: What lies ahead?*, FRB NY Economic Policy Review 11.
- Mc Kinsey (2012): *McKinsey on Cooperatives*.
- Oliver Wyman Report (2012): Mc Carroll, V., Habberfield, S., *The outlook for co-operative banking in Europe*, www.oliverwyman.com.
- Rabobank (2009): *The European banking sector and the co-operative banks*, January, www.rabobank.com.
- Siudek, T. (2010): *Polish cooperative banking sector in the face of systemic transformation and European integration in agriculture*, Agricultural Economics, no. 3.
- Szambelańczyk, J. (2006): *Banki spółdzielcze w Polsce w procesach zmian systemowych*, Wyd. AE w Poznaniu, Poznań.
- The World Bank (2010): *Credit Unions in Poland: Diagnostic and Proposals on Regulation and Supervision*, Report No. 59432 December.

APPENDIX

Cooperative bank survey: selected answers, in %, 2013

	All banks (62)	Smallest banks: assets less than 100 m PLN	Largest banks: assets above 100 m PLN
1. The current model of cooperative banking is:			
stable in the short run	37.10%	40.91%	35.00%
stable in the long run	48.39%	45.45%	50.00%
needs urgent modification	14.52%	13.64%	15.00%
2. Large cooperative banks (capital above 5 m Euro) should ultimately:			
operate independently within the cooperative structure	77.05%	86.36%	71.79%
demutualise	3.28%	9.09%	0.00%
be leaders of consolidation of smaller coop banks	19.67%	4.55%	28.21%
3. The powers of associating banks:			
should be stronger	40.32%	50.00%	35.00%
should remain as today	30.65%	27.27%	32.50%
should be modified	29.03%	22.73%	32.50%
4. In the long run, cooperative banking share will be (as % of total assets)			
as today (5–8%)	33.87%	36.36%	32.50%
increase slightly (to 10%)	61.29%	59.09%	62.50%
increase quite dramatically (to 20%)	4.84%	4.55%	5.00%
5. In the ST, the major risks are:			
credit risk, connected with macroeconomic deterioration	44.62%	39.13%	47.62%
operating risk, connected with necessity to change business model of cooperative banking	18.46%	13.04%	21.43%
liquidity risk, connected with the implementation of CRD IV	36.92%	47.83%	30.95%

	All banks (62)	Smallest banks: assets less than 100 m PLN	Largest banks: assets above 100 m PLN
6. The regulatory proposal to deal with CRD IV implementation is IPS (Institutional Protection Scheme). This proposal is:			
adequate and should be implemented	8.06%	0.00%	12.50%
inadequate, reducing independence of cooperative banks, and should be abandoned	53.23%	54.55%	52.50%
inadequate, but should be implemented because of lack of alternatives	38.71%	45.45%	35.00%
7. The main advantage of cooperative model is:			
stable depository base	9.21%	8.33%	9.62%
knowledge of local market	52.63%	70.83%	44.23%
operational flexibility	35.53%	20.83%	42.31%
other	2.63%	0.00%	3.85%
8. ST bank priorities are:			
keeping employment	9.23%	13.64%	6.98%
increase of profit sharing (dividend)	0.00%	0.00%	0.00%
increase of profitability	67.69%	63.64%	69.77%
decrease of costs	23.08%	22.73%	23.26%
9. LT bank priorities are (indicate 3):			
maintaining employment	8.45%	11.11%	6.82%
increase of profit sharing (dividend)	1.41%	0.00%	2.27%
increase of profitability	30.99%	31.48%	30.68%
decrease of costs	20.42%	20.37%	20.45%
increasing market share	35.92%	35.19%	36.36%
increasing the number of members	2.82%	1.85%	3.41%
Size of assets			
below 100 m zł	35.48%	100%	0.00%
101–200 m zł	27.42%	0.00%	42.50%
above 200 m zł	37.10%	0.00%	57.50%

Source: Own research.