

The role of Cooperative Banks in the Financial Inclusion Process in Light of the Opinions of Customer and Managers

Anna Nowacka¹, Beata Sadowska²

¹Department of Law, Administration and Economics, The Mazovian University in Plock,
Poland

²Department of Accounting, Institute of Economics and Finance, University of Szczecin
Poland

Abstract— Aim: This article aims to determine the perception of the role and importance of cooperative banks in Poland in financial inclusion based on the opinions of the customers and managers of these entities. The specific objectives, on the other hand, are related to identifying the socio-demographic characteristics of customers who differentiate their opinions and the characteristics of cooperative banks that determine the distribution of management responses in this respect.

Results: Theoretical and empirical analyses indicate that cooperative banks' financial inclusion efforts are recognised positively, both by customers and management, as evidenced by an affirmative response rate of over 70%. They are diverse and include a varied range of products, including those dedicated to people at risk of financial exclusion, diversification of service distribution channels, and education and advice. Moreover, cooperative banks are often chosen by customers who have previously been denied financial services by another bank. Concurrently, customers' perceptions of the cooperative banks' role in the financial inclusion process are determined by their socio-demographic characteristics, such as age, gender, place of residence, type of municipality, type of household and socio-professional status. In contrast, the characteristics describing the location of the banks make little difference to the executives' opinions in this respect.

Keywords— cooperative banks, financial inclusion, financial exclusion, customers, management

I. INTRODUCTION

The issue of access to financial services is important in both social and economic contexts. It is relevant not only from the perspective of banks but also for the entire financial sector, the

economy, and households. Previous academic studies in Poland have tended to focus more extensively on the issue of financial exclusion than on financial inclusion. In contrast, recent years have seen an opposite trend in the international literature. An increasing number of publications address financial inclusion, particularly in developing countries such as those in Asia, Africa and South America.¹³ This undoubtedly results from the scale of limited access to financial services and products, as well as the efforts undertaken to mitigate these problems (Wiercioch, Buk, 2022, p. 83). The significance of financial inclusion is increasingly emphasised in the context of sustainable development and economic growth, which has become one of the key topics discussed in the literature, especially with reference to countries affiliated with the OIC (Organization of the Islamic Cooperation), African nations, and, less frequently, European countries (World Bank, 2018; Kim et al., 2018; Van et al., 2019; Tsouli, 2022; Rani, Siwach, 2024). A growing body of research is also devoted to the relationship between financial inclusion and technological innovation, particularly mobile banking and digital payment services. In developing countries, scholars are increasingly asking whether innovations can serve as tools to overcome traditional barriers to accessing financial services—for instance, whether overcoming physical distance can help include millions of people in the formal financial system (Demirguc-Kunt et al., 2018; Ozili, 2021).

In studies concerning Europe, the focus is more often on credit inclusion and access to loans and credit (Burton, 2017; Ozili, 2021). Furthermore, Owen and Pereira (2018), based on analyses conducted across 83 countries over a ten-year period,



concluded that greater banking sector concentration is associated with wider access to deposit accounts and loans, and that countries whose regulations allow banks to carry out a broader range of activities tend to achieve higher levels of financial inclusion. In Poland, research over the past decade on financial inclusion has been conducted by, among others, S. L. Nájuez Alonso et al. (2023), M. Folwarski (2021), Polasik et al. (2018), Idzik (2016), and Frączek (2017). These studies examined the impact of education, digital innovation and the activities of credit institutions on the level of financial inclusion, based on the analysis of secondary data obtained from available databases as well as surveys of respondents. However, there is a lack of studies focusing on the activities of financial institutions—particularly those of a local nature—aimed at enhancing financial inclusion. Therefore, this paper is dedicated to the role of cooperative banks in Poland in improving the level of financial inclusion.

Cooperative banks are fundamentally different from commercial banks in that the activities of the former are focused not only on profit maximisation but also on fulfilling a social mission. Cooperative banks pursue the latter objective through activities that meet the needs of shareholders and the local community. Szpringer (2009) argues that a cooperative bank is a unique example of an institution that is, on the one hand, an inseparable part of contemporary global financial markets and, on the other, the heart of local financial systems. This duality of cooperative banks enables their activities to be considered in both economic and social terms. The social character of cooperative banking stems from its social objectives, which are implemented by providing financial services to economically deprived areas, offering financial services, including credit, to financially vulnerable customers, countering financial exclusion, promoting the use of banking services and providing comprehensive support to local communities (Juszczak, Balina, 2018). This paper focuses on the activities of cooperative banks related to reducing financial exclusion and fostering financial inclusion.

This paper is structured as follows: first, the theoretical framework of the issues, financial exclusion and inclusion, is presented after an introduction. Attention is devoted to the role of financial institutions in the financial inclusion process. The aim, research questions and methods of the study are defined thereafter. The next section presents the results of our research. The study concludes with a summary and conclusions of the research.

II. LITERATURE REVIEW

The themes of financial exclusion and inclusion are frequently addressed, both in academic and journalistic papers. Numerous authors treat these terms as the opposite/inverse of each other. However, this is a gross oversimplification, especially when the different approaches to the two terms are juxtaposed. Financial exclusion is most often presented in the context of limited access to financial services along with difficulties and constraints that entities face in the market

(Gostomski, 2008; Szopa and Szopa, 2011; Warchlewska, 2020). The first trend of research into this phenomenon focused on physical restrictions on access to financial services. In the late 1990s and early 2000s, groups vulnerable to financial exclusion, i.e. low-income, disadvantaged people, began to be identified (Leyshon and Trift, 1995; Kempson, Whyley et al., 2000; Anderloni, Carluccio, 2007). This approach has evolved. The broader context of financial exclusion is presented, *inter alia*, by M. Maciejasz-Świątkiewicz (2013, pp. 38–39) as a phenomenon encompassing difficulties generally faced by financial services market actors in the sphere of their consumption, production and social cohesion by both individuals and groups (households) in terms of access to and ability to use the offer of financial products and services. These difficulties can be culpable or non-culpable, voluntary, coercive, permanent, temporary, primary, secondary, full or partial and conscious or unconscious. A broader view of financial exclusion emphasises its impact not only on those without any relationship with financial institutions but also on those whose relationships are at an unsatisfactory level vis-a-vis the mainstream financial market, compelling them to turn to the services of institutions operating without proper authorisations to meet their needs (Buckland, 2012, pp. 3–4; European Commission, 2008, p. 8; Yun, 2017). This relates to the consideration of financial exclusion from the viewpoint of those involved in the provision of financial services and the division between the main financial market and alternative providers. Currently, this classification is determined by the structure of each country's financial market (Kuchciak, 2020, p. 37).

In this broader understanding of financial exclusion, it should also be noted that the phenomenon should be seen not only through the prism of access to a bank account. Rather, it also includes restrictions in the areas of savings, credit and insurance. Therefore, the literature distinguishes even more specific types of the issue, namely, savings, credit, payment, investment, insurance and pension exclusion (Gloukoviezoff, 2006; Domańska-Szaruga, 2015; Nowacka et al., 2021). Both the areas identified and the causes of financial exclusion simultaneously represent barriers to financial inclusion—also referred to as financial integration or, more commonly, financial inclusion, means that individuals as well as business entities have access to financial products and services that meet their needs and are offered at affordable prices (Sarma, 2011). Financial inclusion refers to the implementation of various measures to better the lot of financially excluded people and steps by these people to foster their activation in the financial services market (Maciejasz-Świątkiewicz, 2016, p. 141). This triggers the question of whether all people should participate in the financial market or rather encourage and create conditions for easier access to financial services for those who encounter problems in this area. Efforts to facilitate financial inclusion should include not only the creation of an appropriate range of financial services but also the following:

- financial education and raising public awareness,
- promoting and facilitating access to financial tools,
- fairness in the communication of information to customers

of financial institutions,

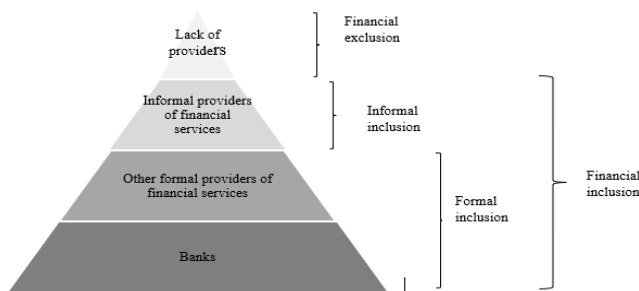
- development of direct advising and
- development of cooperatives and the social economy.

A financial support system consisting of financial education, financial advising, dissemination of reliable information and the provision of financial services can contribute to more effective financial inclusion for those who have experienced such problems. B. Frączek (2017, p. 26) highlights the following components of financial inclusion:

- access to financial products and services;
- their actual use;
- consumer protection;
- financial literacy.

Financial education, teaching not only financial knowledge but also financial behaviour and attitudes, plays a key role in financial inclusion (Ezzahid, Elouaourti, 2021; Van, Linh, 2019). Many authors emphasise the importance of informal education along with formal education, even if imparted at home (Yan, Qi, 2020; Morgan, Long, 2020). The existing literature also describes the phenomenon of financial inclusion involving financially active groups and, above all, those whose primary needs are not being met (Allen et al., 2012). A. Janc and A. Warchlewska (2018) demonstrate that providing a regular source of income to the homeless, those living on or below the poverty line or the unemployed does not represent relief from financial exclusion. Financial inclusion should be defined as the point at which all the consumer’s basic needs are met and financial inactivity is due, inter alia, to logistic and technical-technological barriers or a low stock of knowledge (Warchlewska, 2022). Therefore, inclusion in the financial services market will depend on several factors, viz. the level of financial literacy and awareness, the involvement of financial actors and how well the offer matches customer expectations. The role that financial actors can play in the financial inclusion process is illustrated in Figure 1.

FIGURE 1.: SHARE OF DIFFERENT ACTORS IN THE FINANCIAL INCLUSION PROCESS



Source: Kuchciak 2020, p. 37.

Figure 1 presents the relationship between financial exclusion and inclusion and the share of different financial service providers in these processes, classified as informal, formal and banks. Where banking services are lacking, or the availability of financial products is poor, people turn to accessible or informal providers (Warchlewska, 2022, p. 120; Kuchciak, 2020, p.). Informal financial institutions comprise shadow banking and para-banking institutions, i.e. a system of

financial intermediaries, instruments, entities or contracts that perform banking functions but remain outside the regulatory regime or are subject to a regulatory regime that is either lenient or covers issues other than systemic risk and do not have guaranteed access to a central bank liquidity facility or public sector credit guarantees (The definition is set out in the European Parliament Resolution of 20 November 2012 on the shadow banking system (2012/2115(INI)).

Many authors highlight the extremely significant role played by cooperative banks in minimising financial exclusion, particularly in rural areas. These banks operate in the local environment, have a very high level of public trust and undertake educational initiatives, both digital and financial (Warchlewska, 2022 p. 120; Folwarski, 2021; Szelągowska, 2018). Tackling financial exclusion and concurrently acting for financial inclusion is part of the specificity of cooperative banks as a form of combating economic and social inequalities. S.L. Nájnez Alonso and team (2023), considering the Polish example, reveal the ability of these institutions to offer accessible and proximate financial services to the most isolated populations. A widespread presence, especially at the local level, and strong links with the local communities in which they operate enable cooperative banks to contribute to the process of financial inclusion and promote inclusive development. A Spanish study arrived at similar conclusions. A correlation has been established between sparsely urbanised and populated areas and the use of services offered by credit cooperatives (Carchano et al., 2021). On the other hand, R.K. Nayak (2012) highlights the superiority of cooperative banks over commercial banks in growth measures that foster financial inclusion in India.

III. METHODS

An analysis of the literature on the conceptualisation of financial exclusion and financial inclusion and the extent of the research carried out reveal little coverage of the impact of cooperative banks on the process of financial inclusion in Poland has been addressed to a small extent. The literature review indicates that this research trend has been more frequently explored in developing countries, such as those in Africa and South Asia. The Polish context, however, may yield different research outcomes due to the higher concentration of the banking sector—a factor also noted by Owen and Pereira (2018).

Therefore, this paper aims to determine the perception of the role and importance of cooperative banks in financial inclusion, based on the opinions of customers and managers of these entities. The specific objectives, on the other hand, relate to identifying the sociodemographic characteristics of customers who differentiate their opinions and the characteristics of cooperative banks that determine the distribution of management responses in this respect. The study considered the following socio-demographic characteristics of customers: gender, age, level of education, place of residence, type of household, and type of employment. As for the characteristics

describing the cooperative banks, the following were included: type of municipality, number of inhabitants in the municipality, macro-region and voivodeship in which the banks were located, and the number of branches. In the process of addressing the issues raised in this article, several important questions arise:

- What measures are cooperative banks taking to foster financial inclusion?
- Are the activities in this area perceived by customers of cooperative banks?
- Do cooperative banks also target people potentially at risk of financial exclusion with their offers?
- How is the role of cooperative banks in the financial inclusion process perceived by customers and management?
- Have current cooperative bank customers experienced denial of services by another bank earlier?

The implementation of both the main and specific objectives was based on primary data obtained through survey research conducted among customers and management staff of cooperative banks in Poland in 2023. Two separate survey questionnaires were employed, each addressed to a different group of respondents. The survey was conducted on a sample (N = 143) of management representatives. A finite and defined number of 498 cooperative banks in Poland (as of December 2022) formed the basis for selection. To maintain the heterogeneity of the survey sample as per the developed methodology, a stratified random research sample was chosen, in which the layers were determined based on the known and defined structure of distribution of cooperative banks in the individual Polish provinces. The survey was conducted using the CATI – Computer Assisted Telephone Interviewing – technique between January and March 2023.

Primary data was also obtained through a survey of 1502 cooperative bank customers. The sample selection reflected the population of adult Polish residents, with a proportional share of residents of provinces where cooperative banks are located (with a correction for those aged over 65). Current statistical data from Statistics Poland (GUS), presenting the structure of the Polish population by place of residence (province) and gender, were used to determine the sample selection. The above criteria made the nationally survey. The quantitative survey of cooperative bank customers was carried out according to the Mixed Mode Design procedure, which involves obtaining the same information (based on the same survey questionnaire) from different people, using different research techniques like Computer-Assisted Web Interviewing (CAWI), Computer-assisted Telephone Interviewing (CATI) and Computer-assisted Personal Interviews (CAPI). The survey was conducted between January and April 2023.

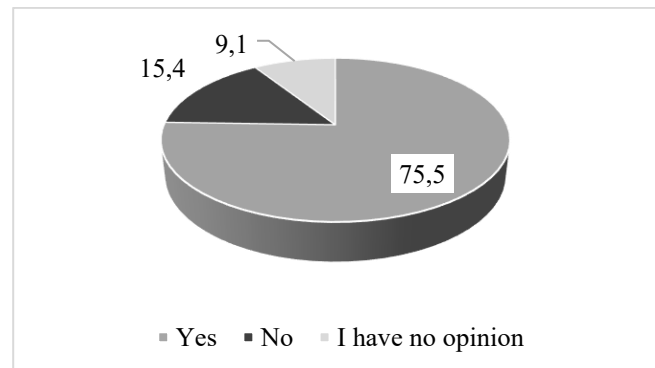
The data collected during the survey underwent a multi-level analysis, both quantitative and qualitative. The results were selected and examined in terms of general trends observed across the entire research sample, as well as in relation to specific independent variables. For each variable, results were compared and analysed in greater detail within subgroups representing the highest and lowest intensity levels of that

variable, as well as any emerging trends (either decreasing or increasing) in the internal structure of responses. Subgroups with the highest and lowest proportions of responses to a given question were also described. The findings were subjected to detailed statistical analysis. The aim of the analyses was to examine correlations between quantitative variables. Assessing the strength and significance of the relationship between variables constituted an essential step in evaluating their interdependence. The effect size (i.e. the strength of association between variables) was measured using Cramér's V and the Phi coefficient. Cramér's V was applied when the number of categories compared exceeded two, while the Phi coefficient was used when both variables had two categories. In the case of the Phi coefficient, a positive or negative sign (or absence thereof) indicates the direction of the relationship. The adopted level of significance $\alpha = < 0.05$.

IV. RESULTS

As a first step, the question on the activities of cooperative banks to reduce financial exclusion was addressed to managers. The responses are presented in Chart 1.

CHART 1.: MANAGEMENT'S VIEW ABOUT COOPERATIVE BANKS' ACTIVITIES TO REDUCE FINANCIAL EXCLUSION



Source: own research.

The activities and initiatives undertaken by cooperative banks, according to most of the respondents (75.5%), contribute to reducing financial exclusion. This reveals the perception of cooperative banks as institutions playing a significant role in providing access to financial services for different societal groups, including those at risk of financial exclusion. Only 15.4% of the respondents disagree with this statement. Some respondents may perceive some barriers or limitations to the ability of cooperative banks to provide full access to financial services for all; 9.1% of the respondents have no opinion on this issue, suggesting a lack of sufficient knowledge of the issue to express an opinion.

The respondents' answers were cross-referenced with the characteristics describing the cooperative banks, and it was found that an affirmative response in this respect was most frequently given by representatives of banks located in municipalities with a population of 5,001 to 10,000 inhabitants (88.9%) and 10,001 to 20,000 inhabitants (80%). The values presented in Table 1 indicate a statistically significant relationship.

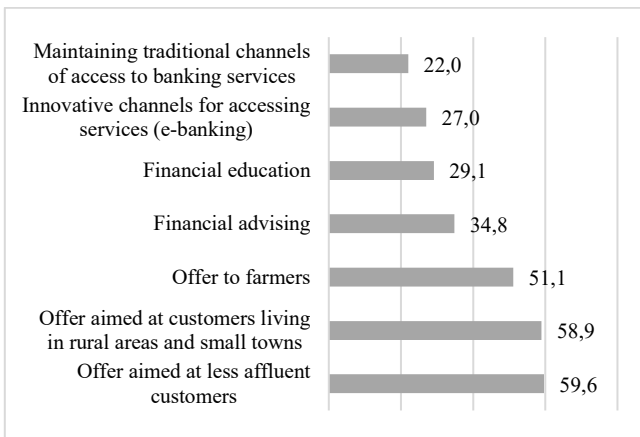
TABLE 1. STATISTICALLY SIGNIFICANT RELATIONSHIPS REGARDING MANAGEMENT'S OPINIONS ON THE ACTIVITIES OF COOPERATIVE BANKS IN SUPPORT OF FINANCIAL INCLUSION

Characteristic: number of inhabitants in the municipality where the cooperative bank was located	Values of association measures	Significance level
5 001-10 000	Phi=0.354 Cramér's V = 0.250	p=0.022 p=0.022
10 001-20 000		

Source: own research.

Subsequently, participants in the survey were asked to identify specific measures taken by cooperative banks contributing to reducing financial exclusion and simultaneous financial inclusion. The sum of the answers presented is greater than 100.0% due to the possibility of more than one answer (Chart 2).

CHART 2.: MANAGEMENT OPINION ON THE EXTENT OF COOPERATIVE BANKS' EFFORTS TO REDUCE FINANCIAL EXCLUSION (FOSTERING FINANCIAL INCLUSION)



Source: own research.

The most frequently indicated action of cooperative banks that contributes to reducing financial exclusion is their services to less affluent customers (59.6%). The accessibility of financial products for people with low incomes is a key element of the financial inclusion process. The next most frequently selected responses were the offer of services to customers living in rural areas and small towns (58.9%) and to farmers (51.1%). These results show that adapting the bank's offer to the needs and realities of a specific customer group, such as rural residents or farmers, is considered an important element of the sector's financial inclusion activities. In addition, financial advising (34.8%) and financial education (29.1%) are perceived as tools to reduce financial exclusion. This means that providing information and support to customers on how to manage their finances and use financial products is important in the combat against financial exclusion. Finally, innovative service access channels such as e-banking (27.0%) and, on the other hand, maintaining traditional service access channels (22.0%) are also seen as important in terms of access to financial services for different customer groups. A comparison of the results obtained (Table 2) with the characteristics of the banks revealed a statistically significant relationship in the case of cooperative banks located in the central macro-region, whose representatives most frequently gave an affirmative response in the category: offer aimed at less affluent customers (81.3%).

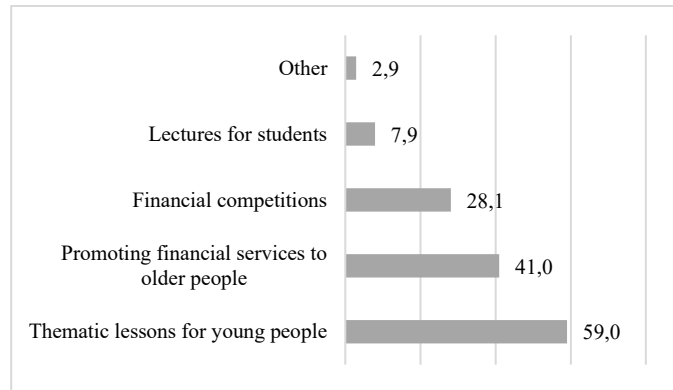
TABLE 2. STATISTICALLY SIGNIFICANT RELATIONSHIPS REGARDING MANAGEMENT'S OPINIONS ON THE SCOPE OF COOPERATIVE BANKS' ACTIVITIES IN SUPPORT OF FINANCIAL INCLUSION

Characteristic: macro-region in which the cooperative bank was located	Values of association measures	Significance level
Central	Phi=0.332	p=0.015
	Cramér's V = 0.0332	p=0.015

Source: own research.

Financial education provided by cooperative banks to different groups of the population was mentioned among the financially inclusive activities, with Management indicating the extent of such activities (Chart 3).

CHART 3. MANAGEMENT OPINION ON THE EXTENT OF COOPERATIVE BANKS' EDUCATIONAL ACTIVITIES



Source: own research.

The most popular activity, according to the responses, is thematic lessons for youth, indicated by 59.0% of respondents. This shows that cooperative banks attach great importance to educating young people about finances, which is crucial for laying a solid foundation of financial knowledge in future adults. A significant group of the cooperative banks surveyed (41.0%) promotes financial services to the elderly, revealing that cooperative banks are aware of the need for financial education among older customers, especially in the context of the increasing digitalisation of financial services. Other activities that cooperative banks (28.1% of the surveyed banks) undertake in the area of financial education are competitions on financial topics. Lectures for students are organised by 7.9% of the banks, while other financial education activities such as promoting services on the Internet, on the website, implementation of the Bakcyl programme, marketing videos and organisation of conferences were indicated by 2.9% of the surveyed entities.

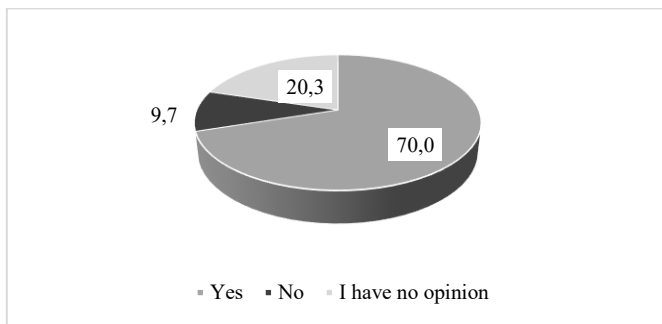
The distribution of the responses obtained, taking into account the characteristics of the banks, shows that the category of lectures to students was most frequently indicated by managers of cooperative banks operating in rural municipalities (20.7%). In these cases, a statistically significant relationship existed, as presented in Table 3. Similar questions were addressed to customers of cooperative banks, and the responses are shown in Chart 4 and 5.

TABLE 3. STATISTICALLY SIGNIFICANT RELATIONSHIPS REGARDING MANAGEMENT'S OPINIONS ON THE EDUCATIONAL ACTIVITIES OF COOPERATIVE BANKS

Characteristic: type of municipality and size of the locality in which the cooperative bank was located	Values of association measures	Significance level
Rural municipality	Phi=0.260; Cramér's V=0.260	p=0.008
Village	Phi=0.288; Cramér's V=0.288	p=0.018

Source: own research.

CHART 4. CUSTOMERS' OPINIONS ON COOPERATIVE BANKS' ACTIVITIES TO REDUCE FINANCIAL EXCLUSION



Source: own research.

In graph 4 we can see that most of the respondents (70.0%) confirmed that the activities of cooperative banks help to reduce financial exclusion. This is very important, given that access to basic banking services is a key factor for full participation in society. Despite this positive picture, 20.3% of the customers surveyed did not express an opinion, which may indicate the need to communicate better the role cooperative banks play in their communities and the impact they have on increasing access to financial services. Only 9.7% of respondents believe that the activity does not contribute to the availability of financial services, i.e. financial inclusion. Statistical analysis of the distribution of responses reveals statistically significant relationships by socio-demographic characteristics (Table 4).

TABLE 4. STATISTICALLY SIGNIFICANT RELATIONSHIPS REGARDING CUSTOMERS' OPINIONS ON THE ACTIVITIES OF COOPERATIVE BANKS IN SUPPORT OF FINANCIAL INCLUSION

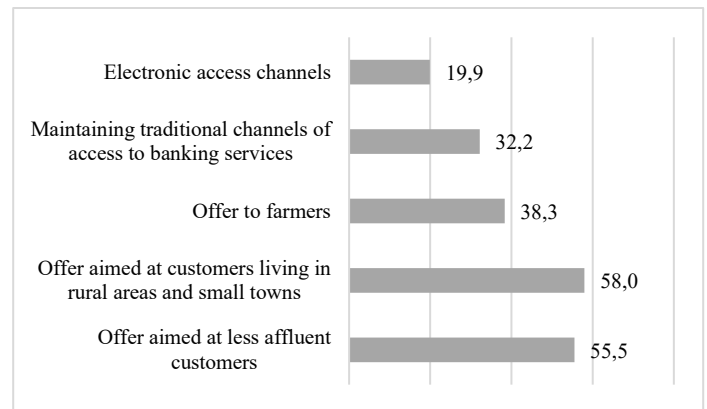
Socio-demographic characteristics of customers	Values of association measures	Significance level
Gender: male	Phi=0.184; Cramér's V=0.184	p=0.00
Age: 46-55; 56-65; 66 and older	Phi=0.335; Cramér's V=0.237	p=0.00
Marital status: divorced, widowed	Phi=0.135; Cramér's V= 0.096	p=0.00
Place of residence (type of municipality): urban	Phi=0.110; Cramér's V=0.078	p=0.001
Level of education: higher education	Phi=0.159; Cramér's V=0.112	p=0.00
Household type: two-person household	Phi=0.201; Cramér's V=0.142	p=0.00
Occupational status: retirees and pensioners	Phi=0.279; Cramér's V=0.197	p=0.00

Source: own research.

These correlations reveal that the activities of cooperative banks that contribute to reducing financial exclusion are most

often perceived by middle-aged and elderly men, those on a pension or retirement pension, those living in a 2-person household and urban municipalities. In the next question, respondents were asked to identify specific activities of these institutions for financial inclusion (Chart 5).

CHART 5: CUSTOMERS' OPINION ON THE EXTENT OF COOPERATIVE BANKS' EFFORTS TO REDUCE FINANCIAL EXCLUSION AND FOSTER FINANCIAL INCLUSION



Source: own research.

As each respondent was able to list a maximum of three answers, the total of the responses does not equal 100.0%. Of the greatest importance is the offer of services aimed at customers living in rural areas and small towns, which was indicated by 58.0% of the respondents. More than half (55.5%) of them also appreciated the offer of services aimed at less affluent customers, demonstrating how cooperative banks can serve as a bridge to access financial services for people with low incomes who may have difficulty obtaining services from other banks. The offer aimed at farmers, indicated by 38.3% of the respondents, is further evidence of how cooperative banks are anchored in their local communities, customising their services to meet the specific needs of their customers. 32.2% of the respondents stressed the importance of maintaining traditional channels of access to banking services, such as an extensive branch network, direct contact with staff or a high proportion of cash transactions. In an era of increasing financial services digitalisation, this is a reminder of the importance of personal contact and traditional forms of access to banking services for many people. Even electronic access channels, which were less commonly indicated (19.9%), have a role to play and can enable access to financial services for people who may have difficulties visiting a physical bank branch, such as the elderly, people with disabilities or those living in remote locations.

Socio-demographic characteristics had a statistically significant impact on the distribution of responses regarding the actions undertaken by cooperative banks to promote financial inclusion in the following areas, as detailed in Table 5:

- women were more likely to offer an affirmative response in the category of offering to customers living in rural areas and small towns (62.1);
- men were more likely to respond affirmatively in the category of electronic access channels (23.6);
- 26–35 and 36–45 year-olds were the most likely to give an

affirmative response in the category of offer to farmers (46.4% and 49.7% respectively);

- persons aged 18–25 and 26–35 were the most likely to respond affirmatively in the category of offering to customers living in rural areas and small towns (65.2% and 69.6% respectively);
- persons aged 56–65 and 66 and above were the most likely to give an affirmative response in the category of electronic access channels (26% and 25.6% respectively);
- persons living in villages and small towns with a population of 5001–10000 were the most likely to give an affirmative response in the category of offer to farmers (41.4% and 45.5% respectively);
- persons living in cities with a population of 5001–10000 and 10001–20000 were the most likely to give an affirmative response in the category of offering to customers living in rural areas and small towns (63.6% and 73% respectively);
- persons living in towns with a population below 5000 and in cities with 50001–100000 inhabitants were the most likely to give an affirmative response in the category of maintaining traditional channels of access to banking services (48.1% and 37.8% respectively);
- persons living in cities with a population of 20001–50000 and above 100000 were the most likely to respond affirmatively in the category of electronic channels of access to banking services (29.2% and 24.3% respectively);
- vocational-technical school and higher education graduates were the most likely to offer an affirmative response in the category of channels of access to banking services (23.5% and 22.2% respectively);
- persons living in a 4-person household or more were the most likely to give an affirmative response in the category of offer to farmers (42.9%);
- persons living in a 4-person household or more were the most likely to respond affirmatively in the category of offer to customers living in rural areas and small towns (64.4%);
- persons living in a 1-person household were the most likely to give an affirmative response in the category of electronic channels of access to banking services (64.4%);
- white-collar workers were the most likely to give an affirmative response in the category of channels of access to banking services (20.4%).

TABLE 5. STATISTICALLY SIGNIFICANT RELATIONSHIPS BETWEEN THE CATEGORIES OF ACTIONS UNDERTAKEN BY COOPERATIVE BANKS TO PROMOTE FINANCIAL INCLUSION AND THE SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Socio-demographic categories/characteristics of respondents	Gender	Age	Place of residence	Level of education	Household type	Type of work performed
Offer targeted at less affluent customers	-	-	-	-	-	-
Offer targeted at customers living in rural	Females: Phi=0.076	8-25 and 26-35:	Cities from 5001 do	-	4-person household	-

areas and small towns	and Cramér's V=0.076 at p=0.013	Phi=0.128 and Cramér's V=0.128 at p=0.04	10000 and from 10001 do 20000 inhabitants: Phi=0.143 Cramér's V=0.143 at p=0.001		and larger: Phi=0.125 Cramér's V=0.125 at p=0.001	
Offer targeted at farmers	-	26-35 and 36-45: Phi=0.150 Cramér's V=0.150 at p=0.000	Villages and small cities from 5001 do 10000 inhabitants: Phi=0.111 and Cramér's V=0.111 at p=0.045		4-person household and larger: Phi=0.093 Cramér's V=0.093 at p=0.028	
Maintaining traditional channels of access to banking services	-	-	Cities below 5000 inhabitants and from 50001 do 100000 inhabitants: Phi=0.121 Cramér's V=0.121 at p=0.017	-	-	-
Electronic access channels	Male: Phi=0.101 Cramér's V=0.101 at p=0.001	56-65 and older: Phi=0.172 Cramér's V=0.172 at p=0.000;	Cities from 20001 to 50000 and from 50001 to 100000 inhabitants:	Persons with vocational secondary or higher education: Phi=0.128	1-person household: Phi=0.110 Cramér's V=0.110 at p=0.005	White-collar workers: Phi=0.120 Cramér's V=0.120 at p=0.006

			Phi=0.164 Cramér's V = 0.164 at p=0.001	Cramér's V = 0.128 at p=0.001		
--	--	--	---	----------------------------------	--	--

Source: own research.

Moreover, customers of cooperative banks were asked whether they experienced a situation of denial of specific services by another bank. Almost 21% (314) of the respondents answered in the affirmative. This group was asked to indicate the services they had been denied, as presented in Table 6.

TABLE 6. SCOPE OF SERVICES DENIED TO COOPERATIVE BANK CUSTOMERS BY OTHER BANKS

Type of banking service	N	%
Bank credit	201	64.0%
Loan	173	55.1%
Opening a bank account	16	5.1%
Issue of debit card for an account	11	3.5%

Source: own research.

In response to this question, each respondent could indicate any number of answers; therefore, the total of the indications is greater than 100.0%. Customers were most often refused bank credit, with 64.0% of respondents ticking this answer. The second most common refusal was for a loan, as indicated by 55.1% of respondents. Significantly fewer respondents (5.1%) faced a refusal to open a bank account. A small section of people (3.5%) were denied a debit card for their account. In view of the socio-demographic characteristics of the respondents, it can be observed that the following individuals experienced denial of specific banking services (Table 7):

- men were most likely to experience bank credit denial (71.9%) and women were most likely to encounter loan denial (63.7%);
- those aged 66 and over were most likely to experience bank credit denial (86.7%) and those aged 18–25 were most likely to experience denial of an ATM card (16.7%);
- divorced or widowed people were most likely to experience denial of bank credit (84.4%) and single people were the most likely to experience denial of an ATM card (9.6%);
- persons living in cities with a population of 50001–100000 were most likely to experience bank credit denial (75.0%), while persons living in villages – loan denial (56.7%);
- persons living in rural municipalities were most likely to experience bank credit denial (71.8%), while persons living in urban-rural municipalities were most likely to experience loan denial (73.7%);
- persons living in a 1-person household were most likely to experience denial of an ATM card (11.4%);
- pensioners were most likely to experience bank credit denial (81.3%), while unemployed persons were most likely to experience loan denial (67.2%);
- blue-collar workers were most likely to experience bank credit denial (73.9%). The results obtained can be used to form a profile of people who refused bank credit most often: males over 66, retired or on a pension, divorced or

widowed, living in a 1-person household in a city with more than 50.000 inhabitants, in a rural municipality or a blue-collar worker.

TABLE 7: STATISTICALLY SIGNIFICANT RELATIONSHIPS BETWEEN THE CATEGORIES OF BANKING SERVICES DENIED TO RESPONDENTS AND THEIR SOCIO-DEMOGRAPHIC CHARACTERISTICS

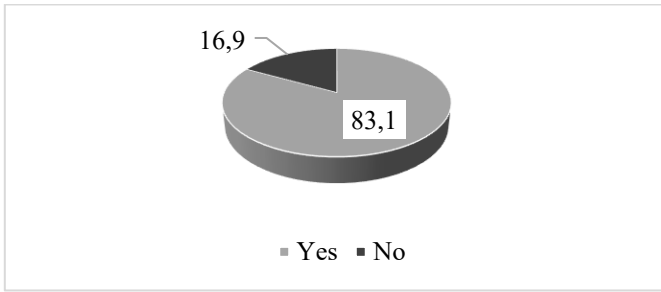
Socio-demographic characteristics/service categories	Denial of bank credit	Denial of a loan	Denial of a bank card
Gender	Males: Phi=0.154 Cramér's V = 0.154 at p=0.007	Females: Phi=-0.185 and Cramér's V=0.185 at p=0.001	-
Age	Age above 66: Phi= 0.216 Cramér's V=0.216 at p=0.012	-	Age 18-25: Phi=0.256 Cramér's V=0.256 at p=0.001
Marital status	Divorced or widowed individuals: Phi=0.161 Cramér's V=0.161 at p=0.017	-	Single individuals: Phi= 0.217 and Cramér's V = 0.217 at p=0.001
Place of residence	Cities from 50001 to 100000 inhabitants: Phi=0.224 and Cramér's V=0.224 at p=0.015	Village: Phi= 0.217 and Cramér's V = 0.217 at p=0.022	-
Type of municipality	Rural: Phi= 0.236 and Cramér's V = 0.236 at p=0.00	Urban-rural: Phi= 0.207 and Cramér's V = 0.207 at p=0.001	-
Household type	-	-	1-person household: Phi=0.213 and Cramér's V =0.213 at p=0.003
Occupational status	Retirees and pensioners: Phi= 0.181 and Cramér's V = 0.181 at p=0.017	Unemployed: Phi= 0.164 and Cramér's V = 0.164 at p=0.038	-
Type of work performed	Blue-collar work: Phi= 0.211 and Cramér's V= 0.211 at p=0.012	-	-

Source: own research.

Loan refusals pertained mostly to women, unemployed persons and residents of villages and urban-rural municipalities.

Respondents who had been refused services by another bank (20.9% of the total respondents) were asked whether this was the reason for their choosing the services of cooperative banks (Chart 6).

CHART 6: CUSTOMERS' OPINION ABOUT USING COOPERATIVE BANKS FOLLOWING DENIAL BY ANOTHER BANK



Source: own research.

As many as 83.1 per cent of respondents confirmed that it was the refusal of another bank to provide a service that drove them to use cooperative banks. This may demonstrate the flexibility and ability of these institutions to adapt their services to the diverse needs of their customers, including those who may have difficulty accessing financial services at other banks. This may also suggest that cooperative banks are perceived as more customer-friendly, may offer more personalised service or be more willing to negotiate and communicate with customers with different financial profiles. 16.9% of the respondents answered ‘no’ to this question. The choice of a cooperative bank by this customer group was, therefore, not directly linked to the refusal of another bank to provide the service. Possibly, for these customers, other factors such as location, customer service or the terms and conditions of the products offered prompted the choice of cooperative banks. Statistical analysis of the distribution of responses indicates statistically significant relationships based on the socio-demographic characteristics of customers who, after being refused by another bank, chose to use the services of cooperative banks (Table 8).

TABLE 8. STATISTICALLY SIGNIFICANT RELATIONSHIPS REGARDING CUSTOMERS' OPINIONS ON USING COOPERATIVE BANKS' SERVICES FOLLOWING DENIAL BY ANOTHER BANK

Socio-demographic characteristics of customers	Values of association measures	Significance level
Gender: male	Phi=0.228; Cramér's V = 0.228	p=0.00
Place of residence: city above 100 of inhabitants	Phi=0.293; Cramér's V = 0.293	p=0.00
Type of municipality: urban	Phi=0.235; Cramér's V = 0.235	p=0.00
Macro-region: south-western	Phi=0.260; Cramér's V = 0.260	p=0.002

Source: own research.

The following people were most likely to use cooperative banks when denied services at other banks: males (26.0%); those living in cities with more than 100.000 inhabitants (36.4%); residents of urban municipalities (24.7%); inhabitants of the south-western macro-region (35.3%).

V. DISCUSSION AND CONCLUSION

The research findings presented illustrate how important it is for many individuals to maintain access to financial services in areas where financial institutions may be less present. Another important issue is the diversification of channels through which

financial services are accessed. Cooperative banks, besides the development of electronic channels for the distribution of banking products, continue to maintain an extensive network of banking outlets, as recognised by the customers surveyed (32.2%) and management (22%). This operating strategy contributes to greater accessibility to financial services for customer groups with diverse needs and, at the same time, digital competencies. This view is consistent with the findings of M. Folwarski (2021, p. 191), who argues that digital innovations in banking contribute to the improvement of both financial inclusion and the digitalisation of society. Executives stressed the importance of financial education and advice in the activities of the cooperative banking sector. These institutions undertake many educational initiatives aimed at different age groups, from children and adolescents (lessons held in schools, competitions organised) to middle-aged and the elderly, where the message is aimed at explaining and encouraging the use of e-banking services and the offer dedicated to this group. This view is also shared by B. Frączek (2017), M. Polasik et al. (2018), and M. Folwarski (2021). M. Polasik et al. (2018, p. 38) who recommend combining financial education with education in information technologies, particularly for older individuals, as an area that enables financial institutions to contribute to enhancing the level of financial inclusion. An important aspect of the financial inclusion efforts is that many customers who had previously been denied service by another bank were able to take advantage of the cooperative banks' product offerings.

This paper sought to explore the role and significance of cooperative banks in Poland in the context of financial inclusion, based on the opinions of their customers and management. The results of the literature review and our research show that cooperative banks in Poland play a significant role in the financial inclusion process, particularly in areas and among people potentially at risk of financial exclusion. Perceptions of the importance of cooperative banks' efforts to reduce financial exclusion converge among the managements of these institutions and their customers. Both groups of respondents (more than 50% of responses) confirm that cooperative banks tailor their offer to the needs of different customer groups, keeping in mind farmers, less affluent people and those living in rural areas and small towns. In conclusion, it can be stated that the objective of the paper was achieved, as the various measures undertaken by cooperative banks to promote financial inclusion are recognised and positively evaluated by their customers and emphasised by the management.

With regard to the specific objectives of the study, it is worth noting that in the case of opinions expressed by representatives of cooperative banks, the characteristics describing those institutions had only a limited impact on the distribution of responses. Only a few statistically significant relationships were recorded in relation to the size of the locality, the type of municipality, and the macro-region in which the banks operate. In contrast, the statistical analysis of the survey results among customers revealed numerous statistically significant relationships, confirming that socio-demographic characteristics (age, gender, place of residence, type of

municipality, type of household, and socio-professional status) influenced the perception of cooperative banks as institutions contributing to the reduction of financial exclusion.

In summary, the various measures taken by cooperative banks for financial inclusion are recognised and positively evaluated by their customers and highlighted by the management.

VI. REFERENCES

- Anderloni, L.; Carluccio, E. M. Access to bank accounts and payment services. in: L. Anderloni; M. D. Braga and E. M. Carluccio (Eds.), *New frontiers in banking services*, Germany, Springer, Berlin, 2007.
- Allen, F., Demircuc-Kunt, A.; Klapser, L.; Martinez Peria, M. The foundation of financial inclusion. Understanding and use of formal accounts. *Policy Research Working Paper*, 6290, 2012.
- Buckland, J. *Hard Choices: Financial Exclusion, Fringe Banks and Poverty in Urban Canada*, University of Toronto Press, Toronto, 2012.
- Burton, D. Credit inclusion and the home credit market in post-communist member states of the European Union. *Critical Social Policy*, 37(3), 2017, p. 444-463. <https://doi.org/10.1177/0261018316672991>.
- Carchano, M.; Carrasco, I.; Soler, F. La contribución de las cooperativas de crédito para aliviar la exclusión financiera geográfica en los espacios menos poblados. El caso de España, CIRIEC-España, *Revista de Economía Pública, Social y Cooperativa*, 103, 2021, pp. 197-224. <https://doi.org/10.7203/CIRIEC-E.103.17509>.
- Demircuc-Kunt, A.; Klapper, L.; Singer, D.; Ansar, S.; Hess, J. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. World Bank Policy Research Working Paper, 8442, 2018.
- Domańska-Szaruga B. Wybrane aspekty wykluczenia kredytowego w świetle założeń zrównoważonego rozwoju. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 378, 2015, ss. 91-102. <https://doi.org/10.15611/pn.2015.378.07>
- European Commission. *Financial Services Provision and Prevention of Financial Exclusion Study*, Brussels, 2008. Available online: <https://www.fi-compass.eu/library/how-to/financial-services-provision-and-prevention-financial-exclusion>. (accessed on 10 September 2025)
- Ezzahid, E.; Elouaouarti, Z. Financial inclusion, mobile banking, informal finance and financial exclusion: micro-level evidence from Morocco. *International Journal of Social Economics*, 48(7), 2021, pp. 1060-1086. <https://doi.org/10.1108/IJSE-11-2020-0747>
- Folwarski, M. Innowacje cyfrowe w bankowości a włączenie cyfrowe i finansowe społeczeństwa, *Wydawnictwo Uniwersytetu Jagiellońskiego*, Kraków, 2021.
- Frączek, B. Edukacja finansowa jako determinanta wzrostu włączenia finansowego. *Podjęcie zintegrowane*, Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, Katowice, 2017.
- Gloukoviezoff, G. From financial exclusion to overindebtedness: The paradox of difficulties for people on low income? In: L. Anderloni; M. D. Braga; E. Carluccio (Eds.), *New frontiers in banking services. Emerging needs and tailored products for untapped markets*, Germany, Springer Verlag, Berlin 2006.
- Gostomski, E. *Życie bez banku*, *Gazeta Bankowa*, 12, 2008.
- Idzik, M. Financial inclusion in Poland in the segment of young consumers, *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 439, 2016, ss. 115-125. <http://dx.doi.org/10.15611/pn.2016.439.10>
- Janc, A.; Warchlewska, A. Działania edukacyjne banków centralnych w obszarze wiedzy ekonomicznej i kompetencji finansowych jako przejaw społecznej odpowiedzialności biznesu. in: K. Waliszewski (Ed.), *Social responsibility of financial institutions: from theory to practice*, CeDeWu, Warszawa 2018.
- Juszczyk, S.; Idasz-Balina, M. Finansowe uwarunkowania działalności prospołecznej polskich banków spółdzielczych. *Problemy Drobnych Gospodarstw Rolnych*, 2, 2018, ss. 17-25. <https://doi.org/10.15576/PDGR/2018.2.17>
- Kim, D.W.; Yu, J.S.; Hassan, M.K. Financial inclusion and economic growth in OIC countries, *Research in International Business and Finance*, 43, 2018, pp.1-14, <https://doi.org/10.1016/j.ribaf.2017.07.178>
- Kempson, E.; Whyley, C.; Caskey, J.; Collard, S. B. (2000). In or out? A literature and research review, *Financial Services Authority* by Errol Walker. Consumer Policy & Research Department, 2000. Available online: <https://www.bristol.ac.uk/media-library/sites/geography/migrated/documents/pfrc0002.pdf> (accessed 5 June 2025)
- Kuchciak, I. *Wykluczenie bankowe w Polsce w aspekcie ekonomicznym i społecznym*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź, 2020.
- Leyshon, A.; Thrift, N. Geographies of financial exclusion: financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers, New Series*, 20(3), 1995, pp. 312-341. <https://doi.org/10.2307/622654>
- Maciejasz-Świątkiewicz, M. *Wykluczenie finansowe i narzędzia jego ograniczania*. *Studia i Monografie*, 488, Uniwersytet Opolski, Opole 2013.
- Maciejasz-Świątkiewicz, M. *Poprzez włączenie finansowe ku społecznej sprawiedliwości* in: O. Janikowska; J. Słodczyk, (Eds.), *Globalna sprawiedliwość*, Wydawnictwo Uniwersytetu Opolskiego, Opole, 2016.
- Morgan, P.J.; Long, T.Q. Financial literacy, financial inclusion, and savings behavior in Laos. *Journal of Asian Economics*, 68, 2020. <https://doi.org/10.1016/J.Asieco.2020.101197>
- Náñez Alonso, S. L.; Jorge-Vázquez, J.; Sastre-Hernández, B.; Ziębicki, B. Do credit unions contribute to financial inclusion and local economic development? Empirical evidence from Poland. *Economics and Sociology*, 16(4), 2023, pp. 110-129. <https://doi.org/10.14254/2071-789X.2023/16-4/5>
- Nayak, R. K. Financial Inclusion through Cooperative Banks: A Feasible Option for Inclusive Growth. *Indore Management Journal*, 5(3), 2012, pp. 9-17, Available online: <https://www.iimdr.ac.in/wp-content/uploads/Vol.-4-Issue-3-Full1.pdf> (accessed 17 July 2025)
- Nowacka, A.; Szewczyk-Jarocka, M.; Zawiślińska, I. Socio-demographic determinants of financial exclusion of the unemployed on the local labour market: a case study. *Ekonomia i Prawo. Economics and Law*, 20(1), 2021, pp. 155-171. <https://doi.org/10.12775/EiP.2021.010>
- Polasik, M.; Huterska, A.; Meler A. Wpływ edukacji formalnej na włączenie finansowe w zakresie usług płatniczych, *e-Mentor*, 1(73), 2018, ss. 30-40. <http://dx.doi.org/10.15219/em73.1336>.
- Ozili, P.K. Financial inclusion research around the world: a review. *Forum for Social Economics*, 50 (4), 2021, pp. 457-479. <https://doi.org/10.1080/07360932.2020.1715238>
- Rani, M.; Siwach, M. Assessing the extent of financial inclusion through bank office expansion in Haryana/ Ocena zakresu włączenia finansowego poprzez ekspansję placówek bankowych w stanie Haryana. *Economic and Regional Studies*, 17(1), 2021, pp. 133-148. <https://doi.org/10.2478/ers-2024-0007>.
- Owen, A. L.; Pereira, J. M. Bank concentration, competition, and financial inclusion. *Review of Development Finance*, 8(1), 2018, pp.1-17. <https://doi.org/10.1016/j.rdf.2018.05.001>.
- Sarma, M.; Pais, J. Financial Inclusion and Development, *Journal of International Development*, 23(5), 2011, pp. 613-628. <https://doi.org/10.1002/jid.1698>
- Szelągowska, A. *Instytucja podstawowego rachunku płatniczego w Polsce*. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 531, 2018, ss. 429-440. <https://doi.org/10.15611/pn.2018.531.38>
- Szopa, B.; Szopa, A. *Wykluczenie finansowe a wykluczenie społeczne*. *Zeszyty Naukowe/Polskie Towarzystwo Naukowe*, 11, 2011, ss.13-27, Available online: <http://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element/ekon-element-000171204525> ,

(accessed 17 July 2025)

Szpringer, W. Społeczna odpowiedzialność banków. Między ochroną konsumenta a osłoną socjalną, Wolters Kluwer Polska, Warszawa, 2009.

Tsouli, D. Financial Inclusion, Poverty, and Income Inequality: Evidence from European Countries, *Ekonomika*, 101(1), 2022, pp. 37–61. <https://doi.org/10.15388/Ekon.2022.101.1.3>

Warchlewska, A. Wokół istoty wykluczenia finansowego. Ujęcie przeglądowe. *Finanse i Prawo Finansowe*, 1(25), 2020, ss. 123-140, <https://doi.org/10.18778/2391-6478.1.25.08>

Warchlewska, A. Wykluczenie finansowe. Od finansów tradycyjnych do cyfrowych, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań, 2022.

Wiercioch, M.; Buk, H. Wpływ pandemii COVID-19 na poziom wykluczenia finansowego mieszkańców południowo-wschodniego regionu Polski. *Nierówności Społeczne a Wzrost Gospodarczy*, 71, 2022, ss. 80-95. <https://doi.org/10.15584/nsawg.2022.3.5>

World Bank. Global Findex Database 2017: Measuring Financial Inclusion and the Fin tech Revolution, 2018, Available online: <https://databank.worldbank.org/source/global-findex-database-2017-measuring-financial-inclusion-and-the-fintech-revolution> (accessed 7 June 2025)

Van, D. T. T.; Linh, N. H. The Impacts of Financial Inclusion on Economic Development: Cases in Asian-Pacific Countries. *Comparative Economic Research. Central and Eastern Europe*, 22(1), 2019. <https://doi.org/10.2478/cer-2019-0001>

Van, L.T.H.; Vo, A.T.; Nguyen, N.T., Vo, D.H. Financial Inclusion and Economic Growth: An International Evidence. *Emerging Markets Finance and Trade*, 57 (1), 2019, pp. 239-263. <https://doi.org/10.1080/1540496X.2019.1697672>

Yun, A. Financial exclusion: Why it is more expensive to be poor. Prepared for the Wharton Public Policy Initiative, University of Pennsylvania, 2017.

Yan, Y.; Qi, S. (2020). Childhood matters: family education and financial inclusion. *Pacific-Basin Finance Journal*, 65, 2020. <https://doi.org/10.1016/J.Pacfin.2020.101489>.