
The Phenomenon of Financial Exclusion in Rural Areas – Case Studies of the Goldapski County

Submitted 11/03/21, 1st revision 14/04/21, 2nd revision 30/04/21, accepted 20/05/21

Sylwia Klus¹, Magdalena Kozera-Kowalska², Anna Ostrowska³

Abstract:

Purpose: The aim of this study is to show the phenomenon of financial exclusion in rural areas as a problem limiting socio-economic development.

Design/Methodology/Approach: The opinions of the residents of Goldapski County regarding the tools and services of modern banking were examined, assessing the relationship between them and the demographic characteristics of the respondents.

Findings: Financial exclusion was found to particularly affect older people i.e., over 60 years of age. This is especially true for people who were born in the years when e-banking and other modern banking services associated with IT development were not available. An additional factor is also the level of education of the respondents.

Practical Implications: The development of rural areas depends both on their stock of human capital, including the age and level of education of the population, but also on the banking infrastructure that facilitates, among other things, job creation and thus limits the migration of young people from these areas. In the case of Goldapski county which is attractive for tourists and well equipped with this kind of infrastructure, the factors influencing the phenomenon of financial exclusion were the lack of knowledge and fear of the complexity of services, as well as the age of the respondents, often causing self-exclusion in this area.

Originality/Value: The research results included in the article fill the cognitive gap concerning the phenomenon of financial exclusion in rural areas, even those which are attractive in terms of tourism. They emphasize the importance of age as a factor causing the formation of exclusion, including financial self-exclusion, especially among people who were born in the years before the dynamic development of banking using IT techniques.

Keywords: Financial exclusion, rural areas, modern forms of banking services and tools.

JEL classification: I21, I23, I25, M54.

Paper Type: Research study.

¹Department of Finance and Accounting, Faculty of Economics, Poznań University of Life Sciences, sylwia.klus@up.poznan.pl;

²Department of Law and Enterprise Management in Agribusiness, Poznań University of Life Sciences, magdalena.kozera@up.poznan.pl;

³Student of Faculty of Economics, Poznan University of Life Sciences;

1. Introduction

The problem of financial exclusion in rural areas has been taken up repeatedly in the literature and concerns many regions of the world. This phenomenon was studied in China (Lin, 2008; Ren, Zhao, and Zhou, 2018), Australia (Argent and Rolley, 2000), South Africa (Wentzel, Diatha, and Yadavalli, 2016). Similar work was also conducted in the United Kingdom (Leyshon, French, and Signoretta, 2008) and Poland (Horska, Szafranska, and Matysik-Pejas, 2013). Despite socio-economic and cultural differences, the key factors causing the financial exclusion of demographic and economic nature remain common. In its essence the financial exclusion is the prevention of individuals and social groups from access to the financial system, which is usually associated with the location of financial institutions (Leyshon and Thrift, 1995). Their absence is considered to be one of the main determinants of exclusion (Solarz, 2010; Sinclair, 2001). Generally speaking, financial exclusion is the inability to access necessary financial services in an appropriate form for an individual, i.e., understandable, inexpensive and safe (Mohan, 2006).

Definitions of financial exclusion highlight not only the existence of general barriers to the use of financial services and products, but also their quality and availability for certain social groups on worse conditions than for the rest of the society. For years the inhabitants of rural areas, especially from peripheral regions (Kata, Walenia, and Pyskosz, 2015; Szafrńska, 2013) have remained the group particularly affected by the threat of financial exclusion. Those areas are usually distant from big cities. Having a high biodiversity, they are attractive places for tourism.

On the other hand, in many cases they are socially impoverished, which is not only a result of population migration, especially of young people who seek economically beneficial sources of income outside the village (Kozera-Kowalska, 2018), but also of infrastructural underdevelopment, which limits the creation of new jobs, thus hindering development. There are also contrary situations, i.e. when with a well-developed infrastructure, including banking and high tourist attractiveness, financial exclusion persists for social reasons.

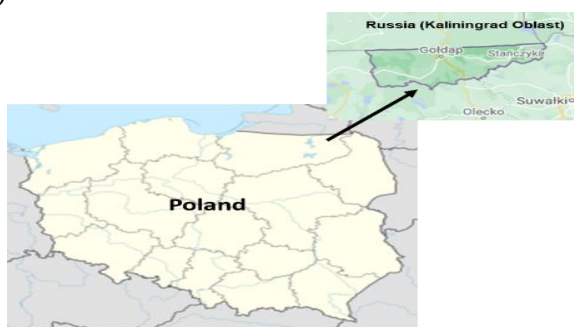
The purpose of this study is to show the phenomenon of financial exclusion in rural areas as a problem limiting socio-economic development. Two research assumptions were made:

- the use of modern tools of the financial market is affected by such social factors as age, education level and labor force participation;
- along with a growing complexity of modern banking, including electronic services, the problem of financial exclusion of the elderly, i.e. people over 60 years of age, born before the dynamic development of information and communication technology (IT), is increasing.

2. Materials and Method

The subject of research presented in this article is the phenomenon of financial exclusion and the natural, economic and social conditions affecting that phenomenon in Gołdapski County. This county is located in Northeastern Poland, bordering Kaliningrad Oblast (Russia) on the North, (Suwalski county on the East, Olecki and Gizycki counties on the South, and Wegorzewski county on the West). It consists of an urban-rural municipality of Gołdap and two rural municipalities, Banie Mazurskie and Dubeninki. The seat of the Gołdapski County is the town of Gołdap (Figure 1).

Figure 1. Gołdap



Source: Own compilation based on Google Maps (<https://www.google.pl/maps/>).

The analysis of the studied phenomenon was based on the accessibility of banking services and tools for inhabitants, comprising such measures of the level of their financial exclusion as: holding or not holding an account with a bank, possessing payment cards and using modern tools of the financial market (e-banking). For the purposes of the study, a diagnostic survey was conducted using the research questionnaire prepared by the authors.

The study involved a total of 187 adult residents of the Gołdapski County (including: women - N=103, men - N=84). (The minimum number of people necessary to guarantee the representativeness of the sample is 187 with a possible maximum error of 7%). The respondents' answers were analyzed according to the following criteria, place of residence (by municipality and city or village), gender, age, education, marital status, occupational activity. The chi-square test was used to verify significance of the correlation relationship between the individual characteristics. Moreover, contingency coefficient C was applied, calculated according to the formula:

$$C = \sqrt{\frac{\chi^2}{\chi^2 + n}}$$

where:

χ^2 - empirical value of the chi-square statistic,

n - sum of responses.

The results of the findings are presented in graphical and tabular forms.

3. Financial Exclusion as a Social Problem

The problem of financial exclusion is one of the most important issues to be solved in the EU countries, especially in the context of "Europe 2020" strategy developed in 2010, the aim of which was to commit all Member States to joint activities for the rational use of resources, development based on knowledge and innovation, and growth in employment (<https://ec.europa.eu/eurostat/>). These goals also include activities to reduce the number of people at risk of poverty and social exclusion by at least 20 million. By 2018, it was possible to minimize this number by less than 9 million people, which illustrates the scale of challenge in this area. It turned out that among citizens of the EU, which as a grouping is one of the richest regions in the world, as many as 21.8% were at risk of poverty or social exclusion (this was as many as 109.9 million people). Only in Poland, at the same time, this percentage was 18.9%, which means that this problem affects almost 7 million Poles (Table 1).

Table 1. Percentage of population at risk of poverty or social exclusion in selected EU countries 2016-2018 (%)

Country	2016	2017	2018
Poland	21,9	19,5	18,9
Czech Republic	13,3	12,2	12,2
Bulgaria	40,4	38,9	32,8
Germany	16,8	17,2	17,0
France	18,2	17,0	17,4
EU	23,5	22,4	21,8

Source: own elaboration based on Eurostat data,

https://ec.europa.eu/eurostat/databrowser/view/ilc_peps01n/default/table?lang=en.

Social exclusion is correlated to a very high degree with financial exclusion, which makes activities aimed at solving both these social problems even more difficult. At the same time, this relationship makes this phenomenon multidimensional, which is further influenced by both demand factors (i.e. directly related to the customer) and supply factors (i.e. determined by the banking sector) (Czarnecka, 2018). In Poland, according to the data of the Polish Bank Association, unbankedness⁴ amounted to 89% in 2019, which means that as many as 11% of Poles are unbanked (Polish Banking in Figures, 2020).

When discussing the demand-side factors causing financial exclusion, it is important to note that the affected part of the society is divided into those who voluntarily give

⁴ Measured by the percentage of people over the age of 15 who have a bank account.

up the use of financial services and products (self-exclusion) and those who lose access to them unintentionally. Self-exclusion is often associated with a failure to see the benefits offered by the banking sector or simply a lack of need to participate in the financial market. Low financial awareness not infrequently leads to the fear or anxiety about opening a bank account and the lack of trust in service providers (Solarz and Swacha-Lech, 2011). This situation is usually influenced by upbringing, education, and the previous experience when interacting with services of a financial institution. Nevertheless, according to the World Bank report, self-excluded people usually do not belong to those affected by financial exclusion (Finance for all..., 2008).

Among those exposed to involuntary exclusion, the predominant group includes people with low incomes, unemployed or unable to work due to illness or disability, but also the elderly and infirm. Demographic changes related to the aging of the population are considered one of the important factors aggravating the problem, as well as changes in the family model, which may also expose to exclusion single parents (Iwanicz-Drozowska, 2008).

The phenomenon of financial exclusion is determined not only by the demand side, i.e. customers, but also by the supply side - financial institutions. The tools at their disposal influence the decisions of entities operating in the financial market. Among them there are legal regulations, the network of bank branches, as well as the number of ATMs or payment terminals (card payment in retail and service establishments) which make up the infrastructure (Czarnecka, 2018).

Another equally important factor influencing the phenomenon of financial exclusion is the geographical accessibility of infrastructure elements. The observations of Leyshon *et al.* (2008) highlighted that the lack of physical access to bank branches depends on the income of the population living in a given area (Kata, Walenia, and Pyrkosz, 2015). As their research shows, the relationship between the availability of bank branches and the area in which they are located is determined by the social status of the population, dynamics of the local economy, situation in the local labor market, migration trends and the development of the local real estate market (Birkin, Clarke, and Douglas, 2002; Kata *et al.*, 2015). Financial institutions are profit-oriented, which influences the placement of their branches and ATMs in more economically attractive locations. These analyses show that the organizational and institutional structure of the financial market facilitates access to financial products or services to more affluent people residing in urban areas, making it more difficult for those living in peripheral areas. This phenomenon significantly increases the level of financial exclusion.

According to the reports of the Polish Financial Supervision Authority (KNF), every year more bank branches are closed. The key factor determining this phenomenon is a widespread use of modern banking solutions, allowing the concentration of operational activities, such as online, mobile and telephone banking. They are most

often used by the young generation which abandons the traditional form of banking, (bank branch or cash point) (Wyzwania informatyki bankowej, 2020). Such solutions, however, cause the financial exclusion of older people for whom the new technologies are difficult to understand and assimilate, and often simply raise anxiety. According to research, as many as 40% of people over 60 prefer traditional banking, using a bank branch at least five times a year (Seniors in a branch..., 2020).

4. Research Results

The respondents were an age-diverse group, dominated by mature age, i.e., 40 to 60 years (43.2%) and 27-39 years (22.9%). Young people (in the range of 18 to 26 years) constituted only 9.1% of those taking part in the study. Among the respondents, people with secondary and higher education dominated (41.2% and 31.5% respectively), primary education was indicated by 7.0% of the respondents, and basic vocational education by as much as 20.3%. Most of the respondents were employed (68.5%) and pensioners (24.6%), i.e., groups with regular incomes. Among the respondents there were also unemployed people (4.3%) and those who had never taken a job (2.3%).

The respondents were asked whether they had a bank account, payment cards, life and property insurance, and whether they used non-cash payments and electronic banking, being then grouped by age, education and professional activity. On the basis of the results obtained it was found that a vast majority of the respondents had a bank account (85.0%), which indicates a high degree of bankedness of the residents of Goldapski county. In order to find the factors determining the lack of bank account, the relationship between its absence and education was analyzed using chi-square test statistics (Table 2). The calculated empirical chi-square test statistical value of 50.773 ($\chi^2 = 50.773$), with an accepted test probability of 95% and a critical value of 7.815, indicate that there is a relationship between the residents' education and bank account ownership. The value of C-Pearson contingency coefficient was 0.46.

Table 2. *Correlation between education and bank account ownership*

Answers \ Value	Actual value	Theoretical value	Chi-square component
yes_ - primary education	4	11,053	4,501
yes_ - vocational education	26	32,310	1,232
yes_ - secondary education	70	65,471	0,313
yes_ - higher education	59	50,166	1,556
no_ - primary education	9	1,947	25,559
no_ - vocational education	12	5,690	6,998
no_ - secondary education	7	11,529	1,779
no_ - higher education	0	8,834	8,834
Total	187	187	50,773

Source: Own calculations.

The fact that the respondents own bank cards was similarly assessed. It turned out that a vast majority of them (73.1%) had such cards, which was also correlated with education (Table 3). A vast majority of the respondents with higher education (94.9%) and secondary education (81.82%) had payment cards, similarly to more than a half of the respondents with basic vocational education (52.6%). However, in the group with primary education, the vast majority (92.3%) did not have payment cards.

Table 3. Correlation relationship between education and payment card ownership

Answers \ Value	Actual value	Theoretical value	Chi-square component
yes_ - primary education	1	9,733	7,835
yes_ - vocational education	20	28,449	2,509
yes_ - secondary education	63	57,647	0,497
yes_ - higher education	56	44,171	3,168
no_ - primary education	12	3,267	23,339
no_ - vocational education	18	9,551	7,475
no_ - secondary education	14	19,353	1,481
no_ - higher education	3	14,829	9,436
Total	187	187	55,740

Source: Own calculations.

The calculated empirical value of the chi-square test statistics was 55.740 ($\chi^2=55.740$), with a 95% probability of the test and a critical value of 7.815. This means that payment card ownership is associated with education. The strength of the correlation relationship as measured by the contingency index C is 0.48.

The use of non-cash payments was also analyzed. As in the case of payment cards, most of the respondents declared the fact of using such a form of payment (72.7%). It is most common in the group of people with higher education (98.3%). The lower the education, the lower the popularity of non-cash payments (only 7.7% of the respondents with primary education can use this type of payment). With this in mind, the correlation relationship between the use of non-cash payments and education was examined (Table 4). The empirical value of the chi-square test statistic was 60.091 ($\chi^2=60.091$), with a 95% test probability and a critical value of 7.815. This confirms the observation about the influence of the respondents' education on the use of non-cash payments. The calculated contingency coefficient $C=0.49$.

Similar observations apply to the use of electronic banking (online, mobile or telephone). Knowledge and use of this type of financial service is declared by 64.2% of respondents. At the same time only 19.6% of the respondents over 60 are able to use this form of banking. The occurrence of correlation between the age of the respondents and the use of electronic banking was checked by performing the chi-

square independence test, and then the convergence coefficient C was calculated (Table 5).

Table 4. Correlation relationship between education and use of cashless payments

Value	Actual value	Theoretical value	Chi-square component
Answers			
yes - primary education	1	9,455	7,560
yes_ - _vocational education	18	27,636	3,360
yes_ - secondary education	59	56,000	0,161
yes_ - higher education	58	42,909	5,307
no_ - primary education	12	3,545	20,161
no_ - vocational education	20	10,364	8,960
no_ - secondary education	18	21,000	0,429
no_ - higher education	1	16,091	14,153
Total	187	187	60,091

Source: Own calculations.

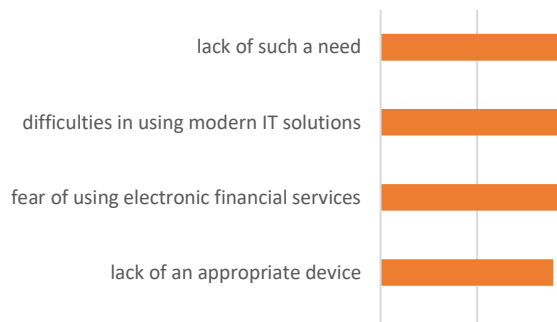
Table 5. Correlation relationship between age and use of electronic banking

Value	Actual value	Theoretical value	Chi-square component
Answers			
yes_18-26	13	10,909	15,492
yes_27-39	31	26,310	36,526
yes_40-60	67	53,262	84,281
yes_over 61	9	29,519	2,744
no_18-26	4	6,091	2,627
no_27-39	10	14,690	6,807
no_40-60	16	29,738	8,609
no_over 61	37	16,481	83,064
Total	187	187	240,150

Source: Own calculations.

The empirical value of the chi-square statistics was 240.150 ($\chi^2 = 240.150$), with a 95% test probability and a critical value of 7.815, supporting the observation that age affects the use of electronic banking. (The calculated value of the contingency coefficient $C=0.75$). To complement the issue of using electronic banking, a question was asked why residents did not use this form of service. The respondents were allowed to select up to three available answers (Figure 2).

The decisive factor was lack of such a need (56.7% of the respondents), which indicates the phenomenon of self-exclusion in this regard. The respondents also indicated difficulties in using modern IT solutions (32.8%) or fear of using electronic financial services (29.8%). For some of the respondents (17.9%) the lack of an appropriate device proved to be an obstacle, and for 14.9% - the lack of access to the Internet or its poor coverage.

Figure 2. Reasons for not using electronic banking

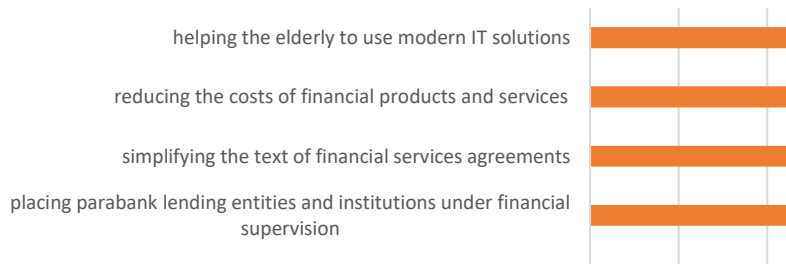
Source: Own study.

The study continued with an attempt to determine the impact of difficulties in the access to banking services and tools on the financial exclusion ("Which financial product in your opinion is the most difficult to access?"). The respondents were asked to select up to three of the following options: bank account, mortgage loan, insurance, consumer credit, payment card, deposit, other. The top choices were mortgage loans (56.2%) and consumer loans (20.3%), followed by deposits (13.9%) and insurance (8.6%). The most easily accessible forms of financial services were payment card (3.2% of the respondents indicated that it was difficult to obtain one) and bank account (2.1% of the respondents thought it was difficult to open).

The survey concluded with an assessment of the level of satisfaction of the residents' needs for banking products and services ("do you think that the financial products you use fully satisfy your financial needs?"). This part of the survey used a 5-point Likert scale, where 1 means "definitely yes" and 5 means "definitely no." It turned out that in the subjective opinion of the respondents, the level of satisfaction of their needs was satisfactory (44.9% of "rather yes" answers and 23.5% of "definitely yes" answers). Doubts about this were expressed by 17.6% of the respondents ("it is difficult to say"), and the lack of satisfaction of those needs was indicated by a total of 13.9% ("rather not" and "definitely not").

County residents were also asked about possible ways to reduce the phenomenon of financial exclusion, ("What, in your opinion, would reduce the phenomenon of financial exclusion?"). To make it easier to respond, the study participants were given an opportunity to familiarize themselves with the concept of financial exclusion and then select three of the possible answers to choose from (Figure 3). The largest number of the respondents indicated that such measures should include: helping the elderly to use modern IT solutions (62.0%), reducing the costs of financial products and services (54.6%), simplifying the text of financial services agreements (49.7%), and placing parbank lending entities and institutions under financial supervision (35.3%). The need for increased financial education was also indicated (30.5% of responses).

Figure 3. Reasons for financial exclusion



Source: Own study.

The last issue examined was self-assessment of the degree of financial exclusion ("do you consider yourself financially excluded?"). As in the case of financial exclusion, the respondents had an opportunity to read the definition of a financially excluded person before answering. Based on the responses, it can be concluded that 48.1% of the respondents do not consider themselves to be financially excluded (combined responses of "definitely not" and "rather not"). However, one out of four county residents considers himself/herself financially excluded (combined "rather yes" and "definitely yes" responses - 24.6%). Difficulties with self-esteem were indicated by 27.37% of the respondents.

5. Conclusions

Due to its multidimensional character, the problem of financial exclusion may concern all regions of the country, although rural areas are most often indicated as being threatened by this phenomenon. The research carried out in the Goldap county seems to confirm this, despite the fact that according to the reports "Tourist potential of the EGO SA region" and "Training needs of tourism staff", prepared for the purpose of monitoring the European Funds for the Development of Eastern Poland program (Report, Tourist potential of the region ... 2021), the county is very well developed in terms of infrastructure, especially technical, facilitating an active use of natural and tourist assets. Despite this, there is still exists the phenomenon of financial exclusion (15% of the surveyed inhabitants do not have a bank account, 26% do not have payment cards, and at the same time a significant proportion of people nearing the end of their working lives, i.e., 60 years and older, indicate difficulties in using modern IT solutions).

For some people using financial services connected with information technologies causes anxiety, which leads to the financial self-exclusion. This is especially true for those for whom information and communication technologies and the related banking services are too modern, and the time required to assimilate them and overcome the fear associated with their use is too long, which confirms the second of the research assumptions.

The study indicates that the phenomenon of financial exclusion is particularly influenced by demographic factors such as education and age, which confirms the first of the research assumptions. Although most of the respondents can be described as “banked”, i.e. using modern forms of banking, a significant number of them still remains outside the system.

References:

- Argent, N.M., Rolley, F. 2000. Financial exclusion in rural and remote New South Wales, Australia: a geography of bank branch rationalisation, 1981–1998. *Australian Geographical Studies*, 38(2), 182-203.
- Birkin, M., Clarke, G., Douglas, L. 2002. Optimising Spatial Mergers: Commercial and Regulatory Perspectives. *Progress in Planning*, 58(4), 229-318.
- Czarnecka, M. 2018. Wykluczenie finansowe i integracja finansowa - aspekty terminologiczne, *Kwartalnik Kolegium Ekonomiczno-Społecznego Studia i Prace. Szkoła Główna Handlowa*, 1, 63-83.
- Finance for all? Policies and Pitfalls in Expanding Access. 2008. A World Bank Policy Research Report. Washington, 29.
<https://openknowledge.worldbank.org/bitstream/handle/10986/6905/417920PAPER0Fi18082137291301PUBLIC1.pdf?sequence=1&isAllowed=y>.
- Horska, E., Szafrńska, M., Matysik-Pejas, R. 2013. Knowledge and financial skills as the factors determining the financial exclusion process of rural dwellers in Poland. *Agricultural Economics*, 59(1), 29-37.
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Europe_2020_indicators_-_employment&oldid=210581.
- https://ec.europa.eu/eurostat/databrowser/view/ilc_peps01n/default/table?lang=en.
- Iwanicz-Drozdowska, M. 2008. Wykluczenie finansowe-poważny problem społeczny. *Journal of Management and Business Administration. Central Europe*, 16.
- Kata, R., Walenia, A., Pyrkosz, D.S. 2015. Wykluczenie finansowe ludności wiejskiej w Polsce. *Journal of Agribusiness and Rural Development*, 4(38), 1-10.
- Wyzwania informatyki bankowej. 2020. Kawiński Andrzej, Sieradz Andrzej. Publikacja Europejskiego Kongresu Finansowego dostęp on-line:
https://www.efcongress.com/wp-content/uploads/2021/03/Hitachi-Biometria-w-sektorze-finansowym_Wyzwania-informatyki-Bankowej.pdf.
- Kozera-Kowalska, M. 2018. Zielone migracje i c.o dalej? In: Sałustowicz, P., Kalinowski, S., Goryńska-Bittner, B., *Bliżej ludzi-programem dla nauk społecznych?* Wydawnictwo Societas Pars Mundi, 139-151.
- Leyshon, A., Thrift, N. 1995. Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States. *Transactions of the Institute of British Geographers, United Kingdom*.
- Leyshon, A., French, S., Signoretta, P. 2008. Financial exclusion and the geography of bank and building society branch closure in Britain. *Transactions of the Institute of British Geographers*, 33(4), 447-465.
- Lin, X.S.T. 2008. The Study on Financial Exclusion in Rural Areas of China. *Journal of Financial Research*, 7.
- Mohan, R. 2006. Economic growth, financial deepening and financial inclusion. *Reserve Bank of India Bulletin*, 1305.

- Polska bankowość w liczbach 2020, III KWARTAŁ 2020. www.prnews.pl. Dostęp on-line: https://prnews.pl/wp-content/uploads/2020/12/polska_bankowosc_w_liczbach_IIIq2020.pdf.
- Prosiński, J. 2018. Determinanty wykluczenia finansowego w Polsce, Finanse i rachunkowość na rzecz zrównoważonego rozwoju, Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 532, 304-312.
- Raporty z badań: „Potencjał turystyczny regionu EGO SA” oraz „Potrzeby w zakresie szkolenia zawodowego kadr zatrudnionych w turystyce”. 2010. Projekt „Platforma współpracy – EGO SA” finansowany z budżetu państwa, budżetów: Miasta Ełku, Gminy Gołdap, Gminy Olecko, Miasta Suwałki, Miasta Augustów oraz ze środków Unii Europejskiej, dostęp on-line: https://www.um.olecko.pl/archiwum/pozyskane_porpw/ego_sa_potencjal.pdf.
- Ren, B., Li, L., Zhao, H., Zhou, Y. 2018. The financial exclusion in the development of digital finance - a study based on survey data in the Jingjinji rural area. *The Singapore Economic Review*, 63(01), 65-82.
- Seniorzy w oddziale banku, Alior Bank, styczeń. 2020. <https://www.aliorbank.pl/aktualnosci/2020-01-20-seniorzy-w-banku.html>.
- Sinclair, S. 2001. *Financial Exclusion: An Introductory Survey*. Centre for Research into Socially Inclusive Services. Edinburgh College of Art/Heriot Watt University.
- Solarz, M. 2010. Wykluczenie finansowe – zarys problematyki. In: Borys, G. (red.): *Nauki o Finansach*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Tom 4, Wrocław.
- Solarz, M., Swacha-Lech, M. 2011. Samowykluczenie bankowe w aspekcie finansów behawioralnych. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 193, 32-48.
- Szafranska, M. 2013. Determinanty poziomu wykluczenia finansowego mieszkańców małopolskiej wsi. *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu*, 15(3).
- Wentzel, J.P., Diatha, K.S., Yadavalli, V.S.S. 2016. An investigation into factors impacting financial exclusion at the bottom of the pyramid in South Africa. *Development Southern Africa*, 33(2), 203-214.