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# FINANCIAL EXCLUSION IN EU MEMBER STATES AND CANDIDATE COUNTRIES – A COMPARATIVE ANALYSIS

## Abstract

- *Goal* – The main goal of this study is to conduct a comparative analysis of the level of financial exclusion in EU states and candidate countries in 2023.
- *Research methodology* – The research procedure consisted of the following steps: a study of literature, review of databases, verification and investigation of data, visualisation of the selected measures on financial exclusion in the countries under analysis and it results.
- *Score/results* – The study reveals that there is no noticeable relation between the membership in the EU and the level of financial exclusion. It follows that EU membership is not an automatic guarantee for financial inclusion. Furthermore, the analysis revealed a differentiation within the group of candidate countries but also among EU member states. Additionally, it follows that poor geographical outreach does not always have a negative impact on the use of financial services.
- *Originality/value* – The value of the paper is related to the comparative analysis of the selected group of countries: such analysis, including two dimensions of financial inclusion, which are geographical outreach, and the use of financial services was not conducted so far.

**Keywords:** financial exclusion, EU candidate countries.

## 1. Introduction

The phenomenon of exclusion has existed in society for a long time: there were – and still there are – certain barriers which prevent certain groups from full participation in various activities. Focusing on the development of the financial

services, the society had to face another aspect of elimination, which was financial exclusion. This term became common in literature and discourse in the 1990s thanks to British geographers: A. Leyshon and N. Thrift who were concerned with limited access to banking services. They described financial exclusion as process which prevents certain groups/individuals from accessing the financial system [*Geographies of Financial Exclusion…*, 1995: 213].

This very first definition of financial exclusion led to further attempts to describe it. A various number of definitions have pointed the problem of finding one, universal explanation of financial exclusion and, consequently, how to measure this phenomenon. There are various databases providing data related to the issue of financial exclusion with different frequency, range and access to them. However, none of them presents a universal indicator describing the level of the phenomenon of financial exclusion.

One of the existing databases is IMF Financial Access Survey (FAS), which was launched in 2009[1]. It is supply-side dataset. The FAS concentrates on accessibility and use of financial services and is based on data collected by central banks and other financial regulators[2]. The database created by FAS highlights two main indicators: geographical outreach and use of financial services, each of them develops into more specific ones. The FAS has also global reach and public access which allow to choose indicators depending on analytical needs.

FAS allows to carry on interesting analyses: the goal of this paper is to conduct an analysis of the level of financial exclusion in 2023 in the selected countries, which are: EU countries and candidates. The choice of these countries is associated with the research hypothesis which is as follows: candidate countries have higher level of financial exclusion than EU members.

The research procedure was carried out to verify the hypothesis. It consisted of the following elements: (a) study of the literature on financial exclusion, (b) review of available databases measuring the level of financial exclusion, (c) verification and investigation of data, (d) visualisation of situation regarding selected measures on financial exclusion in countries of analysis. Furthermore, results and comments are provided in the study.

[1] The Financial Access Survey was launched in 2009 but from 2018 it has been supported by the International Monetary Fund's Data (IMF) [*IMF Data Portal,* https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sid=1412015057755 [date of access: 18.12.2024].

[2] Ibidem.

## 2. Financial exclusion

As it was already mentioned, the very first definition of financial exclusion describes it as a process which prevents the access to the financial system [Layshon, Thrift, 1995: 213]. Without any doubts, this statement is correct, nevertheless, there are various definitions of financial exclusion which consider different aspects of this problem. A review of the selected definitions in the literature focusing on the financial exclusion issue is provided in Table 1.

*Table 1.* Selected definitions of financial exclusion

| Author | Definition |
|---|---|
| S. Richard [*Les comportements financiers...*, 2000: 65] | A gradual process of exclusion from the financial link: absence of an account, means of payment or no access to essential credit. |
| S. Sinclair [*Financial Exclusion...,* 2001: 4] | The inability to obtain essential financial services in an appropriate form. Exclusion may result from issues related to access, conditions, pricing, marketing, or self-exclusion in response to negative experiences, or perceptions. |
| L. Anderoni [*Access to Bank Account...,* 2007: 7] | The challenges faced by low-income and socially disadvantaged people in using financial services, such as having an account, being able to make cashless payments, accessing credit at a "reasonable" level of interest, or building small savings. |
| D. G. McKillop, J.O.S. Wilson [*Financial Exclusion*, 2007: 9] | The inability, reluctance, or difficulty faced by specific groups in accessing mainstream financial services. |
| B. Szopa, A. Szopa [*Wykluczenie finansowe...*, 2011: 18] | The state of limited or lacking financial resources that does not allow for the effective use of financial, banking, insurance, business consulting, legal services, as well as health care, education and culture. In addition, it prevents activities involving investing in the stock market, investment funds, or having a bank account. |
| T. Sossa [*La microfinance au Bénin*, 2011] | A situation where an individual experiences difficulties in accessing financial services. |
| European Commission, [*Financial... ,* 2008: 9] | A process in which individuals face difficulties accessing and/or using financial services and products in the mainstream market that are appropriate to their needs and allow them to lead a normal social life in the society in which they belong. |
| FINCA Canada [www 7] | Financial exclusion refers to individuals and populations lacking access to basic financial services, such as savings accounts, loans, cashless transactions, credit, and other traditional banking services. This exclusion is often due to socio-economic status and an inability to meet the requirements set by formal banking institution. |

Source: the author's own work based on literature indicated in Table 1.

The first of the presented definitions differs from the others, in S. Richard's opinion, financial exclusion is "a gradual process of exclusion from the financial link" [*Les comportements*…, 2000: 65] caused by the lack of a bank account or means of payment. Only this definition draws attention to the "gradual" aspect of financial exclusion which can be inferred that it is related to the fast development of finances.

According to L. Anderoni [*Access to Bank Account…,* 2007: 7], financial exclusion is associated with low income of people/people in disadvantaged social situation who do not have bank accounts/cannot make cashless payment or savings. Similar approach may be observed in B. Szopa and A. Szopa's definition, where financial exclusion is caused by a limit/lack of resources that does not allow for the effective use of not only financial services, but also for health care education or culture which indicates the social aspect of financial exclusion.

In EC report, financial exclusion is a process in which people experience problems in access or in using of financial services which are essential to lead a social life. This definition does not precisely determine what causes problems with access to financial services. In the same way, financial exclusion is described by T. Sossa whose definition is more general (and does not concern social aspect).

S. Sinclair's definition focuses on the reasons that may lead to financial exclusion, which include problems with access, marketing or prices. Moreover, Sinclair refers to the problem of self-exclusion, in which despite access, a person does not use financial services due to negative experience. Similarly, financial exclusion is described by D. McKillop and J. Wilson, however, their definition is not as extensive as Sinclair's, but it also includes the aspect of self-exclusion.

The last of the proposed definitions is the one by FINCA Canada, that characterises financial exclusion as the inaccessibility to the basic financial services. This refers to people who cannot engage in the financial sector, especially in low-income countries.

Considering not only the challenges of multi-definition but also the challenges related to measuring the phenomenon of financial exclusion, the author agrees with the definition proposed by the European Commission's report. It focuses on two aspects of financial exclusion: access and usage of financial services which can be measured with use of approximants, and this is the goal to be achieved in this study.

## 3. How to measure financial exclusion?

Despite the fact that there are numerous definitions of financial exclusion, it should be noted that there is no direct indicator that allows for assessing the level of financial exclusion. What is more, the existing databases give information on financial inclusion. Thus, it shall be clarified here that the less "included" a country is, the higher level of financial exclusion and vice versa: the more "included" a country is, the lower is the level of financial exclusion.

World Bank Group describes two different approaches to the measure of the analysed problem: the demand and supply side surveys. In this paper, the author focused on the second one: supply-side data surveys which, unlike demand-side data, may be collected regularly and are less expensive [www 1]. As stated by the World Bank Group, supply-side data offer information about regulated financial institutions or through reporting to financial regulators (covering geographical access, prices of products and services, use of products and services). The review of databases is provided in Table 2.

*Table 2.* Financial inclusion data from the supply side

| Survey | Description | Frequency | Country coverage | Publicly available |
|---|---|---|---|---|
| FAS | Data on the adoption and utilisation of financial services gathered from regulatory authorities across countries | Annual | Global | Yes |
| Global Payment Systems Survey (GPSS), (World Bank) | A summary of payment and securities settlement systems in developed and emerging markets. | Bi-annual | Global | Yes |
| Remittance Prices Worldwide (RPW) | Data on the cost of transmitting small amounts of money between countries. | Every 6 months | Global | Yes |
| Microfinance Information Exchange (MIX) | Comprehensive operational and financial statement data from microfinance entities. | Irregular | Over 110 countries | Partially |
| BankScope | Database with information on public and private banks. Detailed balance sheet and income statements per bank. | Irregular | Selected countries | No |

| Survey | Description | Frequency | Country coverage | Publicly available |
|---|---|---|---|---|
| FinStats | Information on verified equities, government bonds, fund values, currencies, dividends, and indices. | Irregular | Selected countries | No |
| IMF-International Financial Statistics (IFS) | Collection of 8 financial inclusion measures from app. 190 countries. | Varies | Global | Yes |
| IMF Financial Soundness Indicators (FSI) | FSI assess strengths and weakness of financial systems. | Varies | Global | Yes |

Source: www 1.

The way financial inclusion is presented within these databases differs as far as data collection, frequency, country range and public access are concerned. The first three presented in Table 2: FAS, GPSS and RPW offer the most accurate data. The frequency of publication is annual (FAS) or semi-annual (GPSS, RPW), the data have a global reach, and access to it is public. However, despite the huge advantage of half-yearly data, the latest GPSS data is from 2021 while FAS offers newer data up to 2023 (for most countries); the RPW only focuses on information on remittances.

Microfinance Information Exchange (MIX)[3] provides data (MIX Market database) on microfinance institutions. From 2019, MIX Market dataset became available at the platform of the World Bank. Despite the advantages of public access via World Bank, the available data cover the years 1999–2019 (which are published irregularly) [www 3].

The next two presented databases, BankScope[4] and FinStats, are not publicly available which is a serious disadvantage. Also, dataset is accessed for the public irregularly only for selected countries.

IFS and FSI are part of IMF (International Monetary Fund) dataset. Both databases have public access and global reach. IFS focuses on topics of international

[3] Since 2020, MIX has become a part of the Center for Financial Inclusion at Action (CFI) [www 2].

[4] BankScope discontinued publicising data after 2015 and updated information are now available on Bank Focus but access also is not public [www 4].

and domestic finance, including data on exchange rates, international liquidity, money and banking, prices etc. [www 5]. FSI includes information on financial institutions and indicators representing markets in which financial institutions operate [www 6].

A conducted survey on financial inclusion databases allows the author of this paper to assess them and choose the one which is the most compatible with the chosen definition of financial exclusion. Based on the collected information, the author of the paper decided to rely on the IMF Financial Access Survey database. FAS is characterised by data validity and a wide selection of indicators which, due to the lack of universally accepted method of measuring financial exclusion, makes it possible to search for its approximants.

## 4. Analysis

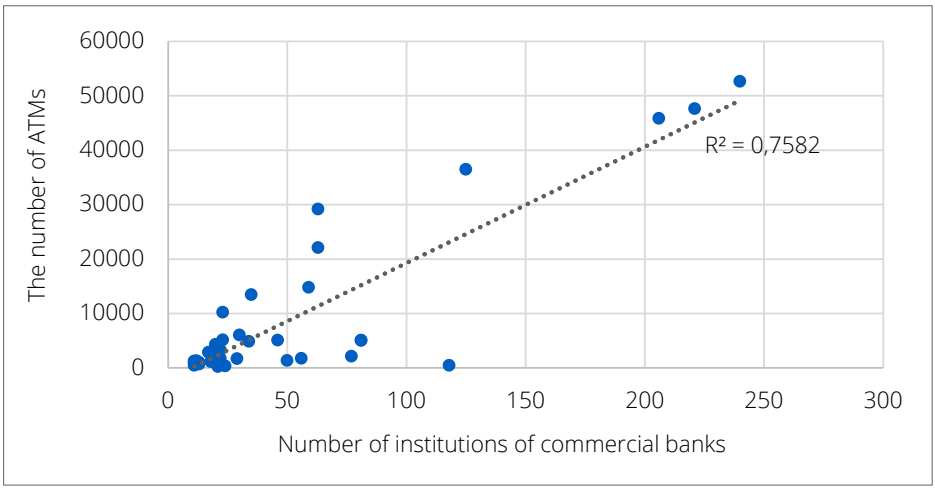
As it was mentioned in the definition of the European Commission's report, financial exclusion is a process in which individuals experience problems with accessing or using financial services [2008: 9]. The FAS database consists of two main types of indicators that cover the aspects described in the definition, which is (a) geographical outreach, and (b) the use of financial services. Based on the availability and validity of data, the author has chosen the following indicators: in the first dimension (a): the number of commercial banks (nCB), the number of ATMs (nAT), the branches of commercial banks (nBC) and in the second dimension (b): the number of credit cards per 1000 adults (nCC), the number of debit cards per 1000 adults (nDC), the number of mobile and internet transactions per 1000 adults (nMI).

The selected indicators were subjected to correlation analysis to exclude the similar ones, and to get the more precise approximants allowing to measure the level of financial exclusion in European Union member states and candidate countries. The correlation analysis results are presented in the charts 1 and 2.

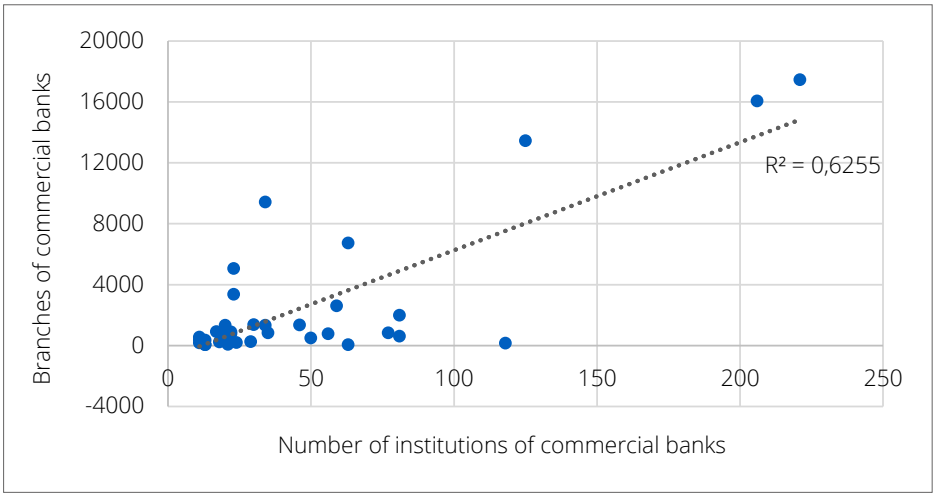
As far as geographical outreach is concerned, it is observed that there is a positive correlation between indicators. The strongest relationship (iii) is to a large extent natural: together with rising nBC, the nAT usually rises as well. The same is for the nAT and the nCB (i). Still, correlation between the nBC and nCB is also significant. Thus, only one indicator here shall be selected, as to avoid repeating information. Out of these three indicators which have the highest correlation coefficient, the author decided to select the number of ATMs.

*Chart 1.* Correlation between i) nCB and nAT; ii) nCB and nBC iii) nAT and nBC

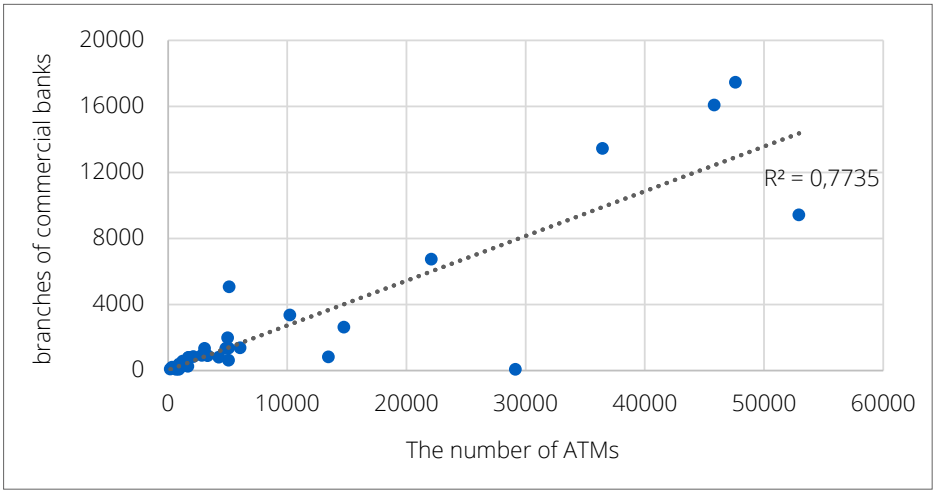
i)




ii)



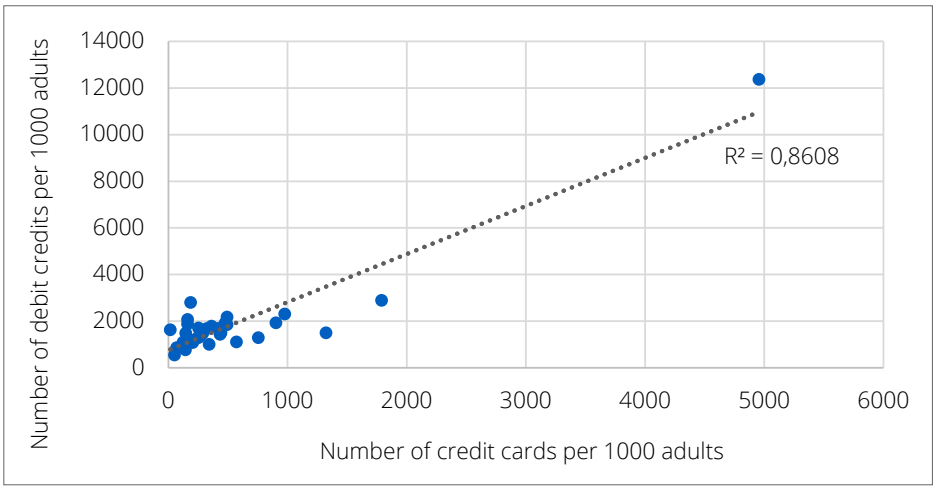

iii)



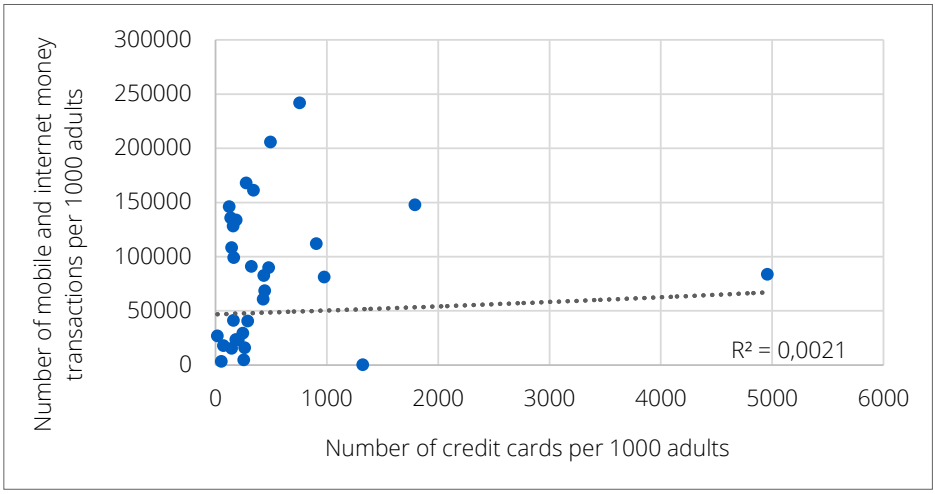

Source: the author's own calculations based on the FAS data.

*Chart 2.* Correlation between iv) nDC and the nCC; v) nMI and the nCC; vi) nMI and nDC

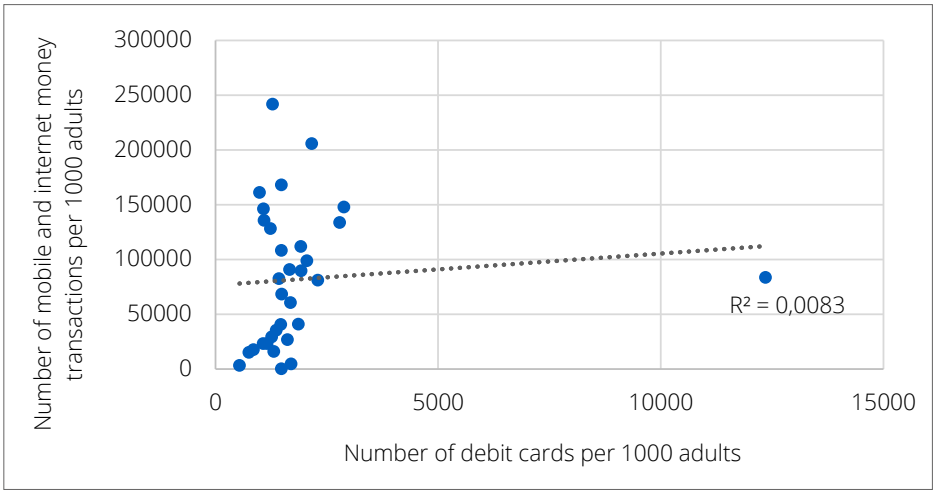
iv)




v)




vi)




Source: the author's own calculations based on the FAS data.

For the use of financial services' indicator, the strong positive correlation appears for relation between nCC and nDC (iv) where r = 0.978. On the contrary, one can notice almost no correlation between nCC and nMI (v), same as nDC and the nMI (vi). These two last indicators are very suitable for further analysis; thus the number of debit cards per 1 000 adults and the nMI were finally chosen to research.

To sum up: the analysis of the correlation coefficient allowed for the selection of the following three indicators: nAT, nDC, and nMI. On the basis of chosen approximants, comparative analysis of the level of financial exclusion in the EU states and candidate countries allowed to investigate whether the financial exclusion differs when it comes to EU membership.

The map number 1 illustrates the number of ATMs in 2023[5] in the analysed countries with the average number of 11 102 ATMs for EU states and 10 370 for candidate countries which is very similar. The largest number of ATMs is in Turkey (52 934), Germany (52 652), France (47 600) and Italy (45 822). The countries with less than 1000 ATMs are Malta (199), Cyprus (335), Montenegro (422), Luxembourg (428), Estonia (668), Latvia (894), and Albania (925).

*Map 1.* The number of ATMs (nAT) in 2023


Source: the author's own visualisation based on the FAS data.

[5] In case of Belgium, France, Germany, and Sweden – data for 2022.

We can notice here that there is no relation between the status of a country and nAT. Among the leaders in terms of ATM accessibility, we can find both candidate and member states and vice versa – among the countries where financial exclusion reflected in the lack of access to ATMs is stronger, we can find small countries (which is somewhat obvious) – but among them there are both small member states and candidate states.

The map number 2 presents nDC in 2023[6]. It is observed that the largest nDC is in Lithuania (around 13 450) and Luxemburg (12 350) which is much higher than the EU's average of 2 386 per 1000 adults. nDC in Turkey (2883) and Georgia (2791) ) is much lower but still above the EU's average.

The average number of debit cards per 1000 adults in the candidate countries is about 1500 cards per 1000 adults which is slightly lower than EU's average. There is no significant difference between the EU states and candidate countries, only in case of the number of debit cards below 1000 per 1000 adults the candidate countries are majority: Lativa (990), Montenegro (852), Bosnia and Herzegovina (753) and Albania (538).

*Map 2.* The number of debit cards per 1000 adults (nDC) in 2023


Source: the author's own visualisation based on the FAS data.

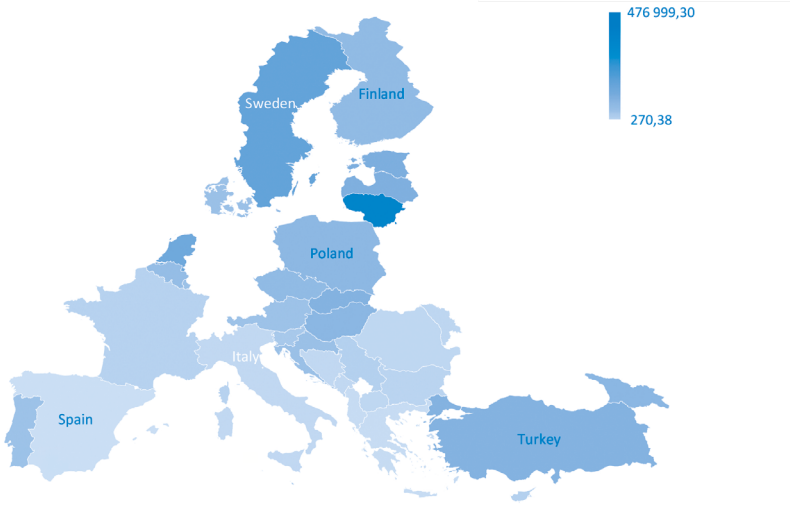
[6] In case of: Belgium, Germany, Greece, Slovenia, and Sweden – data for 2022.

Taking into account the number of debit cards, it can be concluded that the highest level of financial exclusion appears in: Albania, Bosnia and Herzegovina, Montenegro and Lativa where nDC is lower than 1000.

The map number 3 shows the nMI in 2023[7]. The EU's average is 107 585 transactions per 1000 adults, while the average for candidate countries is more than a half lower and equals to 51 117. Among the countries with the highest number of transactions there are: Lithuania (476 999), Sweden (241 786) and Netherlands (205 740).

Similarly to the nDC, Turkey and Georgia occur above both averages with the number of 147 842 and 133 825 transactions. The lowest nMI one can be observed in case of Spain (270), Albania (3324), Greece (4749), Bosnia and Herzegovina (15 204), Italy (16 003) and Montenegro (17 719). There is no data available for Germany, Ireland and Ukraine.

*Map 3.* The number of mobile and Internet transactions per 1000 adults (nMI) in 2023[8]




Source: the author's own visualisation based on the FAS data.

In consideration of nMI as the indicator of use of finances, the highest level of financial exclusion is in Spain, Albania, Greece, Bosnia and Herzegovina, Italy

[7] In case of Belgium, Greece, Slovenia, Spain, and Sweden – data for 2022.
[8] Germany, Ukraine – no data.

and Montenegro. On the other hand, the lowest level of this aspect of financial exclusion is in Lithuania, Sweden and Netherlands.

## 5. Conclusions

The level of financial exclusion might be measured in various ways depending on how this phenomenon is defined and what aspect of it is concerned. In this paper the analysis focuses on two aspects of financial exclusion: geographical outreach (measured by the nAT) and the use of financial services (measured by nCC, nMI). The data come from the IMF FAS and concern 2023.

The selected indicators reflect the differences in the level of financial exclusion in analysed countries. Candidate countries appeared both among the countries with the lowest and the highest level of financial exclusion, thus – in relation to the research hypothesis – it can be stated that there is no noticeable relation between the membership in the EU and the level of financial exclusion. It follows that EU membership is not an automatic guarantee for financial inclusion. To some extent the results may be explained due to the continuing need for financial market integration in the EU. Alternatively, or additionally, candidate countries may already have made significant efforts in the area of financial inclusion.

What is interesting, the analysis revealed a differentiation within the group of candidate countries (where Turkey and Georgia stand out with a low level of financial exclusion), but also among EU member states (we can mention here for instance: Lithuania, Luxembourg, and Germany). These countries are characterised by good geographical outreach and very high use of financial services. On the other hand, Albania, Bosnia and Herzegovina and Montenegro are the countries with a high level of financial exclusion, which is caused not only by the poor access but also by the use of financial services. The remaining candidate countries are at a comparable level of financial exclusion to other European states and do not stand out.

It should be also noted that poor geographical outreach (which may be caused by the low number of ATMs in total and by the low number of ATMS per 1000 $km^2$) does not always have a negative impact on the use of financial services, and what follows the level of financial exclusion, as in the case of Lithuania or Finland.

To sum up, countries should continue their efforts in the framework of financial inclusion. In early 1911, Joseph Schumpeter stated that services offered by

financial brokers are of a key importance for technological innovation and economic development [Saab, 2017: 435]. Financial inclusion enhances the economy – it is not just a socio-political imperative but also an economic one [Damodaran, 2013: 54]. But most importantly financial inclusion may rise wealth [Von Fintel, Orthofer, 2020], thus all efforts and studies highlighting impediments and differences are of a crucial importance.

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