

# Measuring Financial Inclusion in Western Balkan Countries – A Comparative Survey

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**Abstract:** *According to the World Bank, more than one quarter of worlds' population is without a bank account and is excluded from financial system. Improving financial inclusion and building inclusive financial systems is in agenda of all policy makers in both developed and developing countries aiming to include the poorest part of the population in to the financial system. Financial inclusion is becoming more important topic in academic world, but also among regulators and policy makers. In order to emphasize the importance of financial inclusion, this paper investigates the extent of financial inclusion among Western Balkan countries and in comparison to other developing regions around the world. Using data from the World Banks' Global Findex data base, this paper provides comparison of the level of financial inclusion in Western Balkans counties, focusing on the importance of government role in increasing financial inclusion. Research shows similar level of financial inclusion within Western Balkan countries measured by the following indicators of financial inclusion: percentage of population having formal account at a financial institution, percentage of population saving at financial institution and percentage of population borrowing at financial institution. Furthermore, the research shows that the level of financial inclusion in Western Balkan countries is slightly above the levels in other developing regions around the world, but still Western Balkan countries lack national financial inclusion strategies which will help increase their levels of financial inclusion to the level of more developed countries.*

**Keywords:** *financial inclusion, Western Balkan countries, developing regions, national financial inclusion strategies, policy makers*

## **Introductory Considerations**

The Center for Financial Inclusion (CFI) defines full financial inclusion as a state in which everyone who can use financial services/products has access to a wide range of quality financial services at affordable prices, with convenience, dignity, and consumer protections, delivered by a range of providers in a stable, competitive market to financially capable clients.

Furthermore, according to the World Bank, financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.<sup>3</sup>

The term financial inclusion needs to be interpreted in a relative dimension. Depending on the stage of development, the degree of financial inclusion differs among countries. For example, in a developed country non-payment of utility bills through banks may be considered as a case of financial exclusion. However, the same may not (and need not) be considered as financial exclusion in an underdeveloped nation as the financial system is not yet developed to provide sophisticated services. Hence, while making any cross country comparisons due care needs to be taken (Mehrotra et. al., 2009:14).

Improving access and building inclusive financial systems is a goal that is relevant to economies at all levels of development (World Bank, 2008:21) aiming to include the poorest part of the population in the financial streams. It is empirically proven that financial inclusion correlates with high levels of economic development in that country and vice-versa (Swamy, 2014).

Furthermore, financial inclusion is becoming the main priority in developing countries since the research shows that increase in financial inclusion of individuals plays an important role in reduction of poverty and achieving inclusive economic growth. Greater access to financial services for both individuals and firms may help reduce income inequality and accelerate economic growth.

Contrary to inclusion there is financial exclusion, which is often defined in the context of a larger issue – social exclusion. Financial exclusion is indeed a reflection of social exclusion, as countries having low GDP per capita, relatively higher levels of income inequality, low rates of literacy, low urbanisation and poor connectivity seem to be less financially inclusive (Sarma, Pais, 2008:23). This relationship can also be viewed from the other side: The reduction of financial exclusion is a priority for the government because it can lead to social exclusion (Mitton, 2008).

As Western Balkan countries are developing part of the world, financial inclusion can be perceived as on the important aspects and contributors to economic development. Therefore, this

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<sup>3</sup><http://www.worldbank.org/en/topic/financialinclusion/overview>

paper complements to existing literature on financial inclusion measurement, by providing a comparative analysis of financial inclusion in the countries of this region, focusing on the level of financial inclusion and on the government role in increasing financial inclusion.

The second part of the paper summarizes previous researches on financial inclusion globally. In the third part of the paper the methodology of the research was introduced, while in the fourth part of the paper the comparative analysis of financial inclusion in Western Balkan countries is presented.

## **Previous Research**

Financial literacy is a rather new topic among academics. Its' importance increased in the last decade as a result of the global financial crisis. Academic research is mainly focused on measurements of financial inclusion, in other words, on creating integrative measures of financial literacy that can be both internationally comparable and that can capture the specifics of particular national economy that is the subject of the research.

There are two approaches to investigate financial inclusion based on the data collection method. Different databases offer either supply side or demand side data. Supply-side studies and databases (such as CGAP Financial Access, IMF Financial Access Survey or Microfinance Information eXchange) compile data from various types of (formal and non-formal) financial institutions aiming to calculate and understand their overall outreach and performance in providing financial services to individuals in one country, region and globally.

Until recently, the measurement of financial inclusion around the world has focused on usage and access to the formal financial services by using supply-side aggregate data, meaning that data were collected directly from financial institutions. These are the so-called density indicators, such as the number of bank branches or automatic teller machines (ATMs) per capita. Data of this type have been compiled by surveying financial service providers (e.g. Beck, Demirgüç-Kunt, and Martínez Pería 2007; Honohan 2008; Kendall, Mylenko, and Ponce 2010; Chakravarty and Pal 2010; Sarma and Mandira (2012); Amidžić et. al. 2014, etc.). Demand-side (provider side) information on financial inclusion is now collected as part of the IMF's Financial Access Survey, which has annual data for 187 jurisdictions from 2001 up to date.<sup>4</sup>

While these indicators have made it possible to obtain basic provider-side information on the use of financial services, relatively little has been known until recently about the global reach of the financial sector, that is, the extent of financial inclusion and the degree to which the poor, women, and other population segments are excluded from formal financial systems (World Bank 2014:39).

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<sup>4</sup> More on IMF's Financial Access Survey data can be obtained from the following website: <http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C>

World Banks' Global Findex database, released in 2011, helps to overcome the problem of better understanding the underlying reasons of financial exclusion among different population groups. According to Demircuc-Kunt and Klapper (2012), "The Global Findex fills a major gap in the financial inclusion data landscape and is the first public database on demand-side indicators that consistently measures individuals' usage of financial products across countries and over time. Covering a range of topics, the Global Findex can be used to track global financial inclusion policies and facilitate a deeper and more nuanced understanding of how adults around the world save, borrow, and make payments."

Most of recent research on financial inclusion levels around the world relies on the data from Global Findex database. Most of the research provides analysis of several usage and barriers related indicators on countries and regional levels (Demircuc-Kunt and Klapper, 2013, Demircuc-Kunt et al., 2015). Some of the research addresses gender, age, and income inequalities in financial inclusion (e.g. Aterido, Beck, and Iacovone 2011; Demircuc-Kunt, Klapper and Singer 2013), but on the regional level. Still there is no more detailed research on individual level.

## **Research Methodology**

In this research, the status of financial inclusion among Western Balkan countries was assessed using secondary data from World Bank Global Findex Database (2014) through descriptive statistics.

The Global Findex indicators measure two dimension of financial inclusion: access to financial services and the use of financial services.

As the Global Findex indicators cover very broad area of topics of individuals' financial behaviour, we focus on the following indicators that we believe are particularly important to provide better insight into overall financial inclusion of individuals among Western Balkan countries:

- formal account – holding an account (savings or checking) at a financial institution
- formal savings – savings at financial institution
- formal borrowing – loan at financial institution
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Additionally, a chi-square test of independence was performed to examine whether there are statistically significant differences in financial inclusion levels among individuals in respect to gender, education level and income level.

Furthermore, we examine barriers to financial inclusion through understanding the reasons why individuals do not have an account at financial institutions.

The indicators in the Global Financial Inclusion (Global Findex) database are drawn from survey data covering almost 150,000 people in more than 140 economies—representing more

than 97% of the world's population. The survey was carried out over the 2014 calendar year by Gallup, Inc. as part of its Gallup World Poll, which since 2005 has continually conducted surveys of approximately 1,000 people in each of more than 160 economies and in over 140 languages, using randomly selected, nationally representative samples. The target population is the entire civilian, non-institutionalized population aged 15 and above.<sup>5</sup>

## Empirical Evidences on Financial Inclusion in Western Balkans

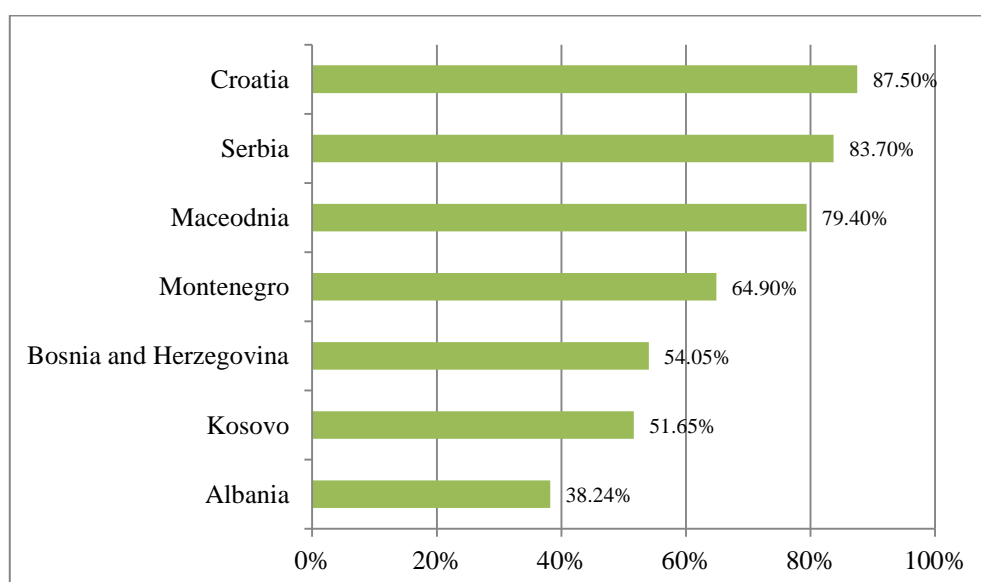
### *Formal account penetration*

The most common indicator of financial inclusion is formal account penetration which measures the percentage of population having (owning) a formal account at financial institution.<sup>6</sup>

Having an account at formal financial sector serves as an entry point into the formal financial sector and opening/having a bank account is considered as the starting point to have relationship with a bank (Bapat, 2010; Demirguc-Kunt and Klapper, 2013).

According to the Global Findex database 2014, it can be clearly observed that there is a wide difference in account penetration among Western Balkan countries (see Figure 1). The highest levels of formal account penetration can be observed in Croatia (87,50%) and Serbia (83,70%), while the lowest level of account penetration is in Albania (38,24%).

**Figure 1 Formal Account Penetration across Western Balkan countries**



<sup>5</sup> More on Global Findex methodology and questionnaire can be obtained from the following web-site: <http://www.worldbank.org/en/programs/globalindex/methodology>

<sup>6</sup> Global Findex data set captures formal account penetration through a mobile money providers as well, but as such service is not provided in Western Balkan countries, this data were omitted from analysis.

Additionally, a chi-square test of independence shows that there are significant differences in formal account penetration in respect to gender, education and household income. Results of a chi-square test are reported in the following table.

**Table 1: Results of chi-square test of independence for formal account penetration**

Country	Gender	Education level	Income level
Albania	$\chi^2(1, N=999) = 10,829$ p=0,001	$\chi^2(2, N=999) = 144,040$ p=0,001	$\chi^2(4, N=999) = 82,533$ p=0,001
Bosnia and Herzegovina	$\chi^2(1, N=1001) = 16,055$ p=0,000	$\chi^2(3, N=1001) = 71,618$ p=0,000 (*)	$\chi^2(4, N=1001) = 36,098$ p=0,000
Croatia	$\chi^2(1, N=1000) = 1,317$ p=0,251	$\chi^2(4, N=1000) = 107,295$ p=0,001 (*)	$\chi^2(4, N=1000) = 23,549$ p=0,000
Kosovo	$\chi^2(1, N=1001) = 46,718$ p=0,000	$\chi^2(4, N=1001) = 89,823$ p=0,000 (*)	$\chi^2(4, N=1001) = 34,801$ p=0,000
Montenegro	$\chi^2(1, N=1000) = 1,735$ p=0,188	$\chi^2(3, N=1000) = 90,466$ p=0,000 (*)	$\chi^2(4, N=1000) = 31,629$ p=0,000
Macedonia	$\chi^2(1, N=1000) = 19,803$ p=0,000	$\chi^2(4, N=1000) = 62,186$ p=0,000 (*)	$\chi^2(4, N=1000) = 43,030$ p=0,000
Serbia	$\chi^2(1, N=1000) = 0,134$ p=0,714	$\chi^2(3, N=1000) = 18,385$ p=0,000 (*)	$\chi^2(4, N=1000) = 11,239$ p=0,024

At significance level 0,05

\*at least 2 cells have expected count less than 5

Based on chi-square test of independence, it can be concluded that there is a significant association between having account at formal institution and gender in Albania, Bosnia and Herzegovina, Kosovo and Macedonia, where it is more likely that males will have an account than females (see table 1).

Also, a significant association exists between having a bank account and income level (except in Serbia).

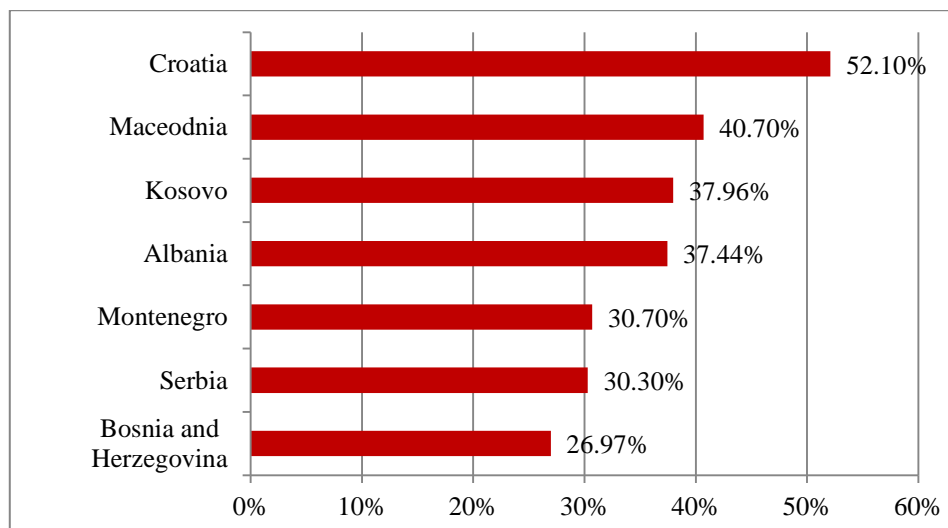
### **Savings**

The second indicator of financial inclusion we focus on is saving. Savings are an essential ingredient for the financial inclusion of low-income populations, allowing households to manage short-term liquidity safely and conveniently, as well as to accumulate assets for future needs.<sup>7</sup> Savings help in consumption smoothening during the economic shocks, especially for individuals with low-level income.

<sup>7</sup> [https://www.fomin.org/Portals/0/remesas/BROCHURE\\_Remesas\\_y\\_Ahorros\\_ingl%20C3%A9s.pdf](https://www.fomin.org/Portals/0/remesas/BROCHURE_Remesas_y_Ahorros_ingl%20C3%A9s.pdf)

Survey data shows variation in savings among Western Balkan countries. The highest level of savings can be observed in Croatia where more than 50% of population have savings, while the lowest level of savings is observed in Bosnia and Herzegovina (26,97%).

**Figure 2: Participation in Formal Saving across Western Balkan countries**



A chi-square test of independence shows that there are significant differences in savings in respect to household income (see Table 2).

**Table 2: Results of chi-square test of independence for savings**

Country	Gender	Education level	Income level
Albania	$\chi^2(1, N=999) = 3,910$ p=0,048	$\chi^2(2, N=999) = 50,801$ p=0,000	$\chi^2(4, N=999) = 56,285$ p=0,000
Bosnia and Herzegovina	$\chi^2(1, N=1001) = 1,096$ p=0,295	$\chi^2(3, N=1001) = 9,073$ p=0,028 (*)	$\chi^2(4, N=1001) = 25,925$ p=0,000
Croatia	$\chi^2(1, N=1000) = 6,043$ p=0,014	$\chi^2(4, N=1000) = 44,852$ p=0,000 (*)	$\chi^2(4, N=1000) = 6,577$ p=0,0160
Kosovo	$\chi^2(1, N=1001) = 16,845$ p=0,000	$\chi^2(4, N=1001) = 67,588$ p=0,000 (*)	$\chi^2(4, N=1001) = 17,095$ p=0,002
Montenegro	$\chi^2(1, N=1000) = 0,193$ p=0,660	$\chi^2(3, N=1000) = 17,525$ p=0,001 (*)	$\chi^2(4, N=1000) = 63,245$ p=0,000
Macedonia	$\chi^2(1, N=1000) = 5,740$ p=0,170	$\chi^2(4, N=1000) = 39,385$ p=0,000 (*)	$\chi^2(4, N=1000) = 18,650$ p=0,001
Serbia	$\chi^2(1, N=1000) = 1,099$ p=0,295	$\chi^2(3, N=1000) = 18,385$ p=0,000 (*)	$\chi^2(4, N=1000) = 44,791$ p=0,000

At significance level 0,05

\*at least 2 cells have expected count less than 5

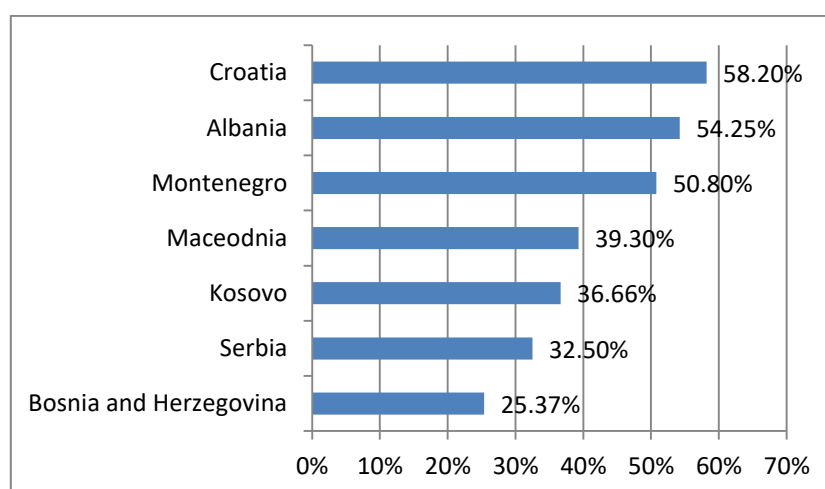
Based on chi-square test of independence, it can be concluded that there is a significant association between participation in formal savings and income level (except in Croatia), where

individuals with higher income level participate in formal savings more than individuals with lower income level. Also, there is no significant association between participation in formal savings and gender (except in Kosovo) and education level.

### **Borrowing**

Analysis of participation in borrowing in Western Balkan countries showed that the highest level of borrowings is in Croatia, where more than 58% of population have loan at financial institution, while the lowest level of borrowing (25,37%) is observed in Bosnia and Herzegovina (see Figure 3).

**Figure3: Participation in Borrowing across Western Balkan countries**



A chi-square test of independence shows that there are no significant differences in borrowings in respect to gender, education level and household income (see Table 3). The only exception is Albania, where there is a significant association between participation in borrowing and income level.

**Table 3: Results of chi-square test of independence for borrowing**

Country	Gender	Education level	Income level
Albania	$\chi^2(1, N=999)=1,874$ p=0,171	$\chi^2(2, N=999)=4,433$ p=0,106	$\chi^2(4, N=999)=57,535$ p=0,000
Bosnia and Herzegovina	$\chi^2(1, N=1001)=1,157$ p=0,282	$\chi^2(3, N=1001)=25,428$ p=0,000 (*)	$\chi^2(4, N=1001)=0,413$ p=0,981
Croatia	$\chi^2(1, N=1000)=1,538$ p=0,215	$\chi^2(4, N=1000)=53,966$ p=0,001 (*)	$\chi^2(4, N=1000)=0,593$ p=0,964
Kosovo	$\chi^2(1, N=1001)=5,695$ p=0,017	$\chi^2(4, N=1001)=15,786$ p=0,003 (*)	$\chi^2(4, N=1001)=12,651$ p=0,013
Montenegro	$\chi^2(1, N=1000)=1,512$ p=0,219	$\chi^2(3, N=1000)=13,610$ p=0,000 (*)	$\chi^2(4, N=1000)=31,629$ p=0,000
Macedonia	$\chi^2(1, N=1000)=19,803$ p=0,192	$\chi^2(4, N=1000)=62,186$ p=0,003 (*)	$\chi^2(4, N=1000)=4,891$ p=0,299
Serbia	$\chi^2(1, N=1000)=0,270$ p=0,604	$\chi^2(3, N=1000)=3,735$ p=0,292 (*)	$\chi^2(4, N=1000)=1,942$ p=0,746

At significance level 0,05

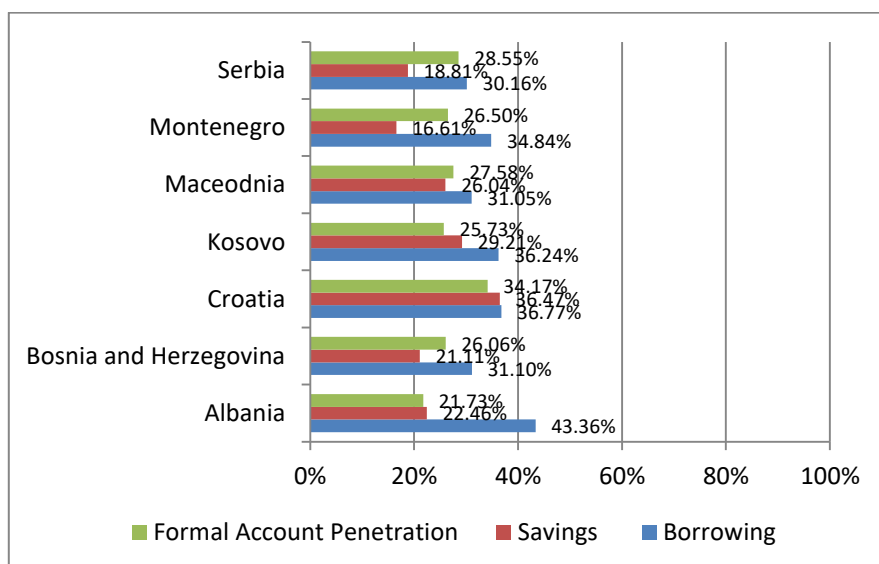
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### Differences in financial inclusion levels among income quintiles

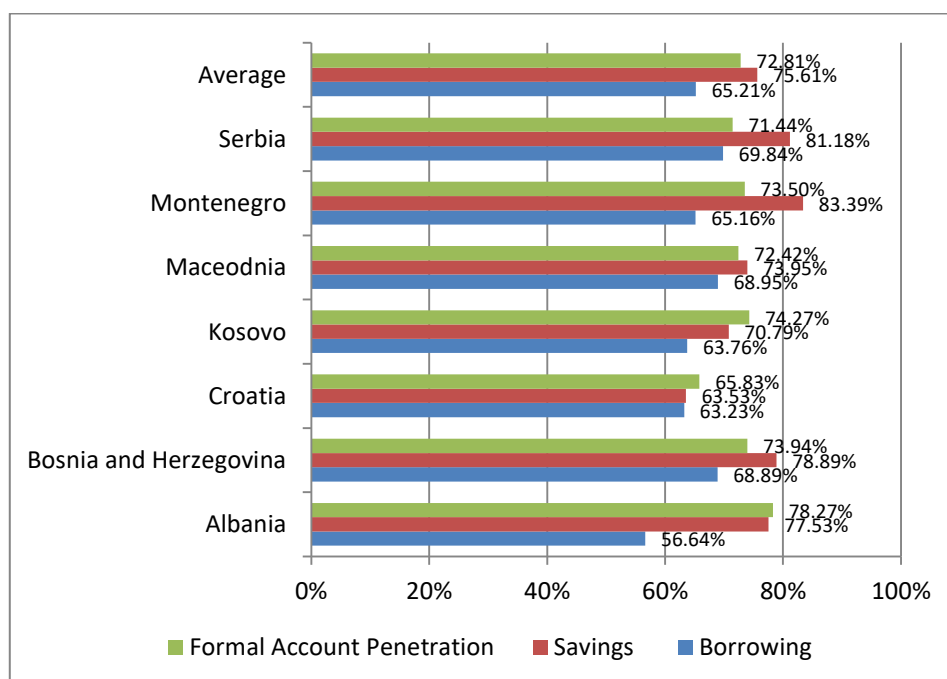
We also analysed basic indicators of financial inclusion among poorest 40 percent and richest 60 percent within WB economies (see Figures 4 and 5).

**Figure 4 Basic indicators on financial inclusion among poorest 40 percent within economies**



The poorest 40 percent have overall lower levels of financial inclusion in comparison to 60 richest. Among three indicators we analysed, the poorest mainly use borrowing, while savings is the less used indicator (except in Kosovo, Croatia and Albania).

**Figure 5 Basic indicators on financial inclusion among richest 60 percent within economies**



The richest 60 percent mostly use savings and current account and they are less oriented to lending at financial institution.

Overview of financial inclusion indicators in WB region in comparison to other developing regions and developed countries is given in Table 4.

**Table 4 Financial inclusion indicators by region**

Region	Eastern Asia	South Asia	Central Asia	Latin America	Sub-Saharan Africa	The Western Balkans*	High income countries
Formal account	69.00%	46.40%	51.40%	51.40%	34.20%	65.80%	94.00%
Formal savings	36.50%	12.80%	8.40%	13.50%	15.90%	11.31%	51.60%
Formal borrowing	11.00%	6.40%	12.40%	11.30%	6.30%	14.04%	18.40%
Debit cards	42.90%	18.00%	36.90%	40.40%	17.90%	45.06%	79.70%
Mobile account usage	0.40%	2.60%	0.30%	1.70%	11.50%	N/A	N/A
* Data for the Western Balkans calculated as an average of particular indicator for the Western Balkan countries (Bosnia and Herzegovina, Serbia, Croatia, Montenegro, FYR Macedonia, Albania, Kosovo, and Greece)							

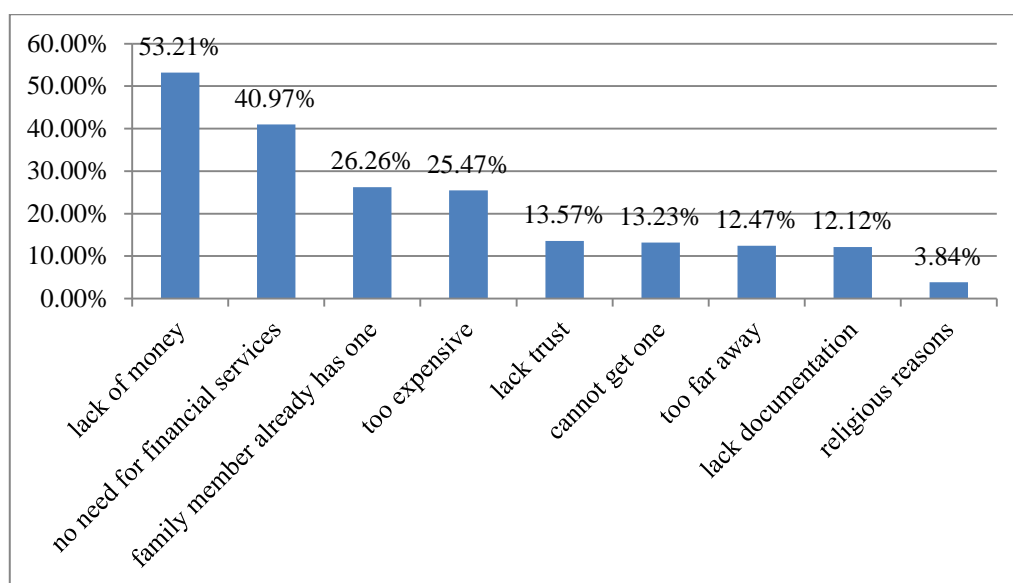
*Source: Global Findex database and authors' calculations*

We can see that the Western Balkans, in average, are far behind developed countries when it comes to financial inclusion measured by the possession of formal account, formal savings, formal borrowing and holding a debit card. On the other side, the level of financial inclusion in Western Balkan countries is mainly slightly above the levels in other developing regions around the world.

### ***Barriers to financial inclusion***

We also conducted analysis of barriers to financial inclusion in Western Balkan countries (see Figure 6).

**Figure 6 Reasons of poor financial inclusion in WB countries**



Among the reasons why individuals do not have an account at financial institutions the most important are the lack of money and no need for financial services.

### **Conclusions and Recommendations**

For many governments the importance of financial inclusion is well known. Financial inclusion is on the agenda of both developed and developing countries. Around 60 countries in the world own and implement financial inclusion strategies. Great Britain is among the first countries to make progress in this field by publishing a financial inclusion strategy, within the Report for the Promotion of Financial Inclusion in 2004. When it comes to Western Balkan countries, none of them has strategy for financial inclusion, nor is financial inclusion included as goal in any other strategy. Bosnia and Herzegovina, for example, partly addresses this topic in the framework of the 2010 social inclusion strategy proposal. Montenegro has strategies to improve the situation of Roma and Egyptians in Montenegro 2012-2016, inclusive education strategy and national employment strategy; Croatia has a strategy to combat poverty and social exclusion, education strategy, employment strategy, etc. In Serbia a lot of research and studies on financial inclusion is being conducted. However, no country has a national strategy for financial inclusion.

Improvement of financial inclusion requires national and regional strategies, whose success requires government support as well as involvement of the private and financial sector that will be interested only if the strategy corresponds to the market.

Government should create and put into effect active measures in the context of the development of electronic and mobile banking. With that aim, close cooperation between the government and commercial banks must exist, in terms of limiting overpricing of banking products and services.

That way the number of ATMs and applicants for mobile and electronic banking could be increased.

Beside with commercial banks, government must collaborate with private associations to exchange expertise, knowledge and information. Also, there are a lot of possibilities for creating new and improvement of the existing regulation which treat this issue. Financial literacy and financial information must be actively promoted among individuals through formal and informal financial education programs.

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  - <http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C>