

NEW TRENDS IN FINANCIAL INCLUSION POLICIES: ROLE OF DIGITAL TECHNOLOGIES AND DIGITAL INCLUSION

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Abstract

By comparing the situation with financial inclusion in developing and developed countries we look at the notion of ‘new financially excluded’. There seems to be a growing evidence that the implementation of new technologies that was seen as a universal cure for financial exclusion backfires for some social groups who cannot keep up with the pace of fintech. This means that traditional ‘more technology-more inclusion’ approach does not always work, and financial inclusion policies shall be amended to include the propositions on digital literacy and access to cash as well.

Keywords: financial inclusion, digital literacy, financial literacy, fintech.

JEL code: O16, O33

Introduction

With the growing penetration of digital financial services, the attention of scholars and regulators is now drawn to the concept of ‘cashless society’, where cashless payment instruments dominate in the economy, while cash, although not completely obsolete, is used only in limited circumstances (Garcia-Swartz et al., 2006).

But emergence of cashless society is not as smooth as expected, as most countries still experience certain barriers – such as lack of infrastructure, sub-optimal regulation or extreme poverty. There is also another side to this story: developing economies seem to drift to the cashless economy too fast (Skingsley, 2017). Customers are affected by the closure of bank branches and more reliance on electronic means of payment.

The road to the cashless society is also complemented by the financial inclusion policies. The financial inclusion is now on the top of international development agenda: e.g. it is a contributor to the fight with poverty and mentioned in Sustainable Development Goals (SDG). The SDG require to end poverty in all its forms, including by ensuring financial access to all men and women by 2030. Financial inclusion is also an important part of the gender equality (SDG 5), as reforms should ensure that women have access to financial services. In more general economic terms, financial inclusion should contribute to development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises (SDG 8) (Transforming our world).

Although financial exclusion is widely discussed in academic literature, the research so far is mostly focused on the developing countries. The authors discuss the role of mobile payment

systems, social impact of financial services on the livelihoods of the poor. Thanks to the work of international organizations, such as the World Bank, we have extensive data on the usage of financial services (Demirguc-Kunt et al., 2018). However, there seems to be assumption that financial exclusion is the problem only for the developing countries which is not exactly true. Residents of the developed countries may face financial exclusion issues as well (Kempson et al., 2004), although this issue is not sufficiently explored in academic literature. This paper is one of the first attempts to fill this gap.

There is body of academic literature that explores the financial inclusion as a development issue. For example, Sarma and Pais research the potential connection between the financial inclusion and Human Development Index, confirming the assumption that low GDP per capita, income inequality, literacy and urbanization correlate with the financial exclusion levels (Sarma & Pais, 2011, p. 626). Chibba also shows that financial inclusion is an important part of the UN millennium development goals, as a part of a poverty reduction strategy (Chibba, 2009). Toxopeus and Lensnik confirmed the hypothesis that remittances support the financial inclusion goals and, therefore, financial inclusion have a development impact (Toxopeus & Lensnik, 2007). Achieving financial inclusion to contribute to achieving the development goals via microfinance (Barman et al., 2009), credit unions (Fuller, 1998), financial technologies (Gabor&Brooks, 2017). This line of research comes from identifying financial exclusion as a form of social exclusion. Mohan claims that financial exclusion may pave a way to social exclusion by taking people out of the normal economic activity (Mohan, 2006). Affleck and Mellor look at one of the instruments to support financial inclusion – community development finance (where funding is provided to the socially oriented enterprises) – to assess if it really can ‘bridge a perceived gap in enterprise finance for poorer communities (Mellor&Affleck, 2006).

There is also academic research on the financial exclusion issues in the developed and developing countries. Presumably, the problem is more researched for the developing jurisdictions, again, within the development narrative: by Sharma and Kukreja (2013) (for India), Park and Mercado (2015) (for Asia and Pacific region), Fungacova and Weill (2014) (for China). The literature for developed economies is less plentiful: for example, Corrado and Corrado (2015) explore the quantitative determinants of financial exclusion in Europe (again, focusing on poorer countries in this region). Probably, the most comprehensive view of financial exclusion in one of the European countries is the report prepared by the British Parliament (Tackling financial exclusion) and the work by Delvin (2005). Therefore, the issue of financial exclusion in the developed countries is based on the methodology used for the developing economies, and leaves some gaps in assessing the situation in general.

Our hypothesis is that financial exclusion, especially in developed countries, is evolving, and the digital financial services are not the solution but sometimes even the reason for exclusion. This major difference shall be taken into account when devising regulatory responses to financial exclusion issues. If the hypothesis is right, then we might be talking about gradual transformation of financial exclusion issues into the subset of digital exclusion problems.

We do not analyze the phenomenon of ‘fintech’, i.e. financial technologies, as they may encompass and mean very different things (Schueffel, 2016). However, we use the term ‘new delivery channels’ to designate new ways to provide the financial services, apart from the traditional face-to-face interaction with the client.

In order to test the hypothesis, we conduct the following analysis. In the first section we look at the state of financial exclusion in the developing countries, highlighting the main reasons for financial exclusion and its dynamics. We also look at the role that digital financial products play in the developing countries.

In the second section we analyze the financial exclusion issues in the developed countries. We are especially interested in who are the victims of financial exclusion and why. Finally, we make some comparative observations and draw some policy-relevant conclusions.

Financial Inclusion in the developing countries

Although neglected a couple of decades ago, the financial inclusion is currently viewed as an important aspect of economic and social development. The financial inclusion is usually defined as a situation where 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 (Financial Inclusion). It also enables seven out of seventeen Sustainable Development Goals. Lack of financial inclusion means high reliance on cash, additional costs to the economy and the growth of the ‘grey’ economy (Claessens, 2006).

According to the World Bank data (MEDICI Team, 2016), around 38% of all economically active people on the planet do not use official financial services at all, most of them live in the developing countries. This includes not only transactional services (i.e. payments or remittances) but also savings, insurance and other ancillary services. It should be noted that in some regions people still use such services as hawala (The Role of Hawala, 2013) – informal remittance mechanism that is not usually regulated or supervised.

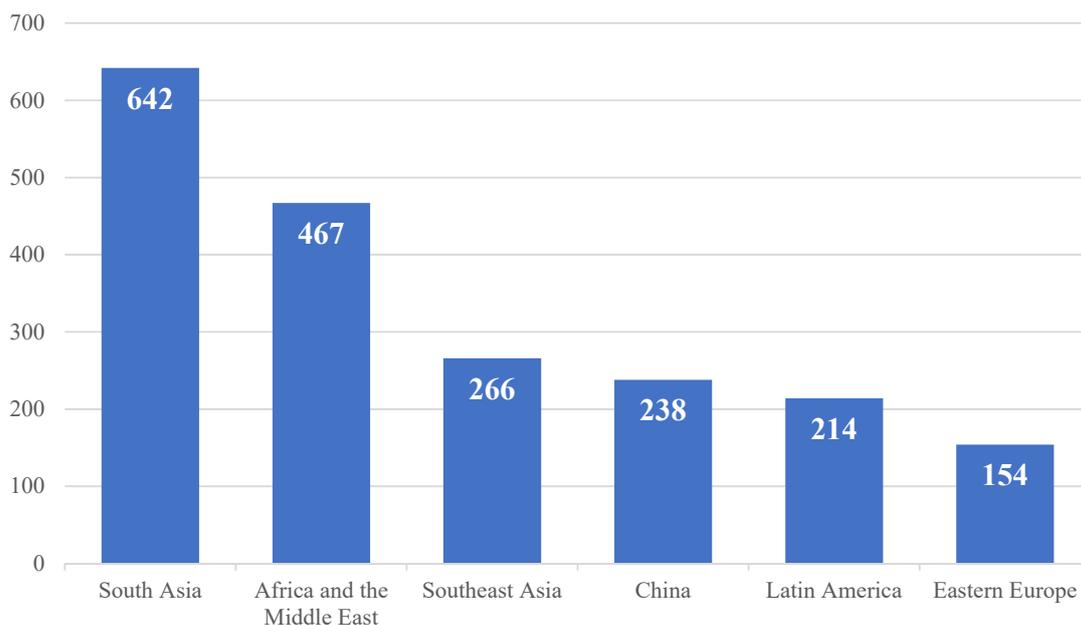


Figure 1 The number of citizens who do not have access to financial services (McKinsey Global Institute, 2016)

There are different reasons for financial exclusion, and they seem to differ a bit from country to country, depending on the social and economic circumstances (Demirguc-Kunt et al., 2018, p. 40). The most obvious challenge for using ‘traditional delivery channels’ is the lack of infrastructure, on different levels:

- Lack of brick-and-mortar bank offices;
- Lack of communication infrastructure (both for banks and the consumers).

Economic reasons include:

- Low profitability of the financially excluded (for example, the financial institution may abstain from providing services to the excluded, as they will not cover their operational costs and such services will be unprofitable to them);
- Potential customers may lack sufficient funds (or only think that, believing that financial services are too expensive for them) (Koku, 2015).

The problem of economic unprofitability of the financially excluded is twofold: it is logical that the profit may come only from the economy of scale – in other words, providing services to the large number of customers. But obtaining this large customer base requires investment and entails some risks. Some research confirm that the financial institutions already focus on the uppermost income segments (From Financial Exclusion, 2006, p. 2).

The lack of sufficient funds seems to be a major barrier. According to the World Bank data, almost 59% of respondents in the developing countries cite this as the reason why they do not use financial services. For 16% of respondents this is the only reason for financial exclusion (Demirguc-Kunt et al., 2018). The rationale behind these answers might be different. In some cases, this is actual price of financial services: for the socially and economically vulnerable even small fees and commissions may be sensitive and even choosing between the convenience and economy, they will choose economy. In other cases, this is only perception of high price: customers may believe that they are not good enough for the banks.

Another factor for financial inclusion is a level of financial literacy that can be defined as ‘knowledge and skills needed to make choices within a financial marketplace that all consumers face regardless of their particular characteristics (Huston, 2010). The financial literacy seems to be a challenge for both the developing and developed economies but the nature of the illiteracy differs: while consumers in the developing countries are struggling with basic literacy skills, in the developed states consumers may have difficulties with more complicated and forward-looking concepts such as pension planning and savings (Financial Literacy, 2015, p. 21).

Thereby the financial exclusion reasons can be very broadly summarized as follows:

- Lack of infrastructure;
- Economic profitability;
- Low income levels;
- Low financial literacy levels.

These factors affect both ‘demand’ and ‘supply’ factors that may affect the access to financial services. The new technologies provide opportunities to either eliminate these barriers or circumvent them (see Table 1):

Table 1 Using innovative products to mitigate the financial exclusion factors

Factor	Effects of innovative products
Lack of infrastructure	Innovative products can be delivered through alternative channels: e.g. via agents network or mobile phones, ATMs, etc.
Economic profitability	Provision of financial services via alternative channels allows to grow the customer base fast, thus leading to the economy of scale and allowing to charge less for the services that were previously provided in the bank office;
Low income levels	As the prices of services are lower, more customers can afford them; The relevance of ‘hidden costs’ is also getting lower, as formal pricing is more transparent and predictable. Customers do not need to spend time traveling to the bank offices, etc.
Low financial literacy levels	New delivery channels do not require special knowledge or skills in broad sense. The financial services might be provided via simple feature phones, etc.

Thus, most of the new financial services that are aimed at bringing the financially excluded into the realm of financial services aimed at fast growth of customer base by lowering the entry requirements for the new clients. Unlike in traditional processes, people are not required to fill out long questionnaires, wait in the queues, travel to the distant bank offices. This significantly increases the attractiveness of the financial services to the customers.

Kenya is an exemplary case for this. The country is well known for its M-PESA mobile payment system that was launched in 2007 by mobile network operator Safaricom (subsidiary of the UK Vodafone) (Jack&Suri, 2011). Safaricom subscribers (and since recently – subscribers of other MNOs as well (Sunday, 2018)) can sign up for e service at any of the 152 000 agents (Wainainah, 2018). The agent performs customer due diligence on behalf of the financial institution and mobile network operator, the customer is opened mobile wallet associated with the phone number that can be used for payments and sending/receiving remittances. The money can also be withdrawn and provided to replenish the m-wallet balance via the same agent network.

Statistics shows that the value of transactions in 2013-2017 grew sharply, indicating the growth and activity of the audience (see Table 2).

Table 2 Value of M-PESA transactions in Kenya, KES bln (Saruni Maina, 2017)

	2013	2014	2015	2016	2017
Deposits	0.845	1,077	1,1319	1,569	1,849
Person-to-person transfers	0.842	0.979	1,151	1,335	1,603
Money withdrawal	0.751	0.929	1,129	1,342	1,591
Other transactions (B2C, C2B, B2B, Lipa Na M-PESA, IMT, Gaming, M-Shwari, KCB M-PESA, Airtime)	0.198	0.336	0.580	1,048	1,826
Total	2,536	3,32	4,18	5,294	6,869

The idea that instruments that are aimed at increasing financial inclusion need to be focused on price, channel and trust are supported by the M-Pesa related research (Mas&Ng'weno, 2010).

M-Pesa is positioned as 'easy-to-use' financial service and was replicated primarily in the developing countries such as Afghanistan, Mozambique, South Africa, Tanzania and India. The research on mobile payment systems also indicates that models similar to M-Pesa are successful in poorer countries with vast agent network and GDP per capita at no more than 1 800USD (Evans&Pirchio, 2015).

It is also important to note that in the developing countries financially excluded population is the population that mostly has never used the financial services before and traditionally non-bank service providers are usually more effective than banks (although the reasons for this is beyond the scope of this paper).

Financial exclusion in the developed countries

The developed countries would naturally exhibit different characteristics. However, the financial inclusion is also relevant for these jurisdictions. Statistics usually differentiates between the 'unbanked' (those who do not use any financial services at all) an 'underbanked' (those who have limited access to financial services). For example, in the USA in 2015 7% of all households were unbanked, although the level of financial exclusion varies greatly across states and boroughs (Yun, 2017). In the United Kingdom 2.6% of overall population did not have the bank account in

2011-2012 – situation obviously less dramatic than in African states. The policy makers focus their attention on the usage of payday loans, low saving levels, high level of indebtedness, and low usage on new delivery channels among the elderly (Tackling financial exclusion).

Some of these problems are economy-related. For example, the research shows that poverty and insecure work, variable wages push people to use payday loans which can charge higher fees and interest than traditional financial institutions but have higher risk appetite and thus have higher loan approval rates (Rowlingson et al., 2016).

But the developed countries also face another emerging financial inclusion risk that is, ironically, relevant for those who were previously banked and enjoyed the whole array of the financial services.

Historically, the financial institutions in the developed economies were based on their brick-and-mortar offices. This face-to-face interactions were used to make banking relationships ‘personal’. In areas with low penetration of banking offices, the postal outlets provided basic financial services – this development is captured in financial history research on the ‘technological modernization’ of the British banking industry (Batiz-Lazo&Wardley, 2007). This reliance on office infrastructure created the sort of path dependence which was absent in developing jurisdictions, as historically they did not have large branch networks.

However, with the availability of new technologies and strive to reduce costs, the financial institutions started introducing new delivery channels that would eventually supersede branches, cashing of cheques, etc. (see Figure 2).

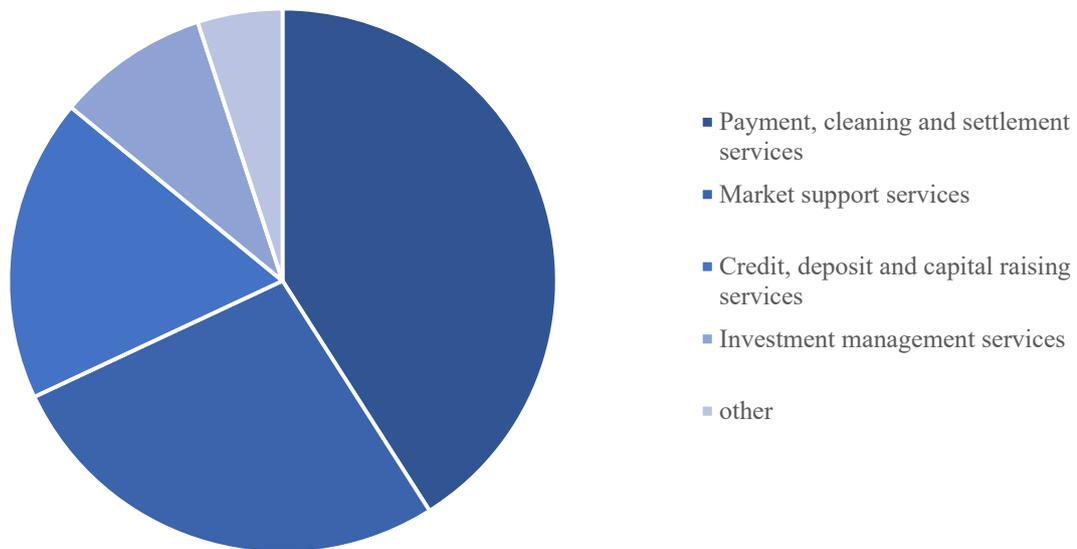


Figure 2. The main areas of implementation of financial technologies (Sound Practices, 2017)

Some banks ultimately decided to provide services exclusively online, not having physical branches at all. These business models continue to emerge throughout Europe and other regions, e.g. OCBC (Singapore), WEBank (China), Tinkoff (Russia), N26 (Germany), etc.

As now financial services are becoming more reliant on technology rather than personal communications, the IT-companies decided to explore this market as well. Leveraging their technological capabilities and experience in non-face-to-face provision of services, they try to

integrate into the existing supply chains as technological intermediaries. This includes Apple, Google, Amazon, Facebook (collectively known as GAFAs or ‘The Big Four’) that were also recently joined by Asian giants, such as Samsung, Alipay, WePay, etc., and Russian companies such as VK or Yandex. All this leads to the erosion of the financial services market, and indicates higher reliance on technology in financial services (Sound Practices, 2017) from both sides: the incumbents become more technologically flexible (the process of technological spillover called ‘Appleization’ (Hendrikse et al., 2018) – for example, 92% of the European banks are investing in Distributed Ledger Technologies, 62% - in Regtech, 39% - Data analytics, etc. (Banking in Europe, 2017)). The statistics also shows the steady decline of bank branches all over Europe for almost decade, coupled with the decline of number bank employees: in Cyprus number of branches per 1000 sq.km fell by 40% in 2011-2016, by 39% in Greece, by 15% in Germany, by 37% in Netherlands. 27% of bank employees in Greece were laid off, 20% - in Portugal, 23% in Spain, 18% in the UK, etc. (Wyman, 2017)

Drive towards more innovative financial services led to the uptake of Internet-based delivery channels among the customers in the developed economies (Reimagining the bank branch, 2017) (see Figure). But this also led to the emergence of ‘new unbanked’: people who previously used the traditional channels and were satisfied by them but for some reason have not switched to Internet banking or mobile applications. This brings up the question of access vs. usage (Financial Services Provision, 2008). Formally, new delivery channels increase the access, by riding on the back of new communication capabilities. But the demand side may lag behind, as people do not actually take advantage of these channels.

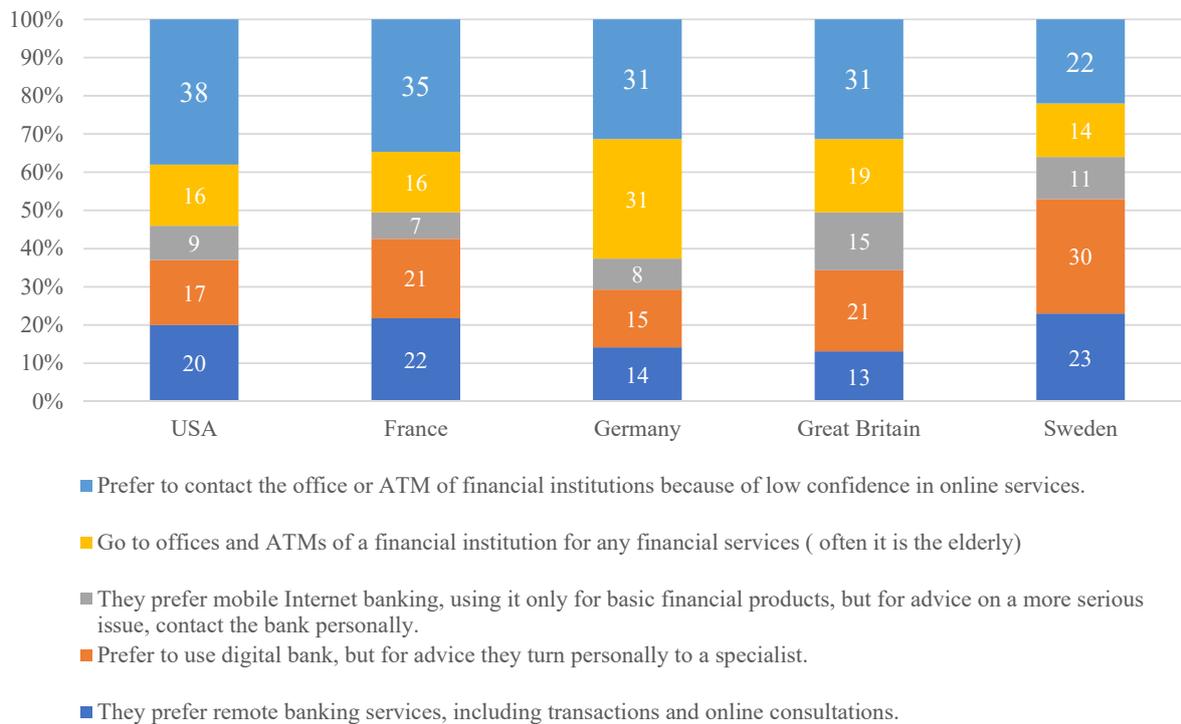


Figure 3. Customer attitudes towards innovative financial services, % (Reimagining the bank branch, 2017)

Such reason for financial exclusion is relatively new and cannot be addressed with solely economic measures. Such ‘financially excluded’ have enough money and show demand for financial services. But the supply side is short.

This means, that some categories of consumers might be vulnerable for ‘new exclusion’ and most probably include:

- 1) Elderly and socially vulnerable who may not have necessary skills to benefit from new delivery channels;
- 2) Disabled persons that may not have physical ability to use new delivery channels (e.g. visually impaired, etc.);
- 3) Households and individuals that may fall outside the innovative scoring models that are based on analysis of ancillary data (e.g. social networks behavior and status, geolocation, etc.), because of the limited digital footprint (Berg et al., 2018);
- 4) Companies, that do not have resources to train their employees, accountants, economists.

This means that the concept of ‘network poor’ is also relevant for the financial exclusion as well (Speak, 2000).

Viewed from this point of view, introduction of new technologies and delivery channels might be not only solution to the financial exclusion problem but also a reason for it. For example, the cases of closure of bank offices have already become the focus of mass-media attention in Europe, in particular, British press (Save our post office, 2018, p. 39). The problem was also discussed in special Parliament inquiry: according to the findings, 600 thousand of elderly are financially excluded, a third of the those older than 80, ever used ATM, 53% of bank branches in the UK were closed in 1989-2016 (Tackling financial exclusion).

Similar issues are discussed in the context of transition to cashless economy, by getting rid of the cash altogether. For example, in Sweden the idea of introducing the responsibility of the banks to provide cash to the customers in any point in the country is being debated: the nearest cash point shall be not further than 15 km from the client (Sweden Tries).

Financial exclusion challenges in the developed and developing countries – policy implications

Financial exclusion is a challenge for both the developing and developed countries. However, the reasons for exclusion vary. In developing economies people usually lack sufficient funds to use the financial services or perceive them as too expensive. Traditionally, in these countries the bank branch network is underdeveloped as well, limiting the usage of the existing brick-and-mortar infrastructure. In the developed countries the situation is a bit different. Some part of vulnerable populations are financially excluded for the same reasons as in the developing economies – economic exclusion. However, some people are financially excluded because of the fast transition to the new delivery channels, just as they are ‘digitally excluded’. It also should be noted there does not seem to be a correlation between level of financial inclusion and level of economic development (See Figure 4.).

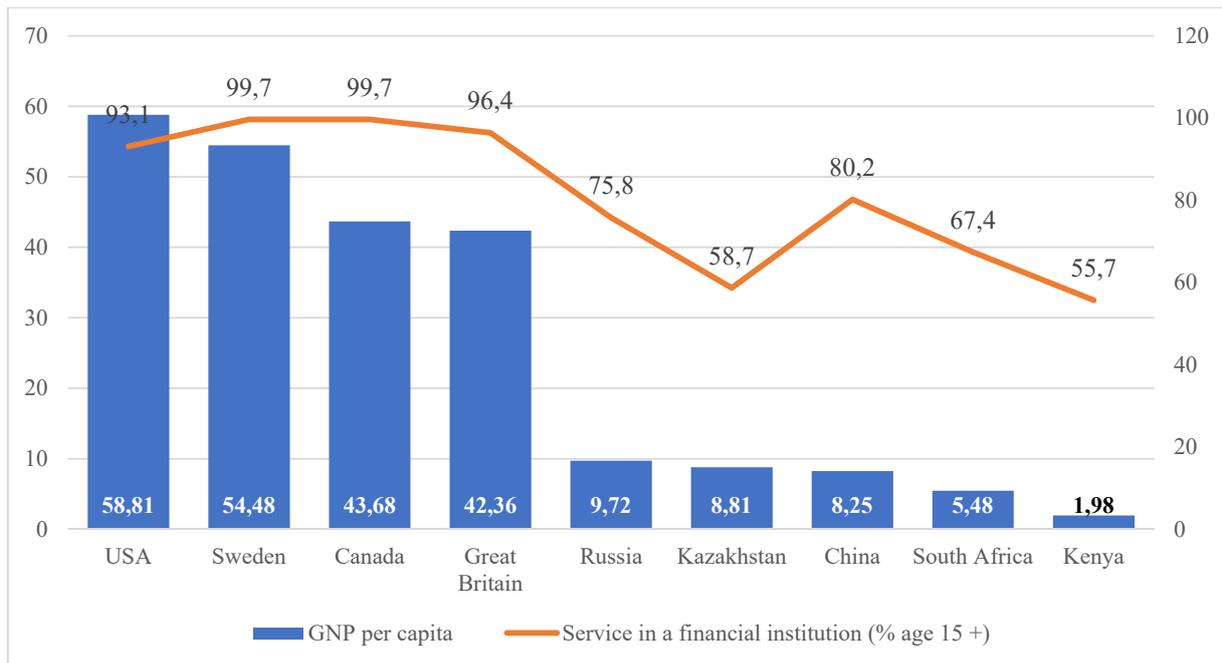


Figure 4. Level of using of financial services in selected countries, % (World Bank Group, 2018)

However, the analysis of financial inclusion in certain social groups shows a more complicated picture.

In the European Union 81% of all citizens use the Internet at least once a week, 72% use the Internet daily (Human Capital, 2018). This essentially means that 19% of the EU resident almost do not use the Internet at all. Those with low education levels, elderly, and some of the disabled are probably the least active part of the population: around 40% of all these groups use the Internet irregularly.

It should be noted, however, that using the Internet is not the same as using digital financial services. For example, M-Pesa only requires a feature phone. But such simple services as M-Pesa are surprisingly not gaining traction in the developed countries, as shown in Evans in Pirchio research (Evans&Pirchio, 2015) – possibly, because, unlike in the developing economies, the potential audience is not that large and cannot ensure rapid growth and, ultimately, the economies of scale.

New financially excluded are not only excluded from the financial sector. They are excluded from the whole digital economy as well. Therefore, the problem is broader than just financial inclusion.

In our opinion – and statistics as well as empirical experience support this – the developing countries are experience the completely new wave of financial exclusion. While some people are still excluded for economic reasons, some people are getting pushed out of the formal financial sector as a result of rapid digitization of financial services. This may have broad social and policy implications in the developed countries. New financially excluded are predictably socially vulnerable. Unlike in the developing countries, they do not form critical mass and therefore there is no incentive to develop very simple delivery channels for them. In our opinion this issue has not been addressed by the policy makers in the field of financial inclusion yet.

In other words, the new financial inclusion challenges is not because some people do not have access to financial services in general. This is because they cannot adapt to rapid change that is happening in the financial sector.

We believe that this new development clearly should entail some of the following implications:

- For the newly excluded, financial exclusion is the result of the digital exclusion. Therefore, policy-makers that previously focused on solely on the financial education, need to include digital literacy as well; this would also include the need to amend the existing financial inclusion strategies;
- Digital skills that are required to use the digital financial services are different from just broad digital skill needed to send an email, or start a conference call;
- We believe that the financial inclusion policies should take into account the digital divide: focusing not only on those living in remote areas, but also those who are digitally excluded;
- Going digital is probably a good strategy for the financial institutions, that allows them to minimize their costs. But the risks of pushing some people out of the financial system due to their inability to use the digital delivery channels should be considered as well; this leads to a complicated issue of state intervention (such as development of postal bank, implementing ‘banking as social service’ regulations, etc.) this is surely a field for further research (including in terms of effectiveness) further.
- It is unclear how the economic model of banking branches shall be supported. Is it sensible to make services that are provided in the bank branch more expensive? Would it marginalize and discriminate the digitally excluded further? Should all bank customers subsidize bank branches, whether they are using them or not?

The issue of ‘new financial exclusion’ is not yet a subject of comprehensive academic research but it surely merits attention. Looking at it as a problem for those who are poor and/or living in remote areas does not cover all cases of financial exclusion. We believe that the aspects of digital divide and digital exclusion should be taken into account as well. This will surely help us to address financial inclusion issues in developed countries – subject not yet covered sufficiently neither in the academic research nor in policy documents.

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